

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

MORE SMILE, MORE IMPLANTS: BEYOND
CONTINUITY TO UNLOCK STRAUMANN'S 2030
OUTLOOK

MATTEO AMARILLI
45071

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

Maria do Rosário Campos Silva André Gouveia

19/05/2020

Abstract

This research is part of the Equity Research Report "More Smiles, More Implants - Straumann's Bright Outlook Towards 2030 Goals" and covers the rationale behind the forecasts of Straumann Group developed by the two analysts. In addition to describing a variety of valuation approaches and discount rates in order to illustrate the results of the evaluation, the report offers a number of scenario assessments relating to various inputs that could influence the valuation.

Keywords (up to four)

Implantology

Clear Aligner

Medical Healthcare

Smiles

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

This report is part of the “More Smiles, More Implants - Straumann's Bright Outlook Towards 2030 Goals” report (annexed), developed by Matteo Amarilli and Filippo Muciaccia and should be read as an integral part of it.

Table of Contents

INTRODUCTION	5
COMPANY OVERVIEW	6
COMPANY DESCRIPTION	6
<i>Straumann Group Shares</i>	7
INDUSTRY OVERVIEW	8
MACROECONOMIC ANALYSIS	8
MARKET TRENDS.....	9
<i>Customer consolidation & health consumer</i>	10
<i>Digital transformation</i>	10
<i>Aging Population</i>	11
MARKET ANALYSIS – DENTAL IMPLANTS & CLEAR ALIGNERS	12
<i>North America</i>	13
<i>EMEA</i>	13
<i>Asia Pacific</i>	14
<i>Latin America</i>	14
COMPETITIVE LANDSCAPE	15
APPENDIX	17
CONSOLIDATED INCOME STATEMENT	17
CONSOLIDATED BALANCE SHEET	18
CONSOLIDATED CASH FLOWS STATEMENT.....	20

Introduction

The purpose of the Joint Equity Research is to determine the intrinsic value of Straumann Group, the world's leading provider of tooth replacement and orthodontic treatments.

Particularly, the analysts began their analysis by giving a full overview of Straumann Group's two primary business segments, Dental Implants and Clear Aligner. To forecast the Group's operational activities, substantial research on both the Group and the market has been done. After this, both an intrinsic and relative method have been provided for valuing the company. According to the authors' analyses, the Group has considerable upside potential (about 40% from the current share price), meaning that the market is underestimating STMN SW.

Straumann is well positioned for future growth because to its business model, its position as the global market leader for premium implants, and its commitment to a long-term outlook. Stable and double-digit margins and cash flows, along with a low level of debt (excluding recent bond issuances) and excellent total liquidity, position the company to flourish even during a financial crisis or a worldwide recession. Aging population, digitization, and industry mergers are the primary accelerators. In conclusion, the market is evaluating a scenario with a low probability of occurring and taking into consideration all the possibilities described in the Individual and Joint Reports, the authors maintain their BUY recommendation.

The present individual report begins with a comprehensive description of Straumann's business model, which provides readers with a first general overview of the company's last-year performance, its current exposure on worldwide markets and the most recent news regarding the stock price movement of the Group. This section's primary objective is to provide investors with a comprehensive framework for understanding the company's core business and other relevant facts that will aid in their comprehension of our assumptions and critical reasoning. The second chapter begins with a macroeconomic overview that examines external factors such as the current geopolitical environment and the most recent market developments. Furthermore, in the following pages, we present the market situation for Implantology and Clear Aligner in order to clarify the key trends of both businesses and give information about future forecast of these markets. We also develop various scenarios to assess the impact that an unforeseen change in these variables will have on our valuation. The final section of this individual report provides an exhaustive description of the competitive landscape. We analysed the key Straumann competitors in order to present to readers who the major players in this industry are, as well as our personal opinion as to whether or not they represent potential threats to the future goals of the Swiss company.

As stated previously, the present report should be read as a complement to the Joint Report, which provides insightful information on our valuation techniques, including both DCF and relative methods, a deeper analysis of the current operating performance of the company, and a conclusion regarding whether the market is misrepresenting Straumann stock price.

Company Overview

Company Description



Straumann Group is a global leader in tooth replacement and orthodontic solutions. Headquartered in Basel, Switzerland, the company employs more than 9000 people worldwide. Straumann Group manufactures its products across a global network of 19 sites, and operates in more than 100 countries, distributing products that stand for excellence to a broad network of subsidiaries and partners.

Straumann dates all the way back to the early 1950s, but the company's concentration on dentistry began only 30 years ago. The Group has experienced rapid expansion in recent years, outpacing both competitors and the market. If Straumann Group was originally solely focused on implantology, it has greatly expanded its reach to include implantology, CAD/CAM prosthetics, orthodontics, and digital equipment. As of FY21, implant & restorative (abutments, the connecting part between the implant fixture and the prosthesis, crowns, inlays, and bridges) solutions continue to be the largest revenue stream (c.79%), followed by *other* revenues, which include clear aligners (13%), biomaterials (3%), custom prosthetics (2%), and computer-aided design (CAD) and computer-aided manufacturing (CAM) equipment (3%).

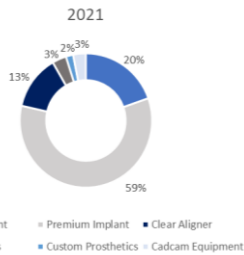


Figure 1: Straumann Revenue Split by Product 2021

Straumann's operations are segmented into four key geographies: North America (30%), EMEA (accounting for 44% of total sales FY21, with Germany being the most important market), Asia Pacific (19%), and Latin America (7%). Straumann Group's revenues exceeded CHF2 billion in 2021 when the four regions are combined, owing mostly to a growing customer base and regional expansion.

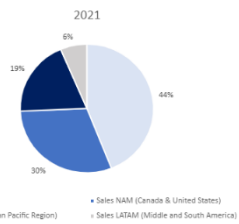


Figure 2: Straumann Revenue Split by Geography 2021

One of the primary reasons for Straumann's success is its market-leading position in the *Premium* implant market, in addition to various initiatives aimed at identifying market trends among customers, health customers, product technologies, and the socio-political landscape. To address the demand of dentists and patients at a range of price points, Straumann Group opted to extend its implant leadership position by entering the *Value* implant market in 2015, which now represents the largest proportion of annual implant sales globally (c. 24 million out of 32 million of total implants sold as of FY21).

Thus, the market can be classified as Premium or Value, with Straumann Group taking a holistic approach, providing training, support, and a broad range of services to dentists and practitioners, clinics, and laboratories. Straumann represents the leading Premium brand in implant and digital dentistry under the Straumann Group umbrella. Additionally, Straumann Group operates in the Value implant category through a variety of challenger brands, including Neodent, Medentika, Anthogyr, and Nuvo, as well as locally through T-Plus and Warantec.

Straumann Group is currently the global market leader in implantology with c.29% of the total implant market size, up from 27% in FY20 and 18% in 2012. The implant market is estimated to be worth approximately CHF5.2 billion, with a 50:50 split between Premium and Value implant. This is due to the company's leadership in the Premium implant industry (c.46%) and its growing global presence in the Value implant market (c.15%).

Straumann Group entered the orthodontics business in 2017 through the acquisition of ClearCorrect (US company). Since then, significant investments (more than CHF0.5bn) have been made in the belief that clear aligners would become a key revenue generator for the Group



Figure 3: Main Value Implant Brands



Figure 4: ClearAligner Brands

in the future. Initially limited to the United States, the Group's orthodontic footprint has grown from 13 to around 45 countries by 2021. Within the orthodontics industry, more specifically clear aligner solutions, Straumann Group develops high-quality, easy-to-use products through ClearCorrect globally and SmileTec, DrSmile and Smilink locally. The Group established a direct-to-consumer presence by acquiring DrSmile in 2020, a Germany-based direct-to-consumer (DTC) company, and Smilink in 2021, one of Brazil's fastest-growing producers of orthodontic treatments. As of today, the Group controls around 5% of the CHF5.3 billion clear aligner industry.

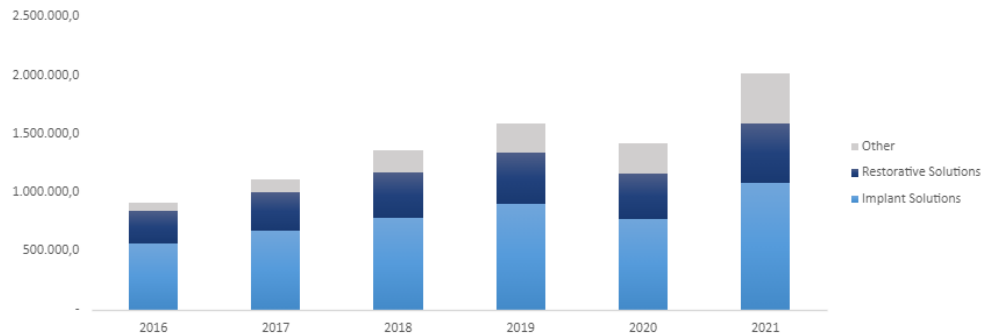


Figure 5: Revenues Evolution by Category since 2016

Therefore, by entering the Value implant and orthodontics businesses, Straumann Group has been able to increase its revenues over time and its presence globally.

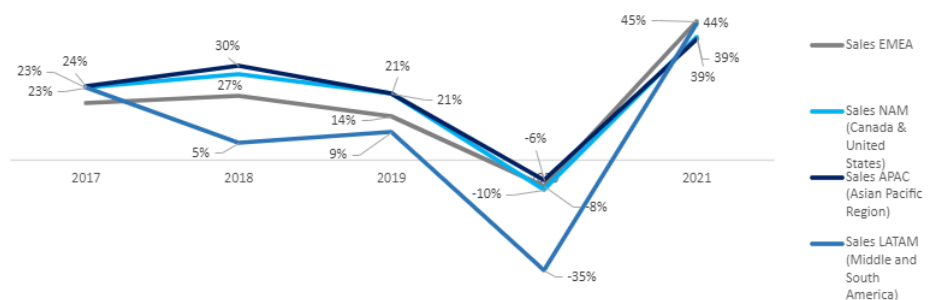


Figure 6: Revenues Evolution by Geography since 2016

In the end, by looking at the market, the Group appears to be the least indebted company compared to its peers (c.3% vs average comps 10%). Additionally, although the pandemic and multiple lockdowns led to the closure of dental practices and a drop in the implantology industry, Straumann Group strongly recovered during 2021 (c.40% up in revenues), in line with the medical devices industry performance. Looking forward, the implantology and clear aligner markets are expected to grow, respectively, at a CAGR of c.10% and c.25% in the next coming years¹.

Straumann Group Shares

Straumann Group has been listed on the Swiss SIX stock exchange since 1998. The IPO took place in Basel at a price of CHF19.50. The Group is part of the Swiss Leader Index (SLI), which includes the largest 30 stocks in the Swiss equity market, and it was the highest performer in 2021 (+88.7%), indicating investors' appreciation for past accomplishments and future growth prospects.

Straumann's market capitalization, as of 05/22A, amounts to CHF18.95bn compared to CHF 30.8bn FY21 and to c. CHF18bn FY19. The 2021 performance was driven also by the successful launch of COVID-19 vaccines and strong economic growth across major economies. However,

STMN SW is part of the SLI, which includes the largest 30 stocks in the Swiss Exchange

¹ Source: GrandViewResearch Market Report – Global Implantology & Clear Aligner markets

**Straumann's
current market
cap is
CHF18.95bn**

**In April 2022,
the Group
announced a
10:1 stock split
in order to
attract more
investors**

STMN SW is trading at a discount of c. 43% YTD mainly due the currently uncertain geopolitical landscape and the correlated fear of stagflation. Indeed, in the last months the stock price has seen frequent ups and downs strongly correlated with the 10y government bond yield (priced in a range of -0.2% and 1% from January 2022). By comparing STMN SW's historical performance to that of the Swiss Exchange over the last decade, it is possible to observe a marked difference in the overall performance (STMN SW: approximately +1000% vs SIX: approximately +100%), mostly due to a surge in STMN SW shares beginning in 2020.

Despite the pandemic, the Group has consistently paid approximately 27-36% in dividends over the last few years, and it will be subject to a dividend payment of CHF0.68 per share in FY21, approved by shareholders at the AGM in April 2022. Additionally, the Group expects to maintain a consistent dividend that would steadily increase over time. Moreover, on the 20/04/2022 the Group announced a 10:1 stock split with immediate effect without disclosing any further comments. In our opinion, the main reason is to attract a greater number of investors that could have been discouraged by the high stock price.

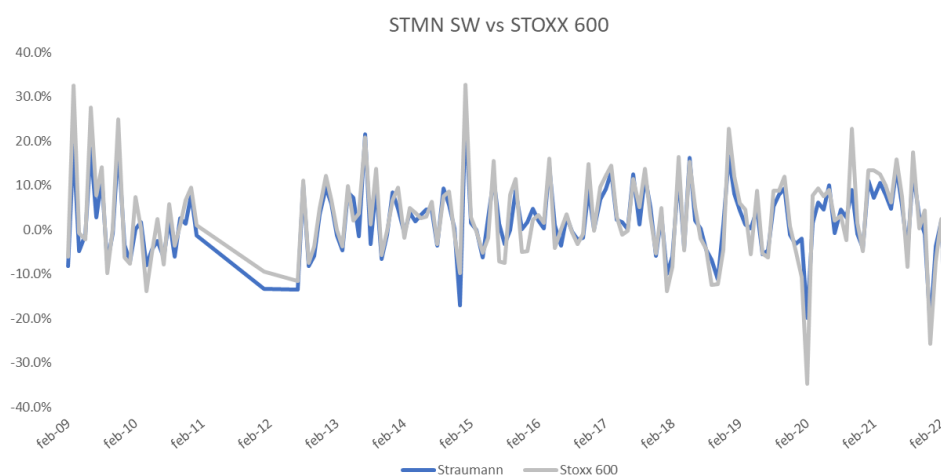
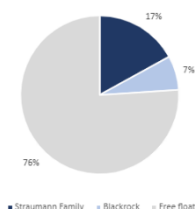


Figure 7: Straumann Group performance versus STOXX 600

The founding family retains a large position in the company (17%) through Thomas Straumann, the founder's grandson, and vice chairman of the board, while Blackrock, an international investment management firm, holds approximately 7%. Institutional, private, and unknown investors own the remainder about 76%.



**Figure 8: Straumann's
Shareholder Structure**

Industry Overview

Macroeconomic Analysis

In early 2020, the COVID-19 pandemic struck Europe, prompting the announcement of repeated lockdowns, the opening, closing, and re-opening of society multiple times, the advent of various viral variations, and the shifting to remote working. Finally, vaccines came; most patients have been vaccinated and boosted against COVID-19. To mitigate the negative impact of lockdown measures on the economy over the previous two years, governments and central banks announced fiscal and monetary stimulus policies aimed at flooding the markets with liquidity (the ECB injected more than €1.8bn), cutting the cost of capital, and expanding lending. As a result, the ECB, the FED, and several other central banks around the world agreed to maintain interest rates at historically low levels.

The Ukrainian-Russian War has led to an economic downturn

At a time when the world economy was attempting to recover from the pandemic, inflation returned angrily and strongly. Additionally, in March 2022, a shock occurred in eastern Europe, notably the Ukrainian-Russian War. Despite being outside the subject of this research, the catastrophic repercussions witnessed their compelled major world powers to implement a series of actions targeted at reducing Russia's dominance. However, because of spill over effects and Europe's reliance on Russian oil and gas, commodity prices have continued to rise, and inflation has increased again. In addition to this, a series of lockdowns reimposed in China have increased the volatility in the markets.

We are currently seeing how the war's aftermath will affect the geopolitical landscape; negotiations are still ongoing and appear to be lasting longer than expected; market volatility is increasing (VIX is now at 19-year highs); and there is growing fear of stagflation, a fatal combination of rising inflation and slowing economic growth. To bolster this notion, during the final week of March 2022, the US yield curve 10y-2y momentarily inverted, which typically signals the start of a recession with a lag of 10 to 18 months. However, prior recessions indicate that months of lag are typically characterized by strong market performance. Additionally, central banks have begun to raise interest rates to contain inflation while not interfering with the economy's growth, which is now anticipated to be about 2.5% p.a.

In our perspective, an imminent recession seems remote, owing to the historically low unemployment rate, continued strong consumer spending demand, and stable corporate profitability expectations. In the long run, however, analysts appear to be more fearful of recession, with the IMF forecasting that the euro area's real GDP will fall to 1.7% in 2024. Finally, we expect inflation to exceed 7% in FY22, before settling at 2.2% from 2026. However, those projections are extremely dependent on the war's future developments and hence carry significant risks.

From a geopolitical point of view, we personally do not believe the current framework will impact Straumann Group. Indeed, despite the entry into the Russian market in 21Q4, the CEO explained during the 22Q1 release conference that there are no stocking issues in the sovietic market. On the other hand, the ongoing pressure on prices and the probable reduction in consumer spending could somehow reduce the overall revenues of the Group. Therefore, as we will explain later, we have adjusted to different scenarios our people affordability rate (10%) - which represents the capability of people in terms of disposable income to afford the purchase of an implant/orthodontics product - trying to understand the impacts on the overall performance. If the affordability decreases, the direct effect would be a reduction in the demand from clinicians and dentists. Finally, as already mentioned above, Straumann Group is highly dependent on the fluctuation of the yield on the Swiss 10-year government bond. For instance, when the yield reached 1% on May 9th 2022, the Group stock price fell more than 10% during the day, followed by the whole Swiss SIX index. According to the Swiss Central Bank, they consider the local inflation temporary (c.2.5%) and therefore no intentioned to hike interest rates.

Market Trends

Numerous market trends will influence the direction of the implants and orthodontics sectors in the future. Overall, the penetration rate will be accelerated by an aging population, an expanding middle class, improved access to dental care (particularly in emerging nations), greater public awareness, and improved professional education. These trends can be classified into three broad categories: consumer, product technology, and social political environment.

Year	Real GDP Growth	Inflation Rate
2020	-6.40%	1.10%
2021	5.30%	3.50%
2022	2.80%	7.90%
2023	2.30%	4.60%
2024	1.70%	3.00%
2025	1.60%	2.50%
2026	1.40%	2.20%

Figure 9: IMF Predictions -Euro Area

The Swiss Central Bank considers the inflation temporary and does not expect to hike interest rates

Customer consolidation & health consumer

DSO placed 7% of Straumann Implants in 2015, grew to 15% in 2021, and expected to reach 30% by 2025

Between 2015 and 2030, the middle class in high-growth markets will rise by 1.5bn individuals, reaching 3.5bn². This demographic transition is resulting in a significant increase in the number of new customers with enhanced access to dental products and services. However, the current state of the art implies a lack of market penetration. For example, China has less than 10 dentists per 100k population, compared to 60 in the United States and 85 in Germany. A significant transition will be marked by the expansion of dental service organizations (DSOs) with the goal of integrating and standardizing the market, particularly in the United States, Europe, and China. Additionally, independent practitioners are banding together to establish shared capabilities to address the DSO trend; for instance, in the United States, DSOs are concentrated in underserved markets such as the Midwest and rural areas, where access to both general and complex dental treatment is very limited. According to Straumann Group, DSO placed 7% of implant sales in 2015, grew to 15% in 2021, and is predicted to reach 30% by 2025. Taking all of this into consideration, Straumann's mission is to become the DSOs' preferred business by partner.

The Group acquired DrSmile and Smilink in order to expand its D2C presence

Additionally, people have become increasingly fascinated with and knowledgeable about oral care. White and flawless teeth have become a new symbol of social status, and the pandemic has reinforced this tendency by requiring online communication (zoom effect). This will advance both the direct-to-consumer and business-to-business-to-consumer business models. In the former case, the provider is responsible for all stages and components of the patient experience, including treatment packages, whereas in the latter case, the provider obtains the patient and connects them to physicians. To counter this trend, Straumann Group began expanding its direct-to-consumer presence with the acquisitions of DrSmile and Smilink, as well as a controlling share in Nihon Implant, Japan's top implant treatment concierge. Particularly, Straumann agreed to buy 75% stake in DrSmile business in 2020 for CHF110m (CHF35m in cash, and CHF75m as contingent consideration based on the achievement of sales targets by 2023). Overall, DrSmile, based in Berlin, operates in 10 countries and it is the leading provider of D2C clear aligner solutions in Europe. From the acquisition, DrSmile business contributed in generating more than CHF40m in revenues. Smilink, on the other hand, was acquired for just CHF4m in 2021 and its business is similar to DrSmile but representing the Brazil market. Despite the revenue contribution is still undisclosed, we believe it will be an important contributor in the future because of the importance of the Brazil market, the LATAM largest market of the Group.

Digital transformation

Nowadays, digital disruption and transformation represents a major global trend, which has been further accelerated by COVID-19. Digital technologies are revolutionizing dentistry across the board, from patient communication and office administration to diagnostics and treatment.

Increased consumer awareness on cosmetic dentistry will be a growth driver in the future

Increased consumer awareness of the critical nature of oral health maintenance and a growing consumer focus on cosmetic dentistry continue to be significant growth drivers for the global dental business. As indicated by the rising usage of clear aligners, orthodontic operations are becoming increasingly aesthetically driven. It is easy to foresee that aesthetic-conscious patients seeking an increasing number of tooth replacement and teeth straightening operations will continue to drive demand for dental implants and clear aligners, with technological developments facilitating the access to more sophisticated procedures. Indeed, with dentists and other

² Source: Brookings Institution's Global economy and development - working paper

professionals seeking higher efficiency and improved workflows, and with these technologies being adopted not only in the United States and Europe, but also in emerging economies, digital solutions span the whole diagnostic and treatment spectrum. Thus, technological developments will enable the treatment of more complex patient requirements at a lesser cost. Additionally, another trend in implant dentistry is instantaneous solution - implant implanted directly in tooth extraction socket or prosthesis mounted immediately after implant placement - which results in a shorter time to teeth and fewer dentist visits. As a result, technology will play a critical role in achieving this transformation in the future.

In order to incorporate the disruptive effect that products innovation could bring in the future in our valuation, as well as the lower costs connected to that, we performed a scenario analysis based on which results are counter intuitive. Indeed, if products will be more accessible, people affordability will increase (e.g. from 10% to 11%). As a result, the focus will be even more on Value implant, considering for instance that more affordability in emerging countries will lead to more people' access to cheaper implants, namely Value category - Straumann considers the % of Premium (25%) and of Value (75%) placed out of total implants will be constant in the future. In terms of number of implants and patients in the market, both indicators would increase but this could lead to a decrease in the consolidated implants revenues of the Group, if Straumann would not adjust its guidance and would keep its focus on Premium implant, However, we have reasons to believe the Group would be able to adjust its outlook and be ready to 'catch the train'.

Similarly, on the clear aligner front, there will likely be significant disruption in terms of material and 3D printing. Straumann is a firm believer in being a leader and in the great potential of innovation to allow those investing in research and development to stay ahead of the curve.

Straumann Group's innovative products pipeline, both in dental implants and in the clear aligner industries, will include the launch in 22Q2 of Anthogyr X3 and Neodent ZI implants.

Aging Population

Worldwide, c.1 billion people are aged 60 or over in 2017, accounting for approximately 13% of the population³. By 2050, this figure is predicted to rise to about 2 billion people, accounting for at least 22% of the world's population. This will be fuelled in large part by the aging of the population in low- and middle-income countries.

The rising population of persons over the age of 60 and the increasing frequency of dental illnesses are likely to increase the number of dental treatments performed, hence driving the market during the forecast period. The geriatric population is critical to the market's growth. Therefore, aging is the primary risk factor for dental problems, which is predicted to be a significant contributing factor. Moreover, Dental implant surgeries have been proved to be safe for individuals over the age of 65⁴.

Therefore, the aging population is expected to increase demand for a variety of preventative, restorative, and surgical procedures, owing to greater self-care spending and improved awareness about the variety of oral care alternatives available. From a demographic and sociological perspective, it is worth emphasizing that affordability will improve in the future as the middle class expands in developing countries, resulting in a greater per capita income for people.

Affordability	11.0%
% Premium Implant	20.0%
% Value Implant	80.0%
DELTA	-3%

Figure 10: Scenario - Technological Advancements & Implants

Affordability	11.0%
% Premium Implant	30.0%
% Value Implant	70.0%
DELTA	23%

Figure 11: Scenario – Aging Population & Implants

³ Source: United Nations Report 2020

⁴ Source: National Center for Biotechnology Information – Report 2021

By looking more in depth at this scenario, Premium implants will be more relevant than Value ones (old people needs sophisticated treatments that normally only Premium implants can provide) and the results would imply an increase in implant revenues.

Market Analysis – Dental Implants & Clear Aligners

Dental implants are the gold standard treatment to successfully replace missing or damaged teeth. The growing demand for tooth replacement has boosted the market for dental implants, which also serve as a foundation for bridges, crowns, and dentures. Straumann indicates that the dental implant market is worth CHF5.2 billion in 2021, with Premium implants accounting for CHF2.6 billion and Value implants (the more accessible category) accounting for CHF2.6 billion. Additionally, the implantology business has an addressable market of around 2 billion teeth each year, out of a total of more than 30 billion missing teeth globally, and in 2021, approximately 32 million implants were manufactured (24m Value and 8m Premium).

According to Straumann latest CMD, the Value market, which includes over 400 companies, is growing faster (about 7% p.a.) than the more consolidated Premium market (approximately 4% p.a.). As already explained above, the Group is market leader in Premium implantology with its brand Straumann, while many other brands (as Neodent and Medentika) are penetrating the Value segment of the market, especially in emerging economies as the price for Value implants is lower and provides more accessibility.

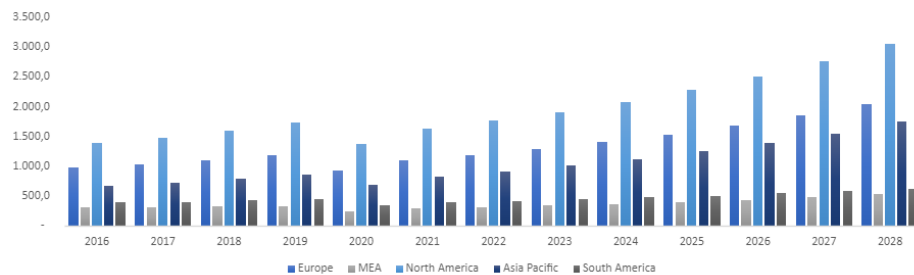


Figure 12: Dental implant market forecast 2016-2028 (in \$m)

By looking at the global market for clear aligners, the key trend is represented by direct-to-consumer marketing and online service providers offering treatment packages. While around 500m people worldwide have misaligned teeth, only roughly 21m began orthodontic treatment in 2021. Out of 21m, only 4m of people began treatment with transparent aligners, which increases the growth potential for clear aligners in the future.

The clear aligner market is currently worth roughly CHF5bn and is predicted to increase at a rate of more than 20% per year. Even though the majority of orthodontic cases are initiated by adolescents, the adult segment accounts for the bulk of clear aligner cases initiated, owing to their unobtrusive nature and comfort. The market is categorized by end-use into Hospitals, Independent Practices, Group Practices, and Others, which includes DSOs and children's hospitals.

Dental Implant market has an addressable market of around 2bn teeth per year. In 2021, only 32m of implants were placed globally.

In its latest CMD, The Group expects the value market to grow at 7% p.a., while the premium market at 4%p.a.

In 2021, only 21m people began orthodontic treatment. Out of this number, only 4m did so through clear aligner.

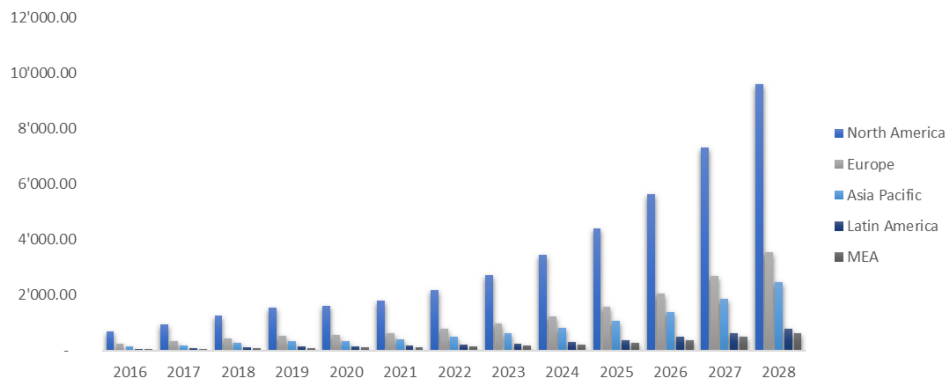


Figure 13: Clear Aligner market forecast 2016-2028 (in \$m)

North America

North America accounted for 38.2% of the total implant market in 2021, as a result of technological developments and increased consumer awareness of dental implants' efficacy and expanding therapeutic uses. Additionally, the increase in the number of clinics and practitioners, as well as the recent trend of older persons increasing their normal dental treatment frequency, could have boosted growth. Undoubtedly, the largest regional marketplaces are the United States and Canada. The North America market was worth approximately \$1.5 billion in 2016, and it is predicted to increase at a 9.4% CAGR, exceeding the \$3 billion mark by 2028.

Moving to the clear aligner industry, the region had a market share of c.55% in 2021. This is due to the growing developments in oral health, the presence of significant businesses in the region (including Align Technology), and a high level of consumer knowledge regarding the efficacy and ease of use of clear aligners. According to Straumann, two out of every three adults in the United States have noticeable tooth irregularities, and the American Academy of Cosmetic Dentistry reports that the majority of adults (99.7 %) believe a smile is a critical social asset and that a perfect smile can improve their appearance. The clear aligner market was valued at c. \$2bn in 2021 and it is expected to reach c. \$10bn by 2028, with an implied CAGR of c. 27%.

Straumann Group continues to be the market leader in implantology in the United States (the group's largest market), especially with its Premium Straumann brand, but the Group is also expanding its Value implant presence through Neodent while also targeting DSOs with a partnership established in 2021 with WesternDental and Aspen, two US dental practice corporations.

EMEA

Europe is the second largest contributor, accounting for more than 26% of the total implant market in 2021. The aging population in Western Europe is predicted to promote market growth in this region (e.g, working age population between 15 and 64 will decrease from 333m in 2016 to 292m people in 2070⁵). Countries such as Germany, France, and Italy have some of the most modern healthcare systems in the world, delivering a broad spectrum of medical services. The implant market in Europe is predicted to exceed \$1bn in 2020 and reach more than \$2bn by 2028 (implied CAGR of c. 9%). Middle Eastern countries have an advanced healthcare infrastructure and a high level of service accessibility. A significant trend in this region is the expansion of medical tourism, which is expected to drive regional market growth. However, like in South Africa, a lack of infrastructure may hamper the region's overall progress. The MEA implant market is estimated to

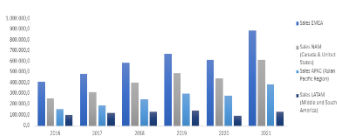


Figure 14: Straumann's revenue performance by Geography

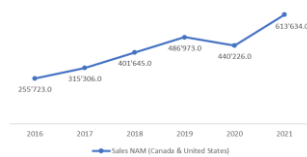


Figure 15: Sales evolution in North America



Figure 16: Sales evolution in EMEA

⁵ Source: European Commission Report – Europe's population is getting older

reach approximately \$250m in 2021 and increase at a CAGR of c.8.8% over the next seven years.

Europe is the second largest contributor also for the clear aligner market, accounting for over 20% of the market in 2021. Germany, the United Kingdom, Spain, France, Italy, and Russia are significant countries in the European region. The increasing relevance of aesthetics and post-treatment self-confidence are the primary factors driving the market's rise. European countries are developed and offer cutting-edge technology for cosmetic surgery and patient care. By 2028, the European market is estimated to exceed \$3bn. However, in the MEA area, due to a lack of experienced specialists, lack of awareness, restricted access to healthcare, reduced price, and a reluctance to adopt cosmetic procedures, market expansion may be hampered.

EMEA contributed most to the Group's overall performance, owing to the launching of the TLX implant and the introduction of Neodent and Medentika (value challenger brands) in Europe. Germany, France, and Spain led the way in terms of clear aligner performance, as did Russia, which has numerous launches scheduled for 2022 but are likely to be put on hold due to the War.

Asia Pacific

In Asia Pacific, travel prospects remained constrained due to ongoing pandemic-related restrictions (as the current lockdowns in China). This has resulted in more discretionary income, and in health spending remaining a priority. However, Asia Pacific is predicted to grow at the greatest rate, with a CAGR of 11.1% over the forecast period, and accounted for around 19.3% of the market in 2020. Asian countries are densely populated, with an increasing share of the population aged 65 years and older. Additionally, these countries are well-known for their low-cost medical care, making them the favourite destination for medical tourists. Particularly, China has a strong R&D base, and Japan has the biggest elderly population per capita. The market is estimated to be around \$700m in 2020 and is expected to reach nearly \$2bn by 2028.

By looking at the clear aligner market, Asia Pacific is predicted to grow at the fastest rate (c.28% yoy) throughout the projection period 2022-2028, as results of the rising prevalence of malocclusions and the increased acceptance of clear aligner therapy. In 2021, the orthodontics companies expanded dramatically, gaining traction in Australia, Japan, and Singapore. By 2028, the Asia Pacific market is estimated to exceed \$2.5bn in value.

Straumann Group's presence in the Asian market was supported by the launch of value implant solutions (BLX Implants) and the consolidation of Neodent and Anthogyr in India and South Korea. Regarding the orthodontics business, the Group announced c. CHF170m of investment for a manufacturing and innovation center in Shanghai. Additionally, the Group expanded its clear aligner presence with the acquisition of Nihon Implant, Japan's top implant treatment concierge.

Latin America

Latin America is also experiencing an increase in the geriatric population, owing to the region's declining death rate. Additionally, the market is being driven by the expanding presence of foreign companies and clinical developments. Latin America is the world leader in terms of Value implants, particularly in Brazil, where implant volumes are second only to the United States. However, because of Brazil's large population, penetration per capita is poor. Premium implants, according to Straumann, are expanding at an even quicker rate but from a considerably lower base. Latin America's implant market is predicted to increase at c.6.7% CAGR, reaching approximately \$700m by 2028, up from approximately \$400m in 2021.

The clear aligner market is predicted to grow at a profitable rate due to the lower cost of dental



Figure 17: Sales evolution in Asia Pacific

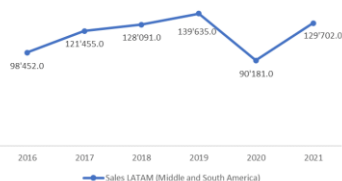


Figure 18: Sales evolution in Latin America

cosmetic procedures in comparison to North America and Europe. Orthodontics is mostly a direct-to-professionals business approach in this region. The clear aligners market was worth over \$150m in 2020 and is predicted to increase at a 24.6% CAGR during the forecast period, reaching a value of more than \$800m in 2028.

Despite being the smallest contributor to the Group revenue, Neodent is considered the strongest brand in the region, and the acquisition of Smilink in 2021 will accelerate the D2C orthodontics presence in the region.

Competitive Landscape

Align Technology is a medical device company with two operating segments - clear aligner and scanners & services. It deals with designing, manufacturing, and marketing of iTero intraoral scanners & services and Invisalign clear aligners. The company's key customers include, among others, orthodontists, general practitioner dentists, and restorative dentists - prosthodontists and oral surgeons. The primary business is the production of Clear Aligner, which accounts for c.90% of total sales, and Align Technology's current market share in this business is c.70%, thereby granting it the title of market leader. Align Technology generated \$4bn revenues FY21 (+60% vs FY20), and more than \$2bn out of \$4bn came from North America, followed by Europe (25%) and Asia-Pacific (10%). Recently, the Group established a new production plant in Poland, with the aim of entering Eastern Europe market, and more generally Europe. Due to its international exposure, the recent entry in Europe and its market leader position for clear aligner, we consider ALGN as the greatest threat to Straumann Group. However, it seems that the customer base of Straumann's clear aligner franchise is mostly adults, while Align Technology's target are teens and young people.

Envista Holding is an independent company and subsidiary of Danaher Corporation. The company was launched in the second half of 2019 and has differentiated portfolios, including orthodontics, dental implants, & digital imaging technologies. The company's service and administrative facilities are located in over 60 countries and it could be defined as the Implant co-leader of Straumann Group for quality and global scale. Particularly, the Group generated \$2.5bn in revenues in 2021, mainly from North America (50%), but also from China (10%). Looking at its past performance, it seems a stable and mature company (revenues stable at over \$2bn per year), offering a wider range of products compared to Straumann Group. In February 2021, NVST announced to extend its contract with Heartland Dental - the largest dental support organization in the U.S. - for 4 years, and also for this reason we believe NVST will be a strong competitor of Straumann in US and China, as they offer same products to the same customer base.

Dentsply International and Sirona merged in February 2016 to form Dentsply Sirona. Dentsply Sirona is a manufacturer and marketer of various oral and dental health products along with other consumables for dental procedures. The company is present in over 120 countries, with its principal manufacturing and distribution units situated in the U.S., Europe, China, and Japan. As of FY21, the Company recorded \$4.2bn in revenues (dental implants & clear aligner products representing c.55%, while CAD/CAM and scanners c.45%). The group operates globally but the United States represents 35% of its revenues. We believe that XRAY is in the same position as Straumann and will face the same challenges and opportunities to increase its market share by increasing its penetration in the Asia-Pacific and European markets. Furthermore, since the United States market is already well-served in this industry, we can assume that Dentsply will make extra efforts to consolidate its market share in the North American markets.

The logo for Align Technology, featuring the word "align" in a lowercase, sans-serif font. The letter "i" has a blue dot above it.The logo for Envista, featuring a stylized orange circular icon with a white "e" inside, followed by the word "Envista" in a bold, sans-serif font.The logo for Dentsply Sirona, featuring a stylized grey "S" icon followed by the words "Dentsply" and "Sirona" stacked vertically in a sans-serif font.



3M is a global company that offers diversified technology in varied business segments - industrial, safety & graphics, electronics & energy, health care, and consumer goods. The company has nearly 60,000 products in its portfolio and provides its services to hospitals, schools, business, and homes. The company's health care generated c.\$9.1bn in 2021 (25% of revenues), with a increase YoY of c.15% during the last 5y. Within that business unit, 3M offers a wide range of dental implants, clear aligners, and CAD/CAM solutions and its competitive advantage all over the world will represent a real threat to STMN SW. 3M operates in more than 70 countries, generating 45% of its revenues from US, 20% each from EMEA and APAC, and 15% from LATAM.



Henry Schein, Inc. is a solutions company for health care professionals powered by a network of people and technology. They are the world's largest provider of health care products and services primarily to office-based dental and medical practitioners, as well as alternate sites of care. The Company generated \$12.4bn in revenues in 2021, keeping its momentum as in the last 5y (YoY revenue growth rate of 10%). The main revenue contributor is North America, but the Company still operates in other 50 countries, including Germany, China, Brazil, among others. It is strong their supplies of implants but only from a local level and they are not planning to expand internationally focusing only on the core products as of Straumann. Despite the company does not appear to be too well positioned in the dental industry, it may impact Straumann's potential to expand its product line in other countries, as the size and reputation of the Henry Schein brand continue to have a significant impact on consumers' perceptions of all medical products.

Appendix

Consolidated Income Statement

Reformulated Consolidated Income Statement (In CHF'000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Historical							Forecast Period 1					
Operating													
Total Consolidated Revenues	917,517.0	1,112,102.0	1,363,560.0	1,596,225.0	1,425,851.0	2,021,903.0	2,288,441.9	2,562,137.2	2,843,069.0	3,182,535.9	3,531,437.7	3,943,196.1	4,366,778.7
Cost of Good Sold	(198,987.0)	(271,638.0)	(344,315.0)	(395,749.0)	(396,073.0)	(481,880.0)	(581,578.8)	(651,135.1)	(722,530.4)	(808,801.6)	(897,470.6)	(1,002,113.9)	(1,109,762.1)
Gross Profit	718,530.0	840,464.0	1,019,245.0	1,200,476.0	1,029,778.0	1,540,023.0	1,706,863.1	1,911,002.1	2,120,538.6	2,373,734.3	2,633,967.0	2,941,082.2	3,257,016.6
<i>Gross margin</i>	78%	76%	75%	75%	72%	76%	75%	75%	75%	75%	75%	75%	75%
Other Operating Income	703.0	1,601.0	1,608.0	3,263.0	3,071.0	3,399.0	4,484.7	5,021.0	5,571.6	6,236.8	6,920.5	7,727.5	8,557.6
Wages And Salary	(283,998.0)	(338,387.0)	(407,538.0)	(500,749.0)	(468,497.0)	(570,927.0)	(650,064.2)	(727,811.2)	(823,766.1)	(940,567.6)	(1,043,682.1)	(1,165,373.3)	(1,290,559.1)
Share-based payments	(4,242.0)	(7,726.0)	(10,706.0)	(13,130.0)	(9,285.0)	(9,364.0)	(13,703.3)	(17,364.9)	(19,827.1)	(19,827.1)	(22,000.7)	(24,565.9)	(27,204.8)
Social security cost	(40,839.0)	(47,469.0)	(53,268.0)	(59,882.0)	(58,621.0)	(69,182.0)	(84,581.2)	(94,697.1)	(107,182.0)	(122,379.2)	(135,795.7)	(151,629.2)	(167,917.4)
Pension costs and other personnel expense	(27,506.0)	(22,448.0)	(36,716.0)	(46,679.0)	(40,679.0)	(55,191.0)	(57,422.3)	(64,289.9)	(83,083.4)	(92,191.8)	(102,491.2)	(113,999.3)	(125,999.3)
Other Distribution and Administrative Expense	(105,122.0)	(104,245.0)	(119,439.0)	(83,911.0)	90,708.0	(189,008.0)	(202,276.0)	(226,468.0)	(251,299.6)	(281,305.2)	(312,144.7)	(348,540.1)	(385,980.7)
EBITDA	257,526.0	321,790.0	393,186.0	499,388.0	546,475.0	649,750.0	703,307.0	787,414.8	853,731.6	932,808.6	1,035,072.5	1,155,759.8	1,279,912.9
EBITDA margin	28.1%	28.9%	28.8%	31.3%	38.3%	32.1%	30.7%	30.7%	30.0%	30.0%	29.3%	29.3%	29.3%
Depreciation of PPE	(22,852.0)	(24,975.0)	(29,960.0)	(66,457.0)	(71,751.0)	(79,650.0)	(79,178.3)	(88,647.9)	(98,367.9)	(110,113.2)	(122,184.9)	(136,431.4)	(151,087.1)
Amortisation	(9,171.0)	(15,283.0)	(22,407.0)	(27,041.0)	(27,716.0)	(23,556.0)	(23,093.8)	(25,446.8)	(27,790.2)	(30,616.3)	(33,435.4)	(36,743.3)	(40,046.6)
Impairments	-	-	-	-	(294,401.0)	(6,637.0)	-	-	-	-	-	-	-
Operating Result Before Taxes	225,503.0	281,532.0	340,819.0	405,890.0	152,607.0	539,907.0	601,028.7	673,320.1	727,573.5	792,079.1	879,452.2	982,585.1	1,088,779.2
EBT margin	24.6%	25.3%	25.0%	25.4%	10.7%	26.7%	26.2%	26.2%	25.9%	24.8%	24.9%	24.9%	24.9%
Taxes	(6,939.8)	(45,436.5)	(52,572.8)	(68,711.8)	(31,288.9)	(95,930.1)	(98,326.8)	(110,153.5)	(119,029.2)	(129,592.2)	(143,876.2)	(160,748.5)	(178,121.6)
Operating Result	232,442.8	236,095.5	288,246.2	337,178.2	121,318.1	443,976.9	502,701.9	563,166.6	608,544.3	662,486.9	735,576.0	821,836.6	910,657.6
Non-operating													
Rental Income	1,673.0	1,752.0	1,816.0	1,799.0	1,521.0	1,414.0	1,676.0	1,876.5	2,082.2	2,330.8	2,586.4	2,887.9	3,198.1
Government Grants	-	-	-	-	13,898.0	493.0	-	-	-	-	-	-	-
Insurance Reimbursements	-	-	-	7,746.0	274.0	767.0	-	-	-	-	-	-	-
Legal Cases	-	-	-	(25,500.0)	-	-	-	-	-	-	-	-	-
Pension Plan	-	-	-	-	5,275.0	-	-	-	-	-	-	-	-
Restructuring	-	-	-	-	(8,747.0)	-	-	-	-	-	-	-	-
Other	-	-	-	(2,796.0)	-	-	-	-	-	-	-	-	-
Restructuring	-	-	-	-	(8,287.0)	-	-	-	-	-	-	-	-
Non-Operating Result Before Taxes	1,673.0	1,752.0	1,816.0	(18,751.0)	3,934.0	2,674.0	1,676.0	1,876.5	2,082.2	2,330.8	2,586.4	2,887.9	3,198.1
Taxes	(435.0)	(455.5)	(472.2)	4,875.3	(1,022.8)	(695.2)	(435.8)	(487.9)	(541.4)	(606.0)	(672.5)	(750.9)	(831.5)
Gain on Consolidation of former associates	-	68,867.0	10,725.0	5,967.0	-	-	-	-	-	-	-	-	-
Share of results of associates	(1,603.0)	(9,739.0)	(9,984.0)	(3,036.0)	(1,588.0)	6,059.0	478.3	478.3	478.3	478.3	478.3	478.3	478.3
Other Comprehensive Income (not considering Non controlling Inter)	53,083.0	(9,410.0)	(92,945.0)	(58,621.0)	(163,362.0)	(33,875.0)	(115,387.2)	(129,187.4)	(143,352.4)	(160,469.0)	(178,061.2)	(198,822.8)	(220,180.5)
Non-Operating Result	52,718.0	51,014.5	(90,860.2)	(69,565.7)	(162,038.8)	(25,837.2)	(113,668.6)	(127,320.5)	(141,333.3)	(158,265.8)	(175,669.0)	(196,207.4)	(217,335.0)
Financing													
Interest Income	2,308.0	2,496.0	1,285.0	2,568.0	1,460.0	2,258.0	5,643.4	4,963.3	5,556.9	6,166.2	6,902.5	7,659.2	8,552.3
Financial Income	32,952.0	56,205.0	71,567.0	62,305.0	73,573.0	87,156.0	108,363.6	121,323.8	134,626.6	150,701.2	167,222.6	186,720.5	206,778.2
Interest Expense	(4,626.0)	(6,020.0)	(8,727.0)	(17,621.0)	(15,626.0)	(17,037.0)	(26,891.8)	(28,108.3)	(29,357.5)	(30,639.8)	(32,189.1)	(33,781.6)	(35,660.9)
Financial Expense	(33,981.0)	(72,008.0)	(81,075.0)	(71,854.0)	(100,452.0)	(143,632.0)	(132,633.2)	(148,496.0)	(164,778.2)	(184,453.0)	(204,674.6)	(228,539.2)	(253,089.1)
Financial Result Before Taxes	(3,470.0)	(19,327.0)	(16,990.0)	(24,602.0)	(41,045.0)	(71,255.0)	(45,518.0)	(50,317.2)	(53,952.2)	(58,225.2)	(62,738.6)	(67,941.1)	(73,419.6)
Taxes	870.2	5,025.0	4,407.0	6,396.5	10,671.7	18,526.3	11,834.7	13,082.5	14,027.6	15,138.6	16,312.0	17,664.7	19,089.1
Non-controlling interests	-	4,397.0	3,887.0	647.0	797.0	3,079.9	3,079.9	3,456.3	3,838.7	4,497.4	4,970.5	5,534.2	6,119.2
Financial Result	(2,476.8)	(9,905.0)	(8,656.0)	(17,558.5)	(29,576.3)	(49,715.7)	(30,603.4)	(33,778.5)	(36,085.9)	(38,589.2)	(41,456.0)	(44,742.2)	(48,211.3)
Comprehensive Income attributable to shareholder of parent comp:	282,684.0	277,205.0	188,729.0	250,054.0	(70,297.0)	368,424.0	358,429.8	402,067.7	431,125.1	465,641.8	518,451.0	580,887.0	645,110.7
Tax Breakdown													
Statutory tax rate	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
Effective tax rate (Operating activities)	-3.3%	12.6%	14.9%	15.7%	19.0%	16.4%	16.4%	16.4%	16.4%	16.4%	16.4%	16.4%	16.4%
Operating result before taxes	225,503.0	281,532.0	340,819.0	405,890.0	152,607.0	539,907.0	601,028.7	673,320.1	727,573.5	792,079.1	879,452.2	982,585.1	1,088,779.2
Reported taxes	7,375.0	(40,867.0)	(48,639.0)	(57,440.0)	(21,640.0)	(78,099.0)	(86,927.9)	(97,558.9)	(105,543.0)	(115,049.6)	(128,236.6)	(143,834.7)	(159,864.0)
Taxes on operating activities	6,939.8	(45,436.5)	(52,573.8)	(68,711.8)	(31,288.9)	(95,930.1)	(98,326.8)	(110,153.5)	(119,029.2)	(129,582.2)	(143,876.2)	(160,748.5)	(178,121.6)
Taxes on non-operating activities	(435.0)	(455.5)	(472.2)	4,875.3	(1,022.8)	(695.2)	(435.8)	(487.9)	(541.4)	(606.0)	(672.5)	(750.9)	(831.5)
Tax shield	870.2	5,025.0	4,407.0	6,396.5	10,671.7	18,526.3	11,834.7	13,082.5	14,027.6	15,138.6	16,312.0	17,664.7	19,089.1

Reformulated Consolidated Income Statement (In CHF'000)	2029	2030	2031	2032	2033
	Forecast Period 2				
Operating					
Total Consolidated Revenues	4'712'234.1	5'059'953.2	5'365'678.3	5'563'704.9	5'707'257.8
Cost of Good Sold	(1'197'555.3)	(1'285'923.7)	(1'363'619.9)	(1'413'945.9)	(1'450'428.1)
Gross Profit	3'514'678.9	3'774'029.5	4'002'058.3	4'149'759.0	4'256'829.7
<i>Gross margin</i>	75%	75%	75%	75%	75%
Other Operating Income	9'234.5	9'916.0	10'515.1	10'903.2	11'184.5
Wages And Salary	(1'392'655.0)	(1'495'420.0)	(1'585'774.1)	(1'664'299.0)	(1'686'724.6)
Share-based payments	(29'357.0)	(31'523.3)	(33'427.9)	(34'661.6)	(35'556.0)
Social security cost	(181'201.3)	(194'572.3)	(206'328.4)	(213'943.2)	(219'463.3)
Pension costs and other personnel expense	(123'017.7)	(132'095.3)	(140'076.6)	(145'246.3)	(148'993.9)
Other Distribution and Administrative Expense	(416'515.6)	(447'250.6)	(474'273.7)	(491'777.4)	(504'466.0)
EBITDA	1'381'166.7	1'483'083.9	1'572'692.7	1'630'734.7	1'672'810.4
EBITDA margin	29.3%	29.3%	29.3%	29.3%	29.3%
Depreciation of PPE	(163'039.5)	(175'070.3)	(185'648.2)	(192'499.8)	(197'466.6)
Amortisation	(42'531.1)	(44'947.1)	(46'908.8)	(47'870.6)	(48'328.9)
Impairments	-	-	-	-	-
Operating Result Before Taxes	1'175'596.0	1'263'066.5	1'340'135.7	1'390'364.4	1'427'014.9
EBT margin	24.95%	24.96%	24.98%	24.99%	25.00%
Taxes	(192'324.6)	(206'634.5)	(219'242.9)	(227'460.2)	(233'456.1)
Operating Result	983'271.4	1'056'432.0	1'120'892.8	1'162'904.2	1'193'558.8
Non-operating					
Rental Income	3'451.1	3'705.8	3'929.7	4'074.7	4'179.9
Government Grants	-	-	-	-	-
Insurance Reimbursements	-	-	-	-	-
Legal Cases	-	-	-	-	-
Pension Plan	-	-	-	-	-
Restructuring	-	-	-	-	-
Other	-	-	-	-	-
Restructuring	-	-	-	-	-
Non-Operating Result before Taxes	3'451.1	3'705.8	3'929.7	4'074.7	4'179.9
Taxes	(897.3)	(963.5)	(1'021.7)	(1'059.4)	(1'086.8)
Gain on Consolidation of former associates	-	-	-	-	-
Share of results of associates	478.3	478.3	478.3	478.3	478.3
Other Comprehensive Income (not considering Non controlling Inter)	(237'599.0)	(255'131.6)	(270'546.8)	(280'531.6)	(287'769.8)
Non-Operating Result	(234'566.8)	(251'911.0)	(267'160.4)	(277'038.0)	(284'198.4)
Financing					
Interest Income	9'471.0	10'220.2	10'974.4	11'637.4	12'066.9
Financial Income	223'136.4	239'601.8	254'078.6	263'455.7	270'253.3

Consolidated Balance Sheet

Reformulated Consolidated Balance Sheet (in CHF'000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Historical				Forecast Period 1								
Operating													
Assets													
Property, plant and equipment	119,320.0	174,243.0	230,206.0	325,164.0	313,547.0	357,546.0	423,797.6	474,483.4	526,509.3	589,375.3	653,988.6	730,242.3	808,685.8
Right-of-use assets	-	-	-	250,584.0	235,584.0	221,324.0	207,927.2	232,795.0	258,320.4	289,164.3	320,865.4	358,277.6	396,764.2
Intangible assets	106,306.0	241,370.0	235,157.0	258,213.0	226,027.0	213,536.0	237,862.3	262,097.6	286,235.2	315,343.6	344,379.4	378,450.4	412,474.2
Goodwill	207,721.0	406,404.0	417,286.0	484,628.0	424,258.0	425,350.0	425,350.0	425,350.0	425,350.0	425,350.0	425,350.0	425,350.0	425,350.0
Total Operating Non-Current Asset	433,347.0	822,017.0	882,649.0	1,318,589.0	1,199,416.0	1,217,756.0	1,294,937.1	1,394,726.1	1,496,414.9	1,619,233.2	1,744,583.4	1,892,320.4	2,043,274.2
Inventories	101,957.0	152,146.0	182,053.0	234,553.0	216,570.0	249,227.0	282,081.5	315,818.2	350,446.9	392,290.8	435,297.6	486,052.5	538,264.8
Trade receivables	148,909.0	191,868.0	231,301.0	281,210.0	236,027.0	287,269.0	325,138.5	364,024.7	403,939.1	452,170.0	501,741.5	560,243.5	620,425.5
Other Operating Receivable	32,736.0	50,855.0	64,104.0	92,584.0	57,349.0	92,691.0	103,928.1	116,357.8	129,116.1	144,532.8	160,377.9	179,077.6	198,314.4
Income tax receivables	8,522.0	4,901.0	7,192.0	6,982.0	8,626.0	16,064.0	14,241.1	15,944.3	17,692.6	19,805.1	21,976.3	24,538.7	27,174.7
Operating Cash	36,700.7	44,484.1	54,542.4	63,849.0	57,034.0	80,876.1	91,537.7	102,485.5	113,722.8	127,301.4	141,257.5	157,727.8	174,671.1
Total Operating Current Asset	328,824.7	444,254.1	539,192.4	679,178.0	575,606.0	726,127.1	816,926.8	914,630.5	1,014,917.3	1,136,100.1	1,260,650.8	1,407,640.1	1,558,850.5
Total Operating Asset	762,171.7	1,266,271.1	1,421,841.4	1,997,767.0	1,775,022.0	1,943,883.1	2,111,863.9	2,309,356.5	2,511,332.2	2,755,333.2	3,005,234.2	3,299,960.5	3,602,124.7
Liabilities													
Other long term employees benefits	4,723.0	6,035.0	6,314.0	7,717.0	9,303.0	10,912.0	11,842.1	13,258.4	14,712.2	16,468.8	18,274.3	19,612.7	21,293.7
Rent payable	1,978.0	2,164.0	3,579.0	1,929.0	2,520.0	3,553.0	4,834.8	5,413.1	6,006.6	6,723.8	7,461.0	8,330.9	9,225.8
Other non current liabilities	-	-	-	653.0	2,134.0	458.0	1,081.7	1,081.7	1,081.7	1,081.7	1,081.7	1,081.7	1,081.7
Income tax liabilities	-	-	-	9,594.0	9,654.0	12,612.0	14,507.8	16,242.9	18,023.9	20,176.0	22,387.9	24,998.3	27,683.6
Provisions	24,511.0	40,321.0	23,804.0	10,964.0	15,436.0	23,681.0	23,681.0	23,681.0	23,681.0	23,681.0	23,681.0	23,681.0	23,681.0
Total Operating Non-Current Liability	31,212.0	48,520.0	33,697.0	30,857.0	39,047.0	51,216.0	55,947.4	59,677.1	63,505.4	68,131.3	72,885.8	77,704.6	82,965.8
Trade payables	30,307.0	43,792.0	47,557.0	63,207.0	49,919.0	74,832.0	86,527.6	96,876.2	107,498.4	120,333.9	133,526.1	149,095.0	165,111.0
Other Operating Payables	106,216.0	137,556.0	164,809.0	230,958.0	222,320.0	321,841.0	360,542.0	403,662.4	447,922.9	501,405.7	556,374.8	621,247.0	687,982.0
Income tax liabilities	12,739.0	28,692.0	26,458.0	45,490.0	34,159.0	73,616.0	67,787.2	75,894.5	84,216.1	94,271.7	104,606.7	116,803.6	129,350.8
Provisions	16,785.0	327.0	124.0	7.0	35.0	8,535.0	8,535.0	8,535.0	8,535.0	8,535.0	8,535.0	8,535.0	8,535.0
Total Operating Current Liability	166,047.0	210,367.0	238,948.0	339,662.0	306,433.0	478,824.0	523,391.8	584,968.1	648,172.5	724,546.3	803,042.6	895,680.6	990,978.8
Total Operating Liability	197,259.0	258,887.0	272,645.0	370,519.0	345,480.0	530,040.0	579,339.2	644,645.2	711,677.9	792,677.6	875,928.5	973,385.2	1,073,944.6
Operating Invested Capital	564,912.7	1,007,384.1	1,149,196.4	1,627,248.0	1,429,542.0	1,413,843.1	1,532,524.7	1,664,711.3	1,799,654.3	1,962,655.6	2,129,305.7	2,326,575.4	2,528,180.1
Non operating													
Assets													
Investments in associates	61,284.0	65,939.0	106,102.0	90,976.0	92,662.0	98,183.0	98,183.0	98,183.0	98,183.0	98,183.0	98,183.0	98,183.0	98,183.0
Other receivables	4,013.0	6,270.0	5,814.0	6,977.0	8,290.0	16,430.0	13,967.9	15,638.4	17,353.2	19,425.2	21,554.7	24,068.0	26,653.4
Deferred income tax assets	80,119.0	90,743.0	70,066.0	59,993.0	68,990.0	75,809.0	74,953.3	74,953.3	74,953.3	74,953.3	74,953.3	74,953.3	74,953.3
Total Non-Operating Non-Current Asset	149,416.0	162,952.0	181,982.0	157,946.0	169,942.0	190,422.0	187,104.2	188,774.8	190,489.5	192,561.5	194,691.1	197,204.3	199,789.7
Other Non-Operating Receivable	-	797.0	625.0	4,531.0	1,174.0	646.0	646.0	646.0	646.0	646.0	646.0	646.0	646.0
Total Non-Operating Current Asset	-	797.0	625.0	4,531.0	1,174.0	646.0	646.0	646.0	646.0	646.0	646.0	646.0	646.0
Total Non-Operating Asset	149,416.0	163,749.0	182,607.0	162,477.0	171,116.0	191,068.0	187,750.2	189,420.8	191,135.5	193,207.5	195,337.1	197,850.3	200,435.7
Liabilities													
Contingent Consideration	6,129.0	8,987.0	18,594.0	36,770.0	72,792.0	70,527.0	70,527.0	70,527.0	70,527.0	14,927.0	14,927.0	14,927.0	14,927.0
Government Grants	930.0	1,017.0	799.0	576.0	236.0	141.0	-	-	-	-	-	-	-
Retirement benefit obligations	46,763.0	49,453.0	59,185.0	67,918.0	73,325.0	61,739.0	77,735.0	86,774.4	97,152.6	107,805.1	120,677.2	133,907.1	143,714.3
Deferred income tax liabilities	2,078.0	40,520.0	36,211.0	36,887.0	43,228.0	31,040.0	37,577.2	37,577.2	37,577.2	37,577.2	37,577.2	37,577.2	37,577.2
Total Non-Operating Non-Current Liability	55,900.0	99,977.0	114,789.0	142,151.0	189,581.0	163,447.0	185,839.2	194,876.6	205,256.8	205,256.8	205,256.8	205,256.8	205,256.8
Contingent Consideration	-	289.0	8,753.0	12,417.0	44,365.0	42,064.0	42,064.0	42,064.0	42,064.0	5,464.0	5,464.0	5,464.0	5,464.0
Total Non-Operating Current Liability	-	289.0	8,753.0	12,417.0	44,365.0	42,064.0	42,064.0	42,064.0	42,064.0	5,464.0	5,464.0	5,464.0	5,464.0
Total Non-Operating Liability	55,900.0	100,266.0	123,542.0	154,568.0	233,946.0	205,511.0	227,903.2	236,940.6	247,320.8	210,720.8	210,720.8	210,720.8	210,720.8
Non-Operating Invested Capital	93,516.0	63,483.0	59,065.0	7,909.0	(62,830.0)	(14,443.0)	(40,152.9)	(47,521.9)	(56,185.3)	27,434.2	16,691.7	5,975.0	(1,246.8)
Financing													
Excess Cash	127,323.3	237,331.9	224,131.6	196,362.0	575,167.0	799,546.9	703,195.7	787,297.2	873,622.3	977,934.2	1,085,145.2	1,211,670.9	1,341,830.0
Financial Asset	51,011.0	29,615.0	35,989.0	33,372.0	27,309.0	33,538.0	43,211.1	48,379.1	53,683.7	60,093.6	66,681.7	74,456.7	82,454.9
Straight bond	199,632.0	199,746.0	199,862.0	199,980.0	479,820.0	479,841.0	479,841.0	479,841.0	479,841.0	479,841.0	479,841.0	479,841.0	479,841.0
Financial Non-Current Liability	1,270.0	58,843.0	62,020.0	295,509.0	278,437.0	251,209.0	284,324.8	318,329.8	353,233.8	395,410.5	438,759.4	489,917.8	542,545.4
Interest accrued on straight bond	2,180.0	2,180.0	2,180.0	2,180.0	987.0	987.0	987.0	987.0	987.0	987.0	987.0	987.0	987.0
Total Funds	(24,747.7)	6,177.9	(3,941.4)	(267,935.0)	(156,768.0)	101,047.9	(18,746.0)	36,518.5	93,244.2	161,789.3	232,239.5	315,381.7	400,911.5
Equity													
Total equity attributable to the shareholders of the parent company	633,681.0	1,077,195.0	1,200,924.0	1,363,413.0	1,204,735.0	1,495,400.0	1,468,577.8	1,648,659.9	1,831,665.2	2,146,831.2	2,373,188.9	2,642,884.1	2,922,796.8
Non-controlling interests	-	(150.0)	3,396.0	3,809.0	5,209.0	5,048.0	5,048.0	5,048.0	5,048.0	5,048.0	5,048.0	5,048.0	5,048.0
Total Equity	633,681.0	1,077,045.0	1,204,320.0	1,367,222.0	1,209,944.0	1,500,448.0	1,473,625.8	1,653,707.9	1,836,713.2	2,151,879.2	2,378,236.9	2,647,932.1	2,927,844.8

Reformulated Consolidated Balance Sheet (In CHF'000)	2029	2030	2031	2032	2033
	Forecast Period 2				
Operating					
Assets					
Property, plant and equipment	872'660.8	937'055.1	993'672.4	1'030'345.1	1'056'929.7
Right-of-use assets	428'152.2	459'745.9	487'524.0	505'516.6	518'559.8
Intangible assets	438'063.9	462'947.8	483'153.5	493'059.8	497'780.6
Goodwill	425'350.0	425'350.0	425'350.0	425'350.0	425'350.0
Total Operating Non-Current Asset	2'164'226.9	2'285'098.8	2'389'699.9	2'454'271.5	2'498'620.1
Inventories	580'846.8	623'707.9	661'392.7	685'802.2	703'497.0
Trade receivables	669'507.3	718'910.7	762'347.7	790'483.0	810'878.8
Other Operating Receivable	214'003.0	229'794.4	243'678.7	252'672.0	259'191.3
Income tax receivables	29'324.5	31'488.3	33'390.9	34'623.2	35'516.5
Operating Cash	188'489.4	202'398.1	214'627.1	222'548.2	228'290.3
Total Operating Current Asset	1'682'171.0	1'806'299.5	1'915'437.1	1'986'128.6	2'037'374.0
Total Operating Asset	3'846'397.9	4'091'398.3	4'305'137.0	4'440'400.0	4'535'994.1
Liabilities					
Other long term employees benefits	22'527.6	23'715.7	24'655.5	25'064.1	25'206.7
Rent payable	9'955.6	10'690.3	11'336.2	11'754.6	12'057.9
Other non current liabilities	1'081.7	1'081.7	1'081.7	1'081.7	1'081.7
Income tax liabilities	29'873.7	32'078.1	34'016.3	35'271.7	36'181.8
Provisions	23'681.0	23'681.0	23'681.0	23'681.0	23'681.0
Total Operating Non-Current Liability	87'119.7	91'246.7	94'770.6	96'853.0	98'209.0
Trade payables	178'172.9	191'320.4	202'880.1	210'367.6	215'795.4
Other Operating Payables	742'408.2	797'191.0	845'357.8	876'556.7	899'173.3
Income tax liabilities	139'583.7	149'883.7	158'939.7	164'805.6	169'057.9
Provisions	8'535.0	8'535.0	8'535.0	8'535.0	8'535.0
Total Operating Current Liability	1'068'699.8	1'146'930.1	1'215'712.6	1'260'264.9	1'292'561.6
Total Operating Liability	1'155'819.5	1'238'176.8	1'310'483.2	1'357'117.9	1'390'770.6
Operating Invested Capital	2'690'578.4	2'853'221.5	2'994'653.9	3'083'282.1	3'145'223.5
Non operating					
Assets					
Investments in associates	98'183.0	98'183.0	98'183.0	98'183.0	98'183.0
Other receivables	28'761.9	30'884.3	32'750.3	33'959.0	34'835.2
Deferred income tax assets	74'953.3	74'953.3	74'953.3	74'953.3	74'953.3
Total Non-Operating Non-Current Asset	201'898.3	204'020.6	205'886.7	207'095.4	207'971.6
Other Non-Operating Receivable	646.0	646.0	646.0	646.0	646.0
Total Non-Operating Current Asset	646.0	646.0	646.0	646.0	646.0
Total Non-Operating Asset	202'544.3	204'666.6	206'532.7	207'741.4	208'617.6
Liabilities					
Contingent Consideration	14'927.0	14'927.0	14'927.0	14'927.0	14'927.0
Government Grants	-	-	1.0	2.0	3.0
Retirement benefit obligations	156'031.6	165'073.8	173'779.1	180'665.6	183'660.1
Deferred income tax liabilities	37'577.2	37'577.2	37'577.2	37'577.2	37'577.2
Total Non-Operating Non-Current Liability	208'535.8	217'578.0	226'284.3	233'171.8	236'167.3
Contingent Consideration	5'464.0	5'464.0	5'464.0	5'464.0	5'464.0
Total Non-Operating Current Liability	5'464.0	5'464.0	5'464.0	5'464.0	5'464.0
Total Non-Operating Liability	213'999.8	223'042.0	231'748.3	238'635.8	241'631.3
Non-Operating Invested Capital	(11'455.6)	(18'375.4)	(25'215.7)	(30'894.5)	(33'013.8)
Financing					
Excess Cash	1'447'982.0	1'554'829.6	1'648'773.3	1'709'623.2	1'753'734.3
Financial Asset	88'977.9	95'543.6	101'316.4	105'055.6	107'766.2
Straight bond	479'841.0	479'841.0	479'841.0	479'841.0	479'841.0
Financial Non-Current Liability	585'466.1	628'668.0	666'652.5	691'256.1	709'091.6
Interest accrued on straight bond	987.0	987.0	987.0	987.0	987.0
Total Funds	470'665.8	540'877.2	602'609.2	642'594.7	671'580.9
Equity					
Total equity attributable to the shareholders of the parent company	3'144'740.6	3'370'675.3	3'566'999.4	3'689'934.3	3'778'742.7
Non-controlling interests	5'048.0	5'048.0	5'048.0	5'048.0	5'048.0
Total Equity	3'149'788.6	3'375'723.3	3'572'047.4	3'694'982.3	3'783'790.7

Consolidated Cash Flows Statement

Reformulated Consolidated Free Cash Flow (In CHF'000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
			Historical					Forecast Period 1					
Operating													
EBIT	225,503.0	281,532.0	340,819.0	405,890.0	152,607.0	539,907.0	601,028.7	673,320.1	727,573.5	792,079.1	879,452.2	982,585.1	1,088,779.2
Notional taxes	6,939.8	(45,436.5)	(52,573.8)	(68,711.8)	(31,288.9)	(95,930.1)	(98,326.8)	(110,153.5)	(119,029.2)	(129,582.2)	(143,876.2)	(160,748.5)	(178,121.6)
Noplat	232,442.8	236,095.5	288,245.2	337,178.2	121,318.1	443,976.9	502,701.9	563,166.6	608,544.3	662,496.9	735,576.0	821,836.6	910,657.6
Depreciation&Amortization	32,023.0	40,258.0	52,367.0	93,498.0	99,467.0	103,206.0	102,272.0	114,094.7	126,158.2	140,729.5	155,620.3	173,174.7	191,133.7
Impairments	-	-	-	-	294,401.0	6,637.0	-	-	-	-	-	-	-
Gross Free Cash Flow	264,465.8	276,353.5	340,612.2	430,676.2	515,186.1	553,819.9	604,973.9	677,261.3	734,702.4	803,226.4	891,196.3	995,011.4	1,101,791.3
- Capital Expenditures	(230,245.0)	(102,117.0)	(462,096.0)	(335,065.0)	(127,091.0)	(179,453.1)	(213,883.6)	(227,847.0)	(263,547.8)	(280,970.5)	(320,911.7)	(342,087.5)	(342,087.5)
- Change in NWC	(71,109.4)	(66,357.3)	(39,271.6)	70,343.0	21,869.9	(46,231.9)	(36,127.3)	(37,082.5)	(44,809.0)	(46,054.4)	(54,351.3)	(55,912.1)	(55,912.1)
+ Change in other non-current operating liabilities	17,308.0	(14,823.0)	(2,840.0)	8,190.0	12,169.0	4,731.4	3,729.7	3,828.3	4,625.9	4,754.5	4,818.7	5,261.2	5,261.2
- Change in other non-current operating assets	(198,683.0)	(10,882.0)	(67,342.0)	60,370.0	(1,092.0)	-	-	-	-	-	-	-	-
Operating Free Cash Flow	264,465.8	(206,375.9)	146,432.8	(140,873.4)	319,024.1	459,675.9	384,020.3	430,980.1	473,601.2	499,495.6	568,925.9	624,567.0	709,052.9
Non-operating													
Non-operating Result before Taxes	1,673.0	1,752.0	1,816.0	(18,751.0)	3,934.0	2,674.0	1,676.0	1,876.5	2,082.2	2,330.8	2,586.4	2,887.9	3,198.1
Taxes on non-operating activities	(435.0)	(455.5)	(472.2)	4,875.3	(1,022.8)	(695.2)	(435.8)	(487.9)	(541.4)	(606.0)	(672.5)	(750.9)	(831.5)
Gain on Consolidation of former associates	-	68,867.0	10,725.0	5,967.0	-	-	-	-	-	-	-	-	-
Share of results of associates	(1,603.0)	(9,739.0)	(9,984.0)	(3,036.0)	(1,588.0)	6,059.0	478.3	478.3	478.3	478.3	478.3	478.3	478.3
Other comprehensive income	53,083.0	(9,410.0)	(92,945.0)	(58,621.0)	(163,362.0)	(33,875.0)	(115,387.2)	(129,187.4)	(143,352.4)	(160,469.0)	(178,061.2)	(198,822.8)	(220,180.5)
Non-operating Result	52,718.0	51,014.5	(90,860.2)	(69,565.7)	(162,038.8)	(25,837.2)	(113,668.6)	(127,320.5)	(141,333.3)	(158,265.8)	(175,669.0)	(196,207.4)	(217,335.6)
- Change in non-current non-operating assets	(13,536.0)	(19,030.0)	24,036.0	(11,996.0)	(20,480.0)	3,317.8	(1,670.5)	(1,714.7)	(2,072.0)	(2,129.6)	(2,513.2)	(2,585.4)	(2,585.4)
+ Change in non-current non-operating liabilities	44,077.0	14,812.0	27,362.0	47,430.0	(26,134.0)	22,392.2	9,039.5	10,378.1	(44,947.5)	12,872.1	13,229.9	9,807.2	9,807.2
- Change in current non-operating assets	(797.0)	172.0	(3,906.0)	3,357.0	528.0	-	-	-	-	-	-	-	-
+ Change in current non-operating liabilities	289.0	8,464.0	3,664.0	31,948.0	(2,301.0)	-	-	-	(36,600.0)	-	-	-	-
Non-operating Free Cash Flow	52,718.0	81,047.5	(86,442.2)	(18,409.7)	(91,299.8)	(74,224.2)	(87,958.7)	(119,951.5)	(132,669.9)	(241,885.3)	(164,926.4)	(185,490.8)	(210,113.7)
Unlevered Free Cash Flow	317,183.8	(125,328.4)	59,990.7	(159,283.1)	227,724.3	385,451.6	296,061.6	311,028.5	340,931.4	257,610.3	403,999.5	439,076.3	498,939.1
Tax shield	870.2	5,025.0	4,407.0	6,396.5	10,671.7	18,526.3	11,834.7	13,082.5	14,027.6	15,138.6	16,312.0	17,664.7	19,089.1
Levered Free Cash Flow	318,054.0	(120,303.4)	64,397.7	(152,886.6)	238,396.0	403,977.9	307,896.3	324,111.0	354,958.9	272,748.9	420,311.5	456,740.9	518,028.2
Financing													
Financial Result Before Taxes	(3,347.0)	(19,327.0)	(16,950.0)	(24,602.0)	(41,045.0)	(71,255.0)	(45,518.0)	(50,317.2)	(53,952.2)	(58,225.2)	(62,738.6)	(67,941.1)	(73,419.6)
Income attributable to minority interests	-	4,397.0	3,887.0	647.0	797.0	3,013.0	3,079.9	3,456.3	3,838.7	4,497.4	4,970.5	5,534.2	6,119.2
- Change in excess cash	(110,008.6)	(110,008.6)	13,200.3	27,769.6	(378,805.0)	(224,379.9)	96,351.2	(84,101.5)	(86,325.1)	(104,311.9)	(107,211.0)	(126,525.7)	(130,159.1)
+ Change in Net Financial	79,083.0	(3,081.0)	236,224.0	267,638.0	(33,436.0)	23,442.7	28,837.0	29,599.4	35,766.8	36,760.8	43,383.5	44,629.3	44,629.3
+ Change in transaction with shareholder	166,159.0	(61,454.0)	(87,152.0)	(86,981.0)	(77,920.0)	(385,252.1)	(221,985.5)	(248,119.8)	(150,475.9)	(292,093.2)	(311,191.8)	(365,198.1)	(365,198.1)
Financing Free Cash Flow	(3,347.0)	120,303.4	(64,397.7)	152,886.6	(238,396.0)	(403,977.9)	(307,896.3)	(324,111.0)	(354,958.9)	(272,748.9)	(420,311.5)	(456,740.9)	(518,028.2)

Reformulated Consolidated Free Cash Flow (In CHF'000)	2029	2030	2031	2032	2033
	Forecast Period 2				
Operating					
EBIT	1'175'596.0	1'263'066.5	1'340'135.7	1'390'364.4	1'427'014.9
Notional taxes	(192'324.6)	(206'634.5)	(219'242.9)	(227'460.2)	(233'456.1)
Noplat	983'271.4	1'056'432.0	1'120'892.8	1'162'904.2	1'193'558.8
Depreciation&Amortization	205'570.6	220'017.4	232'557.0	240'370.3	245'795.5
Impairments	-	-	-	-	-
Gross Free Cash Flow	1'188'842.1	1'276'449.4	1'353'449.8	1'403'274.6	1'439'354.3
- Capital Expenditures	(326'523.3)	(340'889.3)	(337'158.1)	(304'941.9)	(290'144.1)
- Change in NWC	(45'599.5)	(45'898.3)	(40'355.1)	(26'139.1)	(18'948.7)
+ Change in other non-current operating liabilities	4'153.9	4'127.1	3'523.9	2'082.4	1'355.9
- Change in other non-current operating assets	-	-	-	-	-
Operating Free Cash Flow	820'873.2	893'788.9	979'460.4	1'074'276.0	1'131'617.4
Non-operating					
Non-operating Result before Taxes	3'451.1	3'705.8	3'929.7	4'074.7	4'179.9
Taxes on non-operating activities	(897.3)	(963.5)	(1'021.7)	(1'059.4)	(1'086.8)
Gain on Consolidation of former associates	-	-	-	-	-
Share of results of associates	478.3	478.3	478.3	478.3	478.3
Other comprehensive income	(237'599.0)	(255'131.6)	(270'546.8)	(280'531.6)	(287'769.8)
Non-operating Result	(234'566.8)	(251'911.0)	(267'160.4)	(277'038.0)	(284'198.4)
- Change in non-current non-operating assets	(2'108.5)	(2'122.4)	(1'866.0)	(1'208.7)	(876.2)
+ Change in non-current non-operating liabilities	12'317.3	9'042.2	8'706.3	6'887.5	2'995.5
- Change in current non-operating assets	-	-	-	-	-
+ Change in current non-operating liabilities	-	-	-	-	-
Non-operating Free Cash Flow	(224'358.0)	(244'991.1)	(260'320.2)	(271'359.1)	(282'079.1)
Unlevered Free Cash Flow	596'515.1	648'797.8	719'140.2	802'916.8	849'538.3
Tax shield	20'305.4	21'479.4	22'538.9	23'275.4	23'794.5
Levered Free Cash Flow	616'820.6	670'277.1	741'679.2	826'192.2	873'332.8
Financing					
Financial Result Before Taxes	(78'097.9)	(82'613.0)	(86'688.2)	(89'520.6)	(91'517.4)
Income attributable to minority interests	6'583.1	7'055.3	7'465.6	7'722.5	7'908.1
- Change in excess cash	(106'152.0)	(106'847.6)	(93'943.6)	(60'849.9)	(44'111.1)
+ Change in Net Financial	36'397.7	36'636.2	32'211.7	20'864.4	15'125.0
+ Change in transaction with shareholder	(475'551.5)	(524'508.0)	(600'724.6)	(704'408.6)	(760'737.4)
Financing Free Cash Flow	(616'820.6)	(670'277.1)	(741'679.2)	(826'192.2)	(873'332.8)

STRAUMANN GROUP

HEALTHCARE & MEDICAL DEVICES

STUDENT: MATTEO AMARILLI

COMPANY REPORT

20 MAY 2022

45071@novasbe.pt

More Smiles, More Implants

Straumann's bright outlook towards 2030 goals

- Our recommendation is to **BUY** Straumann Group considering a **target price of CHF154.86** as of 31.12.2022 reflected in an upside potential of 40.4% (thereof, CHF0.79 expected dividend) to the current share price of CHF110.85.
- Key catalysts like **aging population**, increasing **affordability**, increasing **demand for cosmetic dentistry**, and high expected **CAGR** in the implant & clear aligner market (10% and 25%, respectively) set a solid foundation for further sustainable growth.
- We expect Straumann Group will be able to keep its **leadership in the Premium market (>40%)**, to increase its presence in the **Value implant market**, and to be a strong **clear aligner** player.
- High Liquidity (CHF880m) and strong Free Cash Flows** provide sufficient funding for the Group's global strategy and offers a plenty of additional firepower, with **ND/EBITDA AT 0.0x**.
- Potential downside as **geopolitical environment** and the **inflation** landscape in the short term could postpone future **profitability**. However, with a **-43% YTD**, a slowdown is now much better anticipated.

Company description

Straumann Group is a global leader in tooth replacement and orthodontic solutions. Headquartered in Basel, Switzerland, the Company employs more than 9000 people worldwide. Straumann Group manufactures its products across a global network of 19 sites, and operates in more than 100 countries, distributing products that stand for excellence to a broad network of subsidiaries and partners.

Recommendation: BUY

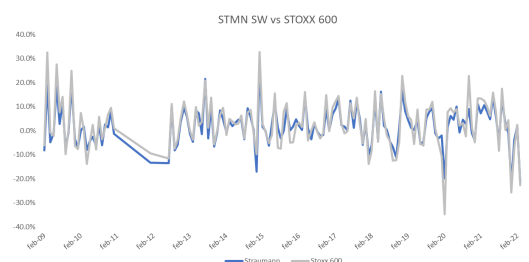
Price Target FY22: 154.86 CHF

Price (as of 20-May-22) 110.85 CHF

Bloomberg: STMN SW

52-week range (CHF)	103.75-210.80
Market Cap (CHF bn)	18.975
Outstanding Shares (m)	159.16

Source: Yahoo Finance



Source: Bloomberg

(Values in CHF millions)	2021	2022E	2023F
Revenues	2,022	2,288	2,562
EBITDA	650	703	787
EBIT	540	601	673
Operating Result	444	503	563
CAPEX	127	179	214
FCF	460	384	431

Source: Annual Report 2021, Analyst Estimation

THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY MATTEO AMARILLI, A MASTER IN FINANCE STUDENT OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

Table of Contents

COMPANY OVERVIEW	3
COMPANY DESCRIPTION	3
STRAUMANN GROUP SHARES	5
INDUSTRY OVERVIEW	6
MACROECONOMIC ANALYSIS	6
MARKET TRENDS	8
▪ <i>Customer consolidation & health consumer</i>	8
▪ <i>Digital transformation</i>	9
▪ <i>Aging Population</i>	10
MARKET ANALYSIS – DENTAL IMPLANTS & CLEAR ALIGNERS	11
▪ <i>North America</i>	12
▪ <i>EMEA</i>	13
▪ <i>Asia Pacific</i>	14
▪ <i>Latin America</i>	15
COMPETITIVE LANDSCAPE	15
STRAUMANN'S PAST PERFORMANCE	17
KEY RISKS	18
VALUE DRIVERS AND FORECASTS	20
IMPLANT REVENUES	21
▪ <i>Global Market</i>	21
▪ <i>Straumann Premium Implant</i>	21
▪ <i>Straumann Value Implant</i>	22
CLEAR ALIGNER REVENUES	22
▪ <i>Global Market</i>	22
▪ <i>Straumann Clear Implant</i>	22
OPERATING PERFORMANCE AND MARGIN DEVELOPMENT	23
CAPITAL EXPENDITURES	25
WORKING CAPITAL MANAGEMENT	26
CAPITAL STRUCTURE AND DIVIDEND STRATEGY	27
VALUATION	28
WEIGHTED AVERAGE COST OF CAPITAL (WACC)	29
▪ <i>Cost of equity</i>	29
▪ <i>Cost of debt</i>	29
SENSITIVITY ANALYSIS	30
RELATIVE VALUATION – TRADING COMPARABLES	31
RECOMMENDATION	32

Company Overview

Company Description



Straumann Group is a global leader in tooth replacement and orthodontic solutions. Headquartered in Basel, Switzerland, the company employs more than 9000 people worldwide. Straumann Group manufactures its products across a global network of 19 sites, and operates in more than 100 countries, distributing products that stand for excellence to a broad network of subsidiaries and partners.

Straumann dates all the way back to the early 1950s, but the company's concentration on dentistry began only 30 years ago. The Group has experienced rapid expansion in recent years, outpacing both competitors and the market. If Straumann Group was originally solely focused on implantology, it has greatly expanded its reach to include implantology, CAD/CAM prosthetics, orthodontics, and digital equipment. As of FY21, implant & restorative (abutments, the connecting part between the implant fixture and the prosthesis, crowns, inlays, and bridges) solutions continue to be the largest revenue stream (c.79%), followed by *Other* revenues, which include clear aligners (13%), biomaterials (3%), custom prosthetics (2%), and computer-aided design (CAD) and computer-aided manufacturing (CAM) equipment (3%).

Straumann's operations are segmented into four key geographies: North America (30%), EMEA (accounting for c.44% of total sales FY21, with Germany being the most important market), Asia Pacific (19%), and Latin America (7%). Straumann Group's revenues exceeded CHF2 billion in 2021 when the four regions are combined, owing mostly to a growing customer base and regional expansion.

One of the primary reasons for Straumann's success is its market-leading position in the *Premium* implant market, in addition to various initiatives aimed at identifying market trends among customers, health customers, product technologies, and the socio-political landscape. To address the demand of dentists and patients at a range of price points, Straumann Group opted to extend its implant leadership position by entering the *Value* implant market in 2015, which now represents the largest proportion of annual implant sales globally (c. 24 million out of 32 million of total implants sold as of FY21).

Thus, the market can be classified as *Premium* or *Value*, with Straumann Group taking a holistic approach, providing training, support, and a broad range of services to dentists and practitioners, clinics, and laboratories. *Straumann*

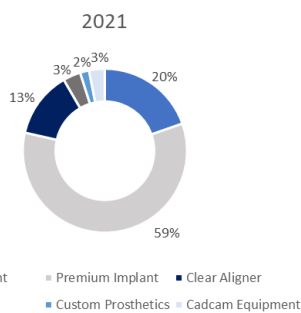


Figure 1: Straumann Revenue Split by Product 2021

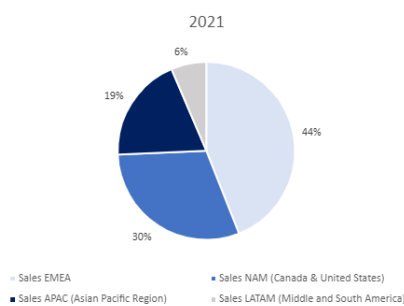


Figure 2: Straumann Revenue Split by Geography 2021

V
I
M
A
L
P
R
K
E
A
N
T



Figure 3: Main Value Implant Brands

represents the leading *Premium* brand in implant and digital dentistry under the Straumann Group umbrella. Additionally, Straumann Group operates in the *Value* implant category through a variety of challenger brands, including *Neodent*, *Medentika*, *Anthogyr*, and *Nuvo*, as well as locally through *T-Plus* and *Warantec*.

Straumann Group is currently the global market leader in implantology with c.29% of the total implant market size, up from 27% in FY20 and 18% in 2012. The implant market is estimated to be worth approximately CHF5.2 billion, with a 50:50 split between *Premium* and *Value* implant. This is due to the company's leadership in the *Premium* implant industry (c.46%) and its growing global presence in the *Value* implant market (c.15%).

C
A
M
L
I
R
A
G
K
E
R
E
T



Figure 4: ClearAligner Brands

Straumann Group entered the orthodontics business in 2017 through the acquisition of *ClearCorrect* (US company). Since then, significant investments (more than CHF0.5bn) have been made in the belief that clear aligners would become a key revenue generator for the Group in the future. Initially limited to the United States, the Group's orthodontic footprint has grown from 13 to around 45 countries by 2021. Within the orthodontics industry, more specifically clear aligner solutions, Straumann Group develops high-quality, easy-to-use products through *ClearCorrect* globally and *SmileTec*, *DrSmile* and *Smilink* locally. The Group established a direct-to-consumer presence by acquiring *DrSmile* in 2020, a Germany-based direct-to-consumer (DTC) company, and *Smilink* in 2021, one of Brazil's fastest-growing producers of orthodontic treatments. As of today, the Group controls around 5% of the CHF5.3 billion clear aligner industry.

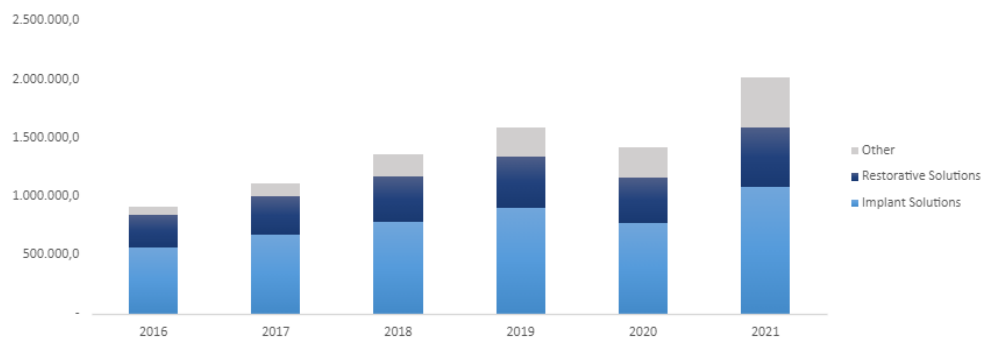


Figure 5: Revenues Evolution by Category since 2016

Therefore, by entering the *Value* implant and orthodontics businesses, Straumann Group has been able to increase its revenues over time and its presence globally.

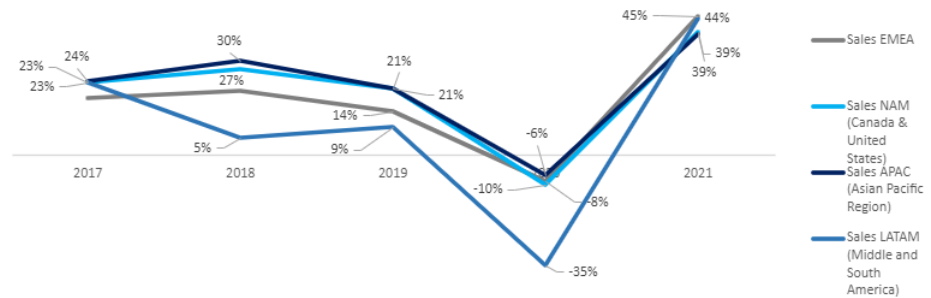


Figure 6: Revenues Evolution by Geography since 2016

In the end, by looking at the market, the Group appears to be the least indebted company compared to its peers (c.3% vs average comps 10%). Additionally, although the pandemic and multiple lockdowns led to the closure of dental practices and a drop in the implantology industry, Straumann Group strongly recovered during 2021 (c.40% up in revenues), in line with the medical devices industry performance. Looking forward, the implantology and clear aligner markets are expected to grow, respectively, at a CAGR of c.10% and c.25% in the next coming years¹.

Straumann Group Shares

Straumann Group has been listed on the Swiss SIX stock exchange since 1998. The IPO took place in Basel at a price of CHF19.50. The Group is part of the Swiss Leader Index (SLI), which includes the largest 30 stocks in the Swiss equity market, and it was the highest performer in 2021 (+88.7%), indicating investors' appreciation for past accomplishments and future growth prospects.

Straumann's market capitalization, as of 05/22A, amounts to CHF18.95bn compared to CHF 30.8bn FY21 and to c.CHF18bn FY19. The 2021 performance was driven also by the successful launch of COVID-19 vaccines and strong economic growth across major economies. However, STMN SW is trading at a discount of c. 43% YTD mainly due the currently uncertain geopolitical landscape and the correlated fear of stagflation. Indeed, in the last months the stock price has seen frequent ups and downs strongly correlated with the 10y government bond yield (priced in a range of -0.2% and 1% from January 2022). By comparing STMN SW's historical performance to that of the Swiss Exchange over the last decade, it is possible to observe a marked difference in the overall performance (STMN SW: approximately +1000% vs SIX: approximately +100%), mostly due to

STMN SW is part of the SLI, which includes the largest 30 stocks in the Swiss Exchange

Straumann's current market cap is CHF18.95bn

¹ Source: GrandViewResearch Market Report – Global Implantology & Clear Aligner markets

In April 2022, the Group announced a 10:1 stock split in order to attract more investors

a surge in STMN SW shares beginning in 2020. Despite the pandemic, the Group has consistently paid approximately 27-36% in dividends over the last few years, and it will be subject to a dividend payment of CHF0.68 per share in FY21, approved by shareholders at the AGM in April 2022. Additionally, the Group expects to maintain a consistent dividend that would steadily increase over time. Moreover, on the 20/04/2022 the Group announced a 10:1 stock split with immediate effect without disclosing any further comments. In our opinion, the main reason is to attract a greater number of investors that could have been discouraged by the high stock price.

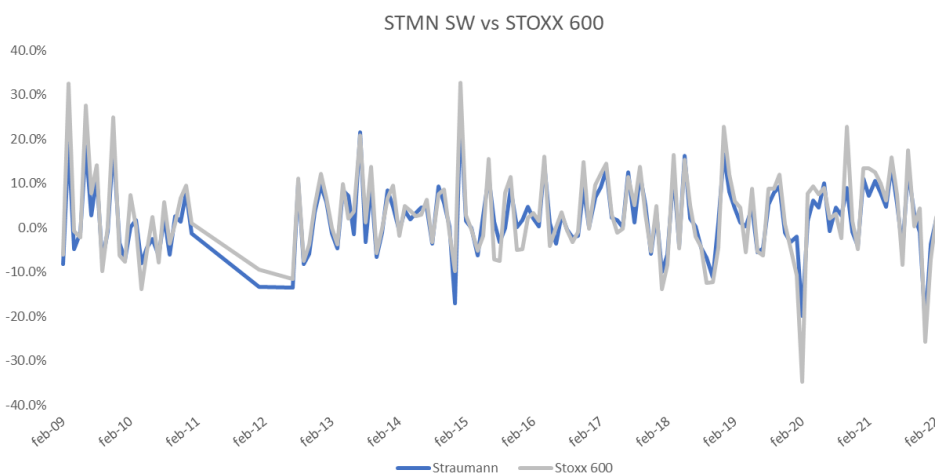


Figure 7: Straumann Group performance versus STOXX 600

The founding family retains a large position in the company (17%) through Thomas Straumann, the founder's grandson and vice chairman of the board, while Blackrock, an international investment management firm, holds approximately 7%. Institutional, private, and unknown investors own the remainder about 76%.

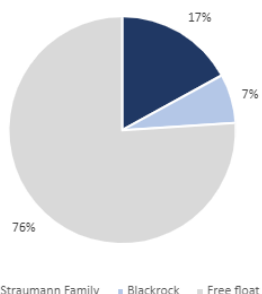


Figure 8: Straumann's Shareholder Structure

Industry Overview

Macroeconomic Analysis

In early 2020, the COVID-19 pandemic struck Europe, prompting the announcement of repeated lockdowns, the opening, closing, and re-opening of society multiple times, the advent of various viral variations, and the shifting to remote working. Finally, vaccines came; most patients have been vaccinated and boosted against COVID-19. To mitigate the negative impact of lockdown measures on the economy over the previous two years, governments and central banks announced fiscal and monetary stimulus policies aimed at flooding the markets with liquidity (the ECB injected more than €1.8bn), cutting the cost of

The Ukrainian-Russian War has led to an economic downturn

capital, and expanding lending. As a result, the ECB, the FED, and several other central banks around the world agreed to maintain interest rates at historically low levels.

At a time when the world economy was attempting to recover from the pandemic, inflation returned angrily and strongly. Additionally, in March 2022, a shock occurred in eastern Europe, notably the Ukrainian-Russian War. Despite being outside the subject of this research, the catastrophic repercussions witnessed there compelled major world powers to implement a series of actions targeted at reducing Russia's dominance. However, because of spillover effects and Europe's reliance on Russian oil and gas, commodity prices have continued to rise, and inflation has increased again. In addition to this, a series of lockdowns reimposed in China have increased the volatility in the markets.

We are currently seeing how the war's aftermath will affect the geopolitical landscape; negotiations are still ongoing and appear to be lasting longer than expected; market volatility is increasing (VIX is now at 19-year highs); and there is growing fear of stagflation, a fatal combination of rising inflation and slowing economic growth. To bolster this notion, during the final week of March 2022, the US yield curve 10y-2y momentarily inverted, which typically signals the start of a recession with a lag of 10 to 18 months. However, prior recessions indicate that months of lag are typically characterized by strong market performance. Additionally, central banks have begun to raise interest rates to contain inflation while not interfering with the economy's growth, which is now anticipated to be about 2.5% p.a.

Year	Real GDP Growth	Inflation Rate
2020	-6.40%	1.10%
2021	5.30%	3.50%
2022	2.80%	7.90%
2023	2.30%	4.60%
2024	1.70%	3.00%
2025	1.60%	2.50%
2026	1.40%	2.20%

Figure 9: IMF Predictions - Euro Area

In our perspective, an imminent recession seems remote, owing to the historically low unemployment rate, continued strong consumer spending demand, and stable corporate profitability expectations. In the long run, however, analysts appear to be more fearful of recession, with the IMF forecasting that the euro area's real GDP will fall to 1.7% in 2024. Finally, we expect inflation to exceed 7% in FY22, before settling at 2.2% from 2026. However, those projections are extremely dependent on the war's future developments and hence carry significant risks.

From a geopolitical point of view, we personally do not believe the current framework will impact Straumann Group. Indeed, despite the entry into the Russian market in 21Q4, the CEO explained during the 22Q1 release conference that there are no stocking issues in the sovietic market. On the other hand, the ongoing pressure on prices and the probable reduction in consumer spending could somehow reduce the overall revenues of the Group. Therefore, as we will explain later, we have adjusted to different scenarios our people affordability rate

(10%) - which represents the capability of people in terms of disposable income to afford the purchase of an implant/orthodontics product - trying to understand the impacts on the overall performance. If the affordability decreases, the direct effect would be a reduction in the demand from clinicians and dentists. Finally, as already mentioned above, Straumann Group is highly dependent on the fluctuation of the yield on the Swiss 10-year government bond. For instance, when the yield reached 1% on May 9th 2022, the Group stock price fell more than 10% during the day, followed by the whole Swiss SIX index. According to the Swiss Central Bank, they consider the local inflation temporary (c.2.5%) and therefore no intentioned to hike interest rates.

The Swiss Central Bank considers the inflation temporary and does not expect to hike interest rates

Market Trends

Numerous market trends will influence the direction of the implants and orthodontics sectors in the future. Overall, the penetration rate will be accelerated by an aging population, an expanding middle class, improved access to dental care (particularly in emerging nations), greater public awareness, and improved professional education.

These trends can be classified into three broad categories: consumer, product technology, and social political environment.

- **Customer consolidation & health consumer**

Between 2015 and 2030, the middle class in high-growth markets will rise by 1.5bn individuals, reaching 3.5bn². This demographic transition is resulting in a significant increase in the number of new customers with enhanced access to dental products and services. However, the current state of the art implies a lack of market penetration. For example, China has less than 10 dentists per 100k population, compared to 60 in the United States and 85 in Germany. A significant transition will be marked by the expansion of dental service organizations (DSOs) with the goal of integrating and standardizing the market, particularly in the United States, Europe, and China. Additionally, independent practitioners are banding together to establish shared capabilities to address the DSO trend; for instance, in the United States, DSOs are concentrated in underserved markets such as the Midwest and rural areas, where access to both general and complex dental treatment is very limited. According to Straumann Group, DSO placed 7% of implant sales in 2015, grew to 15% in 2021, and is predicted to reach 30% by 2025. Taking all of this into consideration, Straumann's mission is to become the DSOs' preferred business by partner.

DSO placed 7% of Straumann Implants in 2015, grew to 15% in 2021, and expected to reach 30% by 2025

² Source: Brookings Institution's Global economy and development - working paper

The Group acquired DrSmile and Smilink in order to expand its D2C presence

Additionally, people have become increasingly fascinated with and knowledgeable about oral care. White and flawless teeth have become a new symbol of social status, and the pandemic has reinforced this tendency by requiring online communication (*zoom effect*). This will advance both the direct-to-consumer and business-to-business-to-consumer business models. In the former case, the provider is responsible for all stages and components of the patient experience, including treatment packages, whereas in the latter case, the provider obtains the patient and connects them to physicians. To counter this trend, Straumann Group began expanding its direct-to-consumer presence with the acquisitions of *DrSmile* and *Smilink*, as well as a controlling share in *Nihon Implant*, Japan's top implant treatment concierge. Particularly, Straumann agreed to buy 75% stake in DrSmile business in 2020 for CHF110m (CHF35m in cash, and CHF75m as contingent consideration based on the achievement of sales targets by 2023). Overall, DrSmile, based in Berlin, operates in 10 countries and it is the leading provider of D2C clear aligner solutions in Europe. From the acquisition, DrSmile business contributed in generating more than CHF40m in revenues. Smilink, on the other hand, was acquired for just CHF4m in 2021 and its business is similar to DrSmile but representing the Brazil market. Despite the revenue contribution is still undisclosed, we believe it will be an important contributor in the future because of the importance of the Brazil market, the LATAM largest market of the Group.

- **Digital transformation**

Nowadays, digital disruption and transformation represents a major global trend, which has been further accelerated by COVID-19. Digital technologies are revolutionizing dentistry across the board, from patient communication and office administration to diagnostics and treatment.

Increased consumer awareness on cosmetic dentistry will be a growth driver in the future

Increased consumer awareness of the critical nature of oral health maintenance and a growing consumer focus on cosmetic dentistry continue to be significant growth drivers for the global dental business. As indicated by the rising usage of clear aligners, orthodontic operations are becoming increasingly aesthetically driven. It is easy to foresee that aesthetic-conscious patients seeking an increasing number of tooth replacement and teeth straightening operations will continue to drive demand for dental implants and clear aligners, with technological developments facilitating the access to more sophisticated procedures. Indeed, with dentists and other professionals seeking higher efficiency and improved workflows, and with these technologies being adopted not only in the United States and Europe, but also in emerging economies, digital solutions span the whole diagnostic and treatment spectrum. Thus, technological

developments will enable the treatment of more complex patient requirements at a lesser cost. Additionally, another trend in implant dentistry is instantaneous solution - implant implanted directly in tooth extraction socket or prosthesis mounted immediately after implant placement - which results in a shorter time to teeth and fewer dentist visits. As a result, technology will play a critical role in achieving this transformation in the future.

In order to incorporate the disruptive effect that products innovation could bring in the future in our valuation, as well as the lower costs connected to that, we performed a scenario analysis based on which results are counter-intuitive. Indeed, if products will be more accessible, people affordability will increase (e.g., from 10% to 11%). As a result, the focus will be even more on *Value* implant, considering for instance that more affordability in emerging countries will lead to more people' access to cheaper implants, namely *Value* category - Straumann considers the % of *Premium* (25%) and of *Value* (75%) placed out of total implants will be constant in the future. In terms of number of implants and patients in the market, both indicators would increase but this could lead to a decrease in the consolidated implants revenues of the Group, if Straumann would not adjust its guidance and would keep its focus on *Premium* implant, However, we have reasons to believe the Group would be able to adjust its outlook and be ready to 'catch the train'.

Similarly, on the clear aligner front, there will likely be significant disruption in terms of material and 3D printing. Straumann is a firm believer in being a leader and in the great potential of innovation to allow those investing in research and development to stay ahead of the curve.

Straumann Group's innovative products pipeline, both in dental implants and in the clear aligner industries, will include the launch in 22Q2 of *Anthogyr X3* and *Neodent ZI* implants.

▪ Aging Population

Worldwide, c.1 billion people are aged 60 or over in 2017, accounting for approximately 13% of the population³. By 2050, this figure is predicted to rise to about 2 billion people, accounting for at least 22% of the world's population. This will be fuelled in large part by the aging of the population in low- and middle-income countries.

The rising population of persons over the age of 60 and the increasing frequency of dental illnesses are likely to increase the number of dental treatments

Affordability	11.0%
% Premium Implant	20.0%
% Value Implant	80.0%
DELTA	-3%

Figure 10: Scenario - Technological Advancements & Implants

³ Source: United Nations Report 2020

performed, hence driving the market during the forecast period. The geriatric population is critical to the market's growth. Therefore, aging is the primary risk factor for dental problems, which is predicted to be a significant contributing factor. Moreover, Dental implant surgeries have been proved to be safe for individuals over the age of 65.⁴

Therefore, the aging population is expected to increase demand for a variety of preventative, restorative, and surgical procedures, owing to greater self-care spending and improved awareness about the variety of oral care alternatives available. From a demographic and sociological perspective, it is worth emphasizing that affordability will improve in the future as the middle class expands in developing countries, resulting in a greater per capita income for people. By looking more in depth at this scenario, *Premium* implants will be more relevant than *Value* ones (old people needs sophisticated treatments that normally only *Premium* implants can provide) and the results would imply an increase in implant revenues.

Affordability	11.0%
% Premium Implant	30.0%
% Value Implant	70.0%
DELTA	23%

Figure 11: Scenario – Aging Population & Implants

Dental Implant market has an addressable market of around 2bn teeth per year. In 2021, only 32m of implants were placed globally.

In its latest CMD, The Group expects the Value market to grow at 7% p.a., while the Premium market at 4%p.a.

Market Analysis – Dental Implants & Clear Aligners

Dental implants are the gold standard treatment to successfully replace missing or damaged teeth. The growing demand for tooth replacement has boosted the market for dental implants, which also serve as a foundation for bridges, crowns, and dentures. Straumann indicates that the dental implant market is worth CHF5.2 billion in 2021, with *Premium* implants accounting for CHF2.6 billion and *Value* implants (the more accessible category) accounting for CHF2.6 billion. Additionally, the implantology business has an addressable market of around 2 billion teeth each year, out of a total of more than 30 billion missing teeth globally, and in 2021, approximately 32 million implants were manufactured (24m *Value* and 8m *Premium*).

According to Straumann latest CMD, the *Value* market, which includes over 400 companies, is growing faster (about 7% p.a.) than the more consolidated *Premium* market (approximately 4% p.a.). As already explained above, the Group is market leader in *Premium* implantology with its brand *Straumann*, while many other brands (as *Neodent* and *Medentika*) are penetrating the *Value* segment of the market, especially in emerging economies as the price for *Value* implants is lower and provides more accessibility.

⁴ Source: National Center for Biotechnology Information – Report 2021

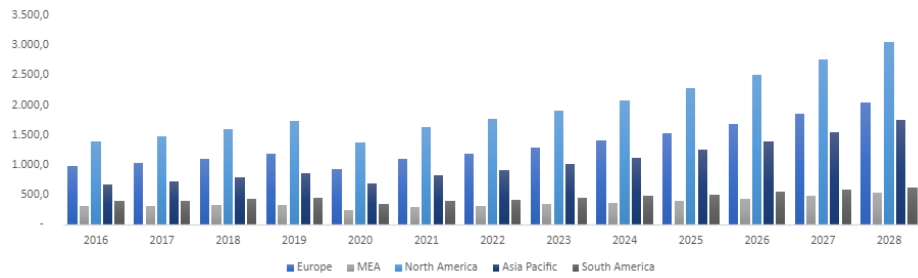


Figure 12: Dental implant market forecast 2016-2028 (in \$m)

By looking at the global market for clear aligners, the key trend is represented by direct-to-consumer marketing and online service providers offering treatment packages. While around 500m people worldwide have misaligned teeth, only roughly 21m began orthodontic treatment in 2021. Out of 21m, only 4m of people began treatment with transparent aligners, which increases the growth potential for clear aligners in the future.

The clear aligner market is currently worth roughly CHF5bn and is predicted to increase at a rate of more than 20% per year. Even though the majority of orthodontic cases are initiated by adolescents, the adult segment accounts for the bulk of clear aligner cases initiated, owing to their unobtrusive nature and comfort. The market is categorized by end-use into Hospitals, Independent Practices, Group Practices, and Others, which includes DSOs and children's hospitals.

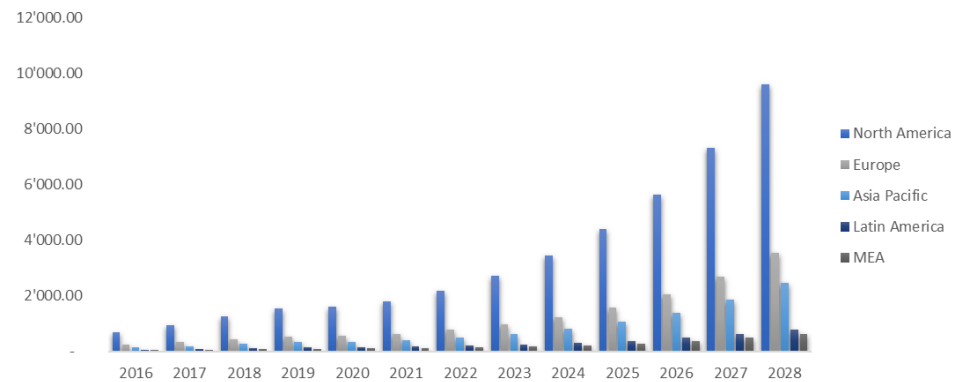


Figure 13: Clear Aligner market forecast 2016-2028 (in \$m)

▪ North America

North America accounted for 38.2% of the total implant market in 2021, as a result of technological developments and increased consumer awareness of dental implants' efficacy and expanding therapeutic uses. Additionally, the increase in the number of clinics and practitioners, as well as the recent trend of older persons increasing their normal dental treatment frequency, could have boosted growth. Undoubtedly, the largest regional marketplaces are the United States and Canada. The North America market was worth approximately \$1.5

In 2021, only 21m people began orthodontic treatment. Out of this number, only 4m did so through clear aligner.

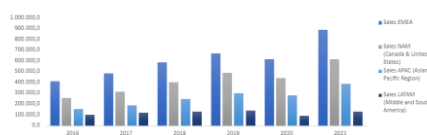


Figure 14: Straumann's revenue performance by Geography

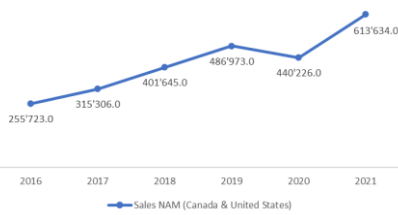


Figure 15: Sales evolution in North America

billion in 2016, and it is predicted to increase at a 9.4% CAGR, exceeding the \$3 billion threshold by 2028.

Moving to the clear aligner industry, the region had a market share of c.55% in 2021. This is due to the growing developments in oral health, the presence of significant businesses in the region (including *Align Technology*), and a high level of consumer knowledge regarding the efficacy and ease of use of clear aligners. According to Straumann, two out of every three adults in the United States have noticeable tooth irregularities, and the American Academy of Cosmetic Dentistry reports that the majority of adults (99.7 %) believe a smile is a critical social asset and that a perfect smile can improve their appearance. The clear aligner market was valued at c. \$2bn in 2021 and it is expected to reach c. \$10bn by 2028, with an implied CAGR of c. 27%.

Straumann Group continues to be the market leader in implantology in the United States (the group's largest market), especially with its *Premium Straumann* brand, but the Group is also expanding its *Value* implant presence through *Neodent* while also targeting DSOs with a partnership established in 2021 with *WesternDental* and *Aspen*, two US dental practice corporations.

▪ EMEA

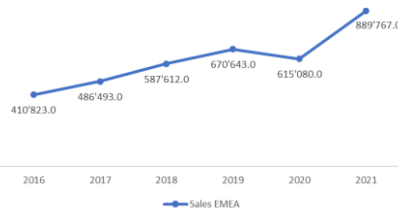


Figure 16: Sales evolution in EMEA

Europe is the second largest contributor, accounting for more than 26% of the total implant market in 2021. The aging population in Western Europe is predicted to promote market growth in this region (e.g, working age population between 15 and 64 will decrease from 333m in 2016 to 292m people in 2070)⁵. Countries such as Germany, France, and Italy have some of the most modern healthcare systems in the world, delivering a broad spectrum of medical services. The implant market in Europe is predicted to exceed \$1bn in 2020 and reach more than \$2bn by 2028 (implied CAGR of c. 9%). Middle Eastern countries have an advanced healthcare infrastructure and a high level of service accessibility. A significant trend in this region is the expansion of medical tourism, which is expected to drive regional market growth. However, like in South Africa, a lack of infrastructure may hamper the region's overall progress. The MEA implant market is estimated to reach approximately \$250m in 2021 and increase at a CAGR of c.8.8% over the next seven years.

Europe is the second largest contributor also for the clear aligner market, accounting for over 20% of the market in 2021. Germany, the United Kingdom, Spain, France, Italy, and Russia are significant countries in the European region.

⁵ Source: European Commission Report – Europe’s population is getting older

The increasing relevance of aesthetics and post-treatment self-confidence are the primary factors driving the market's rise. European countries are developed and offer cutting-edge technology for cosmetic surgery and patient care. By 2028, the European market is estimated to exceed \$3bn. However, in the MEA area, due to a lack of experienced specialists, lack of awareness, restricted access to healthcare, reduced price, and a reluctance to adopt cosmetic procedures, market expansion may be hampered.

EMEA contributed most to the Group's overall performance, owing to the launching of the TLX implant and the introduction of *Neodent* and *Medentika* (*Value* challenger brands) in Europe. Germany, France, and Spain led the way in terms of clear aligner performance, as did Russia, which has numerous launches scheduled for 2022 but are likely to be put on hold due to the War.

- Asia Pacific

In Asia Pacific, travel prospects remained constrained due to ongoing pandemic-related restrictions (as the current lockdowns in China). This has resulted in more discretionary income, and in health spending remaining a priority. However, Asia Pacific is predicted to grow at the greatest rate, with a CAGR of 11.1% over the forecast period, and accounted for around 19.3% of the market in 2020. Asian countries are densely populated, with an increasing share of the population aged 65 years and older. Additionally, these countries are well-known for their low-cost medical care, making them the favourite destination for medical tourists. Particularly, China has a strong R&D base, and Japan has the biggest elderly population per capita. The market is estimated to be around \$700m in 2020 and is expected to reach nearly \$2bn by 2028.

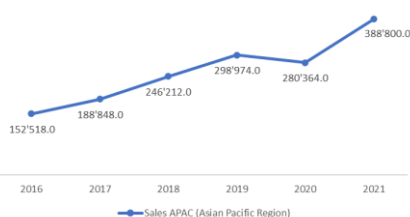


Figure 17: Sales evolution in Asia Pacific

By looking at the clear aligner market, Asia Pacific is predicted to grow at the fastest rate (c.28% YoY) throughout the projection period 2022-2028, as results of the rising prevalence of malocclusions and the increased acceptance of clear aligner therapy. In 2021, the orthodontics companies expanded dramatically, gaining traction in Australia, Japan, and Singapore. By 2028, the Asia Pacific market is estimated to exceed \$2.5bn in value.

Straumann Group's presence in the Asian market was supported by the launch of *Value* implant solutions (BLX Implants) and the consolidation of *Neodent* and *Anthogyr* in India and South Korea. Regarding the orthodontics business, the Group announced c.CHF170m of investment for a manufacturing and innovation center in Shanghai. Additionally, the Group expanded its clear aligner presence with the acquisition of *Nihon Implant*, Japan's top implant treatment concierge.

▪ Latin America

Latin America is also experiencing an increase in the geriatric population, owing to the region's declining death rate. Additionally, the market is being driven by the expanding presence of foreign companies and clinical developments. Latin America is the world leader in terms of *Value* implants, particularly in Brazil, where implant volumes are second only to the United States. However, because of Brazil's large population, penetration per capita is poor. *Premium* implants, according to Straumann, are expanding at an even quicker rate but from a considerably lower base. Latin America's implant market is predicted to increase at c.6.7% CAGR, reaching approximately \$700m by 2028, up from approximately \$400m in 2021.

The clear aligner market is predicted to grow at a profitable rate due to the lower cost of dental cosmetic procedures in comparison to North America and Europe. Orthodontics is mostly a direct-to-professionals business approach in this region. The clear aligners market was worth over \$150m in 2020 and is predicted to increase at a 24.6% CAGR during the forecast period, reaching a value of more than \$800m in 2028.

Despite being the smallest contributor to the Group revenue, *Neodent* is considered the strongest brand in the region, and the acquisition of *Smilink* in 2021 will accelerate the D2C orthodontics presence in the region.

Competitive Landscape

Align Technology is a medical device company with two operating segments - clear aligner and scanners & services. It deals with designing, manufacturing, and marketing of *iTero* intraoral scanners & services and *Invisalign* clear aligners. The company's key customers include, among others, orthodontists, general practitioner dentists, and restorative dentists - prosthodontists and oral surgeons. The primary business is the production of Clear Aligner, which accounts for c.90% of total sales, and Align Technology's current market share in this business is c.70%, thereby granting it the title of market leader. Align Technology generated \$4bn revenues FY21 (+60% vs FY20), and more than \$2bn out of \$4bn came from North America, followed by Europe (25%) and Asia-Pacific (10%). Recently, the Group established a new production plant in Poland, with the aim of entering Eastern Europe market, and more generally Europe. Due to its international exposure, the recent entry in Europe and its market leader position for clear aligner, we consider ALGN as the greatest threat to Straumann Group. However, it seems that the customer base of Straumann's clear aligner

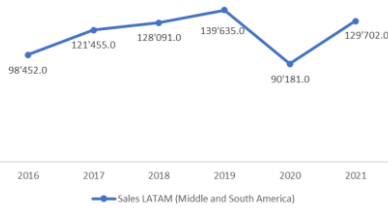


Figure 18: Sales evolution in Latin America



franchise is mostly adults, while Align Technology's target are teens and young people.



Envista Holding is an independent company and subsidiary of Danaher Corporation. The company was launched in the second half of 2019 and has differentiated portfolios, including orthodontics, dental implants, & digital imaging technologies. The company's service and administrative facilities are located in over 60 countries and it could be defined as the Implant co-leader of Straumann Group for quality and global scale. Particularly, the Group generated \$2.5bn in revenues in 2021, mainly from North America (50%), but also from China (10%). Looking at its past performance, it seems a stable and mature company (revenues stable at over \$2bn per year), offering a wider range of products compared to Straumann Group. In February 2021, NVST announced to extend its contract with Heartland Dental - the largest dental support organization in the U.S. - for 4 years, and also for this reason we believe NVST will be a strong competitor of Straumann in US and China, as they offer same products to the same customer base.



Dentsply International and Sirona merged in February 2016 to form **Dentsply Sirona**. Dentsply Sirona is a manufacturer and marketer of various oral and dental health products along with other consumables for dental procedures. The company is present in over 120 countries, with its principal manufacturing and distribution units situated in the U.S., Europe, China, and Japan. As of FY21, the Company recorded \$4.2bn in revenues (dental implants & clear aligner products representing c.55%, while CAD/CAM and scanners c.45%). The group operates globally but the United States represents 35% of its revenues. We believe that XRAY is in the same position as Straumann and will face the same challenges and opportunities to increase its market share by increasing its penetration in the Asia-Pacific and European markets. Furthermore, since the United States market is already well-served in this industry, we can assume that Dentsply will make extra efforts to consolidate its market share in the North American markets.



3M is a global company that offers diversified technology in varied business segments - industrial, safety & graphics, electronics & energy, health care, and consumer goods. The company has nearly 60,000 products in its portfolio and provides its services to hospitals, schools, business, and homes. The company's health care generated c.\$9.1bn in 2021 (25% of revenues), with an increase YoY of c.15% during the last 5y. Within that business unit, 3M offers a wide range of dental implants, clear aligners, and CAD/CAM solutions and its competitive advantage all over the world will represent a real threat to STMN SW. 3M operates in more than 70 countries, generating 45% of its revenues from US, 20% each from EMEA and APAC, and 15% from LATAM.



Henry Schein, Inc. is a solutions company for health care professionals powered by a network of people and technology. They are the world's largest provider of health care products and services primarily to office-based dental and medical practitioners, as well as alternate sites of care. The Company generated \$12.4bn in revenues in 2021, keeping its momentum as in the last 5y (YoY revenue growth rate of 10%). The main revenue contributor is North America, but the Company still operates in other 50 countries, including Germany, China, Brazil, among others. It is strong their supplies of implants but only from a local level and they are not planning to expand internationally focusing only on the core products as of Straumann. Despite the company does not appear to be too well positioned in the dental industry, it may impact Straumann's potential to expand its product line in other countries, as the size and reputation of the Henry Schein brand continue to have a significant impact on consumers' perceptions of all medical products.

Straumann's past Performance

The Group overcame the COVID-19 issues in 2020, proved by a strong result in 2021. Customers had greater discretionary cash to spend on specialist dental procedures because of pandemic-related constraints, which demonstrates why 20H1 is a relatively low comparison period to 21H1, explaining the strong growth rates across all areas. In particular, the Group generated sales of over CHF2bn in 2021 (up from c.CHF 1.5bn in 2020, c.CHF1.6bn in 2019, and c.CHF1.3bn in 2018), with an EBIT margin of 27.4% (slightly above the average of the past 5 years, and excluding the low EBIT margin in 2020 of c.10%), higher than the past 5 years average of its peers (ALGN c.23%, HSIC c.7%, NVST c.14%, and XRAY c.15%). Overall, the annual organic sales growth was 41.7% (57% in Latin America), which was impacted only marginally by currency headwinds, particularly in Latin America, during 21Q1. More specifically, the most significant upward trend occurred in the 21Q2, when sales increased by approximately 100% compared to the previous year's same quarter, owing to the relaxation of restrictions and a noticeable increase in consumer focus on oral healthcare, which could serve as a structural growth driver for the company going forward. In EMEA, the orthodontics business continued to be the primary driver, while in North America, Straumann's *Premium* and *Value* implants remained a substantial growth driver, aided by strong demand for the company's digital solutions. Internal estimates indicate that the Group was able to affect approximately 3.4 million smiles last year, which the Group defines as one implant or two clear aligners.

Revenues increased from CHF1.3bn in 2018 to over CHF2bn in 2021.

By looking at the industry, dental implant market grew by c.\$3.7bn in 2016 to c.\$4.3bn in 2021, and the clear aligner market from c\$1.2bn in 2016 to c.\$3.5bn in 2021. In line with this, all the competitors stated above increased their market share during those years, especially during 2021, confirming that it was an important year for dental implants and medical devices companies thanks to the re-opening of the society after COVID-19. Furthermore, by looking at the stock price movements of Straumann Group and its peers from the end of 2021 onwards, it is worth pointing out a correlation among companies, that are similarly dropping in value because of the current macroeconomic framework, except for Envista and Henry Schein.

Straumann Group is expecting low double-digit growth in 2022

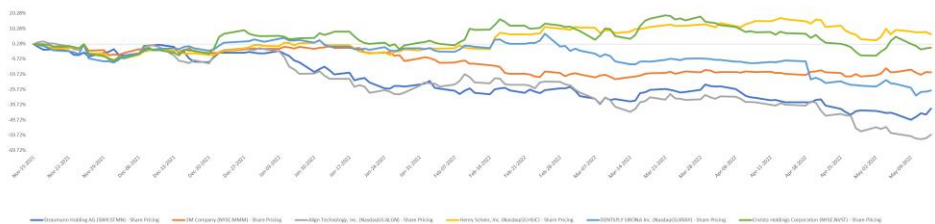


Figure 19: Stock price movements among competitors

During the most recent CMD, the Group updated its outlook, anticipating low double-digit growth in 2022 following the high growth during 2021, with a focus on expanding the clear aligner business in new countries (launches in eight different countries are planned for this year), and particularly strengthening their position in countries where they have only recently entered.

It is also worth pointing out that, despite the current uncertainty, the Group released its Q122 results (only revenues disclosed) and proved the market wrongly underperforms STMN SW, by posting c.CHF589m in revenues (+27.2% vs Q121).

(CHFm)	Q1 21	Q1 22
Group Sales	469.8	588.9
Europe, Middle East & Africa	214.3	267.2
North America	138.0	170.1
Asia/Pacific	92.3	112.3
Latin America	25.2	39.3

% Organic Growth	Q1 21	Q1 22
Group Sales	33.9%	27.2%
Europe, Middle East & Africa	27.0%	33.0%
North America	27.0%	20.7%
Asia/Pacific	74.4%	18.4%
Latin America	23.8%	48.8%

Figure 20: Straumann Q122 Results

Key Risks

Countries have effectively shut down manufacturing operations and set quarantine zones to control the spread of infection as a result of COVID-19, which has had a detrimental impact on medical device manufacturers. Now, the combination of two years of pandemic and the Ukraine war, as well as raw material shortages and rising oil prices, might result in global stagflation, or recession, in the worst-case scenario. As global economic development in the coming years will be highly dependent on the future geopolitical environment and the monetary policies announced by governments, Straumann Group may be negatively impacted by those developments, as people tend to put off large

Current geopolitical environment represents the biggest risk for Straumann to reach its long-term goals

Affordability	9.0%
% Premium Implant	25.0%
% Value Implant	75.0%
DELTA	-10%

Figure 21: Scenario – Slowing Patient Flows

Consolidation and the Risk of Underinvestment

Risk from competitors low-moderate

We classify the risk arising from supply as low

purchases such as dental implants during times of high uncertainty. Indeed, health care systems often do not compensate such products (they are out-of-pocket costs for patients). As a result, patients frequently delay implant surgeries during difficult economic times. At the same time, clear aligners are not covered by insurance, thus the cost is borne by the patient. Treatment duration may be extended compared to braces, and the cost – normally – may exceed the average USD 5,000 cost of braces. For instance, the negative YTD stock performance of the Group has to be read because of a reasonable slowing patient flow due to macro, and inflation related headwinds. In order to quantify the risk, by considering the scenario of additional lockdowns (see the current situation in China), and consequently of a lower affordability for implants, the decrease in revenues could be even higher than 10%.

Another risk may arise as a result of margin pressure. Margins may decline as a result of increased exposure to the non-*Premium* market and a greater emphasis on Dental Service Organizations (DSO). Due to its scale, DSO has a stronger bargaining position than independent practices. Serving DSO, on the other hand, takes fewer resources, such as sales force, marketing, and so on, which can help reduce the impact on EBIT. Additionally, during the Group's most recent CMD, it raised worry about the potential of underinvestment. Indeed, an excessive emphasis on margins and EBIT maximization could result in the company missing the next S curve. We believe Straumann will be enough flexible to adapt its guidance according to this scenario.

Additionally, competition among players could be viewed as a risk to the Group. While the leading implant makers have maintained price discipline, one manufacturer may eventually aggressively reduce implant costs in order to acquire market share. However, competition is likely to remain limited during the forecast period due to the large initial investment required to enter the market. Additionally, the presence of significant firms (3M, for example) and the requisite technical skills function as a strong entry barrier. Additionally, several firms are expected to enter the market following the expiration of Align Technology's Invisalign patent, however it is most likely that large players would function as killer acquirers of small and/or new innovative enterprises.

Although we believe that buyers (dental clinics, practitioners, etc.) have limited bargaining power because they still value quality and brand name, supply power will be strong, particularly in orthodontics, which is heavily reliant on manufacturers of scanning equipment, resin, and other advanced materials. Finding alternative producers may be costly and time intensive, and may even result in a supply interruption. However, this is offset by the implant's low power consumption.

Currency risk because of the global focus of the Group

Finally, as an international corporation, Straumann suffers currency concerns. Indeed, according to the Group's 2020 currency revenue split, 95% of revenues are not in CHF, with significant exposure to USD/CAD/AUD (32%), EUR (28%), and CNY (11%). However, as of FY21, 91% (vs. 86% in 2020) of its foreign currency exposure is hedged (mostly through forward currency and interest rate swaps), and hence we estimate currency risk to be minimal.

Straumann Group operates in a potential CHF18bn market

Value Drivers and Forecasts

Straumann Group operates in a potential market size of around CHF18 billion, as it encompasses not only implantology and orthodontics, but also biomaterials, prosthetics, and CAD/CAM equipment, with an additional total market value of approximately CHF7.5 billion. However, we have chosen to concentrate our revenue analysis on the implant market, which is the Group's core business, and on orthodontics, specifically clear aligners, because this is the segment that will expand the fastest throughout the projected period.

As a result, the remaining portion of the business activities (with a market share of approximately 10% for biomaterials, 3% for prostheses, and 3% for CAD/CAM equipments) has been forecasted keeping their % out of total revenues constant over the forecast period. Indeed, we consider those activities as ancillary and auxiliary to the implant market and we do not expect further market share gains in those industries.

Straumann's 2030 goals include organic sales growth of c.10% p.a., CHF5bn in revenues by 2030, an EBIT margin of 25-30%, and impacting 10m smiles

Having stated that, Straumann Group updated its outlook in its most recent CMD with the objective of achieving the 2030 targets; Straumann predicts organic sales growth of approximately 10% per year until 2030, in order to meet its long-term goal of CHF5 billion in revenue, with an EBIT margin of 25%-30% during the planning period, and 10 million Smiles impacted by 2030. (currently 3.4m).

To further expand its market share in dental implants, Straumann plans continuous improvements in *Value* implants, geographic expansion, and the increase in the number of DSO contracts, as consolidation is a major trend in the industry. To establish a successful orthodontics/clear aligner franchise, the addition of new consumer categories and the expansion of its D2C business will be critical in Europe and LATAM especially. Then, Straumann unveiled a new and comprehensive ESG framework, which should improve the investment case for ESG-conscious investors in the future.

	2030 STMN Goals	Our Projections
Revenues	CHF5bn	CHF5bn
YoY growth	10%	10.70%
EBIT margin	25-30%	25.30%
Smiles	10m	7.5m

Figure 22: Straumann's outlook vs our projections

To develop a credible revenue projection for Straumann Group, we employ a comprehensive bottom-up strategy that begins with identifying the company's

primary revenue drivers. This has been accomplished for the Implant and Orthodontics markets.

Implant Revenues

In our opinion, the Group will be able to maintain its market position in the *Premium* segment (c.80% of total implants revenues of the Group) because of the strength and reputation of its flagship brand. Regarding the *Value* implant, the Group entered this segment less than a decade ago, and it is aiming at expanding into new markets.

- Global Market

We have begun our bottom-up approach by examining the global market. Indeed, based on the global population and its predicted growth over the next several years, we estimated *people's affordability* (10%) to spend money on an implant and the global *penetration* of implants per missing teeth (c.1.6%). As stated above, 32m of implants were placed globally in 2021 and we expect that the relationship (75% *Value* implants and 25% *Premium* implants) will remain unchanged in the future, since *value* implants will continue to grow faster than *Premium* implants, but the *Premium* segment will remain a well-recognized and valuable product. Furthermore, we derived the average selling price (ASP) of an implant, namely CHF322 for a *Premium* and CHF107 for a *Value*.

- Straumann Premium Implant

Straumann produced and sold approximately 42% of 8m *Premium* implants placed globally in 2021, and we expect this number to slightly decline, in order to focus on *Value* segment and orthodontics franchise. Thus, the number of implants sold throughout the forecast period has been estimated to increase from approximately 3.3m in 2021 to more than 5.5m by 2030. The *Premium* Straumann ASP equals CHF354 and will be adjusted for inflation over the forecast period. As expected, the price is higher than the market average, as Straumann benefits from a *Premium* competitive edge over its competitors, which translates into higher prices.

Finally, Straumann's *Premium* implant market share will slightly decline from around 52% in 2021 to 50% in 2033, while revenues will double from approximately CHF1.2bn to approximately CHF2.5bn. This will be mainly driven by a significant year-over-year increase in the number of implants placed, due to market consolidation via DSOs and improved penetration, particularly in emerging markets.

Straumann Premium implant ASP is CHF354, higher than the average of the market

We expect a 195% rise in Value implant revenues by 2033

▪ **Straumann Value Implant**

The same approach applies to the *Value* implant. Straumann sold over 3 million *Value* implants in 2021, out of a total of 24 million globally. The latter is predicted to increase rapidly, with almost 42 million *Value* implants expected to be implanted globally by 2033. Straumann expects to produce and sell approximately 7 million implants by 2033, increasing its market share from around 17% in 2021 to approximately 23% in 2033. Straumann *Value* implants ASP is c.CHF137 in 2021, which will be adjusted for inflation throughout the years. Additionally, we expect a 195% rise in revenues (from c. CHF400m to c. CHF1.2bn in 2033) during the forecast period. This should occur without significantly boosting its worldwide position, but rather because high demand will be the primary growth engine, particularly in emerging markets with lesser discretionary income.

Clear Aligner Revenues

As previously noted, the prevalence of malocclusion is increasing internationally, e.g., at least one in every two individuals has misaligned teeth. Straumann is concentrating its efforts on growing product awareness among professionals and customers, as well as geographical expansion. Although clear aligners are presently accessible in 46 countries, the Group planned to launch its franchise in eight new countries by 2022.



Figure 23: Straumann's revenues generated per Smile

One smile either defined as one implant or two clear aligners

▪ **Global Market**

In 2021, only 21m orthodontics cases have been initiated globally, out of over 500 million prospective cases resolvable with orthodontics treatments. Only 4 million of these 21 million were clear aligners (19%, which is expected to reach at least 25% by 2025). Additionally, since there is no reason to believe that the number of orthodontics cases per population will increase in the next years, we have chosen to keep the number as a % of the overall population (6%). According to our estimation, the price of a clear aligner is around CHF877, and it has been adjusted for inflation in the forecast period. By 2028, there will be over 17 million clear aligner cases p.a.

▪ **Straumann Clear Aligner**

Straumann clear aligner revenues accounted for CHF265 million in 2021. The group measures its level of penetration using a unique metric: *smiles*. Straumann influenced approximately 3.4 million smiles globally in 2021, which must be read as: one smile, two implants, or one clear aligner. With this information and knowledge of Straumann's implant placements, we computed the Group's

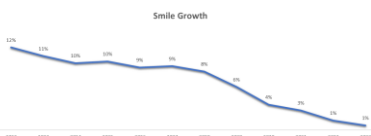


Figure 24: Smiles growth decline from 2028 to maintain a conservative outlook

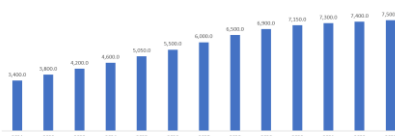


Figure 25: Smiles impacted by Straumann until 2033

effective amounts of clear aligners produced and sold in 2021 (c.280k or 7% out of 4m total cases). As a result, we projected that the Straumann clear aligner ASP is around CHF946, which is in line with market prices, and we adjusted it for inflation during the forecast period. Additionally, we think Straumann will be able to affect 7.5 million smiles by 2033 (vs 10m smiles of the Group guidance by 2030). Indeed, this is the only projection different from the Group outlook, as we do not have useful information about how the industry will grow from 2028, and therefore we decided to keep conservative assumptions and low digit smile growth YoY going forward.

In terms of market share, we do not expect Straumann to increase its position (expected to be between 5% and 8%). However, the clear aligner business will be a fundamental contributor to the Group revenues (c.CHF1.3bn in 2030 or c.26% out of total revenues vs c.13% in 2021). This is because the clear aligner market will explode in the coming years, and simply 'catching the train' will elevate Straumann to a significant player at the table, despite the entry of numerous small players (the future will reveal whether Align Technology will be able to keep its leadership position; we have our doubts).

Operating Performance and Margin Development

From 2016 to 2019, the Group's revenues increased at a CAGR of around 20%, before declining by approximately 10% in 2020 (due to COVID-19 lockdowns and supply shortages), from rebounding in 2021 (+42% versus FY20). As previously stated in the report, the Group expects an operating margin of between 25% and 30% (ALGN c.24%, HSIC c.7%, NVST c.15%, and XRAY c.15%), depending on growth investments, and we believe that even in the current market environment, driven by the market trends & risks discussed above, this target is achievable for Straumann. Indeed, Straumann has by far the largest gross, EBITDA, EBIT and operating income margins among dental implant and clear aligner competitors.

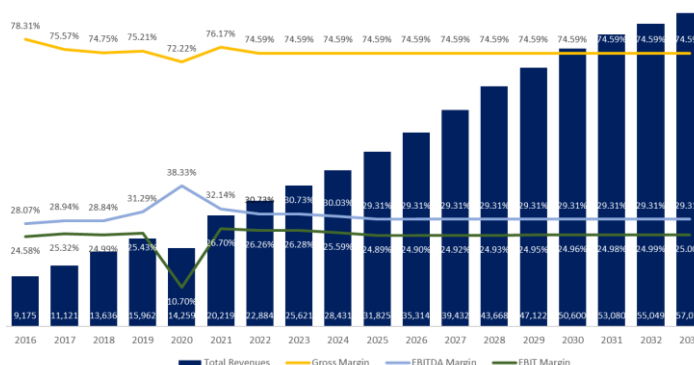


Figure 26: Overview Revenue (in CHFm) and Margins

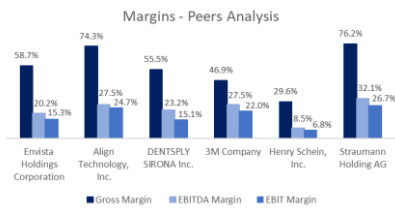


Figure 27: Margins – Peers Analysis

With a gross margin of c.74%, only Align Technology comes close to the c.76% of Straumann Group, while the other competitors have margins between 50% and 60%. The same apply when comparing EBITDA and EBIT margins, where Straumann's margins are larger than those of its competitors. Additionally, by looking at cost structure of both Straumann and its competitors, it is possible to state that STMN operating efficiency is translated into less expenses for the Group, compared to e.g., Align Technology, Envista, and Dentsly Sirona, where their expenses account for more than 50% of revenues. Particularly, breaking down costs into administrative and operating expenses, Straumann peers seem to spend more for employees, and also for R&D. However, the Group still focuses mainly on technology and innovation, particularly in supporting its partners through different training programs and education center activities (more than CHF100m spent p.a.).

For the future, we expect the EBITDA margin to be around 29-31%, as stated above. According to our estimation, the CAGR for revenue growth will be approximately 10% over the next few years, enabling the Group to attain the target of c.CHF5 billion in revenues by 2030.

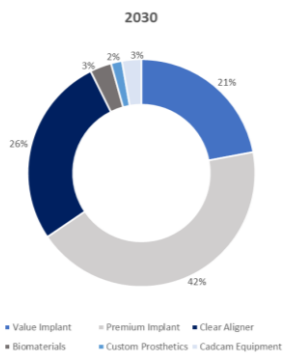


Figure 28: Straumann's consolidated revenues in 2030

Looking at the consolidated revenues more in detail, Implantology revenues (accounted for 79% of total revenues in 2021) were valued at c.CHF1.6bn in 2021 and will reach c.CHF3.4bn by 2030, representing 67% of total revenues and still the major contributor to the Group. Clear Aligner will move from c. CHF265m in 2021 (13%) to c.CHF1.3bn by 2030, representing 26% of the total revenues. Finally, to reach the threshold of CHF5bn, we believe the Group will be able to keep its business operations in biomaterials, custom prosthetics, and CAD/CAM equipment also in the future, as really important and auxiliary to the Implant growth. Indeed, we expect the group will keep constant its market share on those segments, and they will represent together c.8% of total revenues.

Then, from a geographical point of view, we are not able to deeply forecast revenues by each Region, as we do not have a breakdown of revenues by products per geography, and therefore this has to be read as caveat. However, we believe Straumann will be able to achieve its desired split.

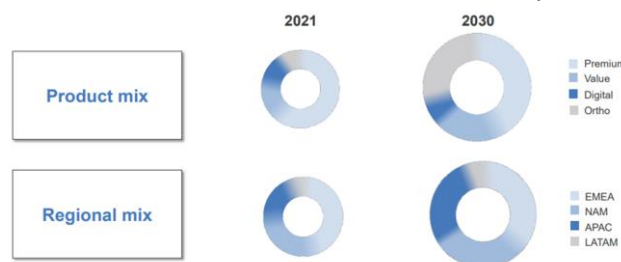


Figure 29: Product and Regional Split from in 2021 and 2030

We have reasons to believe revenues to rise significantly in Asia Pacific, because of both the high expected CAGR 21-28 for Dental Implant and Clear Aligner market (see market analysis above) and the lack of a clear competitive advantage in the region (*Osstem Implants* and *Dentium* are the two major APAC companies but they just operate locally), and Europe, because the Group holds the leader position in the region and due to high forecasted CAGR 21-28. Furthermore, as announced in the latest Group's conference, the company is expected to consolidate its revenue in the North America as the market is strongly competitive.

Straumann's liquidity has historically stayed high, but has increased dramatically in recent years (in 2021 c. CHF880m vs CHF630m in 2020 and CHF260m in 2019). With strong cash balances, the company is always in a sound financial position, which also results in a comfortable position during a financial crisis such as the pandemic or the current environment. Additionally, the Group's healthy free cash flow provide additional cushioning for economic downturns. Despite the Group being able to meet its short term obligations, excessive cash would decrease the ROA, and also increase its cost of capital, as excess cash might make the management team complacent, which could increase the risk of damaging the business value. However, even if the tax shield lost is significant (TS will range between CHF15-20m in the future vs >2x consensus of its peers), Straumann's liquidity offers a plenty of additional firepower, in order for the Group to reach its operating goals.

Moving on, between 2016 and 2021, the 5-year average return on invested capital (ROIC) and organic growth rate reached 27% and 13%, respectively (despite an organic growth rate of -6% and a ROIC of only 11% in 2020 due to the pandemic). We expect an increase in ROIC over the forecast period, with a final ROIC of c.38% in 2033. In comparison to its peer group, these figures are quite high (only Align Technology comes at around 18%, while the others below 10%), reinforcing Straumann's operational efficiency. Additionally, the company's WACC is 5.3% and its ROIC consistently exceeds this level, indicating that the company is generating value for its owners.

Capital Expenditures

By examining past capital expenditures, it is clear that the value has fluctuated significantly over time. *Capex* accounted for around 20% of revenues in 2017, 7.5% in 2018, 28.9% in 2019, and only approximately 6% in 2021. 2017 was a year of considerable M&A activity, with the Group acquiring and consolidating various businesses worth approximately CHF225 million. The high percentage of revenues in 2019 is justified by the incorporation of various firms globally (about

In our view, the Group will grow mostly in Asia Pacific and Europe

We expect an increase in ROIC over the forecast period (reaching 38% in 2033)

CHF100 million), but more than CHF300 million were invested in production capacity, information technology, and other fixed assets. On 2020, approximately half of the capex was invested in the acquisition of c.75% of *DrSmile* and *Promaton*, a software firm that develops AI applications to assist with diagnostic and treatment planning. Also, the Group increased its manufacturing capability (c.CHF50m). Then, in 2021 the focus was on investments in land, buildings, and machinery with the goal of expanding industrial capacity, particularly in Switzerland, Brazil, and the United States (a total investment of c.CHF121m).

Accordingly, the primary drivers of Straumann's capital expenditures are investments in tangible assets, most notably to maintain manufacturing and production capacity, as well as investments in innovation and digitalization as part of the company's objective to accelerate digital transformation. Capital expenditures are primarily financed from the company's own liquid funds. Nonetheless, past Straumann's acquisitions have never contributed more than 20% to growth (CER).

The primary drivers of Straumann's Capex are investments in tangible assets, as well as in innovation and digitalization

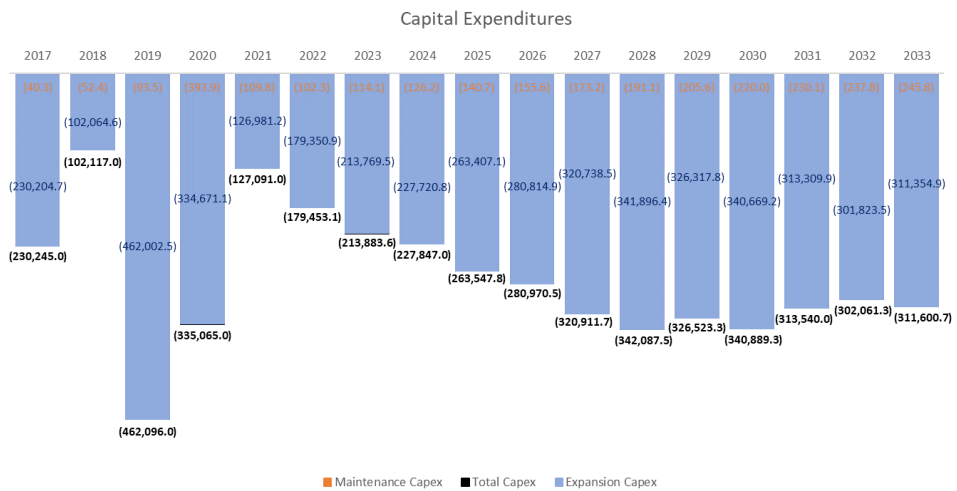


Figure 30: Overview Capital Expenditures

For the future, we believe the company will maintain its M&A strategy in light of the company's ND/EBITDA 0.0x and past activities, but without guidance on that front, we are unable to create an accurate pipeline.

Working Capital Management

Straumann's Cash Conversion Cycle was 214 days in fiscal year 2021, especially because really high Days of Inventory Outstanding (DIO), as Days of Sales Outstanding (DSO) are similar to the ones of its peers. This indicates that Straumann Group converts its inventory and other short-term assets into cash flow on average every 214 days. Since the average of the past 5y DIO was in our too high (198 days) compared to its peers (84 days), we estimated inventories as % of sales for 2022, as we think will not change compared to revenues. Then, we

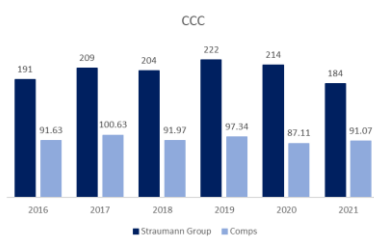


Figure 31: Cash Conversion Cycle Comparison

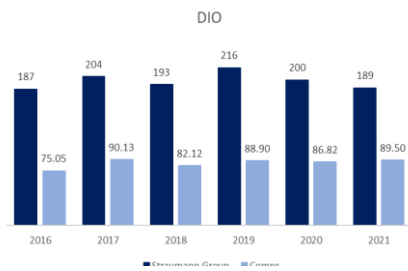


Figure 32: DIO Comparison

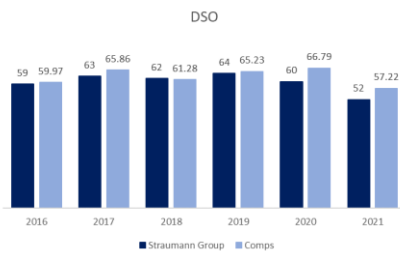


Figure 33: DSO Comparison

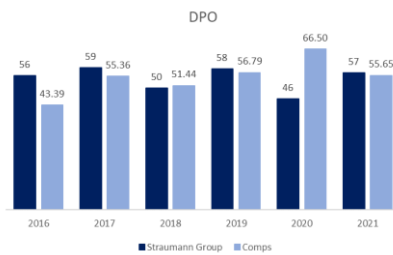


Figure 34: DPO Comparison

calculated the DIO based on the new 2022 inventories, i.e. 177 days, and keep this value going forward. In our opinion, the high number is explained given the Group's global exposure in various markets and the significant inventory item. On the other hand, even if in the short term could mean the Group has enough inventory to avoid inflated supplies, this is a current risk for the Group as in the long term will likely lead to issues in the production line. However, considered the historical high level of DIO and not further information about the inventory breakdown, we are not allowed to drastically drop the metric. By looking at collecting money with clients, Straumann did better than competition (c.62 days vs peers 66 days), demonstrating more efficient payment and cash flow management and mitigating payment risk. With the same logic as for inventories, we estimated the future DSO constant at 51.9 days. Additionally, we expect Straumann will be able to maintain its slightly lower DPO than its peer group (54 days vs 57). Consequently, Straumann's cash conversion cycle will be around 174.6 days in an industry that is consolidating and by maintaining its competitive position, as we expect an overall improvement in the working capital management, that will be critical going forward, particularly for the DIO, which has a substantially larger working capital requirement than its counterparts.

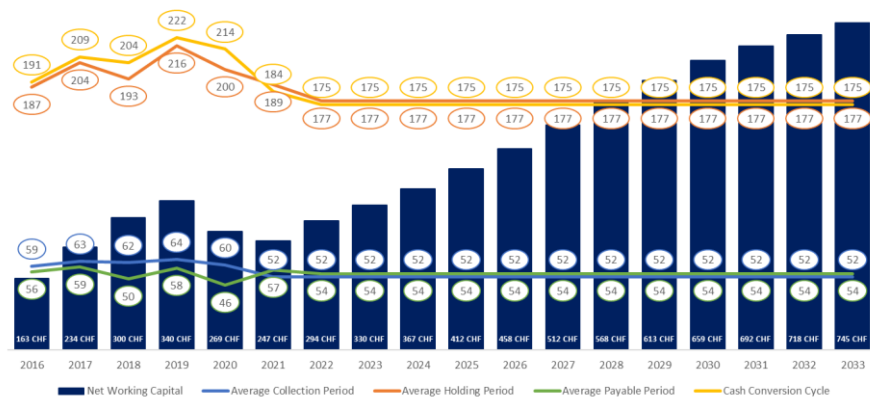


Figure 35: Straumann's Net Working Capital

Capital Structure and Dividend Strategy

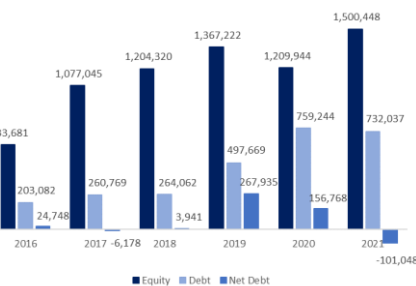


Figure 36: Debt, Net Debt, and Equity Evolution over years

By looking at Straumann's historical capital structure, we notice that the D/E ratios vary depending on the book and fair market value. Indeed, D/E ratios based on book have traditionally fluctuated between 32% and 49% (63% in 2020 because of the issuance of two c.CHF480m corporate bonds). Management guidance does not include any adjustments to this strategy in the future, which reinforces our belief that the capital structure will remain relatively stable in the future. As a result, once both corporate bonds mature, we estimate the capital structure to return to its 32% level.

By looking at D/E ratios based on market values, they ranged between 2% and 5%. In terms of valuation, what is matter is the D/E based on fair market values and we assumed to be constant during the forecast period (3.86%). By comparing these figures to the debt-to-equity ratios based on fair value of Straumann's peers, only ALGN showed % similar to Straumann (2-5%), while the others are far above (10%-26%).

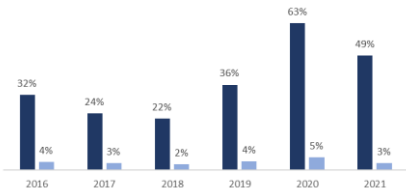


Figure 37: Debt/Equity based on book values and fair market values

Straumann's dividend policy is "shareholder oriented," as evidenced by the Group's lengthy history of dividend payment to shareholders. Indeed, the Group's growth and favorable operating margins have enabled it to maintain a consistent increase in its gross dividend payout since 2016. Between 2017 and 2021, only 2020 and 2021 saw a little reduction in the payout ratio, but still they paid it out despite the pandemic. Particularly, the c.CHF0.675/sh dividend FY21 has been approved at the April 2022 AGM.

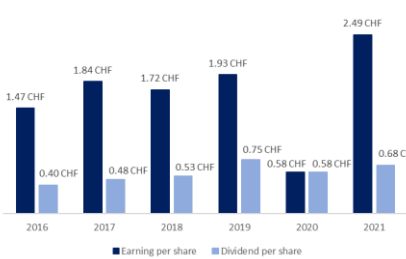


Figure 38: EPS vs DPS

The Group's strategy is to enhance its gross dividend in the future while maintaining a consistent dividend that increases gradually over time and a stable payout ratio in the short term.

Valuation

As we do not expect big differences in the capital structure, we have decided to perform an intrinsic valuation through the DCF approach. Our projection is separated into two distinct time periods. The first period runs from 2022 to 2028, the last year for which we have available market and industry statistics, and the second period runs from 2029 to 2032, when we expect the Group to have met its guidance and continued to develop steadily.

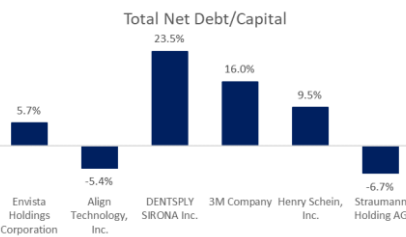


Figure 39: Total Net Debt/EV

As a result, we construct the Terminal Value using a terminal growth rate of 1.8% (more conservative than analysts' opinion) that stabilizes near the conclusion of our second prediction period, and it is calculated by multiplying 2033 reinvestment rate and the company's RONIC. This growth rate is approximately in line with the long-term inflation rate projected and also in our opinion really conservative considered the high potential of the Group and that the average of GDP growth rates was historically higher than 3%, excluding global downturns periods as 2008 Financial Crisis and COVID-19. After separating Straumann's operations into operational and non-operating segments, and other than deduct the value of the company's financial debt to find the final equity value, we add the non operating activities (only c.CHF-40m). This item includes investments in associates (assumed to be constant during the forecast period), net deferred income tax, and contingent consideration, among others. Particularly, contingent



Figure 40: Historical Global GDP Growth Rate

consideration (c.CHF110m in 2021) will depend on the performance of the acquired businesses; c.CHF90m comes from DrSmile and we believe this amount will be write off during the forecast period highlighting the further penetration in the clear aligner market by the Group.

Weighted Average Cost of Capital (WACC)

To arrive at an accurate valuation for Straumann Group, we discount its cash flows using a suitable discount rate, which is determined primarily by the company's cost of equity and cost of debt, and yields in 5.3%.

- Cost of Equity

We use the Capital Asset Pricing Model (CAPM) to determine the cost of equity. Straumann's Beta is calculated using a regression of the company's historical closing stock prices versus a market index, in this case the Stoxx Europe 600. We chose a time span of five years to regress Beta also because, in terms of comparability, the β s acquired from Capital IQ are likewise 5y β s. We are convinced that, because Straumann is a mature company with observable history stock returns, the estimated historical stock beta is more precise than a peer group-based estimate. Particularly when it comes to concerns of comparability caused by massive outliers in terms of size. We delever the result from Straumann's current capital structure in order to re-lever it to the company's target capital structure. We base our target capital structure of 3.86% D/E based on market value. We then detect a levered Beta of 0.86 as a result of these calculations. In order to investigate deeply the standard error in our regression (19%), we additionally calculate Straumann's levered Beta using comparable companies, also to offset the bias and the effect of idiosyncratic shocks. By unlevering Straumann's peer group betas and re-levering the median of the unlevered betas with the intended fair MV capital structure, we obtain a levered Beta of 0.82, confirming our β plausibility. Dealing with Risk-free rate, we utilize the rate on the Swiss 10-year Government Bonds, which is 0.738%, and the 5.5% equity market risk premium advised by KPMG as of 31 March 2022, which reflect and include the current macro scenario. After incorporating all of these inputs into the CAPM, our analysis yields a cost of equity estimate of 5.5%.

- Cost of Debt

Due to Straumann's low leverage compared to available cash and amount of equity and to the short maturity of its two straight bonds (within 2025), we believe these loans are not an appropriate proxy for calculating the cost of debt (YTM 1.10%). Therefore, since we are not able to find an official credit rating of the Company, we have derived the cost of debt by applying *Damodaran* Method.

Beta Regression		
Coefficient	0.864	0.02
Standard Error	0.19	0.01
Coefficient of determination	0.19	0.07
F-Test	20.81	86.00
SS reg	0.11	0.46

Figure 41: β Regression Analysis, 95% level of confidence

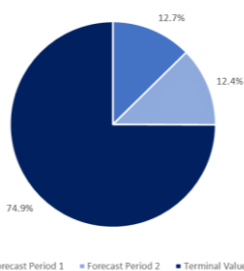


Figure 42: Distribution of Enterprise Value

Cost of Debt	
10y Europe Composite AAA YTM	0.92%
Rating	AAA
Default Rate	0.00%
Cost of Debt	0.92%

Cost of Debt - Debt Rating approach	
Risk free Rate	0.74%
Credit Rating	AAA
Coverage Ratio	31.7
EBIT (Avg. [...])	539'907.0
Interest Exp. (Avg. [...])	17'037.0
Cost of Debt	1.41%

Cost of debt calculation using Straumann Bond		
	17/05/2022	10/03/2025
Coupon number	0	6
Days from today	0	1'028
Cash Flow	0	1
Present Value Cash Flow	0	101
Total Present Value of CFs	100.7303343	
Yield to Maturity	1.10%	
1-Yr Default Prob	0.00%	
Cost of Debt	1.10%	

Source: Bloomberg

Figure 43: Cost of Debt – Different approaches

Sensitivity Analyses reinforce our recommendation, as the median price of CHF186.97 is slightly below our TP

Based on the interest coverage ratio of the company, we believe the structure of the Group could be reconducible to a AAA credit rating, implying a 0.67% spread. We adjust the spread adding the risk-free rate, resulting in an effective cost of debt of 1.41% for the company. We use the Swiss statutory tax rate of 26% for the tax rate. Despite that, the calculation has to be read as caveat as many others information should be taken into account in order to compute the rating of a Company. However, since the low D/E of the Group, this input does not really affect the WACC.

To summarize, our prediction results in an Enterprise Value of CHF21.44 billion for Straumann Group and an Equity Value of CHF21.38 billion. With c.159.16m shares outstanding, our target share price is CHF134.37.

Sensitivity Analysis

As stated in the report, several variables and risks have a significant impact on Stramann Group's final value. As a result, we have conducted a number of sensitivity analyses with the intent of gaining an understanding of how varying input variables affect the ultimate outcome of our analysis.

First, we examined the effect of various beta and cost of debt values on the WACC. The beta is evaluated utilizing the upper and lower bounds of our beta regression analysis, as shown in the preceding section. Thus, we were able to incorporate into our valuation both the scenario in which geopolitical uncertainty would increase (markets would be more volatile) and the scenario in which stagflation fears would be a thing of the past and markets would be more stable. On the other hand, we chose the risk-free rate as the lower bound cost of debt and our computed cost of debt as the upper bound cost of debt, despite the difference being quite small. In doing so, we determined how a change in the cost of debt would impact our Straumann price target, as the Swiss market has been severely impacted by large changes in the 10-year Swiss government bond in recent months.

	Beta levered									
	0.48	0.57	0.65	0.74	0.82	0.91	0.99	1.07	1.16	1.24
Cost of Equity	3.41%	3.87%	4.33%	4.79%	5.26%	5.72%	6.18%	6.64%	7.11%	7.57%
WACC	3.32%	3.76%	4.21%	4.65%	5.10%	5.55%	5.99%	6.44%	6.88%	7.33%

	Cost of debt									
	0.74%	0.81%	0.89%	0.96%	1.04%	1.11%	1.18%	1.26%	1.33%	1.41%
WACC	5.30%	5.31%	5.31%	5.31%	5.31%	5.31%	5.32%	5.32%	5.32%	5.32%

Figure 44: Impact of Beta and Cost of Debt on WACC

Another meaningful variable is the terminal growth rate, that we have considered at 1.8% in our DCF valuation and therefore we tried to vary different reinvestment rates and RONICs based on the observed values as in our forecast, having as output a sensitivity analysis of Straumann's stock price relative to different WACCs and different TV growth rates.

	WACC									
	3.30%	3.75%	4.19%	4.64%	5.09%	5.54%	5.98%	6.43%	6.88%	7.33%
2.05%	450.36	328.15	256.99	210.46	177.69	153.39	134.66	119.80	107.72	97.73
2.15%	488.42	347.46	268.42	217.89	182.84	157.12	137.46	121.96	109.43	99.10
2.26%	534.23	389.53	281.11	225.99	188.38	161.10	140.42	124.22	111.21	100.52
2.36%	590.42	394.97	295.26	234.84	194.34	165.34	143.55	126.61	113.07	102.00
2.47%	660.98	424.64	311.16	244.55	200.79	169.87	146.88	129.13	115.02	103.55
2.58%	752.23	459.68	329.13	255.26	207.78	174.73	150.41	131.78	117.07	105.16
2.68%	874.83	501.70	349.63	267.13	215.39	179.95	154.16	134.58	119.22	106.85
2.79%	1044.29	553.01	373.21	280.35	223.70	185.57	158.17	137.55	121.48	108.62
2.89%	1274.78	617.69	400.64	295.18	232.81	191.64	162.45	140.70	123.87	110.47
3.00%	1591.97	699.31	432.93	311.92	242.85	198.22	167.04	144.03	126.38	112.42

Figure 45: Sensitivity Analysis WACC and growth rate on Stock Price

The above analyses present a wide range of prices. By taking a closer look on those values, the median price is CHF186.97, the 25th quartile CHF131.11 and the upper quartile is CHF315.97. According to our target price of CHF154.86, we can conclude that the sensitivity analyses further reinforce our recommendation, in the sense that the median value is c.15% higher than our TP, underlying again the Group's upside potential.

Relative Valuation – Trading Comparables

We performed a Relative analysis to see how the Comprehensive Dental Industry interacts to the key measure multiples. To selecting the firm to investigate, we decided to consider just the five major competitors that are most closely connected to Straumann in terms of business and presence by geography.

We opted to undertake a relative valuation while being aware that Straumann's peculiarity may result in a significantly different stock price when compared to DCF approaches. In our analysis, we chose to evaluate EV/Sales, EV/Ebitda, EV/Ebit, and P/E and, as anticipated, competitors have relative multiples that are significantly lower than those of Straumann. Also, it is worth mentioning that the market is composed of c.400 companies that are primarily privately held and offer their products solely locally.

According to our estimation, Straumann presents an EV/Sales of 9,3x, an EV/Ebitda of 28,9x, an EV/Ebit of 34,8x, and a P/E of 47,9x. By incorporating Straumann's peers trading multiples, we derived an average EV/Sales of 2,9x, an EV/Ebitda of 13,4x, an EV/Ebit of 17,0x, and a P/E of 22,0x.

The general rules of the relative valuation could lead to wrongly define Straumann as overrated by presenting a share price that should range around CHF55-60 depending on the multiple selected. However, we believe that, due to the large outliers in terms of size, different business models and an unusually high difference in multiples, the relative valuation does not lead to a meaningful result.

By looking at the graph below, only Align Technology appears to have comparable metrics to those of Straumann Group. However, ALGN operates only in one of Straumann's core businesses (clear aligner), and therefore it cannot be interpreted as an equitable outcome.

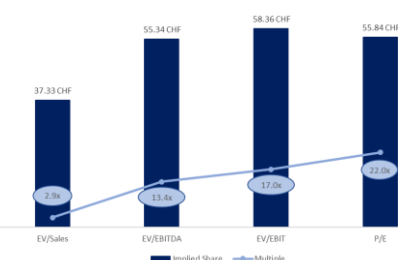


Figure 46: Trading Multiple Results

	In \$ M	Share Price	Yield	Market Cap	EV	EV/Sales	EV/EBITDA	EV/EBIT	Price/Earnings
Envista Holdings Corporation (NYSE:NVST)	41.8	162.6	6,789.3	7,240.2	2.9x	14.3x	18.9x	28.2x	
Align Technology, Inc. (NasdaqGS:ALGN)	275.5	78.8	21,712.5	20,722.2	5.2x	19.1x	21.2x	28.4x	
Dentsply Sirona Inc. (NasdaqGS:XRAY)	38.2	215.5	8,236.7	10,238.7	2.4x	10.4x	16.0x	20.0x	
3M Company (NYSE:MMM)	149.3	569.1	84,960.5	99,279.5	2.8x	10.2x	12.7x	14.8x	
Henry Schein, Inc. (NasdaqGS:HSIC)	83.5	138.1	11,528.6	13,866.6	1.1x	13.1x	16.3x	18.8x	

Figure 47: Straumann’s Comparable Companies Overview

Recommendation

With a target price of CHF154.86, an expected dividend of CHF0.79 in 2022, and a current share price of CHF110.85, we believe Straumann Group has considerable upside potential (40.4%). Straumann is in a strong position for future growth because of its proven business model, its position as the market leader for *Premium* implants worldwide, and its long-term strategy. Stable and double-digit margins and cash flows, together with a low level of debt (excluding recent bond issuances) and good total liquidity, position the company to thrive even during a financial crisis, or, for the more pessimists, a global recession. Straumann's revenues will continue to grow in the next years as a result of market forces such as an aging population, digitization, and industry consolidation. Straumann, we believe, is well prepared for the majority of potential risks that may develop over the next few years and is well positioned to retain and potentially improve its strong market position. Additionally, the Group operates in segments that offer structural mid-term growth from paradigm shifts in treatment – arguably the wider dental market does not need to grow to allow Straumann to grow.

As a conclusion, the market is considering a scenario that has low probability of occurrence. Taking into account all the scenario presented in the report, we retain our **BUY** recommendation.

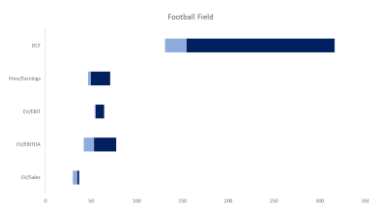


Figure 48: Valuation Overview

Financial Statements

Consolidated Income Statement

Reformulated Consolidated Income Statement (In CHF'000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Historical			Forecast Period 1									
Operating													
Total Consolidated Revenues	917,517.0	1,112,102.0	1,363,560.0	1,596,225.0	1,425,851.0	2,021,903.0	2,288,441.9	2,562,137.2	2,843,069.0	3,182,535.9	3,531,437.7	3,943,196.1	4,366,778.7
Cost of Good Sold	(198,987.0)	(271,638.0)	(344,315.0)	(395,749.0)	(396,073.0)	(481,880.0)	(581,578.8)	(651,135.1)	(722,530.4)	(808,801.6)	(897,470.6)	(1,002,113.9)	(1,109,762.1)
Gross Profit	718,530.0	840,464.0	1,019,245.0	1,200,476.0	1,029,778.0	1,540,023.0	1,706,863.1	1,911,002.1	2,120,538.6	2,373,734.3	2,633,967.0	2,941,082.2	3,257,016.6
<i>Gross margin</i>	78%	76%	75%	75%	72%	76%	75%	75%	75%	75%	75%	75%	75%
Other Operating Income	703.0	1,601.0	1,608.0	3,263.0	3,071.0	3,399.0	4,484.7	5,021.0	5,571.6	6,236.8	6,920.5	7,727.5	8,557.6
Wages And Salary	(283,998.0)	(338,387.0)	(407,538.0)	(500,749.0)	(468,497.0)	(570,927.0)	(650,064.2)	(727,811.2)	(823,766.1)	(940,567.6)	(1,043,682.1)	(1,165,373.3)	(1,290,559.1)
Share-based payments	(4,242.0)	(7,726.0)	(10,706.0)	(13,130.0)	(9,285.0)	(9,364.0)	(13,703.3)	(15,342.2)	(17,364.9)	(19,827.1)	(22,000.7)	(24,565.9)	(27,204.8)
Social security cost	(40,839.0)	(47,469.0)	(53,268.0)	(59,882.0)	(58,621.0)	(69,182.0)	(84,581.2)	(94,697.1)	(107,182.0)	(122,379.2)	(135,795.7)	(151,629.2)	(167,917.4)
Pension costs and other personnel expense	(27,506.0)	(22,448.0)	(36,716.0)	(46,679.0)	(40,679.0)	(55,191.0)	(57,422.3)	(64,289.9)	(72,765.9)	(83,083.4)	(92,191.8)	(102,941.2)	(113,999.3)
Other Distribution and Administrative Expense	(105,122.0)	(104,245.0)	(119,439.0)	(83,911.0)	90,708.0	(189,008.0)	(202,276.0)	(226,468.0)	(251,299.6)	(281,305.2)	(312,144.7)	(348,540.1)	(385,980.7)
EBITDA	257,526.0	321,790.0	393,186.0	499,388.0	546,475.0	649,750.0	703,300.7	787,414.8	853,731.6	932,808.6	1,035,072.5	1,155,759.8	1,279,912.9
<i>EBITDA margin</i>	28.1%	28.9%	28.8%	31.3%	38.3%	32.1%	30.7%	30.7%	30.0%	29.3%	29.3%	29.3%	29.3%
Depreciation of PPE	(22,852.0)	(24,975.0)	(29,960.0)	(66,457.0)	(71,751.0)	(79,650.0)	(79,178.3)	(88,647.9)	(98,367.9)	(110,113.2)	(122,184.9)	(136,431.4)	(151,087.1)
Amortisation	(9,171.0)	(15,283.0)	(22,407.0)	(27,041.0)	(27,716.0)	(23,556.0)	(23,093.8)	(25,446.8)	(27,790.2)	(30,616.3)	(33,435.4)	(36,743.3)	(40,046.6)
Impairments	-	-	-	(294,401.0)	(6,637.0)	-	-	-	-	-	-	-	-
Operating Result Before Taxes	225,503.0	281,532.0	340,819.0	405,890.0	152,607.0	539,907.0	601,028.7	673,320.1	727,573.5	792,079.1	879,452.2	982,585.1	1,088,779.2
EBIT margin	24.6%	25.3%	25.0%	25.4%	10.7%	26.7%	26.2%	26.2%	25.5%	24.8%	24.9%	24.9%	24.9%
Taxes	6,939.8	(45,436.5)	(52,573.8)	(68,711.8)	(31,288.9)	(95,930.1)	(98,326.8)	(110,153.5)	(119,029.2)	(129,582.2)	(143,876.2)	(160,748.5)	(178,121.6)
Operating Result	232,442.8	236,095.5	288,245.2	337,178.2	121,318.1	443,976.9	502,701.9	563,166.6	608,544.3	662,496.9	735,576.0	821,836.6	910,657.6
Non-operating													
Rental Income	1,673.0	1,752.0	1,816.0	1,799.0	1,521.0	1,414.0	1,676.0	1,876.5	2,082.2	2,330.8	2,586.4	2,887.9	3,198.1
Government Grants	-	-	-	-	13,898.0	493.0	-	-	-	-	-	-	-
Insurance Reimbursements	-	-	-	7,746.0	274.0	767.0	-	-	-	-	-	-	-
Legal Cases	-	-	-	(25,500.0)	-	-	-	-	-	-	-	-	-
Pension Plan	-	-	-	-	5,275.0	-	-	-	-	-	-	-	-
Restructuring	-	-	-	-	(8,747.0)	-	-	-	-	-	-	-	-
Other	-	-	-	(2,796.0)	-	-	-	-	-	-	-	-	-
Restructuring	-	-	-	-	(8,287.0)	-	-	-	-	-	-	-	-
Non-Operating Result before Taxes	1,673.0	1,752.0	1,816.0	(18,751.0)	3,934.0	2,674.0	1,676.0	1,876.5	2,082.2	2,330.8	2,586.4	2,887.9	3,198.1
Taxes	(435.0)	(455.5)	(472.2)	4,875.3	(1,022.8)	(695.2)	(435.8)	(487.9)	(541.4)	(606.0)	(672.5)	(750.9)	(831.5)
Gain on Consolidation of former associates	-	68,867.0	10,725.0	5,967.0	-	-	-	-	-	-	-	-	-
Share of results of associates	(1,603.0)	(9,739.0)	(9,984.0)	(3,036.0)	(1,588.0)	6,059.0	478.3	478.3	478.3	478.3	478.3	478.3	478.3
Other Comprehensive Income (not considering Non controlling Inter)	53,083.0	(9,410.0)	(92,945.0)	(58,621.0)	(163,362.0)	(33,875.0)	(115,387.2)	(129,187.4)	(143,352.4)	(160,469.0)	(178,061.2)	(198,822.8)	(220,180.5)
Non-Operating Result	52,718.0	51,014.5	(90,860.2)	(69,565.7)	(162,038.8)	(25,837.2)	(113,668.6)	(127,320.5)	(141,333.3)	(158,265.8)	(175,669.0)	(196,207.4)	(217,335.6)
Financing													
Interest Income	2,308.0	2,496.0	1,285.0	2,568.0	1,460.0	2,258.0	5,643.4	4,963.3	5,556.9	6,166.2	6,902.5	7,659.2	8,552.3
Financial Income	32,952.0	56,205.0	71,567.0	62,305.0	73,573.0	87,156.0	108,363.6	121,323.8	134,626.6	150,701.2	167,222.6	186,720.5	206,778.2
Interest Expense	(4,626.0)	(6,020.0)	(8,727.0)	(17,621.0)	(15,626.0)	(17,037.0)	(26,891.8)	(28,108.3)	(29,357.5)	(30,639.8)	(32,189.1)	(33,781.6)	(35,660.9)
Financial Expense	(33,981.0)	(72,008.0)	(81,075.0)	(71,854.0)	(100,452.0)	(143,632.0)	(132,633.2)	(148,496.0)	(164,778.2)	(184,453.0)	(204,674.6)	(228,539.2)	(253,089.1)
Financial Result Before Taxes	(3,347.0)	(19,327.0)	(16,950.0)	(24,602.0)	(41,045.0)	(71,255.0)	(45,518.0)	(50,317.2)	(53,952.2)	(58,225.2)	(62,738.6)	(67,941.1)	(73,419.6)
Taxes	870.2	5,025.0	4,407.0	6,396.5	10,671.7	18,526.3	11,834.7	13,082.5	14,027.6	15,138.6	16,312.0	17,664.7	19,089.1
Non-controlling interests	-	4,397.0	3,887.0	647.0	797.0	3,013.0	3,079.9	3,456.3	3,838.7	4,497.4	4,970.5	5,534.2	6,119.2
Financial Result	(2,476.8)	(9,905.0)	(8,656.0)	(17,558.5)	(29,576.3)	(49,715.7)	(30,603.4)	(33,778.5)	(36,085.9)	(38,589.2)	(41,456.0)	(44,742.2)	(48,211.3)
Comprehensive Income attributable to shareholder of parent comp	282,684.0	277,205.0	188,729.0	250,054.0	(70,297.0)	368,424.0	358,429.8	402,067.7	431,125.1	465,641.8	518,451.0	580,887.0	645,110.7
Tax Breakdown													
Statutory tax rate	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%
Effective tax rate (Operating activities)	-3.3%	12.6%	14.9%	15.7%	19.0%	16.4%	16.4%	16.4%	16.4%	16.4%	16.4%	16.4%	16.4%
Operating result before taxes	225,503.0	281,532.0	340,819.0	405,890.0	152,607.0	539,907.0	601,028.7	673,320.1	727,573.5	792,079.1	879,452.2	982,585.1	1,088,779.2
Reported taxes	7,375.0	(40,867.0)	(48,639.0)	(57,440.0)	(21,640.0)	(78,099.0)	(86,927.9)	(97,558.9)	(105,543.0)	(115,049.6)	(128,236.6)	(143,834.7)	(159,864.0)
Taxes on operating activities	6,939.8	(45,436.5)	(52,573.8)	(68,711.8)	(31,288.9)	(95,930.1)	(98,326.8)	(110,153.5)	(119,029.2)	(129,582.2)	(143,876.2)	(160,748.5)	(178,121.6)
Taxes on non-operating activities	(435.0)	(455.5)	(472.2)	4,875.3	(1,022.8)	(695.2)	(435.8)	(487.9)	(541.4)	(606.0)	(672.5)	(750.9)	(831.5)
Tax shield	870.2	5,025.0	4,407.0	6,396.5	10,671.7	18,526.3	11,834.7	13,082.5	14,027.6	15,138.6	16,312.0	17,664.7	19,089.1

Reformulated Consolidated Income Statement (In CHF'000)	2029	2030	2031	2032	2033
	Forecast Period 2				
Operating					
Total Consolidated Revenues	4'712'234.1	5'059'953.2	5'365'678.3	5'563'704.9	5'707'257.8
Cost of Good Sold	(1'197'555.3)	(1'285'923.7)	(1'363'619.9)	(1'413'945.9)	(1'450'428.1)
Gross Profit	3'514'678.9	3'774'029.5	4'002'058.3	4'149'759.0	4'256'829.7
	<i>Gross margin</i>				
	75%	75%	75%	75%	75%
Other Operating Income	9'234.5	9'916.0	10'515.1	10'903.2	11'184.5
Wages And Salary	(1'392'655.0)	(1'495'420.0)	(1'585'774.1)	(1'644'299.0)	(1'686'724.6)
Share-based payments	(29'357.0)	(31'523.3)	(33'427.9)	(34'661.6)	(35'556.0)
Social security cost	(181'201.3)	(194'572.3)	(206'328.4)	(213'943.2)	(219'463.3)
Pension costs and other personnel expense	(123'017.7)	(132'095.3)	(140'076.6)	(145'246.3)	(148'993.9)
Other Distribution and Administrative Expense	(416'515.6)	(447'250.6)	(474'273.7)	(491'777.4)	(504'466.0)
EBITDA	1'381'166.7	1'483'083.9	1'572'692.7	1'630'734.7	1'672'810.4
	29.3%	29.3%	29.3%	29.3%	29.3%
Depreciation of PPE	(163'039.5)	(175'070.3)	(185'648.2)	(192'499.8)	(197'466.6)
Amortisation	(42'531.1)	(44'947.1)	(46'908.8)	(47'870.6)	(48'328.9)
Impairments	-	-	-	-	-
Operating Result Before Taxes	1'175'596.0	1'263'066.5	1'340'135.7	1'390'364.4	1'427'014.9
EBIT margin	24.95%	24.96%	24.98%	24.99%	25.00%
Taxes	(192'324.6)	(206'634.5)	(219'242.9)	(227'460.2)	(233'456.1)
Operating Result	983'271.4	1'056'432.0	1'120'892.8	1'162'904.2	1'193'558.8
Non-operating					
Rental Income	3'451.1	3'705.8	3'929.7	4'074.7	4'179.9
Government Grants	-	-	-	-	-
Insurance Reimbursements	-	-	-	-	-
Legal Cases	-	-	-	-	-
Pension Plan	-	-	-	-	-
Restructuring	-	-	-	-	-
Other	-	-	-	-	-
Restructuring	-	-	-	-	-
Non-Operating Result before Taxes	3'451.1	3'705.8	3'929.7	4'074.7	4'179.9
Taxes	(897.3)	(963.5)	(1'021.7)	(1'059.4)	(1'086.8)
Gain on Consolidation of former associates	-	-	-	-	-
Share of results of associates	478.3	478.3	478.3	478.3	478.3
Other Comprehensive Income (not considering Non controlling Inter.)	(237'599.0)	(255'131.6)	(270'546.8)	(280'531.6)	(287'769.8)
Non-Operating Result	(234'566.8)	(251'911.0)	(267'160.4)	(277'038.0)	(284'198.4)
Financing					
Interest Income	9'471.0	10'220.2	10'974.4	11'637.4	12'066.9
Financial Income	223'136.4	239'601.8	254'078.6	263'455.7	270'253.3
Interest Expense	(37'594.2)	(39'170.9)	(40'758.0)	(42'153.4)	(43'057.2)
Financial Expense	(273'111.0)	(293'264.1)	(310'983.2)	(322'460.4)	(330'780.4)
Financial Result Before Taxes	(78'097.9)	(82'613.0)	(86'688.2)	(89'520.6)	(91'517.4)
Taxes	20'305.4	21'479.4	22'538.9	23'275.4	23'794.5
Non-controlling interests	6'583.1	7'055.3	7'465.6	7'722.5	7'908.1
Financial Result	(51'209.4)	(54'078.4)	(56'683.7)	(58'522.8)	(59'814.7)
Comprehensive Income attributable to shareholder of parent comp.	697'495.3	750'442.7	797'048.7	827'343.5	849'545.7
Tax Breakdown					
Statutory tax rate	26.0%	26.0%	26.0%	26.0%	26.0%
Effective tax rate (Operating activities)	16.4%	16.4%	16.4%	16.4%	16.4%
Operating result before taxes	1'175'596.0	1'263'066.5	1'340'135.7	1'390'364.4	1'427'014.9
Reported taxes	(172'916.4)	(186'118.7)	(197'725.7)	(205'244.2)	(210'748.3)
Taxes on operating activities	(192'324.6)	(206'634.5)	(219'242.9)	(227'460.2)	(233'456.1)
Taxes on non-operating activities	(897.3)	(963.5)	(1'021.7)	(1'059.4)	(1'086.8)
Tax shield	20'305.4	21'479.4	22'538.9	23'275.4	23'794.5

Consolidated Balance Sheet

Reformulated Consolidated Balance Sheet (in CHF'000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Historical				Forecast Period 1								
Operating													
Assets													
Property, plant and equipment	119,320.0	174,243.0	230,206.0	325,164.0	313,547.0	357,546.0	423,797.6	474,483.4	526,509.3	589,375.3	653,988.6	730,242.3	808,685.8
Right-of-use assets	-	-	-	250,584.0	235,584.0	221,324.0	207,927.2	232,795.0	258,320.4	289,164.3	320,865.4	358,277.6	396,764.2
Intangible assets	106,306.0	241,370.0	235,157.0	258,213.0	226,027.0	213,536.0	237,862.3	262,097.6	286,235.2	315,343.6	344,379.4	378,450.4	412,474.2
Goodwill	207,721.0	406,404.0	417,286.0	484,628.0	424,258.0	425,350.0	425,350.0	425,350.0	425,350.0	425,350.0	425,350.0	425,350.0	425,350.0
Total Operating Non-Current Asset	433,347.0	822,017.0	882,649.0	1,318,589.0	1,199,416.0	1,217,756.0	1,294,937.1	1,394,726.1	1,496,414.9	1,619,233.2	1,744,583.4	1,892,320.4	2,043,274.2
Inventories	101,957.0	152,146.0	182,053.0	234,553.0	216,570.0	249,227.0	282,081.5	315,818.2	350,446.9	392,290.8	435,297.6	486,052.5	538,264.8
Trade receivables	148,909.0	191,868.0	231,301.0	281,210.0	236,027.0	287,269.0	325,138.5	364,024.7	403,939.1	452,170.0	501,741.5	560,243.5	620,425.5
Other Operating Receivable	32,736.0	50,855.0	64,104.0	92,584.0	57,349.0	92,691.0	103,928.1	116,357.8	129,116.1	144,532.8	160,377.9	179,077.6	198,314.4
Income tax receivables	8,522.0	4,901.0	7,192.0	6,982.0	8,626.0	16,064.0	14,241.1	15,944.3	17,692.6	19,805.1	21,976.3	24,538.7	27,174.7
Operating Cash	36,700.7	44,484.1	54,542.4	63,849.0	57,034.0	80,876.1	91,537.7	102,485.5	113,722.8	127,301.4	141,257.5	157,727.8	174,671.1
Total Operating Current Asset	328,824.7	444,254.1	539,192.4	679,178.0	575,606.0	726,127.1	816,926.8	914,630.5	1,014,917.3	1,136,100.1	1,260,650.8	1,407,640.1	1,558,850.5
Total Operating Asset	762,171.7	1,266,271.1	1,421,841.4	1,997,767.0	1,775,022.0	1,943,883.1	2,111,863.9	2,309,356.5	2,511,332.2	2,755,333.2	3,005,234.2	3,299,960.5	3,602,124.7
Liabilities													
Other long term employees benefits	4,723.0	6,035.0	6,314.0	7,717.0	9,303.0	10,912.0	11,842.1	13,258.4	14,712.2	16,468.8	18,274.3	19,612.7	21,293.7
Rent payable	1,978.0	2,164.0	3,579.0	1,929.0	2,520.0	3,553.0	4,834.8	5,413.1	6,006.6	6,723.8	7,461.0	8,330.9	9,225.8
Other non current liabilities	-	-	-	653.0	2,134.0	458.0	1,081.7	1,081.7	1,081.7	1,081.7	1,081.7	1,081.7	1,081.7
Income tax liabilities	-	-	-	9,594.0	9,654.0	12,612.0	14,507.8	16,242.9	18,023.9	20,176.0	22,387.9	24,998.3	27,683.6
Provisions	24,511.0	40,321.0	23,804.0	10,964.0	15,436.0	23,681.0	23,681.0	23,681.0	23,681.0	23,681.0	23,681.0	23,681.0	23,681.0
Total Operating Non-Current Liability	31,212.0	48,520.0	33,697.0	30,857.0	39,047.0	51,216.0	55,947.4	59,677.1	63,505.4	68,131.3	72,885.8	77,704.6	82,965.8
Trade payables	30,307.0	43,792.0	47,557.0	63,207.0	49,919.0	74,832.0	86,527.6	96,876.2	107,498.4	120,333.9	133,526.1	149,095.0	165,111.0
Other Operating Payables	106,216.0	137,556.0	164,809.0	230,958.0	222,320.0	321,841.0	360,542.0	403,662.4	447,922.9	504,405.7	566,374.8	621,247.0	687,982.0
Income tax liabilities	12,739.0	28,692.0	26,458.0	45,490.0	34,159.0	73,616.0	67,787.2	75,894.5	84,216.1	94,271.7	104,606.7	116,803.6	129,350.8
Provisions	16,785.0	327.0	124.0	7.0	35.0	8,535.0	8,535.0	8,535.0	8,535.0	8,535.0	8,535.0	8,535.0	8,535.0
Total Operating Current Liability	166,047.0	210,367.0	238,948.0	339,662.0	306,433.0	478,824.0	523,391.8	584,968.1	648,172.5	724,546.3	803,042.6	895,680.6	990,978.8
Total Operating Liability	197,259.0	258,887.0	272,645.0	370,519.0	345,480.0	530,040.0	579,339.2	644,645.2	711,677.9	792,677.6	875,928.5	973,385.2	1,073,944.6
Operating Invested Capital	564,912.7	1,007,384.1	1,149,196.4	1,627,248.0	1,429,542.0	1,413,843.1	1,532,524.7	1,664,711.3	1,799,654.3	1,962,655.6	2,129,305.7	2,326,575.4	2,528,180.1
Non operating													
Assets													
Investments in associates	61,284.0	65,939.0	106,102.0	90,976.0	92,662.0	98,183.0	98,183.0	98,183.0	98,183.0	98,183.0	98,183.0	98,183.0	98,183.0
Other receivables	4,013.0	6,270.0	5,814.0	6,977.0	8,290.0	16,430.0	13,967.9	15,638.4	17,353.2	19,425.2	21,554.7	24,068.0	26,653.4
Deferred income tax assets	84,119.0	90,743.0	70,066.0	59,993.0	68,990.0	75,809.0	74,953.3	74,953.3	74,953.3	74,953.3	74,953.3	74,953.3	74,953.3
Total Non-Operating Non-Current Asset	149,416.0	162,952.0	181,982.0	157,946.0	169,942.0	190,422.0	187,104.2	188,774.8	190,489.5	192,561.5	194,691.1	197,204.3	199,789.7
Other Non-Operating Receivable	-	797.0	625.0	4,531.0	1,174.0	646.0	646.0	646.0	646.0	646.0	646.0	646.0	646.0
Total Non-Operating Current Asset	-	797.0	625.0	4,531.0	1,174.0	646.0	646.0	646.0	646.0	646.0	646.0	646.0	646.0
Total Non-Operating Asset	149,416.0	163,749.0	182,607.0	162,477.0	171,116.0	191,068.0	187,750.2	189,420.8	191,135.5	193,207.5	195,337.1	197,850.3	200,435.7
Liabilities													
Contingent Consideration	6,129.0	8,987.0	18,594.0	36,770.0	72,792.0	70,527.0	70,527.0	70,527.0	70,527.0	14,927.0	14,927.0	14,927.0	14,927.0
Government Grants	930.0	1,017.0	799.0	576.0	236.0	141.0	-	-	-	-	-	-	-
Retirement benefit obligations	46,763.0	49,453.0	59,185.0	67,918.0	73,325.0	61,739.0	77,735.0	86,774.4	97,152.6	107,805.1	120,677.2	133,901.7	143,714.3
Deferred income tax liabilities	2,078.0	40,520.0	36,211.0	36,887.0	43,228.0	31,040.0	37,577.2	37,577.2	37,577.2	37,577.2	37,577.2	37,577.2	37,577.2
Total Non-Operating Non-Current Liability	55,900.0	99,977.0	114,789.0	142,151.0	189,581.0	163,447.0	185,839.2	194,878.6	205,256.8	160,309.3	173,181.4	186,411.3	196,218.5
Contingent Consideration	-	289.0	8,753.0	12,417.0	44,365.0	42,064.0	42,064.0	42,064.0	42,064.0	5,464.0	5,464.0	5,464.0	5,464.0
Total Non-Operating Current Liability	-	289.0	8,753.0	12,417.0	44,365.0	42,064.0	42,064.0	42,064.0	42,064.0	5,464.0	5,464.0	5,464.0	5,464.0
Total Non-Operating Liability	55,900.0	100,266.0	123,542.0	154,568.0	233,946.0	205,511.0	227,903.2	236,942.6	247,320.8	165,773.3	178,645.4	191,875.3	201,682.5
Non-Operating Invested Capital	93,516.0	63,483.0	59,065.0	7,909.0	(62,830.0)	(14,443.0)	(40,152.9)	(47,521.9)	(56,185.3)	27,434.2	16,691.7	5,975.0	(1,246.8)
Financing													
Excess Cash	127,323.3	237,331.9	224,131.6	196,362.0	575,167.0	799,546.9	703,195.7	787,297.2	873,622.3	977,934.2	1,085,145.2	1,211,670.9	1,341,830.0
Financial Asset	51,011.0	29,615.0	35,989.0	33,372.0	27,309.0	33,538.0	43,211.1	48,379.1	53,683.7	60,093.6	66,681.7	74,456.7	82,454.9
Straight bond	199,632.0	199,746.0	199,862.0	199,980.0	479,820.0	479,841.0	479,841.0	479,841.0	479,841.0	479,841.0	479,841.0	479,841.0	479,841.0
Financial Non-Current Liability	1,270.0	58,843.0	62,020.0	295,509.0	278,437.0	251,209.0	284,324.8	318,329.8	353,233.8	395,410.5	438,759.4	489,917.8	542,545.4
Interest accrued on straight bond	2,180.0	2,180.0	2,180.0	2,180.0	987.0	987.0	987.0	987.0	987.0	987.0	987.0	987.0	987.0
Total Funds	(24,747.7)	6,177.9	(3,941.4)	(267,935.0)	(156,768.0)	101,047.9	(18,746.0)	36,518.5	93,244.2	161,789.3	232,239.5	315,381.7	400,911.5
Equity													
Total equity attributable to the shareholders of the parent company	633,681.0	1,077,195.0	1,200,924.0	1,363,413.0	1,204,735.0	1,495,400.0	1,468,577.8	1,648,659.9	1,831,665.2	2,146,831.2	2,373,188.9	2,642,884.1	2,922,796.8
Non-controlling interests	-	(150.0)	3,396.0	3,809.0	5,209.0	5,048.0	5,048.0	5,048.0	5,048.0	5,048.0	5,048.0	5,048.0	5,048.0
Total Equity	633,681.0	1,077,045.0	1,204,320.0	1,367,222.0	1,209,944.0	1,500,448.0	1,473,625.8	1,653,707.9	1,836,713.2	2,151,879.2	2,378,236.9	2,647,932.1	2,927,844.8

Reformulated Consolidated Balance Sheet (In CHF'000)	2029	2030	2031	2032	2033
	Forecast Period 2				
Operating					
Assets					
Property, plant and equipment	872'660.8	937'055.1	993'672.4	1'030'345.1	1'056'929.7
Right-of-use assets	428'152.2	459'745.9	487'524.0	505'516.6	518'559.8
Intangible assets	438'063.9	462'947.8	483'153.5	493'059.8	497'780.6
Goodwill	425'350.0	425'350.0	425'350.0	425'350.0	425'350.0
Total Operating Non-Current Asset	2'164'226.9	2'285'098.8	2'389'699.9	2'454'271.5	2'498'620.1
Inventories	580'846.8	623'707.9	661'392.7	685'802.2	703'497.0
Trade receivables	669'507.3	718'910.7	762'347.7	790'483.0	810'878.8
Other Operating Receivable	214'003.0	229'794.4	243'678.7	252'672.0	259'191.3
Income tax receivables	29'324.5	31'488.3	33'390.9	34'623.2	35'516.5
Operating Cash	188'489.4	202'398.1	214'627.1	222'548.2	228'290.3
Total Operating Current Asset	1'682'171.0	1'806'299.5	1'915'437.1	1'986'128.6	2'037'374.0
Total Operating Asset	3'846'397.9	4'091'398.3	4'305'137.0	4'440'400.0	4'535'994.1
Liabilities					
Other long term employees benefits	22'527.6	23'715.7	24'655.5	25'064.1	25'206.7
Rent payable	9'955.6	10'690.3	11'336.2	11'754.6	12'057.9
Other non current liabilities	1'081.7	1'081.7	1'081.7	1'081.7	1'081.7
Income tax liabilities	29'873.7	32'078.1	34'016.3	35'271.7	36'181.8
Provisions	23'681.0	23'681.0	23'681.0	23'681.0	23'681.0
Total Operating Non-Current Liability	87'119.7	91'246.7	94'770.6	96'853.0	98'209.0
Trade payables	178'172.9	191'320.4	202'880.1	210'367.6	215'795.4
Other Operating Payables	742'408.2	797'191.0	845'357.8	876'556.7	899'173.3
Income tax liabilities	139'583.7	149'883.7	158'939.7	164'805.6	169'057.9
Provisions	8'535.0	8'535.0	8'535.0	8'535.0	8'535.0
Total Operating Current Liability	1'068'699.8	1'146'930.1	1'215'712.6	1'260'264.9	1'292'561.6
Total Operating Liability	1'155'819.5	1'238'176.8	1'310'483.2	1'357'117.9	1'390'770.6
Operating Invested Capital	2'690'578.4	2'853'221.5	2'994'653.9	3'083'282.1	3'145'223.5
Non operating					
Assets					
Investments in associates	98'183.0	98'183.0	98'183.0	98'183.0	98'183.0
Other receivables	28'761.9	30'884.3	32'750.3	33'959.0	34'835.2
Deferred income tax assets	74'953.3	74'953.3	74'953.3	74'953.3	74'953.3
Total Non-Operating Non-Current Asset	201'898.3	204'020.6	205'886.7	207'095.4	207'971.6
Other Non-Operating Receivable	646.0	646.0	646.0	646.0	646.0
Total Non-Operating Current Asset	646.0	646.0	646.0	646.0	646.0
Total Non-Operating Asset	202'544.3	204'666.6	206'532.7	207'741.4	208'617.6
Liabilities					
Contingent Consideration	14'927.0	14'927.0	14'927.0	14'927.0	14'927.0
Government Grants	-	-	1.0	2.0	3.0
Retirement benefit obligations	156'031.6	165'073.8	173'779.1	180'665.6	183'660.1
Deferred income tax liabilities	37'577.2	37'577.2	37'577.2	37'577.2	37'577.2
Total Non-Operating Non-Current Liability	208'535.8	217'578.0	226'284.3	233'171.8	236'167.3
Contingent Consideration	5'464.0	5'464.0	5'464.0	5'464.0	5'464.0
Total Non-Operating Current Liability	5'464.0	5'464.0	5'464.0	5'464.0	5'464.0
Total Non-Operating Liability	213'999.8	223'042.0	231'748.3	238'635.8	241'631.3
Non-Operating Invested Capital	(11'455.6)	(18'375.4)	(25'215.7)	(30'894.5)	(33'013.8)
Financing					
Excess Cash	1'447'982.0	1'554'829.6	1'648'773.3	1'709'623.2	1'753'734.3
Financial Asset	88'977.9	95'543.6	101'316.4	105'055.6	107'766.2
Straight bond	479'841.0	479'841.0	479'841.0	479'841.0	479'841.0
Financial Non-Current Liability	585'466.1	628'668.0	666'652.5	691'256.1	709'091.6
Interest accrued on straight bond	987.0	987.0	987.0	987.0	987.0
Total Funds	470'665.8	540'877.2	602'609.2	642'594.7	671'580.9
Equity					
Total equity attributable to the shareholders of the parent company	3'144'740.6	3'370'675.3	3'566'999.4	3'689'934.3	3'778'742.7
Non-controlling interests	5'048.0	5'048.0	5'048.0	5'048.0	5'048.0
Total Equity	3'149'788.6	3'375'723.3	3'572'047.4	3'694'982.3	3'783'790.7

Consolidated Cash Flows Statement

Reformulated Consolidated Free Cash Flow (In CHF'000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	Historical					Forecast Period 1							
Operating													
EBIT	225,503.0	281,532.0	340,819.0	405,890.0	512,607.0	539,907.0	601,028.7	673,320.1	727,573.5	792,079.1	879,452.2	982,585.1	1,088,779.2
Notional taxes	6,939.8	(45,436.5)	(52,573.8)	(68,711.8)	(31,288.9)	(95,930.1)	(98,326.8)	(110,153.5)	(119,029.2)	(129,582.2)	(143,876.2)	(160,748.5)	(178,121.6)
Nonplaf	232,442.8	236,095.5	288,245.2	337,178.2	543,318.1	443,976.9	502,701.9	563,166.6	608,544.3	662,496.9	735,576.0	821,836.6	910,657.6
Depreciation&Amortization	32,023.0	40,258.0	52,367.0	93,498.0	99,467.0	103,206.0	102,272.0	114,094.7	126,158.2	140,729.5	155,620.3	173,174.7	191,133.7
Impairments	-	-	-	-	294,401.0	6,637.0	-	-	-	-	-	-	-
Gross Free Cash Flow	264,465.8	276,353.5	340,612.2	430,676.2	515,186.1	553,819.9	604,973.9	677,261.3	734,702.4	803,226.4	891,196.3	995,011.4	1,101,791.3
- Capital Expenditures	(230,245.0)	(102,117.0)	(102,117.0)	(462,096.0)	(335,065.0)	(127,091.0)	(179,453.1)	(213,883.6)	(227,847.0)	(263,547.8)	(280,970.5)	(320,911.7)	(342,087.5)
- Change in NWC	(71,109.4)	(66,357.3)	(39,271.6)	(39,271.6)	70,343.0	21,869.9	(46,231.9)	(36,127.3)	(37,082.5)	(44,809.0)	(46,054.4)	(54,351.3)	(55,912.1)
+ Change in other non-current operating liabilities	17,308.0	(14,823.0)	(2,840.0)	(2,840.0)	8,190.0	12,169.0	4,731.4	3,729.7	3,828.3	4,625.9	4,754.5	4,818.7	5,261.2
- Change in other non-current operating assets	(198,683.0)	(10,882.0)	(67,342.0)	(60,370.0)	(1,092.0)	-	-	-	-	-	-	-	-
Operating Free Cash Flow	264,465.8	(206,375.9)	146,432.8	(140,873.4)	319,024.1	459,675.9	384,020.3	430,980.1	473,601.2	499,495.6	568,925.9	624,567.0	709,052.9
Non-operating													
Non-operating Result before Taxes	1,673.0	1,752.0	1,816.0	(18,751.0)	3,934.0	2,674.0	1,676.0	1,876.5	2,082.2	2,330.8	2,586.4	2,887.9	3,198.1
Taxes on non-operating activities	(435.0)	(455.5)	(472.2)	4,875.3	(1,022.8)	(695.2)	(435.8)	(487.9)	(541.4)	(606.0)	(672.5)	(750.9)	(831.5)
Gain on Consolidation of former associates	-	68,867.0	10,725.0	5,967.0	-	-	-	-	-	-	-	-	-
Share of results of associates	(1,603.0)	(9,738.0)	(9,984.0)	(3,036.0)	(1,588.0)	6,059.0	478.3	478.3	478.3	478.3	478.3	478.3	478.3
Other comprehensive income	53,083.0	(9,410.0)	(92,945.0)	(58,621.0)	(163,362.0)	(33,875.0)	(115,387.2)	(129,187.4)	(143,352.4)	(160,469.0)	(178,061.2)	(198,822.8)	(220,180.5)
Non-operating Result	52,718.0	51,014.5	(90,860.2)	(69,565.7)	(162,038.8)	(25,837.2)	(113,688.6)	(127,320.5)	(141,333.3)	(158,265.8)	(175,669.0)	(196,207.4)	(217,335.6)
- Change in non-current non-operating assets	(13,536.0)	(19,030.0)	24,036.0	(11,996.0)	(20,480.0)	3,317.8	(1,670.5)	(1,714.7)	(2,072.0)	(2,129.6)	(2,513.2)	(2,584.4)	(2,584.4)
+ Change in non-current non-operating liabilities	44,077.0	14,812.0	27,362.0	47,430.0	(26,134.0)	22,392.2	9,039.5	10,378.1	(44,947.5)	12,872.1	13,229.9	9,807.2	-
- Change in current non-operating assets	(797.0)	172.0	(3,906.0)	3,357.0	528.0	-	-	-	-	-	-	-	-
+ Change in current non-operating liabilities	289.0	8,464.0	3,664.0	31,948.0	(2,301.0)	-	-	-	-	(36,600.0)	-	-	-
Non-operating Free Cash Flow	52,718.0	81,047.5	(86,442.2)	(18,409.7)	(91,299.8)	(74,224.2)	(87,958.7)	(119,951.5)	(132,669.9)	(241,885.3)	(164,926.4)	(185,490.8)	(210,113.7)
Unlevered Free Cash Flow	317,183.8	(125,328.4)	59,990.7	(159,283.1)	227,724.3	385,451.6	296,061.6	311,028.5	340,931.4	257,610.3	403,999.5	439,076.3	498,939.1
Tax shield	870.2	5,025.0	4,407.0	6,396.5	10,671.7	18,526.3	11,834.7	13,082.5	14,027.6	15,138.6	16,312.0	17,664.7	19,089.1
Levered Free Cash Flow	318,054.0	(120,303.4)	64,397.7	(152,886.6)	238,396.0	403,977.9	307,896.3	324,111.0	354,958.9	272,748.9	420,311.5	456,740.9	518,028.2
Financing													
Financial Result Before Taxes	(3,347.0)	(19,327.0)	(16,950.0)	(24,602.0)	(41,045.0)	(71,255.0)	(45,518.0)	(50,317.2)	(53,952.2)	(58,225.2)	(62,738.6)	(67,941.1)	(73,419.6)
Income attributable to minority interests	-	4,397.0	3,887.0	647.0	797.0	3,013.0	3,079.9	3,456.3	3,838.7	4,497.4	4,970.5	5,534.2	6,119.2
- Change in excess cash	-	(110,008.6)	13,200.3	27,769.6	(378,805.0)	(224,379.9)	96,351.2	(84,101.5)	(86,325.1)	(104,311.9)	(107,211.0)	(126,525.7)	(130,159.1)
+ Change in Net Financial	79,083.0	(3,081.0)	236,224.0	267,638.0	(33,436.0)	23,442.7	28,837.0	29,599.4	35,766.8	36,760.8	43,383.5	44,629.3	44,629.3
+ Change in transaction with shareholder	166,159.0	(61,454.0)	(87,152.0)	(86,981.0)	(77,920.0)	(77,920.0)	(385,252.1)	(221,985.5)	(248,115.8)	(350,875.9)	(292,093.2)	(311,191.8)	(365,198.1)
Financing Free Cash Flow	(3,347.0)	120,303.4	(64,397.7)	(152,886.6)	(238,396.0)	(403,977.9)	(307,896.3)	(324,111.0)	(354,958.9)	(272,748.9)	(420,311.5)	(456,740.9)	(518,028.2)

Reformulated Consolidated Free Cash Flow (In CHF'000)	2029	2030	2031	2032	2033
	Forecast Period 2				
Operating					
EBIT	1'175'596.0	1'263'066.5	1'340'135.7	1'390'364.4	1'427'014.9
Notional taxes	(192'324.6)	(206'634.5)	(219'242.9)	(227'460.2)	(233'456.1)
Nonplaf	983'271.4	1'056'432.0	1'120'892.8	1'162'904.2	1'193'558.8
Depreciation&Amortization	205'570.6	220'017.4	232'557.0	240'370.3	245'795.5
Impairments	-	-	-	-	-
Gross Free Cash Flow	1'188'842.1	1'276'449.4	1'353'449.8	1'403'274.6	1'439'354.3
- Capital Expenditures	(326'523.3)	(340'889.3)	(337'158.1)	(304'941.9)	(290'144.1)
- Change in NWC	(45'599.5)	(45'898.3)	(40'355.1)	(26'139.1)	(18'948.7)
+ Change in other non-current operating liabilities	4'153.9	4'127.1	3'523.9	2'082.4	1'355.9
- Change in other non-current operating assets	-	-	-	-	-
Operating Free Cash Flow	820'873.2	893'788.9	979'460.4	1'074'276.0	1'131'617.4
Non-operating					
Non-operating Result before Taxes	3'451.1	3'705.8	3'929.7	4'074.7	4'179.9
Taxes on non-operating activities	(897.3)	(963.5)	(1'021.7)	(1'059.4)	(1'086.8)
Gain on Consolidation of former associates	-	-	-	-	-
Share of results of associates	478.3	478.3	478.3	478.3	478.3
Other comprehensive income	(237'599.0)	(255'131.6)	(270'546.8)	(280'531.6)	(287'769.8)
Non-operating Result	(234'566.8)	(251'911.0)	(267'160.4)	(277'038.0)	(284'198.4)
- Change in non-current non-operating assets	(2'108.5)	(2'122.4)	(1'866.0)	(1'208.7)	(876.2)
+ Change in non-current non-operating liabilities	12'317.3	9'042.2	8'706.3	6'887.5	2'995.5
- Change in current non-operating assets	-	-	-	-	-
+ Change in current non-operating liabilities	-	-	-	-	-
Non-operating Free Cash Flow	(224'358.0)	(244'991.1)	(260'320.2)	(271'359.1)	(282'079.1)
Unlevered Free Cash Flow	596'515.1	648'797.8	719'140.2	802'916.8	849'538.3
Tax shield	20'305.4	21'479.4	22'538.9	23'275.4	23'794.5
Levered Free Cash Flow	616'820.6	670'277.1	741'679.2	826'192.2	873'332.8
Financing					
Financial Result Before Taxes	(78'097.9)	(82'613.0)	(86'688.2)	(89'520.6)	(91'517.4)
Income attributable to minority interests	6'583.1	7'055.3	7'465.6	7'722.5	7'908.1
- Change in excess cash	(106'152.0)	(106'847.6)	(93'943.6)	(60'849.9)	(44'111.1)
+ Change in Net Financial	36'397.7	36'636.2	32'211.7	20'864.4	15'125.0
+ Change in transaction with shareholder	(475'551.5)	(524'508.0)	(600'724.6)	(704'408.6)	(760'737.4)
Financing Free Cash Flow	(616'820.6)	(670'277.1)	(741'679.2)	(826'192.2)	(873'332.8)

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 Matteo Amarilli, a Master in Finance student of Nova School of Business and Economics (“Nova SBE”), within the context of the Field Lab – Equity Research.

This report is issued and published exclusively for academic purposes, namely for academic evaluation and master graduation purposes, within the context of said Field Lab – Equity Research. It is not to be construed as an offer or a solicitation of an offer to buy or sell any security or financial instrument.

This report was supervised by a Nova SBE faculty member, acting merely in an academic capacity, who revised the valuation methodology and the financial model.

Given the exclusive academic purpose of the reports produced by Nova SBE students, it is Nova SBE understanding that Nova SBE, the author, the present report and its publishing, are excluded from the persons and activities requiring previous registration from local regulatory authorities. As such, Nova SBE, its faculty and the author of this report have not sought or obtained registration with or certification as financial analyst by any local regulator, in any jurisdiction. In Portugal, neither the author of this report nor his/her academic supervisor is registered with or qualified under COMISSÃO DO MERCADO DE VALORES MOBILIÁRIOS (“CMVM”, the Portuguese Securities Market Authority) as a financial analyst. No approval for publication or distribution of this report was required and/or obtained from any local authority, given the exclusive academic nature of the report.

The additional disclaimers also apply:

USA: Pursuant to Section 202 (a) (11) of the Investment Advisers Act of 1940, neither Nova SBE nor the author of this report are to be qualified as an investment adviser and, thus, registration with the Securities and Exchange Commission (“SEC”, United States of America’s securities market authority) is not necessary. Neither the author nor Nova SBE receive any compensation of any kind for the preparation of the reports.

Germany: Pursuant to §34c of the WpHG (*Wertpapierhandelsgesetz*, i.e., the German Securities Trading Act), this entity is not required to register with or otherwise notify the *Bundesanstalt für Finanzdienstleistungsaufsicht* (“BaFin”, the German Federal Financial Supervisory Authority). It should be noted that Nova SBE is a fully-owned state university and there is no relation between the student’s equity reports and any fund raising programme.

UK: Pursuant to section 22 of the Financial Services and Markets Act 2000 (the “FSMA”), for an activity to be a regulated activity, it must be carried on “by way of business”. All regulated activities are subject to prior authorization by the Financial Conduct Authority (“FCA”). However, this report serves an exclusively academic purpose and, as such, was not prepared by way of business. The author - a Master’s student - is the **sole and exclusive responsible** for the information, estimates and forecasts contained herein, and for the opinions expressed, which exclusively reflect his/her own judgment at the date of the report. Nova SBE and its faculty have no single and formal position in relation to the most appropriate valuation method, estimates or projections used in the report and may not be held liable by the author’s choice of the latter.

The information contained in this report was compiled by students from public sources believed to be reliable, but Nova SBE, its faculty, or the students make no representation that it is accurate or complete, and accept no liability whatsoever for any direct or indirect loss resulting from the use of this report or of its content.

Students are free to choose the target companies of the reports. Therefore, Nova SBE may start covering and/or suspend the coverage of any listed company, at any time, without prior notice. The students or Nova SBE are not responsible for updating this report, and the opinions and recommendations expressed herein may change without further notice.

The target company or security of this report may be simultaneously covered by more than one student. Because each student is free to choose the valuation method, and make his/her own assumptions and estimates, the resulting projections, price target and recommendations may differ widely, even when referring to the same security. Moreover, changing market conditions and/or changing subjective opinions may lead to significantly different valuation results. Other students’ opinions, estimates and recommendations, as well as the advisor and other faculty members’ opinions may be inconsistent with the views expressed in this report. Any recipient of this report should understand that statements regarding future prospects and performance are, by nature, subjective, and may be fallible.

This report does not necessarily mention and/or analyze all possible risks arising from the investment in the target company and/or security, namely the possible exchange rate risk resulting from the security being denominated in a currency either than the investor’s currency, among many other risks.

The purpose of publishing this report is merely academic and it is not intended for distribution among private investors. The information and opinions expressed in this report are not intended to be available to any person other than Portuguese natural or legal persons or persons domiciled in Portugal. While preparing this report, students did not have in consideration the specific investment objectives, financial situation or

particular needs of any specific person. Investors should seek financial advice regarding the appropriateness of investing in any security, namely in the security covered by this report.

The author hereby certifies that the views expressed in this report accurately reflect his/her personal opinion about the target company and its securities. He/ She has not received or been promised any direct or indirect compensation for expressing the opinions or recommendation included in this report.

The content of each report has been shown or made public to restricted parties prior to its publication in Nova SBE's website or in Bloomberg Professional, for academic purposes such as its distribution among faculty members for students' academic evaluation.

Nova SBE is a state-owned university, mainly financed by state subsidies, students tuition fees and companies, through donations, or indirectly by hiring educational programs, among other possibilities. Thus, Nova SBE may have received compensation from the target company during the last 12 months, related to its fundraising programs, or indirectly through the sale of educational, consulting or research services. Nevertheless, no compensation eventually received by Nova SBE is in any way related to or dependent on the opinions expressed in this report. The Nova School of Business and Economics does not deal for or otherwise offer any investment or intermediation services to market counterparties, private or intermediate customers.

This report may not be reproduced, distributed or published, in whole or in part, without the explicit previous consent of its author, unless when used by Nova SBE for academic purposes only. At any time, Nova SBE may decide to suspend this report reproduction or distribution without further notice. Neither this document nor any copy of it may be taken, transmitted or distributed, directly or indirectly, in any country either than Portugal or to any resident outside this country. The dissemination of this document other than in Portugal or to Portuguese citizens is therefore prohibited and unlawful.