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COMBIBLOC GROUP AG

An efficient carton filled with a refreshing future!

Sector: Consumer Cyclical
Industry: Packaging & Containers
Stock Exchange: SIX SWISS
Ticker: SIGN

Recommendation: BUY | Current Price: CHF 24.2 | Valuation Date: 30.11.2021

Upside: 22.5% | 12-month Target Price: CHF 29.7

SIG Combibloc Group AG (hereafter SIG) is a pure player and Global System Supplier (hereafter GSS) (i.e., the company supplies filling machines in addition to carton packaging material and after-market services) in aseptic carton packaging. It fully targets food and beverage markets. With a successful previous expansion of its global reach and a constant control over its margins, we believe SIG is positioned to deliver higher value to shareholders.

INVESTMENT SUMMARY

We issue a strong BUY recommendation for SIG. **The 12-month target price of CHF 29.7**, which represents a substantial **upside of 22.5%**, is derived from an 80%/20%-weighted DCF and EV/Forward EBITDA multiple valuations. We are convinced that the continuous expansion of its global reach and its ability to drive margins up will benefit the company in the coming decade. Our positive outlook is built upon the following 3 factors:

Growing demand driven by turning points in consumption and environmental awareness

The market for aseptic carton packaging is set to grow at a 4.8% 5-year CAGR (vs. 4.4% consensus). Changes in consumption habits in APAC and MEA will drive up the sales of packaged foods by a 2.4% CAGR over the next 10 years. SIG will greatly **benefit from the rising awareness for health and environmental matters** as its technology is the **most eco-friendly**, with at least 40% less CO_2 emissions than plastic solutions. The ever-changing **regulatory environment will act as a catalyst** in the transition to a low-carbon economy. In addition, **China's 50% target increase in domestic raw milk production constitutes a key element of the expansion of SIG in Asia Pacific**. The company also has an interesting card to play in non-dairy substitutes, an industry that particularly conveys an eco-friendly image. Finally, SIG will profit from **a growth opportunity in online grocery shopping thanks to the products' long shelf lives** (**up to 12 months**) and highly customizable design.

A powerful competitive position nourished by a focus on innovative processes

SIG is a clear number 2 that operates in a duopolistic and niche market with a 21% share (in volume). Except for an Asian non-system supplier, **the company is the unique provider of the sleeve technology**, which ensures a **99% customer retention rate.** Due to its technological uniqueness and flexibility, **SIG delivers a large number of solutions that can reduce up to 30% of its customers' operating costs**. Thanks to its razor-razorblade business model, the company wins its customers' loyalty by engaging in mutually beneficial **long-term partnerships that constitute smooth and recurring revenue streams**. The company's focus on R&D (**3% of sales**) allows for differentiation in a rather commoditized industry and is at the origin of a solid portfolio of **860+ active and pending patents**. Furthermore, the presence of Tetra Pak as a major shareholder further consolidates SIG's competitive position as it proves to be very supportive of the current duopoly market structure.

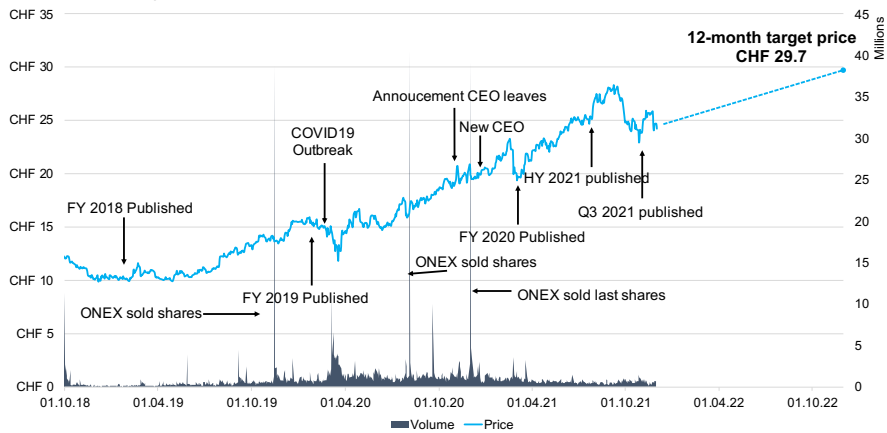
Outstanding margin management will widen the gap with competitors

Through its operations, **we expect the company's revenue to grow at a 10.3% 5-year CAGR** (incl. 7.7% organic). SIG is positioned to **gain a 5% additional market share by further penetrating APAC, MEA and the Americas**, which exhibit high growth potential. Thanks to the opening of a **new production plant in Mexico, SG&A is expected to decrease by 200bps**. Combining this with an efficient sourcing of raw materials, **we expect the EBITDA margin to reach a record high of 29.7% by 2026**, slightly above the 29% management target. The company's remarkable cash flow generation will support the deleveraging process, reaching the industry's optimal capital structure in the long run. **We also expect the ROE to top 10% and dividend payouts to remain at 55% of net income from 2021.**

ISIN	CH0435377954
FY 2020 REVENUE	CHF 1816M
FOUNDED	1853
HEADQUARTERS	Neuhausen, CH
CEO	Samuel Sigrist
ESG SCORE	AA
No. EMPLOYEES	5900

KEY INFORMATION	
MARKET CAPITALIZATION	CHF 8.20B
SHARES OUTSTANDING	337.52M
52-WEEK RANGE	CHF19.20 - CHF28.56
FREE FLOAT	95.40%
LEVERAGE (ASSETS/EQUITY)	x2.46
EQUITY BETA	0.95
WACC	6.20%
DIVIDEND YIELD	2.10%
TARGET PRICE	CHF 29.70
DCF (80%)	CHF 30.55
MULTIPLE (20%)	CHF 26.26
AVG. DAILY VOLUME TRADED	626K

MAJOR SHAREHOLDERS	*share*
HALDOR FOUNDATION	10.00%
OBEIKAN INVESTMENT GROUP	5.17%
NORGES BANK	4.96%
BLACKROCK, INC.	3.57%
UBS FUND MANAGEMENT AG	3.18%
AMERIPRISE FINANCIAL, INC.	3.17%



Key Financials	2020A	2021E	2022E	2023E	2024E	2025E	2026E
Revenue growth	1.8%	17.2%	8.0%	8.8%	8.7%	8.2%	4.5%
EBITDA Margin	24.8%	25.2%	22.8%	25.5%	26.7%	28.3%	29.7%
Net Margin	3.7%	8.0%	5.9%	8.7%	10.5%	12.6%	14.6%
ROE	3.6%	8.1%	5.6%	8.7%	10.7%	13.0%	14.5%
EPS (in €)	0.20	0.50	0.40	0.65	0.84	1.10	1.33
DPS (in €)	0.34	0.38	0.28	0.22	0.36	0.46	0.60

BUSINESS DESCRIPTION

Founded in 1853 and headquartered in Neuhausen, Switzerland, SIG Combibloc Group AG is a leading global manufacturer of aseptic carton packaging solutions for the liquid food and beverage industry. Even though the firm was already manufacturing packaging machinery since 1906, it only became a **pure player in aseptic carton packaging** in 2000. Before their second IPO on the SIX Swiss Exchange in September 2018, SIG was held by the Canadian Private Equity firm Onex. The firm currently employs around 5'900 people worldwide.

Supplying non-cyclical end-markets with an end-to-end solution

The company's solution is split into **3 distinct segments**: **sleeves & closures** (86% of revenue), **filling machines** (7%), and **factory services** (7%) (Fig. 1). The firm supplies **3 principal end-markets**: **liquid dairy** (69% of revenues), **non-carbonated soft drinks** (hereafter NCSD) (22%), and **food** (9%) (Fig. 2). This **exposure to non-cyclical end-markets guarantees robustness to important economic downturns** such as the one induced by the COVID-19 pandemic. With a historical focus on the liquid dairy market, SIG has recently been able to further expand in NCSD. **Newly signed contracts with Coca-Cola and Volvic reflect the ongoing shift from PET bottles to aseptic cartons.**

Efficient and flexible product portfolio

SIG manufactures highly flexible filling machines that offer superior production rates**.** At the end of 2020, the company exhibited an **installed base of 1266 fillers** worldwide. Their latest model, **SIG NEO, offers the highest output per hour for mid-size carton packaging** in the industry, with a production capacity of 18'000 packs per hour. In addition to their cutting-edge production efficiency, SIG's diversified product outline is ideal to fit varying demand characteristics across the globe. **The company offers more than 300 packaging solutions**, depending on design, volume (from 80mL to 2L) and materials used (Fig. 6). As a result, the company sold no less than 38 billion cartons in 2020. The firm's innovation processes led to numerous industry breakthroughs. In 2010, SIG produced the **first aluminum-free aseptic carton**, resulting in a **28% cut in CO_2 emissions**. As of today, 2.6% of the cartons sold by the company are aluminum-free. The momentum in environmental awareness should push this proportion further. Furthermore, **the new Combivita will facilitate the shift from PET bottles to aseptic cartons from a convenience standpoint,** as the company managed to round the carton's angles to improve its grip.

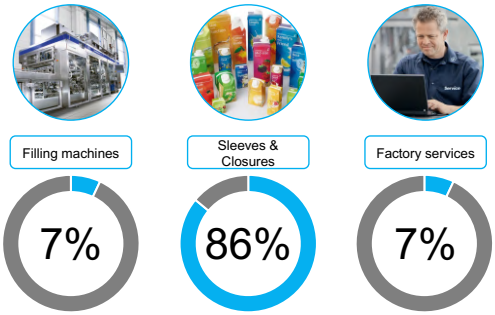
Valuable network of long-term partnerships

Throughout the years, the company managed to nurture partnerships with several leading companies in the dairy industry. Through its GSS offer, SIG creates value for customers thanks to its **unique proprietary sleeve technology**. This **technology sets the company apart from its competitors** who share the exact same roll-fed system (Appx. 4). As a consequence, **SIG's clients regularly extend their original 5- to 7-year contracts** to capture more value from these long-term relationships. For that reason, the company manages to keep an outstanding **customer retention rate of 99%**, minimizing the risk of losing major clients. Besides fostering long-term client relationships, SIG's **razor-razorblade business model acts as a stable foundation for the company's revenue structure**. SIG usually sells machines and equipment at cost. The transaction is financed with leasing agreements, where customers pay 30% of the total cost upfront. **Sales of sleeves and closures provide smooth and cumulative cash flows** that lead to a small **breakeven period of 2-3 years on each new filler placed** (Fig. 3).

Capturing growth from emerging markets

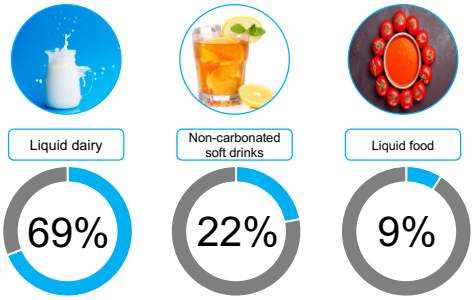
The company aims at growing above the market by strengthening its platform for geographic growth. To do so, **SIG penetrates emerging markets** with a solution-selling approach that sets the interest of customers as paramount. As a result, **it progressively reduced the dependency on EMEA** (44% of sales) **by further expanding in APAC** (38%), **and in the Americas** (18%) as both regions have higher growth prospects (Fig. 4). To consolidate the penetration of high potential markets, the company aims at having a fleet of production plants and Tech centers in every business region. With their upcoming plant in Mexico, **the company will be able to supply every geographic segment locally**. This strategy will drive a 4 to 6% guidance for future revenue growth, which is way above the market's historical 3%. In the mid-term, we expect the company to be **further exposed to APAC and MEA** (Fig. 5). Additionally, the **management expressed the willingness to maintain its R&D expenses to 3% of sales** to deepen its position of customer-oriented innovation leader and to pursue its objective to win at the customer.

Fig. 1: Revenue by products



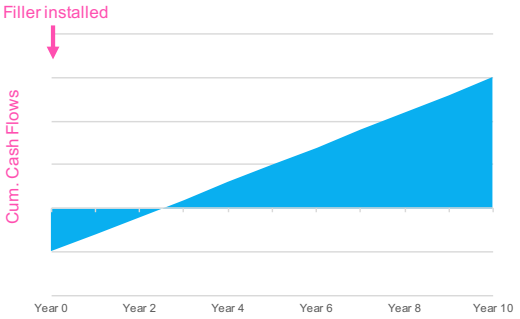
Source: Company Data

Fig. 2: Revenue by end-markets



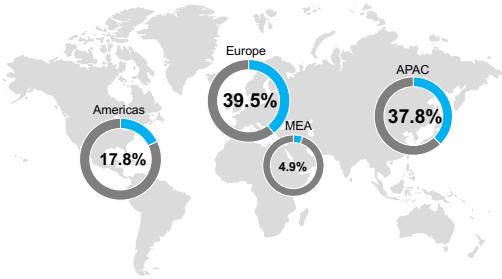
Source: Company Data

Fig. 3: Cumulative Cash Flows



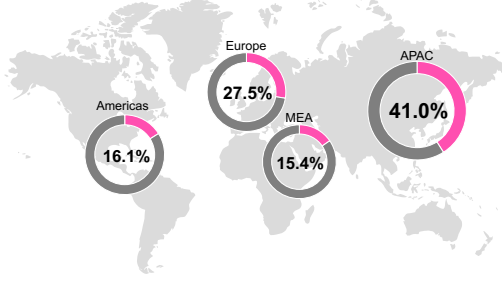
Source: Company Data

Fig. 4: Revenue by region FY20



Source: Company Data

Fig. 5: Revenue by region FY26E



Source: Team Assessment

Fig. 6: Product line

Source: Company Data

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

We computed our own ESG score based on several metrics and ended up with a **score of 4.1/5 for SIG**. From this perspective, **the company outperforms its packaging peers** which obtained an average score of 3.2. To emphasize the industry's characteristics, we set weights of 40% for Environment, 20% for Social, 30% for Governance, and 10% for SDGs (Fig. 7). By incorporating a SDG criterion, we take into account the extent to which companies contribute to the sustainable development goals set by the United Nations. **We strongly believe that the company's environmental credentials will positively impact the company's reputation**.

In order to reward **SIG's superior ESG score**, we decided to apply a **0.1% discount to the WACC** which leads to a premium of +3% to the final Enterprise Value. We did not assign a larger discount to avoid underestimating the final value of the WACC. To come up with this discount, we consider a rule of thumb applied by practitioners which states that best-in-class companies could obtain up to a 10% premium (i.e., 0.35% WACC discount at most in our case) onto the fair value that comes out of the DCF model (Ref. 13).

Environmental

Being more environmental-friendly by sourcing responsibly

In 2018, SIG was the **first in the industry to achieve a carbon-neutral production by sourcing 100% renewable energy for production** and by using the Gold Standard. However, we believe that there is still room for improvement as it could produce more of its own renewable energy and use it locally. As of today, only 2 small plants supply their energy through their own solar panels. While searching for a solution to remove the aluminum layer from all packaging, **SIG is the first in the industry to source aluminum from ASI certified suppliers** (60%). Furthermore, **100% of its liquid paperboard is FSC-certified** and it also uses plant-based renewable polymers to produce its most sustainable offering. Thanks to their responsible sourcing, the company's **total CO_2 emission per liter of food packed is continuously decreasing** (Fig. 8) (Ref. 7). However, the company remains perfectly aware of the challenges imposed by responsible sourcing and thus announced a **target to source 100% of its raw materials from certified suppliers by 2025**.

A good alternative to reduce customers' environmental and financial costs

As shown by a Life Cycle Assessment analysis, **the beverage carton is the most eco-friendly packaging solution**. It emits very few CO_2 emissions compared to other packaging substrates (Fig. 9). **SIG offers products that emit fewer emissions than the average peers** (Fig. 10). Furthermore, its **strong focus on sustainable innovation** allows it to be a pioneer and a leading example in the area. SIG offers machines that reduce both the customers' negative environmental impact and their costs. Its **latest filling machine reduces the carbon footprint per pack filled by 25% while saving up to 30% of operating costs.** Moreover, SIG's filling machines have the **lowest waste rate in the industry (<0.5%)**. Indeed, their unique sleeve technology enables them to reduce food loss by up to 80% during changeovers which represents a substantial cost saving for customers and society.

Green does not always rhyme with expensive

Aluminum is the most expensive and polluting raw material necessary to the production of aseptic cartons. Offering aluminum-free packaging or replacing traditional polymers by plant-based ones does not only impact the environment but also SIG's financials. We conducted a quantitative analysis on prices to estimate the impact of green alternatives on SIG's costs. Plant-based polymers are currently 30% more expensive than traditional ones. As a result, the **SIGNATURE Full Barrier**, because it uses plant-based polymer, **is 9% more costly** than the standard offer for aseptic carton. In contrast, the **aluminum-free ECOPLUS is 6% less costly** than standard models. The company's **most sustainable solution, the SIGNATURE 100**, which benefit from these two characteristics, **is only 2% more costly** compared to their standard offer (Fig. 11).

Commonly investing in the recycling of a complex material

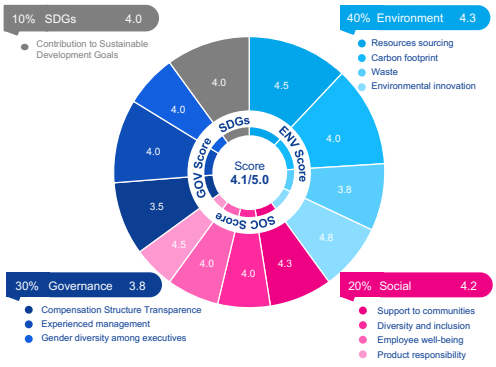
One capital area for improvement in the upcoming years is the post-consumer life cycle of beverage cartons due to its **complex multi-layer structure** (Fig. 12). To address the problem, **SIG contributed to the construction of a specialized recycling facility in Europe** and also made important partnerships in recycling projects with NGOs. To efficiently incorporate aseptic carton packaging in the circular economy, **governments and industry players must further invest** in recycling infrastructures.

Social

A willingness to improve the well-being of their human resources

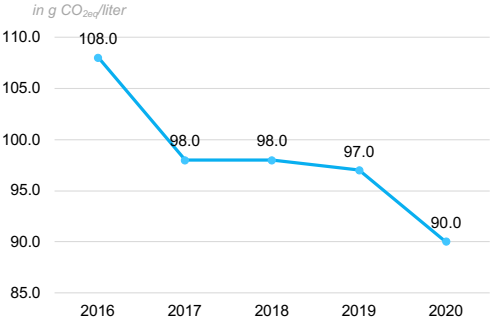
Following their negative employee Net Promoter Score (hereafter eNPS) in the past (Fig. 13), the company has shown a great improvement in the overall satisfaction and engagement of its employees. Indeed, **in 2020, SIG obtained a sustainable engagement score of 87%, which is above the industry benchmark of 80%.** Moreover, in 2018, it identified a material issue regarding diversity and equal opportunity. As a consequence, SIG managed to achieve the associated objective within 2 years by creating a dedicated focus group to drive its diversity and inclusion strategy across the business. SIG also sets a **target to increase women in leadership to 30% by 2025.** As a consequence, **SIG welcomed its first female member in the Group Executive**

Fig. 7: ESG Score



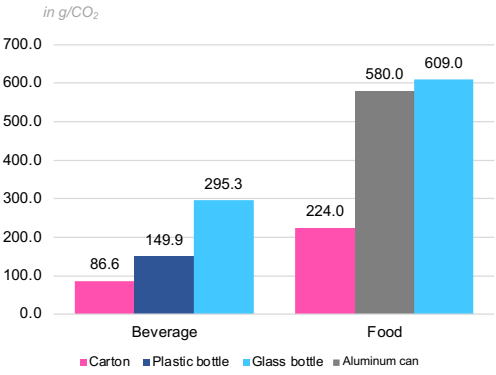
Source: Team Assessment

Fig. 8: CO_2 emissions per liter packed



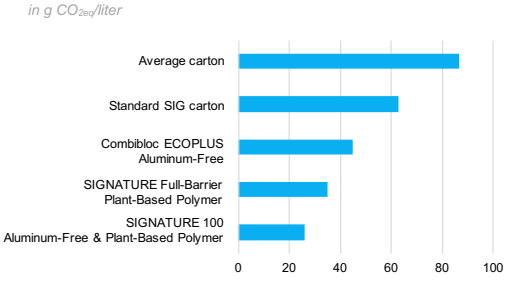
Source: Company Data

Fig. 9: Emissions per liter per packaging



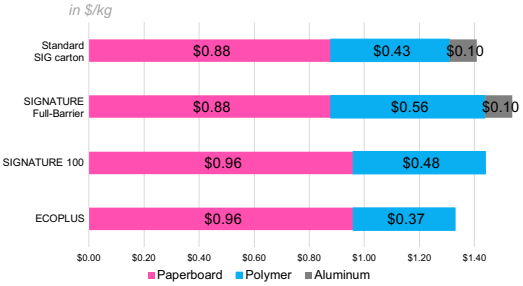
Source: Company Data

Fig. 10: Life cycle carbon footprint



Source: Company Data

Fig. 11: Price estimation per model



Source: Team Assessment, Company Data, Refinitiv

Board in January 2021. Two other women will also be appointed as executives as of January 2022.

Helping communities to thrive

The **cumulative impact of its community engagement programs in 2020 was 10 times that of 2016**. In accordance with its commitment to go Way Beyond Good, its corresponding foundation launched several initiatives. Overall, these different local initiatives helped the company to **tackle 2 main issues in the industry which are food loss and recycling**. Now, the main challenge is to scale up these projects to other countries and regions which will help to further affirm the implementation of aseptic beverage cartons over other types of packaging in less developed countries.

Governance

Positioning the Executive Committee for growth

The company benefits from being managed by a cross-functional team of individuals coming from complementary backgrounds. **In 2020, Mr. Sigrist was appointed CEO**, arguably because of his **solid experience within the Group as CFO and EMEA General Manager**. The rest of the team is composed of **managers that have decades of proven track records** in Fast Moving Consumer Goods industries.

The company decided to **oversee Europe and MEA as 2 distinct geographical segments**. Mrs. Matthijsse, who previously held general management positions at Heineken and Friesland Campina was appointed GM for Europe. On the other hand, Mr. Eladib, previously COO of the joint venture with Obeikan, will manage MEA. As of January 2022, **the management of APAC will also be split**, with Mr. Lidong overseeing APAC North and Mrs. Lu managing APAC South. **Both managers have more than 20 years of experience** in the food and beverage and packaging industries. We believe this **double region split will position SIG to execute their strategy** with an additional degree of expertise. Apart from being endowed with extensive knowledge, the **company also benefits from its gender and cultural diversity**, where it surpasses the Swiss private sector (Fig. 14).

Including sustainability targets in the compensation scheme

The management's compensation is designed and monitored by an independent compensation committee. After a thorough analysis of the compensation report, **we do not identify any fraud or red flags** worth mentioning. In 2021, the committee designed a new scheme where **5% of the executives' short-term incentive plan** (hereafter STIP**) depends on SIG's annual EcoVadis performance score** (Fig. 15). This tangible change **reinforces the company's sustainable vision**. The 5% assigned to this metric were previously assigned to the Group adjusted EBITDA target, which then accounted for 60% of STIP (vs. 55% now) (Ref. 10). This slight modification shows that the management sees **operating result targets and sustainability matters as closely interrelated**. However, the new policy remains quite unclear since the company has been ranking at the top of the chart for 4 years. We could easily argue that this new scheme does not provide additional motivation to executives. Therefore, SIG could choose a more challenging metric in terms of sustainability to further affirm its commitment. Finally, we are convinced that SIG could use metrics that comply with IFRS standards as they would provide more standardization and transparency.

Ownership structure supports duopoly

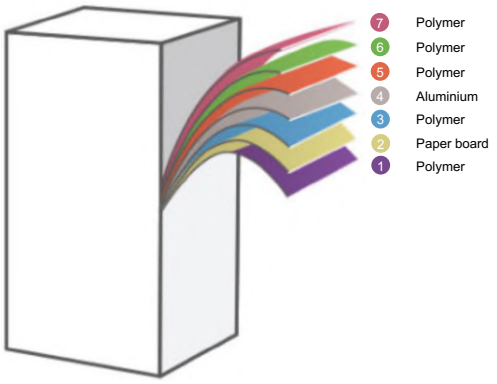
The shareholder base is rather diluted, with the **10 largest owners holding approximately 40% of the company**. The company's largest shareholder, the **Rausing family – owners of the privately-held Tetra Laval – has a 10% share in SIG** (Fig. 16). This stake is held through Winder Investment Pte Ltd., a Singapore-based shell fund controlled by the Haldor Foundation. Mention must be made of the packaging giant's restrictive diversification: in addition to playing in both fresh and aseptic carton packaging markets through Tetra Pak, the Group also supplies PET solutions through Sidel. We believe that this **10% stake is a way for the family to profit from the expansion of aseptic carton without cannibalizing their PET-based revenues**. Even though Tetra Pak has proved to be aggressive in the past, a takeover would not be authorized because of the competition and antitrust laws in force. Hence, we deem **this stake to be highly supportive of the current duopoly market structure**.

INDUSTRY OVERVIEW & COMPETITIVE POSITIONING

Industry overview

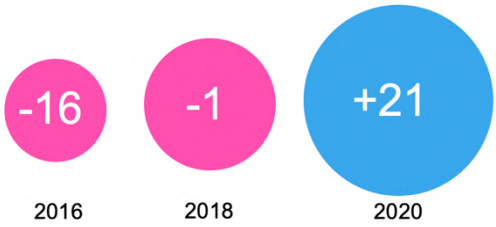
The aseptic carton packaging market has historically grown at a steady 3% rate over the past decade, reaching a **total value of €10.7 billion in 2020** (Ref. 6). However, **growing environmental concerns** coupled with **strong demographics** in emerging regions will allow the **market to reach a 4.8% 5-year CAGR**, 40 bps higher than the market consensus (Fig. 17). Indeed, we forecast the aseptic carton to gain more shares over plastic than the market expects. Moreover, the **ongoing end-market** trends will significantly contribute to the rise of the global **aseptic carton packaging market, reaching an expected total value of €13.5 billion in 2025**.

Fig. 12: SIG carton composition



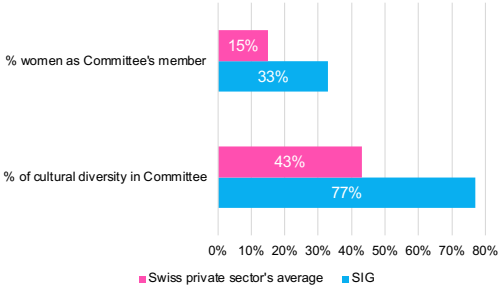
Source: Company Data

Fig. 13: Employee Net Promoter Score



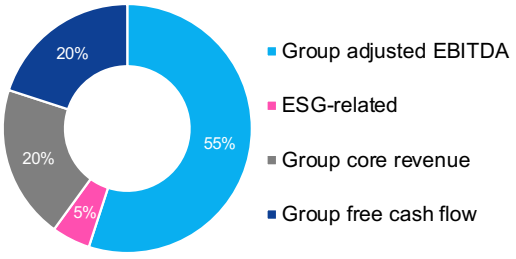
Source: Company Data

Fig. 14: Diversity in Executive Committee



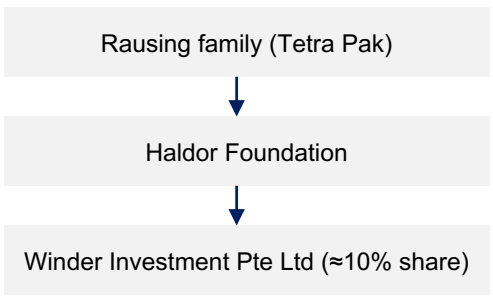
Source: Company Data, Schilling Report

Fig. 15: KPIs for Short Term Incentive Plan



Source: Company Data

Fig. 16: Haldor Foundation



Source: Refinitiv

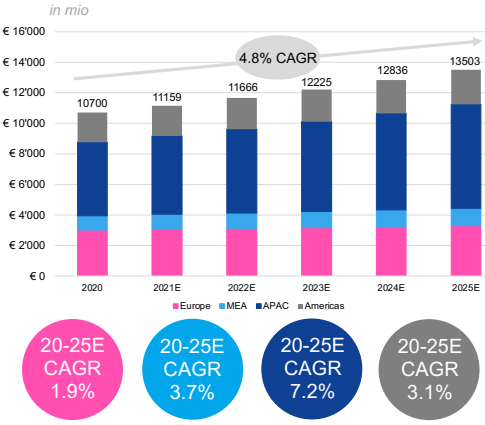
Demographic trends driving growth

Aseptic carton packaging providers supply end-markets that are highly impacted by demographic trends. **In APAC and MEA, demographics are expected to strongly drive growth** in the aseptic carton packaging market (Appx. 5). For this reason, expenditures on packaged food are expected to grow at a 2.4% 10-year CAGR (Ref. 1). Furthermore, **emerging countries suffer from a lack of cold chain infrastructure**. This represents a **real opportunity for SIG**, as aseptic carton packaging presents characteristics that exclude this need.

Environmental awareness will support growth in mature markets.

According to a report by Kantar, **people from all parts of the globe seem to be more concerned about environmental emergencies** and take these matters into account in their daily purchases (Fig. 19). Furthermore, large-scale regulations from governments and committees around sustainability have considerably gained in importance recently. As a matter of fact, the **European Commission opened a public consultation** with an objective to assess the requirements for packaging towards the prevention of waste (Ref. 2). Therefore, **we expect a mandatory legislation that will strongly tighten regulations around traditional PET** for 2022. Thus, aseptic carton could strongly benefit from the deficiencies of plastic bottles and gain strategic shares beyond traditional end-markets in developed regions (Fig. 20). Additionally, aseptic carton packaging solutions are **increasingly offering more advantageous features than traditional plastic bottles** and other packaging solutions (Fig. 18) (Appx. 15).

Fig. 17: Aseptic carton market evolution



Source: Team Assessment, Roland Berger

Fig. 18: Aseptic carton best in class

	CO2 emissions	Plastic polution	Design flexibilty	Price for customer	Renewable materials	Convenience to use	Commodity price exposure	Final score
Carton	4	5	4	5	4	4	3	4.1
Plastic bottle	2	1	3	5	1	5	2	2.7
Aluminum can	1	5	2	2	1	2	2	2.1
Glass bottle	1	5	1	1	5	1	3	2.4

Source: Team Assessment

A card to play in non-dairy substitutes

Dairy alternatives constitute an additional opportunity for aseptic carton packaging. Plant-based milk, high-protein beverages and other health-focused products are becoming more popular in developed countries as they are considered a healthier alternative to milk. Indeed, according to Nielsen and NPD Crest, the current **US dairy alternatives market's revenues are $2.4 billion** and are **expected to grow at a 9.8% CAGR until 2023** (Ref. 3). **These premium products are often associated with a bio and eco-friendly image**. For this reason, **aseptic carton packaging is the best fit** for these newly adopted products and SIG's highly sustainable packaging solutions have a significant card to play.

E-commerce grocery shopping: here to stay

The adoption of e-commerce as a means to do grocery shopping has been enhanced by the COVID-19 pandemic. As an example, **e-commerce grocery sales are expected to account for 9.5% of U.S. 2021 total grocery sales** and to **rise up to 20.5% by 2026** (Ref. 5). SIG **exhibits capital arguments** to profit from this opportunity: **maximization of space utilization** during storage and transportation, **extended shelf life** (up to 12 months), and the capacity to stand out from digital shelves thanks to a **remarkable capacity of product customization**. In fact, **SIG is already strongly positioned in digital grocery stores**. For instance, the best-selling dairy product on Amazon US as well as the third best-selling non-dairy product are both packaged by SIG.

A window to profit from machine obsolescence in the Americas

There exists a high opportunity in the Americas to replace obsolete filling machines, and thus win new customers. Indeed, **approximately 30% of locally installed filling machines approach the end of their lifecycle**, exceeding the usual replacement age of 25 years (Ref. 6). This represents a **huge occasion to acquire new clients**. Part of this opportunity will be captured by suppliers such as SIG, by providing customers with higher technology and design flexibility.

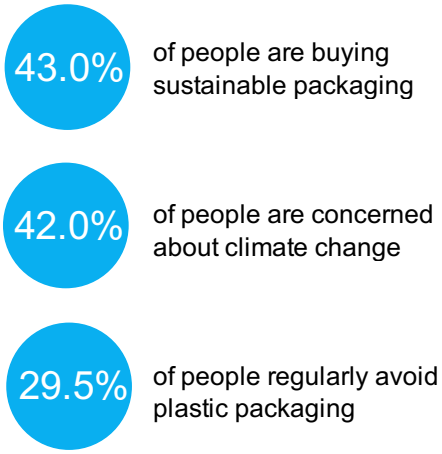
Chinese growth outlook influenced by production targets

China accounts for 16% of the company's total revenue in 2020 and is a key area for development. The Chinese dairy market is far from its full potential as **milk consumption per capita is one of the lowest compared to other large milk markets** (Fig. 21). However, the **government established a 50% target increase in domestic raw milk production** between 2018 and 2025. This constitutes a strong signal for an expected increase in dairy revenues from the region. Effectively, **68% of the Chinese dairy market is occupied by Mengniu and Yili, which are SIG's customers**. Due to its already strong customer base in the country, SIG will thus directly benefit from the increasing production of dairy products on the Chinese territory (Ref. 4).

Competitive Positioning

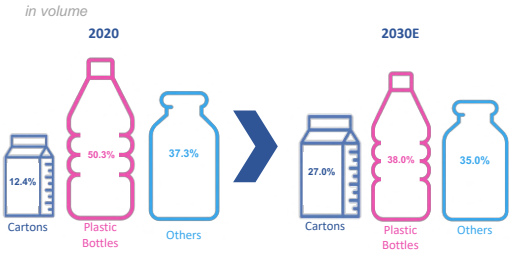
SIG positions itself as a clear number 2 in the global aseptic carton packaging market for Food & Beverage**.** The market is highly concentrated (Herfindahl-Hirschman Index value of 4400) as **Tetra Pak and SIG have a combined market share of 81%** (Fig. 22). Additionally, the significant presence of the **Rausing family as a major shareholder strengthens the duopoly** argument and the dominance of both actors. **We expect SIG's overall market share to increase to 22% by 2025** (in revenues).

Fig. 19: Environmental awareness



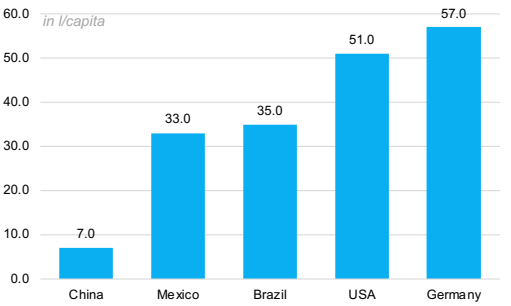
Source: Kantar

Fig. 20: Market share for still drinks, iced tea and coffee in US and Europe



Source: Team Assessment, Global Data, Exane BNP Paribas

Fig. 21: Milk consumption per capita



Source: OECD, IMF

A flexible process that allows for high efficiency

The main drivers of this growth are the attractive features SIG offers to both customers and consumers. **We are convinced of the company's capacity to capture part of Tetra Pak's market shares** and to profit from future additional market growth. Over the years, SIG differentiated itself from the competition by developing its proprietary technology, which ensures a high-quality filling procedure. When comparing among **GSS**, **the only competitor worth mentioning is Tetra Pak** as Greatview and Elopak mainly operate as Non-System Suppliers in the aseptic market. However, Tetra Pak provides roll-fed carton material to customers (Appx. 4) while **SIG engineered a flexible technology that yields a +17% higher revenue per filling machine**. For the same reason, in 2020, **SIG managed to produce 45.7% more packs per filling machine compared to Tetra Pak** which clearly sets them above in terms of both productivity and profitability per machine (Appx. 23). In addition to complying with industry sterility standards, **the sleeve system minimizes waste rates** (<0.5%, the lowest in the industry) compared to the continuous filling processes that come with competitive systems. This flexible technology allows for more compatibility with new products and shows a very **high potential to address emerging on-the-go consumption trends in APAC**. The technology provides clients with a high potential for customization and requires an industry-low of **only 2 minutes to complete changeovers**. This results from the engineering of SIG's technology that enables them to **produce up to 16 different packaging solutions on a unique filling machine**.

Innovating based on a B2B2C approach

As opposed to its main competitor, SIG is a pure player in aseptic carton packaging. This allows the company to dedicate its whole R&D process to improving its cutting-edge technology. Throughout the years, the company strategically installed research centers in its different operating regions (Fig. 23). The **proximity of these centers with plant facilities** helps to monitor innovation in an efficient way by **driving down innovation cycles** and adopting regionally tailored research directives. In order to maintain its position of innovation pioneer, **the company targets a stable R&D level of 3% of sales**, which is above packaging peers that exhibit a lower ratio of 1%. SIG demonstrates an **11% greater efficiency in conducting research** (Fig. 24). Recent conversations with a customer justify the **unconventional carton shapes designed by the company as a remarkable means of differentiation** on shelves. Thanks to this combination of superior R&D efficiency and activity, SIG is able to reinforce its leading position and further develop its **valuable portfolio of 265 active patents.** We strongly believe that this meaningful **focus on research will help them to further widen the gap with competitors** and continue to acquire new customers through their unique offering.

A diversified supplier base to serve cycle-proof markets

SIG benefits from an advantageous position in the value chain as it shows **limited dependence to both suppliers and customers**. On the one hand, **SIG's direct supplier base comprises more than 200 different entities**, among which 45 deliver the 3 main raw materials (liquid paper board, aluminum, polymers) (Appx. 3). **Liquid Paperboard** (hereafter LPB) **suppliers support SIG through 3- to 4-year contracts**, which anticipate rebates in case pre-specified volumes are reached. This key input represents on average **48% of total raw materials costs** (Appx. 8) and is purchased through contractual, one-year fixed prices. The group **sources LPB mainly through 3 major actors** that are Stora Enso, Billerudkorsnäs and Klabin which together represent 59% of the market (in volume). On the other hand, **SIG's top 10 customers accounted for 35% of total revenues in 2020 and have been working with SIG for 28 years on average** (Fig. 25). None of them accounted for more than 10% of the group's revenue. These relationships are amplified by the geographic proximity and after-market services provided by the company. The **threat of new entrants is low** as competitors would difficultly implement a stable supply of LPB and establish a loyal customer base. Also, considerable investments in technology and high safety requirements for the end-product constitute **substantial barriers to enter** the market (Appx. 2).

FINANCIAL ANALYSIS

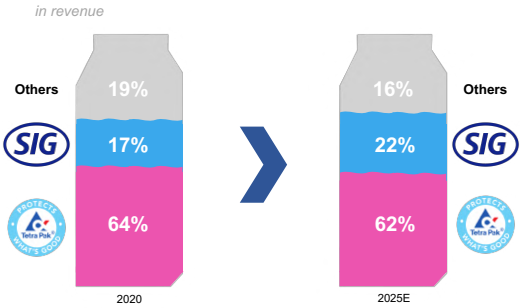
Strong and steady revenue growth for the next 10 years

Over the last 4 years, SIG has been able to generate a strong revenue CAGR of 3.0%. **We expect the group to generate an organic revenue CAGR of 7.7% for the next 5 years** (Fig. 26). The regional distribution of revenues has seen a huge shift over the past ten years. **APAC is now one of SIG's key revenue drivers**. We expect **the importance of this region to keep increasing**. Over the years, SIG has expanded to other regions by building additional plants and multiplying contracts with new customers.

Penetrating promising regions to gain market shares

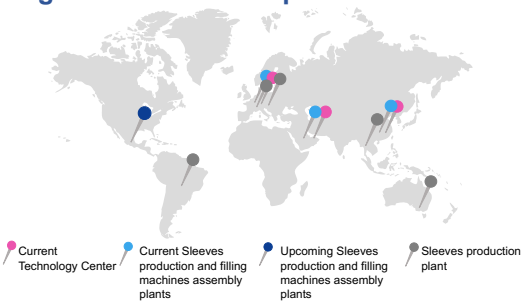
We forecast the revenue by separating the market into 4 main regions: Europe, MEA, Americas, and APAC. Since **SIG operates in a niche market**, there is very limited information on future prices, volumes or revenue distributions. Considering that SIG is a pure player, we judge using a **top-down revenue forecasting approach** as the most appropriate method. We thus forecast the growth of the aseptic carton packaging market first globally and then by region (Appx. 6). We assessed market shares based on the company's current and future geographic revenue split and

Fig. 22: Share in aseptic carton market



Source: Team Assessment, Company Data

Fig. 23: International production



Source: Team Assessment, Company Data

Fig. 24: R&D efficiency

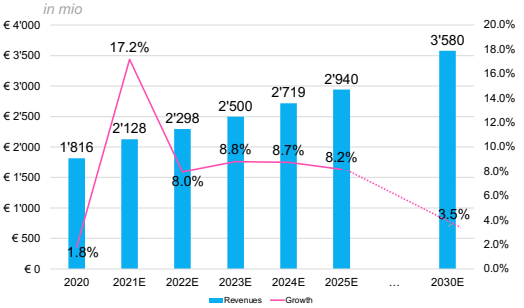
Source: Team Assessment, Google Patents

Fig. 25: Top 10 customers

Customer	% of 2020A sleeves	Length of relationship
1	8%	>20 years
2	5%	>15 years
3	4%	>35 years
4	4%	>40 years
5	3%	>35 years
6	3%	>40 years
7	2%	>40 years
8	2%	>10 years
9	2%	>20 years
10	2%	>40 years
Total	**35%**	**>30 years on average**

Source: Company Data

Fig. 26: Revenue evolution & growth



Source: Team Assessment, Company Data

an estimated **€10.7 billion 2020 market size** (Appx. 7). Considering the **omnipresence of Tetra Pak**, it is quite difficult to capture shares in the market. Nevertheless, **we strongly believe in SIG's ability to compete** with them and acquire new customers, as it recently happened with Hochwald. Moreover, we are convinced of the company's ability **to penetrate MEA through the recent full acquisition of its joint venture in the region**. We **expect SIG to exhibit an outstanding 18.4% increase in revenue in 2021**. 14.5% of this growth is inorganic and comes from the consolidation of joint venture sales (Fig. 27). Moreover, **we expect SIG's market share to increase in the Americas**, thanks to the new plant in Mexico scheduled to open in the first quarter of 2023 and because of the opportunity to replace obsolete machines on the continent. Lastly, the aseptic carton packaging market in **APAC exhibits the highest momentum**. It is driven by a relatively new market and an important expansion of the middle-income class, translated into higher purchasing power. Overall, **we expect a big shift in revenue decomposition up to 2030**. **APAC (45%) will drive the biggest part of revenue, followed by Europe (25%), Americas (15%), and MEA (15%)**.

Accurate cost management leading to exceptional margins

One of the company's major strengths is its outstanding EBITDA margin. The FY2020 average for packaging peers is sitting at 17.7%, which is quite far from the 24.8% reported by SIG. This tremendous **gap clearly illustrates the superior efficiency of SIG when conducting its business**. In 2020, COGS accounted for 66% of sales and raw materials accounted for 61% of COGS. Contracts for the supply of liquid paperboard are long-term (3 to 4 years) with index-based prices that are renegotiated on a yearly basis. Only polymer and aluminum (representing 22% of COGS) are exposed to short-term price increases. **In 2021, prices for the necessary raw materials considerably increased due to production shortages** (i.e., +30% for aluminum and +70% for polymers YoY). As a consequence, **we expect a net increase of approximately 12% in COGS in 2022** related to the raw materials price effect, which **will lead to an EBITDA margin decrease for the next 2 years** (from 24.8% in 2020 to 22.8% in 2022) (Fig. 28) (Appx. 16). To minimize this impact, **the hedging policy buys the company time to adapt its prices through negotiations with customers**. In fact, SIG is hedging 80% of polymers and aluminum supplies. We are convinced that **SIG will quickly recover** from this important shock **by passing 80% of this increase onto the customers** thanks to its high pricing power. The net effect of raw materials price increase will provoke a 2.4% decrease in EBITDA margin. Thus, we forecast a **strong recovery in margins by 2023**. On top of that, **SIG will cut its SG&A expenses**, mainly through a decrease in transportation costs. The new Mexican plant will allow the firm to substantially cut ocean freight costs as SIG will no longer need to supply the Americas segment from European or Asian plants. By decomposing the EBITDA by region, **we clearly identify Americas as the main cause for the projected increase in margins** (Fig. 29).

High-end operating management and liquidity control

In 2020, SIG managed to **efficiently control its level of trade working capital**, **achieving a cash conversion cycle of 49.1 days**. This is way better compared to packaging peers that exhibit a conversion cycle of 77.8 days. This shows rigorous management of payables and receivables. It **mainly comes from a much lower Days Sales Outstanding of 50.0 days** against 69.8 for peers. Thus, SIG has an **excellent management of its receivables**, i.e., it is paid quicker than peers (Appx. 12). In fact, this ratio is emphasized with their securitization program, which helps SIG to recover cash quicker. **We forecast a further decrease in SIG's cash conversion cycle** (Fig. 30). Even though the quick ratio lays below 1, **we do not identify an important liquidity risk**. Effectively, the company will generate strong cash flows in future years, which clearly demonstrates SIG's capacity to honor its commitments (Appx. 18).

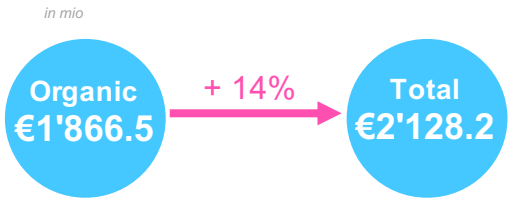
Continually investing for future growth

On the other side, SIG also incurs a lot of capital expenditures in order to expand and gain shares, outpacing peers. These **huge CAPEX lead to higher D&A compared to competitors**, which explains why the EBIT margin is close to their peers'. With the new plant coming up in 2023, **we forecast SIG to increase their CAPEX to 11.2% of revenues in 2022**. Then investments will decrease to a lower rate of 10% of sales by 2026, which is in line with the management targets of 8-10% of sales in the mid-term. This rate has been obtained by computing the number of filling machines needed to sustain the forecasted revenue growth and by adding the minimum CAPEX expenditure required to replace obsolete assets (Appx. 19). In addition to applying this bottom-up approach, we then incorporated the scheduled investments regarding the upcoming Mexican plant. **We expect D&A-to-Revenue to slightly increase for the next 5 years and to come back at a constant level of 14% by 2026**.

Strong cash conversion supports deleveraging

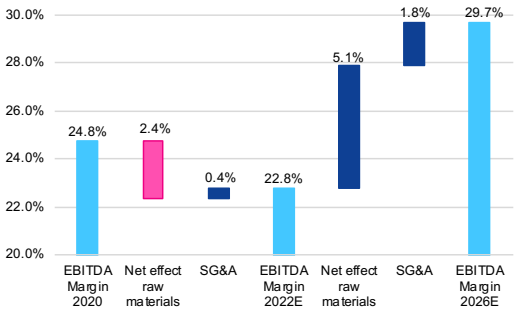
SIG had a **significant decrease in leverage between 2017 and 2018** going from €2'564M to €1'592M of debt. The company mainly used the proceeds from the IPO to repay large amounts of debt. Furthermore, their **net leverage ratio went from x5.3 in 2018 to x3.0 in 2020**. **We expect it to decrease below 1 from 2026 thanks to their strong cash flow generation**. In 2020, the company issued new debt to repay older amounts by issuing 3- and 5-year senior unsecured notes. They also issued a senior unsecured credit facility with a 5-year maturity and better interest terms. Finally, they issued a revolving credit facility that expires in 2025 with a principal of €300M

Fig. 27: JV effect on 2021 revenue



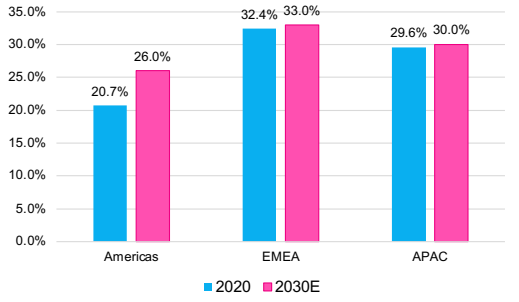
Source: Team Assessment, Company Data

Fig. 28: EBITDA margin bridge



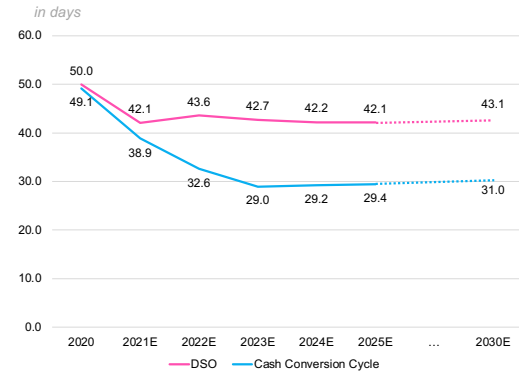
Source: Team Assessment, Company Data

Fig. 29: EBITDA margin by region



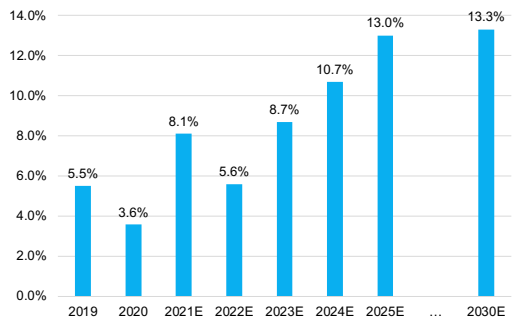
Source: Team Assessment, Company Data

Fig. 30: Efficient WC management



Source: Team Assessment, Company Data

Fig. 31: ROE evolution



Source: Team Assessment, Company Data

which has not been exercised yet. **We expect the debt ratio to decrease and go from 48% in 2020 to the targeted optimal structure of 11.1%** in 2030. This target is based on the average for packaging peers, which is the best proxy of the optimal capital structure in the industry. **As time goes on, SIG's operations will thus depend less on debt and more on its cash flows**. Also, the **probability of bankruptcy is minimal** as assessed with the Z-score. **SIG displays a secure BB credit rating**, derived with an Interest Coverage Ratio of 2.1 (Appx. 9).

Attractive investment for equity holders

Through the ROE, we can clearly see that **SIG's profitability will increase over the years** (Fig. 31). Their current low profitability compared to packaging peers is explained by a **very low asset turnover**, as shown by our Dupont analysis (Appx. 12). This is due to a **very high level of goodwill**. In 2020, the goodwill amounted to 34% of total assets. It is expected to further increase with the acquisition of the joint venture. Also, SIG has only shown positive net incomes for the past couple of years, which partly explains low net margins. Additionally, the Dupont analysis identifies the net margin as the main driver for the improvement of future returns on equity. In fact, **we expect the ROE to more than double within 5 years**. Lastly, SIG expressed a clear **willingness to maintain a high dividend payout policy of 50 to 60% of net income in the future**. This gives a good signal about SIG's willingness to be attractive for shareholders. Comparing dividend yields to packaging peers shows that SIG is a leader in returning cash to shareholders (Fig. 32).

VALUATION

We issue **a buy recommendation** for SIG Combibloc Group AG with a **12-month target share price of CHF 29.7**, representing a **22.5% upside** from the closing price on November 30th, 2021. To come to this conclusion, we use a **Discounted Free Cash Flow to the Firm (FCFF) model**, which yields a target price of CHF 30.6 weighted at 80%. We assign the remaining 20% to a **Forward EV/EBITDA Multiple** method, yielding a target price of CHF 26.3 (Fig. 33). We decide to underweight the relative valuation method due to the lack of highly comparable peers in such a niche market. In contrast, the DCF model allows us to assess the company's revenues and other main performance drivers more precisely. Furthermore, it allows us to take into account future characteristics regarding SIG's business. Lastly, we deemed the DDM model to be irrelevant for this valuation as it would not allow us to perfectly incorporate both market drivers and margin performances that characterize SIG's business.

Conservative WACC underlining a secure business model

A weighted cost of capital of 6.2% is used to discount the Free Cash Flows to the Firm (Fig. 34). It is derived from a **pre-tax cost of debt of 4.1%** which is computed through the credit spread method because the company's bonds are not publicly traded. The **risk-free rate of 1.2%** is obtained by computing a **10-year arithmetic average of the 10-year Euro area government bond yield** in order to circumvent current negative rates. We believe proceeding this way yields a correct assessment of the risk-free territory. The **credit spread** is computed based on **SIG's 2.1 Interest Coverage Ratio** which results in **a spread of 2.8%** based on Damodaran's estimations. The cost of equity is computed from an **equity beta of 0.95**, a **market risk premium of 5.8%**, and the abovementioned risk-free rate. To come up with our beta, we use **a bottom-up approach,** as it minimizes the associated standard error. First, we unlever the median levered beta of packaging peers of 0.89 (Fig. 35) by using a median Debt-to-Market value of equity of 12.4%. We obtain an **unlevered industry beta of 0.81**. We relever the latter by using SIG's **Debt-to-Market value of equity ratio of 21.4%** and a **25% effective tax rate** based on an average of the company's historical data**.** The **market risk premium is obtained by using a weighted average for the different regions** (Fig. 36). By using this weighted average, we make sure to truly represent the risk associated with the different markets in which SIG operates. Plugging all the previous inputs into the CAPM, we finally obtain a **cost of equity of 6.7%**. Finally, **to compute our WACC we use the optimal Debt-to-Capital structure of 11.1%.** This optimal capital structure is based on the idea that industry peers' management is wise and thus adopted the optimal capital structure for the industry in the long run.

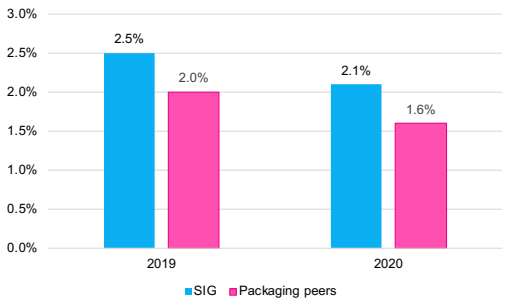
Long-term growth rate representative of non-cyclical, defensive end-markets

To compute the terminal growth rate, we perform a weighted average of long-term real GDP growth forecasts (2020-2060) with respect to the forecasted geographical revenue decomposition in 2030. We end up with a **weighted average real GDP growth of 1.5%**. We then took a **2% inflation forecast** in the long run which comes from the optimal target of many central banks and the recommended target set by IMF. Finally, **we apply a 50% inflation pass-through**, resulting in a **terminal nominal growth rate of 2.5%**. We are convinced that this rate reflects the fast-changing trends in packaging consumption, increasing returns in R&D and investments, and the defensive markets SIG operates in (Fig. 37).

Intrinsic value based on FCFF and undervalued share price

We decided to use the DCF method because SIG is expected to have **a constant increase in its Free Cash Flows to the Firm** and eventually meet a stationary long-term growth outlook by 2030. We assume that the FCFFs occur at the end of each year and we perform our DCF analysis by projecting ourselves to November 30th, 2022. By doing so, we find **the 12-month target price at the end of 2022**. Regarding the changes in NWC, we forecasted payables, receivables and

Fig. 32: Dividend yield



Source: Team Assessment, Company Data, Refinitiv

Fig. 33: Valuation blend

SIG's Target Price	DCF	Multiple
Equity Value (*in € mio*)	9895.4	8504.6
Shares Outstanding (*in mio*)	337.5	337.5
Target Price (CHF)	30.6	26.3
Weights	80.0%	20.0%
Final Target Price (CHF)		**29.7**

Source: Team Assessment

Fig. 34: WACC computation

Levered Beta of SIG	0.95
Cost of Equity	6.7%
Cost of Debt	4.1%
Debt to Total Capital	11.1%
Tax Rate	25.0%
ESG Discount	0.1%
Risk Free Rate	1.2%
Credit Spread	2.8%
Market RP	5.8%
WACC	**6.2%**

Source: Team Assessment. Damodaran

Fig. 35: Bottom-up beta

Median Beta of Peers	0.89
Median Debt to Equity for Peers	12.4%
Unlevered Beta of industry	**0.81**
Share Price SIG (30.11.21) (*in CHF*)	24.2
MV Equity SIG (30.11.21) (*in CHF mio*)	8181.0
Debt SIG (*in CHF mio*)	1754.6
Debt to Equity for SIG	21.4%
Levered Beta of SIG	**0.95**

Source: Team Assessment. Company Data, Refinitiv

Fig. 36: Market risk premium

Region	Avg. MRP	Weights
AMERICAS	5.5%	15.3%
APAC	5.7%	44.6%
EMEA	6.1%	40.1%
Final MRP		**5.8%**

Source: Team Assessment, Damodaran, Refinitiv

inventories and then computed the expected Working Capital needs for upcoming years. As a consequence, we expect the Net Working Capital to remain around 10% of revenue until 2030. **The FCF margin will decrease to 9.8% in 2022 but will quickly recover and eventually reach 14.2% in 2030** thanks to SIG's superior efficiency. We believe SIG's **FCFFs will go through 3 distinct stages** (Fig. 38). The first stage is characterized by a decrease of FCFF in 2021 due to the important amount of CAPEX needed for the upcoming Mexican plant. We then expect a quick recovery and a remarkable increase of FCFF until 2026. During these 6 years, SIG will face a CAGR of 14.4% of FCFFs. The second phase will see growth decrease incrementally from 5.5% to 3.65% between 2027 and 2030. Finally, the last stage is fully defined by a perpetual growth of 2.5%. As a result, **we obtain a target price of CHF 30.6 through our DCF valuation** (Appx. 21).

Robust buy recommendation with modest room for downside

We realized a sensitivity analysis to assess the impact of both the WACC and the terminal growth on our final estimation. As our **terminal value represents 78% of the enterprise value**, there is a clear need to assess its influence on our final target price. By conducting our analysis, we come to the conclusion that our **buy recommendation is robust to changes in the factors mentioned previously** (Fig. 39). In order to obtain a different investment recommendation, the WACC must increase by at least 60 bps while the terminal growth rate needs to decrease by more than 30 bps. **The sensitivity analysis reinforces our belief** that the true value of the share price is far from the considered closing price.

SIG trades at an unfair discount compared to its peers

In order to incorporate the current view of the market, we balanced our DCF analysis with a relative approach. **We use the forward EV/EBITDA multiple** in order to value SIG and to compare it with its peers. Since our analysis is based on industrial firms, **we deemed EBITDA to be the most relevant performance metric**. The choice regarding the composition of the peers is based on several criteria (Appx. 22). Due to the lack of highly comparable firms, we choose packaging firms as well as companies that supply machinery and services to the packaging industry. We also choose Swiss industrial companies to better reflect country-specific pricing characteristics. This allows us to adopt larger perspectives on peers and to deliver a more relevant comparison. We actually observe that **SIG trades at an unjustified discount compared to its peers** (Fig. 40). Considering an **expected 2022 EBITDA of CHF 545.9 million** and an **18.8 multiple (peers' median)**, we end up with a **target price for the multiple valuation of CHF 26.3**. This represents **an 8.3% increase** compared to the closing price on November 30th, 2021.

INVESTMENT RISKS

Strategic Risks

Non-system suppliers' competitors

The growing presence of Greatview in China could curb SIG's expansion in APAC. Greatview Aseptic Packaging offers blank-fed solutions that are compatible with SIG's filling machines. We are convinced that there are chances for this risk to occur and would have a moderate to strong impact on our valuation according to its development.

Valuation impact: A loss of **1% in APAC market shares** would result in a **10.3% upside** compared to the considered closing price.

Mitigation: The company has an active management of its patent portfolio and long-term customer partnerships. In addition, SIG monitors its offers with discounts and premiums related to the quantity of sleeves sold to customers. The company's flexible solutions also add more value to its offers.

New entrants

New market entrants could boost competition in the industry, placing both differentiating factors and pricing as key elements of adoption.

Valuation impact: A **250bps increase** in the company's **SG&A/sales** due to higher advertising expenses would result in a **7.7% upside** compared to the closing price on November 30th, 2021.

Mitigation: In the possibility of a new entrant, capturing market shares from SIG will prove difficult because of the structure of the company's business model. The company's cutting-edge filling

Market Risks

Raw Materials

SIG may fail to pass on raw materials price increases. This could lead to an important deterioration of margins. Recent spikes in prices of polymers and aluminum witness a temporary though extended problem of unmatched supply and demand (Fig. 41, 42).

Valuation impact: A constant high level of raw materials' prices coupled with SIG's inability to pass on costs to the customers would deteriorate SIG's valuation. We look at an extreme bear scenario where **COGS** will stay at a high **68% of sales** for the next ten years. This leads to an **11.3% downside** from the current stock price.

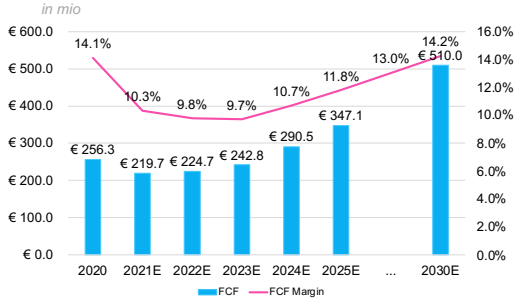
Mitigation: Regarding the market position of SIG, we cannot imagine that prices do not see an increase. Moreover, a constant high level of raw materials prices will impact the whole industry and thus, key players would react together.

Fig. 37: Terminal growth rate

Region	Avg Real GDP Growth	2030E Weight
AMERICAS	1.4%	15.3%
APAC	2.0%	44.6%
EMEA	1.1%	40.1%
Weighted Average Real GDP Growth		**1.5%**
LT Inflation		2.0%
Inflation pass trough		50.0%
Long Term Growth Rate		**2.5%**

Source: Team Assessment, Damodaran, OECD

Fig. 38: FCF + FCF Margin



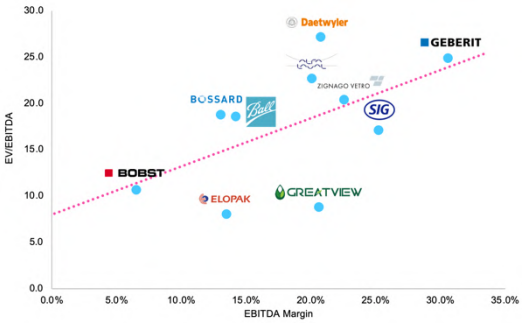
Source: Team Assessment, Company Data

Fig. 39: Sensitivity analysis

WACC \ Terminal growth	1.9%	2.2%	**2.5%**	2.8%	3.1%
5.6%	31.5%	42.3%	55.2%	70.9%	90.5%
5.9%	15.8%	28.7%	39.3%	52.0%	67.4%
6.2%	6.3%	17.3%	**26.0%**	36.4%	48.8%
6.5%	-1.9%	7.4%	14.8%	23.4%	33.6%
6.8%	-9.2%	-1.1%	5.2%	12.4%	20.9%

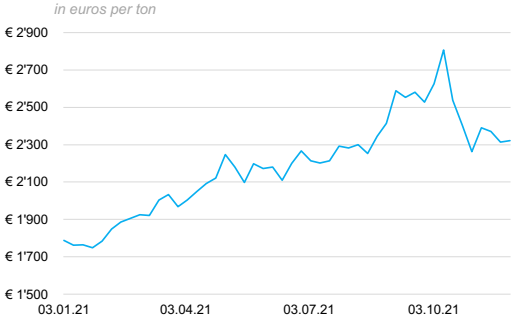
Source: Team Assessment

Fig. 40: Multiple Valuation



Source: Team Assessment, Company Data

Fig. 41: 2021 aluminum price fluctuation



Source: Reuters

Freight costs

With ocean freight rates hovering around 8-9x pre-pandemic levels, SIG's operations are particularly subject to increases in shipping costs (Ref. 12). Up until the readiness of the plant in Mexico, Americas will be supplied in sleeves by EMEA and APAC regions (Fig. 43).

Valuation impact: A constant increase in freight costs can offset the benefits from the new plant. A **failure to decrease SG&A costs**, staying constantly at the actual level of 8.5% of sales would lead to an **upside of 9.7%** compared to the current price.

Mitigation: Those costs are intimately linked to the inflation status. Therefore, we consider this risk as transitory and the impact on SIG to be on the short-term. We reiterate that the new plant in Mexico will boost the decrease in SG&A expenses.

Foreign exchange risk

SIG has a substantial exposure to currency fluctuation due to their international operations. Global subsidiaries have more than 9 different functional currencies.

Valuation impact: To consider this risk, **we increased our COGS** by **300bps**, leading to a **4.8% upside**. If this were the case, our recommendation would turn into a **Hold**.

Mitigation: To reduce this exposure, SIG sources, produces, and sells locally when possible. Furthermore, SIG hedges its major currency exposures by using a twelve-month rolling layered approach (Ref. 11). However, SIG is still very exposed to foreign exchange risk as seen in 2020 with the depreciations of the Brazilian Real and the Thai Baht (Fig. 44).

Financial Risk

Goodwill impairment risk (add the analysis on D/E and thus impact on WACC)

The profitability of SIG is seriously impacted by the high level of intangible assets. This is mainly due to a very high amount of goodwill on the balance sheet (34% of total assets as of each 2020).

Valuation impact: A huge, **sudden impairment of the goodwill** could lead to **financial distress** and in the worth case, a bankruptcy.

Mitigation: No impairment was performed on goodwill yet. As a result, the account grows following each acquisition and never decreases except for a small, yearly amortization. To avoid a problem if they have to perform an impairment on the goodwill, SIG should perform regular impairment tests. Furthermore, to impair any losses, they should try to smoothen them over several years to mitigate the loss and then have lower distress.

Regulatory Risk

New regulations towards circular economies and green objectives could negatively impact the aseptic carton market in case industry players and municipalities fail to develop specialized recycling facilities.

Valuation impact: if markets were to contract and **we assumed a 100bps decline in global market growth**, we would still get an **upside of 15.6%** in our valuation.

Mitigation: SIG already took many initiatives to incorporate the notion of circular economy into its business and offers packaging solutions that are 100% designed to be recycled. The numerous industry-firsts engineered by the firm also act as a tangible proof of its commitment towards a more sustainable industry.

Reputational Risk

A food or beverage poisoning scandal due to a deficient packaging process could negatively impact SIG as its customers' reputation would also be significantly impaired (Fig. 45).

Valuation impact: We assume that major customers would look for other business partners. **Eliminating revenues from the 5 biggest customers** (representing 21% of total revenues) would result in a **downside of 4.2%**.

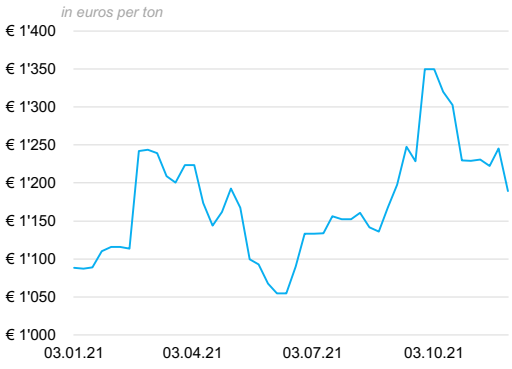
Mitigation: SIG's customer base is highly fragmented as no customer accounts for more than 10% of total revenues. Indeed, the fifth biggest customer only represents 2.6% of total revenues. However, poisoning risk is very unlikely to happen as the company complies with strict and very high-quality standards to avoid such situations.

Blue sky/grey sky

Upside potential with limited risk

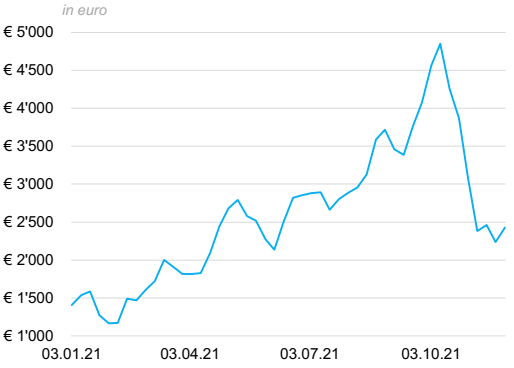
In order to assess the influence of the different risks on the share price, we performed a blue-grey sky scenario which allows us to compare the best and worst scenarios. Our **Blue Sky scenario** assumptions rely on **new regulations from 2025** in order to reduce the share of polluting packaging (like PET, cans or glass), **huge market share gains**, and **an outperformance in management targets** for margins. The gross margin is much higher thanks to a low impact of raw materials price increase. The change of regulation will accelerate the market's growth beyond expectations. All of this leads **to a share price of CHF 39.8**, **with an extreme positive upside of 64.2%**. Regarding the **Grey Sky scenario**, SIG will suffer from the **status quo in consumption trends for packaging**. Market will thus grow at a lower rate than expected. Furthermore, SIG will not succeed in gaining market shares in the APAC region and in the Americas. **The pressure on raw materials costs** will be too high to fully transfer the burden to the customers. Moreover, the new management team will fail to achieve margin targets. Due to current inflation, interest rates will increase and by consequence induce a **higher cost of debt**. We project a pronounced **negative downside of 15%, leading to a price of CHF 20.5** (Fig. 46).

Fig. 42: 2021 polymer price fluctuation



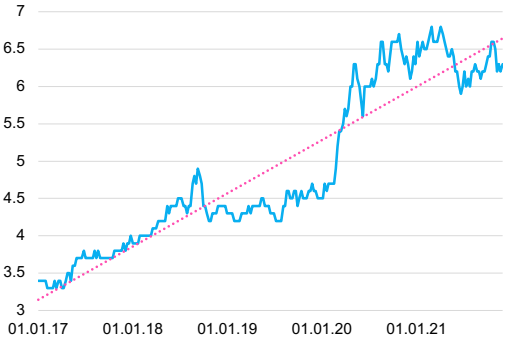
Source: Reuters

Fig. 43: Baltic Dry Index



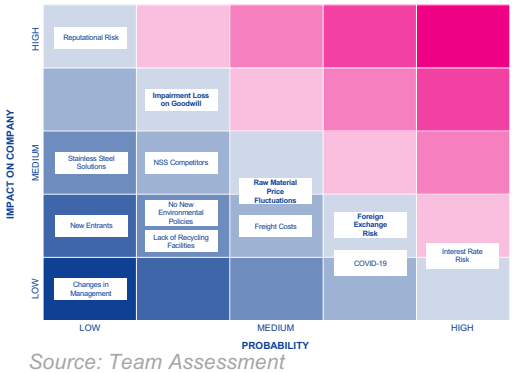
Source: Reuters

Fig. 44: EUR/BRL exchange rate



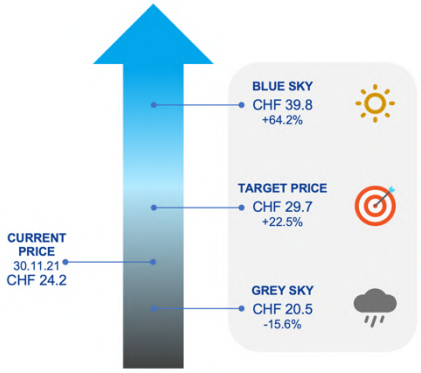
Source: Reuters

Fig. 45: Risk matrix



Source: Team Assessment

Fig. 46: Blue sky/Grey sky



Source: Team Assessment

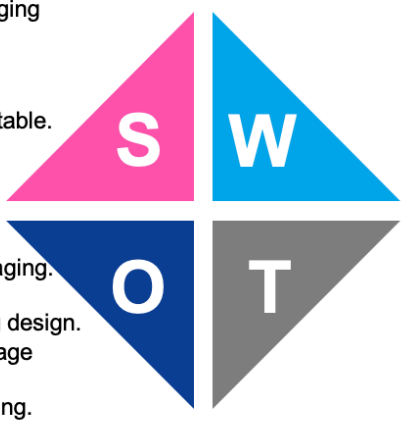
Appendix 1: SWOT

Strengths

- Second most important global aseptic carton packaging supplier in a global duopolistic market.
- High product design flexibility from their technology.
- Sticky customer relationships.
- Can easily enter new end-markets and remain profitable.
- High R&D efficiency compared to peers.
- Higher production efficiency compared to peers.

Weaknesses

- SIG is 3 times smaller than Tetra Pak in terms of market share.
- Exposure to raw material inflation that cannot be passed to customers immediately.



Opportunities

- Shift from polluting solutions to aseptic carton packaging.
- Growth in high potential regions such as APAC.
- Increasing demand for premiumization of packaging design.
- Shift from unpackaged to packaged food and beverage consumption in developing regions.
- Increasing usage of E-commerce for grocery shopping.
- Further development in digitization and AI technologies.

Threats

- Potential rise of non-system suppliers in sleeves.
- Further increase in raw material prices.
- Negative impact on consumption from GDP and political weakness in developing countries.
- Underinvestment in recycling facilities.

Source: Team Assessment

Appendix 2: Porter's 5 Forces

Threat of new entrants

- Aseptic carton packaging is a niche market
- The industry requires high investments in technology
- High safety requirements due to the end-markets served (F&B). Developed regulatory framework within this industry.
- The business model implies sticky customer relationships.
- Highly concentrated market as Tetra Pak and SIG share 86% of the market (in volume). Global duopolistic market.
- Important number of patents to ensure IP protection.
- SIG has cost advantage due to economies of scales, local sourcing and local production.
- SIG's customers would suffer from considerable switching costs to shift towards roll-fed system suppliers.

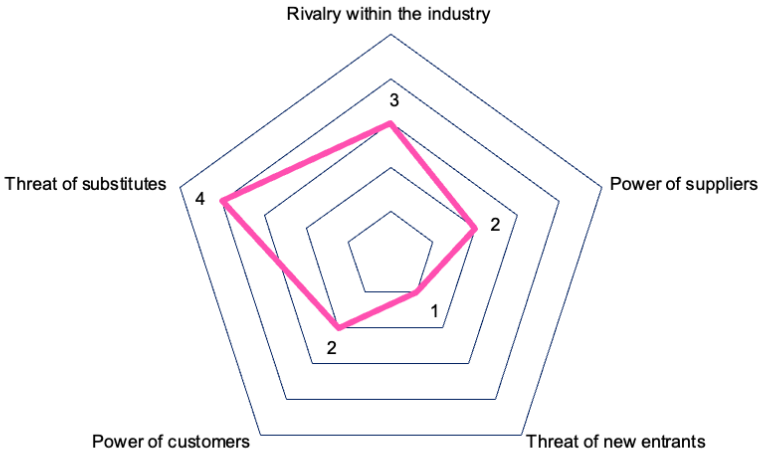
Threat of substitutes

- Numerous different packaging solutions that could substitute aseptic carton packaging.
- In terms of aseptic cartons, the final output is the same regardless of the system (Roll-fed vs Sleeve fed).
- Cartons have the smallest market share on the global beverage market (31% for plastic bottles, 23% glass bottles, 18% aluminium cans, 17% other, 11% cartons, from Global Data).
- Aseptic carton packaging is considered as the most eco-friendly packaging solution.
- Low incentives for customers to switch packaging as it engenders important costs.

Power of suppliers

- SIG has a diversified supplier base for its main raw materials (45 different suppliers).
- Aluminium and polymer contracts are priced on the market spot prices (22% COGS).
- The product differentiation is low among the different raw materials suppliers.
- It is unlikely to have a forward integration as the suppliers are very diversified and supply clients operating in different industries.
- SIG supplies itself from certified sources for most of their raw materials.

Source: Team Assessment



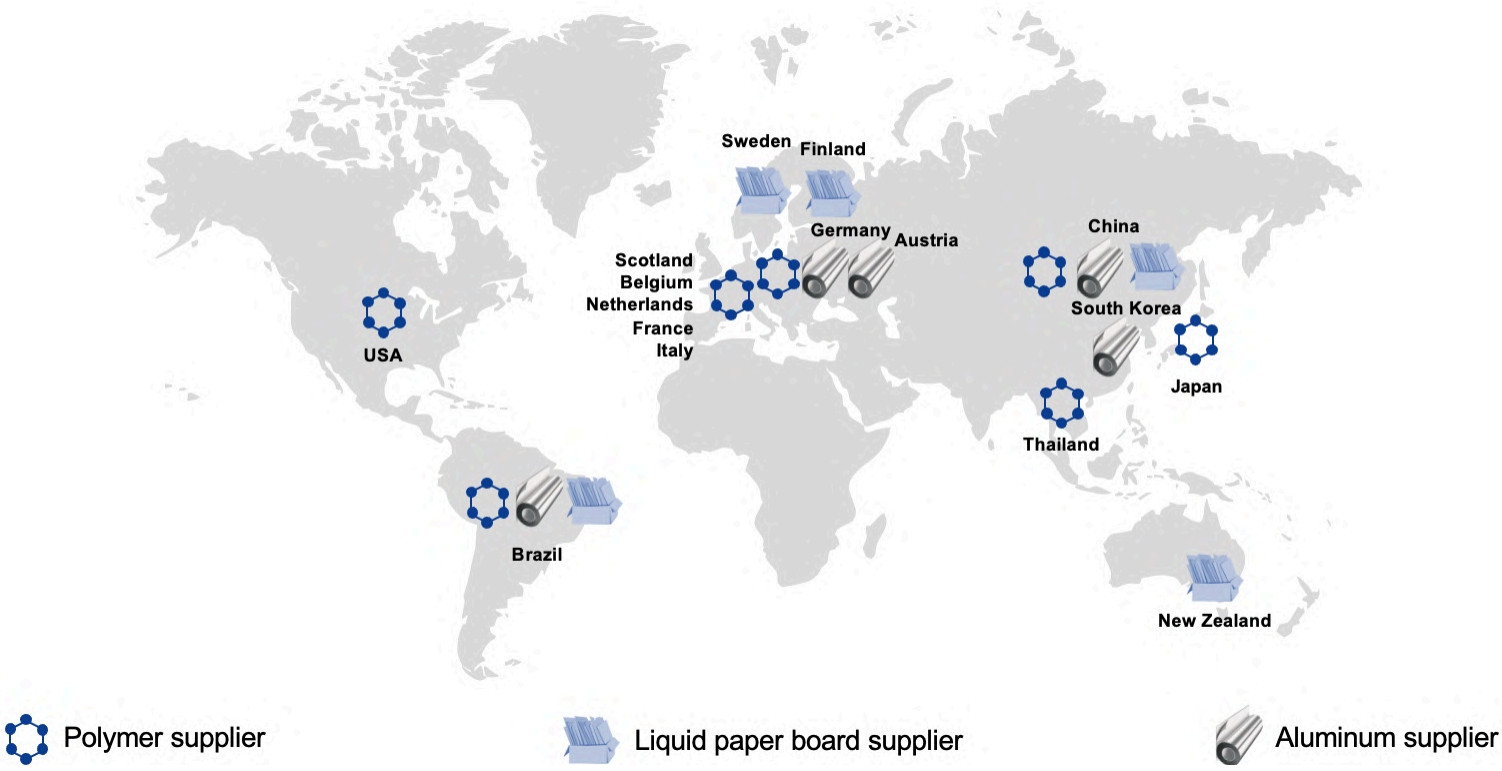
Power of customers

- Customers are highly dependent on SIG due to long-term contracts.
- Low buyer concentration (top 10 customers account for 35% of SIG's total revenues).
- Backward integration is unlikely as SIG is the second leading supplier of aseptic carton packaging.
- On average, packaging represents at most 5% of the final cost of the end-product.

Rivalry within the industry

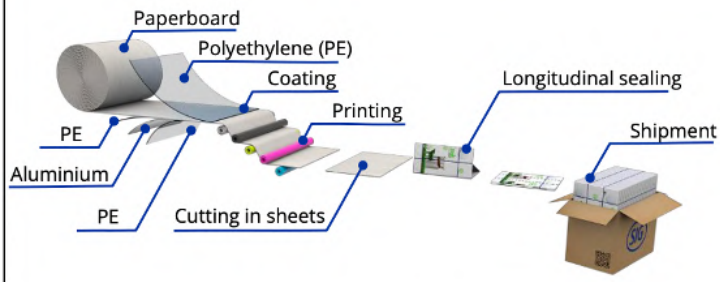
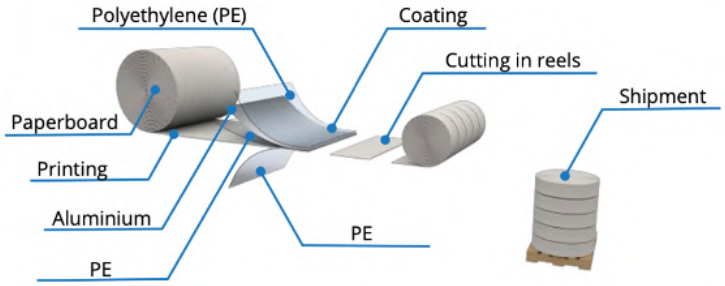
- Global aseptic carton packaging market is highly concentrated as SIG and Tetra Pak share 86% of the market (in volume).
- Tetra Pak is 3 times bigger than SIG in terms of market share.
- The product's final output is similar.
- SIG is the only pure player in aseptic carton packaging
- Exit barriers are high as they are in a niche market and have a lot of industry-specific assets.

Appendix 3: Key Raw Material Suppliers by Region



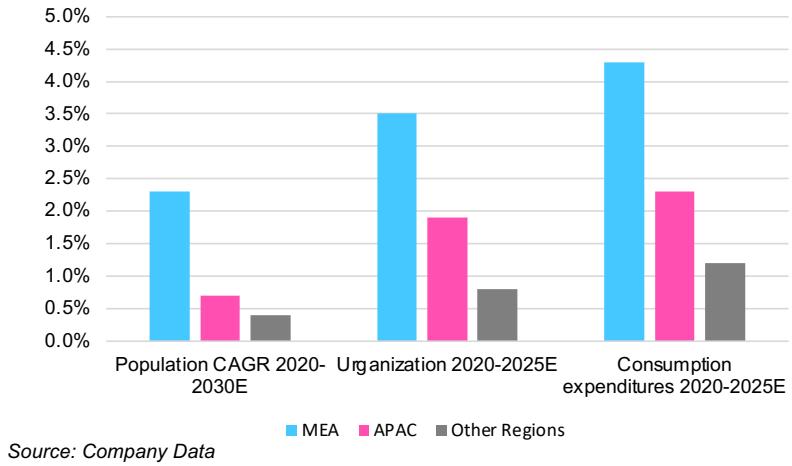
Source: Team Assessment, Company Data

Appendix 4: Unique Technology

Sleeves fed system	Roll fed system
	

Source: Company Data

Appendix 5: Demographics



Source: Company Data

Appendix 6: Market Growth

GLOBAL (*in € millions*)	2019	2020	2021E	2022E	2023E	2024E	2025E
Europe	3093.2	3008.8	3060.0	3115.8	3176.6	3241.7	3311.4
Middle East & Africa	976.8	950.2	980.6	1014.9	1053.2	1095.6	1142.2
EMEA	4070.0	3959.0	4040.6	4130.7	4229.8	4337.3	4453.6
APAC	4950.0	4815.0	5142.4	5502.4	5898.6	6332.1	6805.4
Americas	1980.0	1926.0	1976.1	2032.9	2096.9	2167.2	2244.1
Total	**11000.0**	**10700.0**	**11159.1**	**11666.0**	**12225.3**	**12836.6**	**13503.1**

GLOBAL (*in € millions*)	2026E	2027E	2028E	2029E	2030E
Europe	3378.3	3442.2	3502.7	3559.8	3613.2
Middle East & Africa	1186.7	1228.8	1268.1	1304.3	1336.9
EMEA	4565.0	4671.0	4770.9	4864.1	4950.1
APAC	7287.3	7774.4	8263.4	8750.5	9231.8
Americas	2316.8	2384.7	2447.2	2503.7	2553.8
Total	**14169.1**	**14830.1**	**15481.5**	**16118.4**	**16735.7**

Source: Team Assessment, Company Data, Roland Berger

Appendix 7: Revenue Growth

SIG Revenue	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Europe	672.0	709.8	721.7	741.1	768.3	800.2	827.4	844.1	860.0	875.2	889.4	902.8
Middle East & Africa	83.1	87.7	351.5	376.0	402.8	428.9	455.1	472.9	489.7	505.3	519.7	532.7
EMEA	755.1	797.5	1073.2	1117.1	1171.1	1229.1	1282.5	1317.0	1349.7	1380.5	1409.2	1435.5
APAC	683.8	679.5	715.0	814.6	926.3	1045.0	1177.6	1261.0	1345.3	1429.9	1514.2	1597.5
Americas	329.5	320.8	340.0	366.0	402.7	444.4	480.4	495.9	510.5	523.8	535.9	546.7
Total core revenue	**1768.4**	**1797.8**	**2128.2**	**2297.7**	**2500.1**	**2718.6**	**2940.5**	**3073.9**	**3205.4**	**3334.2**	**3459.3**	**3579.6**
YoY growth revenue		*1.7%*	*18.4%*	*8.0%*	*8.8%*	*8.7%*	*8.2%*	*4.5%*	*4.3%*	*4.0%*	*3.8%*	*3.5%*

SIG Organic Revenue	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Europe	672.0	709.8	721.7	741.1	768.3	800.2	827.4	844.1	860.0	875.2	889.4	902.8
MEA	83.1	87.7	90.5	96.8	103.7	110.5	117.2	121.8	126.1	130.1	133.9	137.2
EMEA	755.1	797.5	812.2	837.9	872.0	910.7	944.6	965.9	986.1	1005.3	1023.3	1040.0
APAC	683.8	679.5	715.0	814.6	926.3	1045.0	1177.6	1261.0	1345.3	1429.9	1514.2	1597.5
Americas	329.5	320.8	340.0	366.0	402.7	444.4	480.4	495.9	510.5	523.8	535.9	546.7
Total core revenue	1768.4	1797.8	1867.2	2018.5	2201.0	2400.1	2602.6	2722.8	2841.9	2959.0	3073.4	3184.1
YoY growth revenue		1.7%	3.9%	8.1%	9.0%	9.0%	8.4%	4.6%	4.4%	4.1%	3.9%	3.6%

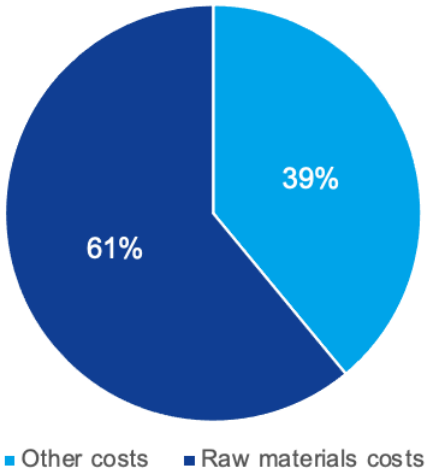
SIG Revenue Distribution	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Europe	38.0%	39.5%	33.9%	32.3%	30.7%	29.4%	28.1%	27.5%	26.8%	26.2%	25.7%	25.2%
Middle East & Africa	4.7%	4.9%	16.5%	16.4%	16.1%	15.8%	15.5%	15.4%	15.3%	15.2%	15.0%	14.9%
EMEA	42.7%	44.4%	50.4%	48.6%	46.8%	45.2%	43.6%	42.8%	42.1%	41.4%	40.7%	40.1%
APAC	38.7%	37.8%	33.6%	35.5%	37.1%	38.4%	40.0%	41.0%	42.0%	42.9%	43.8%	44.6%
AMERICAS	18.6%	17.8%	16.0%	15.9%	16.1%	16.3%	16.3%	16.1%	15.9%	15.7%	15.5%	15.3%

SIG Market Share	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Europe	21.7%	23.6%	23.6%	23.8%	24.2%	24.7%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Middle East & Africa	8.5%	9.2%	35.8%	37.0%	38.2%	39.1%	39.8%	39.8%	39.8%	39.8%	39.8%	39.8%
EMEA	18.6%	20.1%	26.6%	26.7%	26.8%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%	26.9%
APAC	13.8%	14.1%	13.9%	14.8%	15.7%	16.5%	17.3%	17.3%	17.3%	17.3%	17.3%	17.3%
AMERICAS	16.6%	16.7%	17.2%	18.0%	19.2%	20.5%	21.4%	21.4%	21.4%	21.4%	21.4%	21.4%
Total	**16.1%**	**16.8%**	**19.1%**	**19.7%**	**20.5%**	**21.2%**	**21.8%**	**21.7%**	**21.6%**	**21.5%**	**21.5%**	**21.4%**

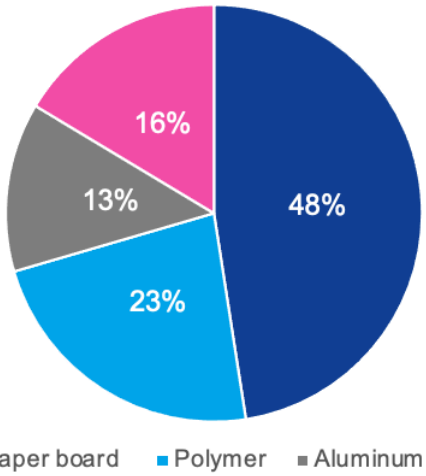
Source: Team Assessment, Company Data, Roland Berger

Appendix 8: Raw Material Decomposition

Decomposition of COGS



Decomposition of raw materials costs



Source: Team Assessment, Company Data, Morgan Stanley

Appendix 9: Ratio Forecast

Profitability	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Gross Margin	36.68%	34.28%	34.50%	31.90%	34.00%	35.00%	36.00%	37.00%	37.00%	37.00%	37.00%	37.00%
EBITDA Margin	26.89%	24.76%	25.20%	22.80%	25.50%	26.70%	28.30%	29.70%	29.70%	29.70%	29.70%	29.70%
EBIT Margin	10.80%	9.47%	12.95%	9.86%	13.35%	15.39%	17.92%	20.39%	20.43%	20.46%	20.48%	20.48%
EBT Margin	8.30%	5.01%	10.64%	7.82%	11.63%	13.97%	16.81%	19.42%	19.60%	19.80%	19.91%	20.06%
Net Margin	5.99%	3.74%	7.98%	5.87%	8.72%	10.48%	12.61%	14.57%	14.70%	14.85%	14.93%	15.05%
ROE	5.50%	3.58%	8.07%	5.57%	8.68%	10.68%	12.98%	14.51%	14.19%	13.95%	13.63%	13.33%
ROA	2.32%	2.19%	3.40%	2.50%	4.02%	5.20%	6.72%	7.98%	8.20%	8.45%	8.66%	8.85%
ROCE	4.79%	4.37%	5.89%	4.96%	7.35%	9.33%	11.51%	13.34%	13.82%	14.02%	14.33%	14.34%
EPS (*in €*)	0.32	0.20	0.50	0.40	0.65	0.84	1.10	1.33	1.40	1.47	1.53	1.60

Liquidity	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Current Ratio	1.03	1.13	1.15	0.99	0.92	0.82	0.83	0.90	0.89	0.96	0.98	1.09
Quick Ratio	0.79	0.89	0.87	0.75	0.70	0.60	0.59	0.65	0.66	0.70	0.73	0.82

Working Capital	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
DSO	52.80	50.00	42.09	43.58	42.71	42.21	42.15	42.85	42.90	42.95	43.01	43.06
DIO	50.35	51.67	47.42	45.12	44.55	44.17	43.88	44.78	44.83	44.89	44.94	45.00
DPO	55.81	52.53	50.66	56.13	58.30	57.16	56.61	57.22	56.84	56.91	56.99	57.06
Cash Conversion Cycle	47.34	49.15	38.86	32.57	28.96	29.22	29.42	30.41	30.89	30.93	30.96	31.00
Asset Turnover	0.39	0.39	0.43	0.43	0.46	0.50	0.53	0.55	0.56	0.57	0.58	0.59
Inventory Turnover	7.25	7.06	7.70	8.09	8.19	8.26	8.32	8.15	8.14	8.13	8.12	8.11
Fixed Asset Turnover	1.63	1.61	1.83	1.88	1.93	1.96	1.97	1.93	1.90	1.88	1.85	1.83
Receivables Turnover	6.91	7.30	8.67	8.38	8.55	8.65	8.66	8.52	8.51	8.50	8.49	8.48

Solvency	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Debt/Equity	0.80	0.93	0.68	0.64	0.56	0.47	0.37	0.31	0.26	0.20	0.17	0.12
Debt/Assets	0.34	0.36	0.30	0.29	0.26	0.23	0.20	0.17	0.15	0.12	0.11	0.08
Net Debt/EBITDA	2.78	2.95	2.47	2.38	1.77	1.42	1.09	0.81	0.62	0.44	0.32	0.12
Interest Coverage Ratio	4.32	2.12	5.61	4.84	7.74	10.84	16.16	21.17	24.62	30.87	35.69	48.72
Goodwill/Equity	1.24	1.26	1.20	1.14	1.04	0.94	0.84	0.76	0.69	0.62	0.57	0.52
D/(D+E)		0.48	0.41	0.39	0.36	0.32	0.27	0.24	0.21	0.17	0.14	0.11

Dupont Analysis	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Net Margin	5.99%	3.74%	7.56%	5.00%	6.76%	7.78%	8.91%	10.64%	10.96%	11.17%	11.36%	11.54%
Efficiency	38.75%	38.86%	42.60%	42.69%	46.07%	49.62%	53.26%	54.76%	55.74%	56.90%	58.00%	58.80%
Financial Leverage	2.37	2.46	2.37	2.22	2.16	2.05	1.93	1.82	1.73	1.65	1.57	1.51
ROE	5.50%	3.58%	8.07%	5.57%	8.68%	10.68%	12.98%	14.51%	14.19%	13.95%	13.63%	13.33%

Source: Team Assessment, Company Data

Appendix 10: M-Score

	2019	2020
Day's Sales Receivables Index (DSR)	1.05	0.81
Gross Margin Index (GMI)	0.63	1.07
Asset Quality Index (AQI)	0.96	0.96
Sales Growth index (SGI)	1.06	1.02
Depreciation Index (DEPI)	1.09	1.09
SG&A Expenses Index (SGAI)	0.84	1.03
Accruals to Assets Index (Accruals)	-0.06	-0.06
Leverage Index (LEVI)	0.95	1.08
M Score	**-2.81**	**-2.90**

M-Score is computed with the following formula:

M-Score = -4.84 + 0.92DSR + 0.53GMI +0.40AQI + 0.89SGI + 0.12DEPI – 0.17SGAI + 4.67Accruals – 0.33LEVI

Likelihood of SIG manipulating its earnings is extremely low.

Source: Team Assessment, Company Data

Appendix 11: Z-Score

	2019	2020
Net Working Capital	19.4	92.2
Retained Earnings	8.3	86.7
EBIT	192.6	172
Market Value of Equity	4947.9	6573.8
BV of Liabilities	2735.4	2808.7
Revenues	1783.9	1816.1
Total Assets	4724.1	4622.4
Z-Score	**1.60**	**1.97**

Z-Score is computed with the following formula:

Z-Score = 1.2(NWC/TA) + 1.4(RE/TA) +3.3(EBIT/TA) + 0.6(MV Equity/BV Liabilites) + 1.0(Revenues/TA)

A score of less than 1.81 indicate a high probability of bankruptcy and a score between 1.81 and 2.99 indicates a moderate chance of filing for bankruptcy.

Source: Team Assessment, Company Data

Appendix 12: Ratio vs Peers

Profitability

Gross Margin	2019	2020
Ball Corp	19.8%	20.9%
Elopak	35.2%	36.5%
Greatview	29.5%	30.9%
Zignago Vetro	48.9%	45.5%
Average	**33.3%**	**33.5%**
SIG	36.7%	34.3%

EBITDA Margin	2019	2020
Ball Corp	14.0%	14.2%
Elopak	11.2%	13.5%
Greatview	20.7%	20.6%
Zignago Vetro	26.0%	22.6%
Average	**18.0%**	**17.7%**
SIG	26.9%	24.8%

EBIT Margin	2019	2020
Ball Corp	8.1%	8.5%
Elopak	4.0%	7.8%
Greatview	15.2%	15.3%
Zignago Vetro	13.6%	8.9%
Average	**10.2%**	**10.1%**
SIG	10.8%	9.5%

Net Margin	2019	2020
Ball Corp	4.9%	5.0%
Elopak	1.1%	5.3%
Greatview	12.5%	11.3%
Zignago Vetro	16.4%	14.9%
Average	**8.7%**	**9.1%**
SIG	6.0%	3.7%

ROA	2019	2020
Ball Corp	3.3%	3.3%
Elopak	1.4%	6.3%
Greatview	9.9%	9.4%
Zignago Vetro	9.8%	8.0%
Average	**6.1%**	**6.7%**
SIG	2.3%	1.5%

ROE	2019	2020
Ball Corp	17.2%	18.4%
Elopak	6.6%	28.2%
Greatview	13.8%	13.7%
Zignago Vetro	25.1%	20.2%
Average	**15.7%**	**20.1%**
SIG	5.5%	3.6%

ROCE	2019	2020
Ball Corp	7.9%	7.3%
Elopak	7.3%	13.5%
Greatview	15.9%	17.9%
Zignago Vetro	7.8%	4.8%
Average	**9.7%**	**10.8%**
SIG	4.8%	4.4%

Liquidity

Quick Ratio		
Ball Corp	0.6	0.7
Elopak	0.6	0.6
Greatview	1.1	1.1
Zignago Vetro	0.7	0.7
Average	**0.8**	**0.8**
SIG	0.8	0.9

Current Ratio		
Ball Corp	0.9	1.1
Elopak	1.2	1.2
Greatview	2.0	2.1
Zignago Vetro	1.1	1.3
Average	**1.3**	**1.4**
SIG	1.0	1.1

Working Capital

DSO	2019	2020
Ball Corp	54.6	52.2
Elopak	39.2	48.2
Greatview	66.8	69.3
Zignago Vetro	101.8	109.5
Average	**65.6**	**69.8**
SIG	52.8	50.0

DIO	2019	2020
Ball Corp	50.5	51.4
Elopak	91.0	83.4
Greatview	107.3	109.6
Zignago Vetro	186.4	202.7
Average	**108.8**	**111.8**
SIG	50.4	51.7

DPO	2019	2020
Ball Corp	123.6	128.5
Elopak	77.0	72.6
Greatview	75.3	82.6
Zignago Vetro	146.4	131.5
Average	**105.6**	**103.8**
SIG	55.8	52.5

CCC	2019	2020
Ball Corp	-18.5	-24.9
Elopak	53.3	59.0
Greatview	98.8	96.3
Zignago Vetro	141.8	180.8
Average	**68.8**	**77.8**
SIG	47.3	49.1

Asset Turnover	2019	2020
Ball Corp	0.7	0.7
Elopak	1.3	1.2
Greatview	0.8	0.8
Zignago Vetro	0.6	0.5
Average	**0.9**	**0.8**
SIG	0.4	0.4

Inventory Turnover	2019	2020
Ball Corp	7.2	7.2
Elopak	4.0	4.4
Greatview	3.4	3.3
Zignago Vetro	2.0	1.8
Average	**3.5**	**3.4**
SIG	7.3	7.1

Receivables Turn.	2019	2020
Ball Corp	6.7	7.0
Elopak	9.3	7.6
Greatview	5.5	5.3
Zignago Vetro	3.6	3.3
Average	**6.2**	**5.7**
SIG	6.9	7.3

Fixed Asset Turn.	2019	2020
Ball Corp	2.6	2.4
Elopak	4.2	3.5
Greatview	2.0	2.2
Zignago Vetro	1.0	0.9
Average	**2.4**	**2.1**
SIG	1.6	1.6

Solvency

Debt/Assets	2019	2020
Ball Corp	45.0%	42.7%
Elopak	48.0%	42.0%
Greatview	9.3%	5.9%
Zignago Vetro	44.3%	43.5%
Average	**36.6%**	**33.5%**
SIG	34.0%	36.0%

Liabilities/Assets	2019	2020
Ball Corp	82.6%	81.7%
Elopak	80.2%	75.2%
Greatview	31.7%	31.2%
Zignago Vetro	60.9%	59.8%
Average	**63.9%**	**62.0%**
SIG	57.9%	60.8%

Net Debt/EBITDA	2019	2020
Ball Corp	3.7	3.9
Elopak	3.5	2.5
Greatview	na	na
Zignago Vetro	2.5	2.9
Average	**3.2**	**3.1**
SIG	2.8	3.0

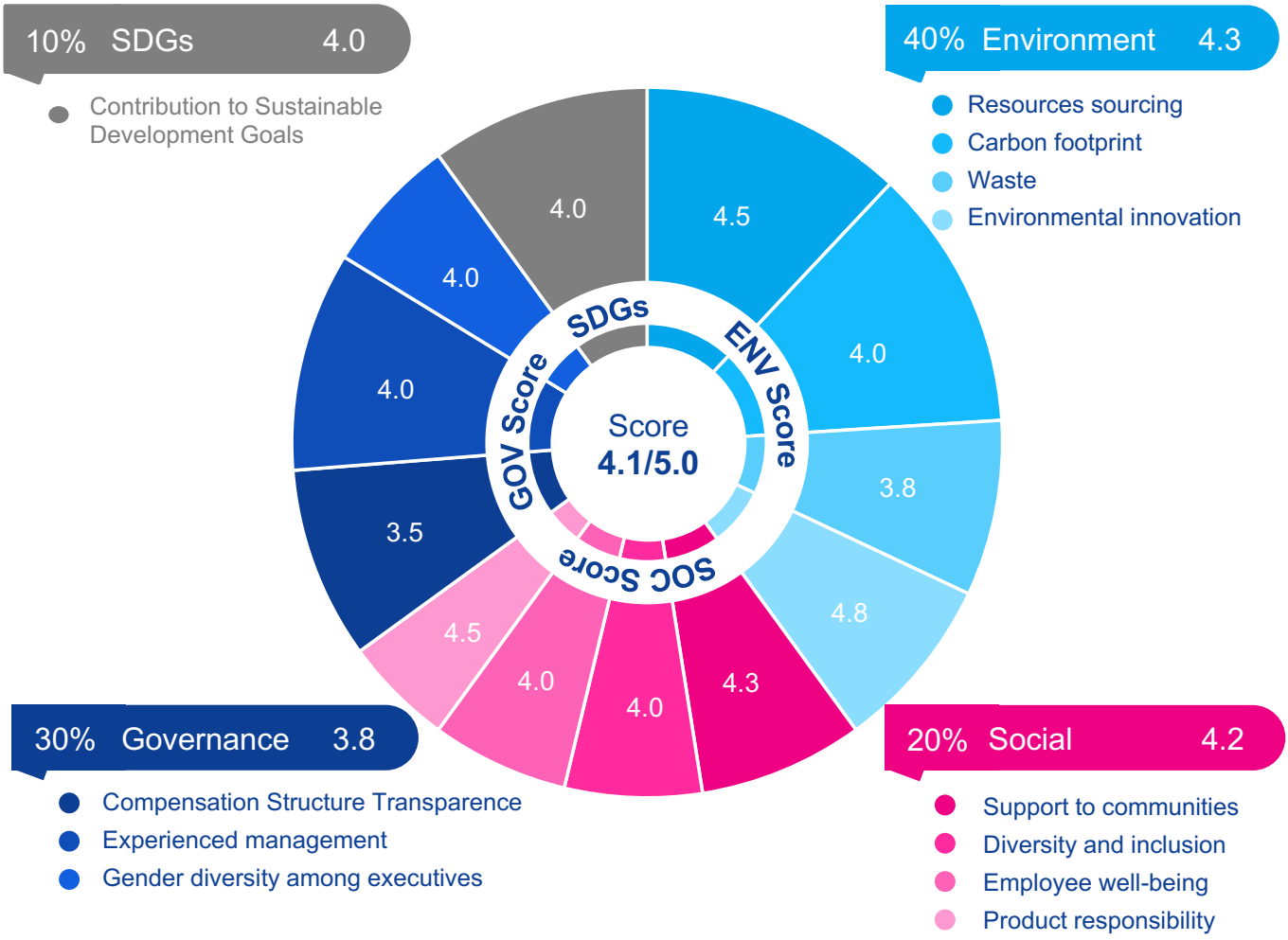
Interest Cov. Ratio	2019	2020
Ball Corp	2.9	3.2
Elopak	2.3	6.8
Greatview	79.0	102.8
Zignago Vetro	37.8	16.2
Average	**30.5**	**32.2**
SIG	4.5	4.7

Dupont Analysis

	Net Margin		Efficiency		Financial Leverage		ROE	
	2019	2020	2019	2020	2019	2020	2019	2020
Ball Corp	4.9%	5.0%	67.7%	66.2%	5.2	5.6	17.2%	18.4%
Elopak	1.1%	5.3%	125.7%	119.2%	4.8	4.5	6.6%	28.2%
Greatview	12.5%	11.3%	79.8%	83.3%	1.4	1.5	13.8%	13.7%
Zignago Vetro	16.4%	14.9%	60.1%	53.8%	2.6	2.5	25.1%	20.2%
Average	**8.7%**	**9.1%**	**83.3%**	**80.6%**	**3.5**	**3.5**	**15.7%**	**20.1%**
SIG	6.0%	3.7%	38.8%	38.9%	2.4	2.5	5.5%	3.6%

Source: Team Assessment, Company Data, Refinitiv

Appendix 13: ESG



	Environmental Pillar - 40%	Social Pillar - 20%	Governance Pillar - 30%	SDG contribution - 10%	Final Score
Greatview	2.9	2.3	2.5	2.0	2.6
Elopak	4.1	4.2	3.6	4.1	4.0
Ball Corp	4.0	2.8	3.2	3.3	3.4
Zignago Vetro	2.5	2.4	2.7	3.5	2.6
Average Score	**3.4**	**2.9**	**3.0**	**3.2**	**3.2**

Source: Team Assessment, Company Data

Appendix 14: Board of Directors

Name	A	C	N	Information	Member Since
Andreas Umbach (Chairman)			■	- MSc in mechanical engineering from the Technical University of Berlin - CEO of Landys+Gyr from 2002 to 2017	2018
Matthias Währen	■			- MA in economics from the University of Basel - Previously a member of the regulatory board of SIX Swiss Exchange from 2006 to 2017	2020
Colleen Goggins		■		- MA in management from the Northwestern University - Various leadership position in pharmaceutical companies	2018
Werner Bauer	■		■	- PHD in chemical engineering from the University of Erlangen-Nürnberg - Currently vice chairman on BoD of Givaudan and Bertelsmann SE&Co	2018
Wah-Hui Chu		■	■	- MBA from Roosevelt University - Several leadership position at PepsiCo International	2018
Mariel Hoch	■	■		- PHD in law from University of Zurich - Board member of Comet and Komax	2018
Nigel Wright			■	- MA in law from Harvard Law School - Senior managing director of Onex Partners	2014

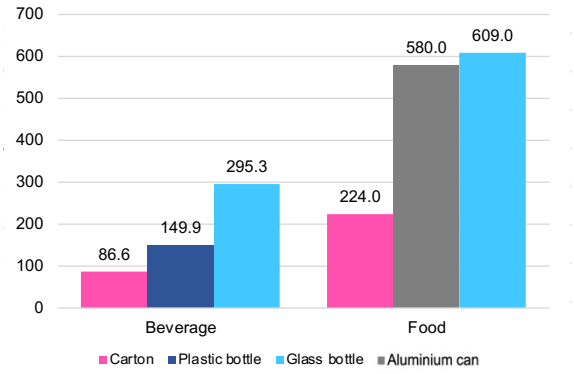
A = Audit & Risk Committee ; C = Compensation Committee ; N = Nomination Committee

Source: Company Data

Appendix 15: Scorecard

	CO2 emissions	Plastic polution	Design flexibilty	Price for customer	Renewable materials	Convenience to use	Commodity price exposure	Final score
Carton	4	5	4	5	4	4	3	4.1
Plastic bottle	2	1	3	5	1	5	2	2.7
Aluminum can	1	5	2	2	1	2	2	2.1
Glass bottle	1	5	1	1	5	1	3	2.4

CO_2 emissions



Price for customer

Lower bound price on Alibaba.com for 0.5L

Carton	0,019	CHF
Plastic bottle	0,019	CHF
Aluminum can	0,047	CHF
Glass bottle	0,084	CHF

Renewable materials

% of renewable materials used

Carton	75%	Paperboard is fully renewable and represents 75% of carton's composition
Plastic bottle	0%	Fully made of fossil fuels which are non-renewable ressource
Aluminum can	0%	Fully made of aluminium which is a non-renewable ressource
Glass bottle	100%	Fully renewable as it made of sand, an inexhaustible ressource

Source: Company Data

Design flexibility & convenience to use

Carton

Glass bottle

Plastic bottle

Aluminum can

Appendix 16: Projected Income Statement

(Millions of Euro)	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	**1783.9**	**1816.10**	**2128.2**	**2297.7**	**2500.1**	**2718.6**	**2940.5**	**3073.9**	**3205.4**	**3334.2**	**3459.3**	**3579.6**
Cost of Sale	1129.5	1193.5	1394.0	1564.7	1650.1	1767.1	1881.9	1936.5	2019.4	2100.6	2179.4	2255.2
Gross Profit	**654.4**	**622.6**	**734.2**	**733.0**	**850.0**	**951.5**	**1058.6**	**1137.3**	**1186.0**	**1233.7**	**1279.9**	**1324.5**
SGA	149.5	156.3	180.9	188.4	187.5	198.5	197.0	193.7	201.9	210.1	217.9	225.5
R&D	51.7	50.9	59.6	66.6	75.0	81.6	88.2	92.2	96.2	100.0	103.8	107.4
Other operating Expense/Incor	-26.5	-34.3	-42.6	-46.0	-50.0	-54.4	-58.8	-61.5	-64.1	-66.7	-69.2	-71.6
EBITDA	**479.7**	**449.7**	**536.3**	**523.9**	**637.5**	**725.9**	**832.2**	**912.9**	**952.0**	**990.3**	**1027.4**	**1063.2**
Depreciation	187.2	177.7	180.4	196.7	206.7	213.8	214.8	216.5	229.3	242.0	254.8	267.6
Amortization	99.9	100.0	80.2	100.6	97.1	93.7	90.4	69.8	67.8	65.9	64.1	62.3
EBIT	**192.6**	**172.0**	**275.6**	**226.6**	**333.8**	**418.4**	**526.9**	**626.6**	**654.9**	**682.3**	**708.5**	**733.3**
Net Finance Expense	44.6	81.0	49.1	46.9	43.1	38.6	32.6	29.6	26.6	22.1	19.9	15.1
EBT	**148.0**	**91.0**	**226.5**	**179.7**	**290.7**	**379.8**	**494.3**	**597.0**	**628.3**	**660.2**	**688.6**	**718.2**
Income Tax	41.1	23.0	56.6	44.9	72.7	95.0	123.6	149.3	157.1	165.0	172.2	179.6
Net Income	**106.9**	**68.0**	**169.9**	**134.8**	**218.0**	**284.9**	**370.7**	**447.8**	**471.2**	**495.1**	**516.5**	**538.7**

Source: Team Assessment, Company Data

Note: Since the company includes part of its depreciation & amortization in cost of sales, we decided to perform adjustments. In our sense, it is a more precise measure to completely exclude D&A from the cost of sales. This explains the differences with reported cost of sales and depreciation accounts.

Appendix 17: Projected Balance Sheet

(in € millions)	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Cash & Equivalent	261.0	355.1	312.9	316.7	310.4	259.2	182.4	245.4	292.0	297.8	335.8	378.6
Receivables	272.8	224.8	266.0	282.6	302.5	326.2	352.9	368.9	384.7	400.1	415.1	429.6
Inventory	167.2	170.7	191.5	195.3	207.5	220.2	232.3	242.8	253.2	263.4	273.3	282.8
Other Current Assets	22.2	28.5	21.3	23.0	25.0	27.2	29.4	30.7	32.1	33.3	34.6	35.8
Total Current Asset	**723.2**	**779.1**	**791.8**	**817.6**	**845.4**	**832.8**	**796.9**	**887.8**	**961.9**	**994.7**	**1058.8**	**1126.7**
Gross PPE	1911.6	2042.3	2287.0	2544.4	2834.4	3144.3	3473.7	3781.0	4101.6	4435.0	4780.9	5138.9
Accumulated Depreciation	-789.5	-914.6	-1095.0	-1291.7	-1498.4	-1712.2	-1927.0	-2143.5	-2372.8	-2614.8	-2869.6	-3137.2
Net PPE	1122.1	1127.7	1192.0	1252.7	1336.0	1432.2	1546.7	1637.5	1728.8	1820.2	1911.3	2001.7
Intangible Assets	2460.3	2292.8	2874.3	2773.7	2676.6	2582.9	2492.5	2422.7	2354.9	2288.9	2224.8	2162.5
Other LT Assets	418.5	422.8	510.8	551.5	600.0	652.5	705.7	737.7	769.3	800.2	830.2	859.1
Total Assets	**4724.1**	**4622.4**	**5368.8**	**5395.4**	**5458.0**	**5500.3**	**5541.8**	**5685.7**	**5814.9**	**5904.1**	**6025.1**	**6150.1**
Account Payables	179.6	163.9	223.0	258.2	269.0	284.5	299.2	307.9	321.1	334.0	346.5	358.6
Other Current Liabilities	473.4	499.0	418.2	469.4	495.0	530.1	564.6	581.0	605.8	630.2	653.8	676.6
Current Debt	39.0	0.0	50.0	100.0	150.0	200.0	100.0	100.0	150.0	75.0	80.0	0.0
Current Lease	11.8	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Current Liabilities	**703.8**	**686.9**	**691.2**	**827.6**	**914.0**	**1014.6**	**963.8**	**988.9**	**1076.9**	**1039.2**	**1080.3**	**1035.1**
LT Debt	1502.8	1536.7	1486.7	1386.7	1236.7	1036.7	936.7	836.7	686.7	611.7	531.7	451.7
LT Leases	41.7	123.0	100.0	75.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Other Non-Current Liabilities	487.1	462.1	691.4	665.2	672.6	649.3	627.5	602.6	568.7	534.6	450.4	446.0
Total Liabilities	**2735.4**	**2808.7**	**2969.3**	**2954.5**	**2873.3**	**2750.7**	**2578.0**	**2478.1**	**2382.3**	**2235.5**	**2112.5**	**1982.8**
Common Stock	2.8	2.8	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Additional Paid in Capital	2059.8	1945.0	2140.0	2046.6	1972.4	1852.5	1695.8	1491.9	1245.7	986.5	714.1	430.1
Retained Earning	8.3	86.7	256.6	391.4	609.4	894.3	1265.0	1712.8	2184.0	2679.2	3195.7	3734.3
Treasury Stock	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Compr. Income	-82.1	-220.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Equity	**1988.7**	**1813.7**	**2399.5**	**2440.9**	**2584.7**	**2749.7**	**2963.8**	**3207.6**	**3432.6**	**3668.5**	**3912.7**	**4167.3**
Total Liabilities and Equity	**4724.1**	**4622.4**	**5368.8**	**5395.4**	**5458.0**	**5500.3**	**5541.8**	**5685.7**	**5814.9**	**5904.1**	**6025.1**	**6150.1**

Source: Team Assessment, Company Data

Note: Recently, SIG has been paying dividends from the account "Additional Paid in Capital". We assume the company to keep using this method.

Appendix 18: Projected Cash Flow Statement

(in € millions)	2019	2020	2021E	2022E	2023E	2024E	2025	2026E	2027E	2028E	2029E	2030E
Net Income	**106.9**	**68.0**	**169.9**	**134.8**	**218.0**	**284.9**	**370.7**	**447.8**	**471.2**	**495.1**	**516.5**	**538.7**
Depreciation	187.2	177.7	180.4	196.7	206.7	213.8	214.8	216.5	229.3	242.0	254.8	267.6
Amortization	99.9	100.0	80.2	100.6	97.1	93.7	90.4	69.8	67.8	65.9	64.1	62.3
Asset Writedown	2.8	43.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Operating Activities	-37.9	-64.2	-40.0	-40.0	-40.0	-40.0	-40.0	-40.0	-40.0	-40.0	-40.0	-40.0
Ch. in Acc. Receivable	-11.3	32.6	41.2	16.6	19.9	23.7	26.6	16.0	15.8	15.5	15.0	14.4
Ch. in Inventories	-9.3	-11.8	20.8	3.8	12.2	12.7	12.1	10.5	10.4	10.2	9.9	9.5
Ch. in Acc. Payables	31.7	26.9	59.1	35.1	10.8	15.5	14.7	8.7	13.2	12.9	12.5	12.1
Ch. in Other Operating Assets	68.1	52.7	-7.2	1.7	2.0	2.2	2.2	1.3	1.3	1.3	1.3	1.2
CFO	**438.1**	**425.8**	**394.9**	**405.2**	**458.4**	**529.2**	**609.8**	**674.9**	**714.0**	**749.1**	**781.8**	**815.4**
CAPEX	-182.2	-199.2	-244.7	-257.3	-290.0	-309.9	-329.3	-307.4	-320.5	-333.4	-345.9	-358.0
Sales of PPE	4.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Acquisitions	-40.5	-2.5	-63.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Investing Activities	21.2	24.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CFI	**-197.3**	**-176.2**	**-308.3**	**-257.3**	**-290.0**	**-309.9**	**-329.3**	**-307.4**	**-320.5**	**-333.4**	**-345.9**	**-358.0**
Total Debt Issued	0.0	1550.0	0.0	0.0	850.0	0.0	300.0	0.0	0.0	400.0	0.0	250.0
Total Debt Repaid	-41.1	-1577.0	0.0	-50.0	-950.0	-150.0	-500.0	-100.0	-100.0	-550.0	-75.0	-330.0
Issuance of Common Stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repurchase of Common Stock	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Common Dvidend Paid	-99.0	-114.8	-128.1	-93.4	-74.1	-119.9	-156.7	-203.9	-246.3	-259.2	-272.3	-284.1
Other Financing Activities	1.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-50.0	-50.0
CFF	**-139.4**	**-141.3**	**-128.7**	**-144.0**	**-174.7**	**-270.5**	**-357.3**	**-304.5**	**-346.9**	**-409.8**	**-397.9**	**-414.7**
Forex	2.5	-14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Change in Cash	**103.9**	**94.1**	**-42.2**	**3.8**	**-6.3**	**-51.2**	**-76.9**	**63.0**	**46.6**	**5.9**	**37.9**	**42.8**

Source: Team Assessment, Company Data

Appendix 19: Capex forecasts

Historical average cost per machine	**2.07**
Historical average revenue per machine	**1.43**
Average revenue with better machines	**1.7**
Average composition of Filling machines/CAPEX	**67.6%**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Capex initial	199.2	244.7	257.3	290.0	309.9	329.3	307.4	320.5	333.4	345.9	358.0
Estimated Capex for filling machines		150.3	158.0	178.1	190.3	202.2	188.7	196.8	204.7	212.4	219.8
Implied new machines		72	76	85	91	97	91	94	98	102	106
Total number of machines	1266	1338	1414	1499	1590	1687	1778	1872	1970	2072	2178
Implied revenue		**2236.8**	**2363.9**	**2506.0**	**2658.1**	**2820.3**	**2999.8**	**3158.4**	**3323.8**	**3495.8**	**3674.7**

Source: Team Assessment, Company Data

Appendix 20: Valuation Assumptions

		2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue Growth	%	1.81%	17.19%	7.96%	8.81%	8.74%	8.16%	4.54%	4.28%	4.02%	3.75%	3.48%
COGS	% Sales	65.72%	65.5%	68.1%	66.0%	65.0%	64.0%	63.0%	63.0%	63.0%	63.0%	63.0%
SGA	% Sales	8.6%	8.5%	8.2%	7.5%	7.3%	6.7%	6.3%	6.3%	6.3%	6.3%	6.3%
R&D	% Sales	2.8%	2.8%	2.9%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Other expense/(income)	% Sales	-1.89%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%	-2.00%
Net interest	% Borrowings	4.8%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Tax Rate	%	25.3%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Depreciation	% Net PPE (t-1)	15.8%	16.0%	16.5%	16.5%	16.0%	15.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Amortization	% Intangible Asset (t-1)	4.06%	3.5%	3.5%	3.5%	3.5%	3.5%	2.8%	2.8%	2.8%	2.8%	2.8%
Capex	% Sales	11.0%	11.5%	11.2%	11.6%	11.4%	11.2%	10.0%	10.0%	10.0%	10.0%	10.0%
Dividend payout	% Net Income		55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Account Receivables	% Sales	12.4%	12.5%	12.3%	12.1%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Other Current Assets	% Sales	1.6%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Other LT Assets	% Sales	23.3%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Account Payables	% COGS	13.7%	16.0%	16.5%	16.3%	16.1%	15.9%	15.9%	15.9%	15.9%	15.9%	15.9%
Other Current Liabilities	% COGS	41.8%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
		9.4%	9.0%	8.5%	8.3%	8.1%	7.9%	7.9%	7.9%	7.9%	7.9%	7.9%

Source: Team Assessment, Company Data

Appendix 21: Free Cash Flows to the Firm

(in € millions)	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	172.0	275.6	226.6	333.8	418.4	526.9	626.6	654.9	682.3	708.5	733.3
- Taxes	23.0	68.9	56.6	83.4	104.6	131.7	156.7	163.7	170.6	177.1	183.3
NOPLAT	**149.0**	**206.7**	**169.9**	**250.3**	**313.8**	**395.2**	**470.0**	**491.2**	**511.7**	**531.4**	**550.0**
+Depreciation & Amortization	277.7	260.7	297.3	303.8	307.4	305.2	286.3	297.1	308.0	318.9	329.9
- CAPEX	199.2	244.7	257.3	290.0	309.9	329.3	307.4	320.5	333.4	345.9	358.0
NWC	231.6	234.5	219.7	241.1	261.9	285.9	303.8	316.8	329.5	341.9	353.8
- Change in NWC		2.9	-14.8	21.3	20.9	24.0	17.9	13.0	12.7	12.4	11.9
FCFF (as of 31.12)		**219.7**	**224.7**	**242.8**	**290.5**	**347.1**	**431.0**	**454.7**	**473.5**	**492.0**	**510.0**
YoY growth of Cash flows			*2.3%*	*8.0%*	*19.7%*	*19.5%*	*24.2%*	*5.5%*	*4.1%*	*3.9%*	*3.7%*
Terminal Value											14303.8
Discount Factor			0.995	0.937	0.882	0.831	0.782	0.736	0.693	0.653	0.615
Present value (as of 30.11.2022)			**18.6**	**227.4**	**256.2**	**288.3**	**337.1**	**334.9**	**328.4**	**321.2**	**9107.0**
Enterprise Value			11219.2								
Terminal Value as a [%] of EV			78%								
- Net Debt			1323.8								
Equity Value			**9895.4**								
Number of Shares Outstanding			337.5								
12 months Target Price (€)			**29.3**								
Exchange Rate €/CHF			1.04								
12 months Target Price (CHF)			**30.6**								
%Change			26.0%								
30.11.21 price			**24.2**								

Source: Team Assessment, Company Data

Note: Exchange rate at 30.11.21

Appendix 22: Multiple Valuation

	Line of Business	Size	Revenue Growth	Profitability	Leverage
Ball Corp	***	*	**	**	***
EloPak	****	****	**	**	****
Greatview Aseptic	****	**	*	****	*
Daetwyler	*	***	****	****	**
Geberit	*	**	****	***	**
Bobst	***	*	*	*	***
Bossard	*	*	***	**	***
Alfa Laval	**	*	***	****	**
Zignago Vetro	***	*	**	****	***

Comparability * Low ** Moderate *** High ****Very High

Source: Team Assessment, Refinitiv

Multiple Valuation	2021E EV/EBITDA
Ball Corp	18.6
Elopak	8.1
Greatview	8.8
Daetwyler	27.2
Geberit	24.9
Bobst	10.7
Bossard	18.8
Alfa Laval	22.7
Zignago Vetro	20.4
Median	**18.8**

Multiple Valuation Price	
2022E SIG EBITDA	523.9
Implied SIG's EV	9833.2
Total Debt	1683.7
Cash & Cash Equivalents	355.1
Equity Value	**8504.6**
Total Shares Outstanding	337.5
Implied Stock Price EUR	**25.2**
Exchange Rate EUR/CHF	1.04
Implied Stock Price CHF	**26.26**
% Change	*8.3%*

Appendix 23: Tetra Pak vs SIG machines efficiency

Revenues per filling machine	Tetra Pak	SIG
Total Revenues (*in € mio*)	10'800	1'816
[%] of revenues from Aseptic	64.53%	100.00%
Revenues from Aseptic carton (*in € mio*)	6'969	1'816
Number of filling machines installed	8'800	1'266
Number of filling machines for aseptic	5'679	1'266
Revenues per filling machine (*in € mio*)	**1.23**	**1.43**

Production capacity/efficiency	Tetra Pak	SIG
Total units sold (*in mio*)	117'000	38'000
Number of filling machines for aseptic	5679	1266
Units produced per filling machine (*in mio*)	**20.60**	**30.02**

Source: Team Assessment, Company Data

Appendix 24: Glossary

Aseptic	Free from contamination due to viruses or bacterias. Can be conserved withour refregiration for 12 months, which is not the case for fresh packaging.
ASI, FSC	Labels that certify sustainable processes for producers.
GHG	Green House Gas. Responsible for the global warming.
Gold Standard	Certified projects that capture methane, a green house gas.
GHG	Green House Gas. Responsible for the global warming.
Non-system supplier	Packaging suppliers that do not offer filling machines and associated services to their customers.
Roll-fed	Carton packaging technology used by SIG's competitor's (cf Appendix 4).
Sleeves	Carton packaging technology specific to SIG (cf Appendix 4).

Source: Team Assessment

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