SIG Group AG Valuation Report

Investment Thesis

- SIG's main revenue line, aseptic cartons, is an industry run by two companies, SIG and Tetra Pack. These two companies have 90% of market share combined, according to Barclays.
- Aseptic carton packaging is one of the fastest growing subsegments of the beverage packaging industry at a consensus CAGR of 5.7% compared to the overall industry CAGR of 3.2%, reflecting the shift in demand to more environmentally sustainable packaging alternatives.
- We believe that SIG's strong position in the oligopoly means it is well placed to avail of this heightened growth opportunity given their established capacity and global reach.
- Although new players are trying to enter the market using fully sustainable cartons, we do not see these as a threat to SIG's market position as a switch to recycled pulp or a new product offering would diminish newcomers' value proposition.
- SIG's other business segment, bag-in-box, has been underwhelming since its introduction in 2022; however, we believe this is due to a tough macroeconomic climate that has affected food service volumes. As inflation is slowly curbed, we believe this business segment is poised for high returns, reflecting a successful investment for SIG.

SIX Swiss Exchange: SIGNC.S

Current Price (12/02/2024): 17.39 CHF

Target Price: 23.83 – 24.37 CHF

Call: BUY

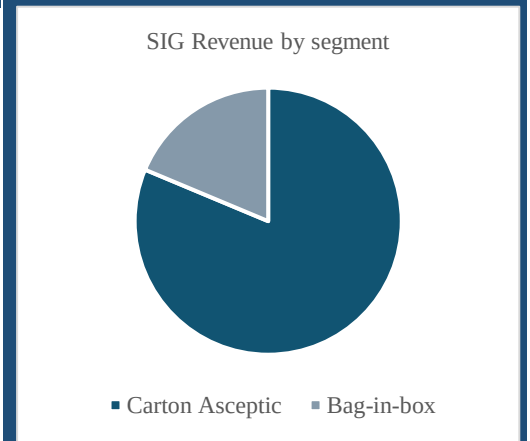
DCF Analysis

Implied Share Price:	**23.83 -24.37 CHF**
Enterprise Value:	**11,391 CHFm**
WACC	**5.65%**

Graph 1: SIG Stock Price

Valuation Methodology

- To value SIG, we used a discounted cashflow model to determine the intrinsic value.
- We aimed to establish how the market values SIG and then compare it with our approach.
- Our DCF approach analyses both revenue streams. We performed a sensitivity test on the bag-in-box revenue stream to determine how the intrinsic value reacts to changes in growth rates.
- For the market approach, we looked at using basic forecast methodologies for all line items to understand why the market holds it at a current price of roughly 17.39 CHF.
- We then compared the two models to explain some of the intrinsic value we believe the market is not seeing and why we believe SIG is a buy.



Graph 2: Revenue breakdown Pie chart

Chris Byrne: christopher.byrne3@ucdconnect.ie
Gavin Kennelly: gavin.kennelly@ucdconnect.ie

Historical Performance of SIG Group AG:

In Millions of EUR	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	*5 year average % of Revenue*
Revenue	**1,664.10**	**1,676.10**	**1,783.90**	**1,816.10**	**2,061.80**	**2,779.90**	**3,230.30**	
% Revenue Growth		*0.72%*	*6.43%*	*1.81%*	*13.53%*	*34.83%*	*16.20%*	
Cost of Revenue	**1,275.70**	**1,300.30**	**1,370.10**	**1,422.20**	**1,577.20**	**2,204.70**	**2,468.90**	
COGS as % of Revenue	*76.66%*	*77.58%*	*76.80%*	*78.31%*	*76.50%*	*79.31%*	*76.43%*	***77.47%***
Gross Profit	**388.40**	**375.80**	**413.80**	**393.90**	**484.60**	**575.20**	**761.40**	
Gross Profit Margins	*23.34%*	*22.42%*	*23.20%*	*21.69%*	*23.50%*	*20.69%*	*23.57%*	***22.53%***
Total Operating Expenses	**250.90**	**269.80**	**257.00**	**268.60**	**305.80**	**485.10**	**409.80**	
OpEx as % of Revenue	*15.08%*	*16.10%*	*14.41%*	*14.79%*	*14.83%*	*17.45%*	*12.69%*	***14.83%***
Other Operating Income	**11.70**	**8.50**	**20.40**	**29.30**	**78.60**	**24.70**	**97.60**	
Other Operating Inc as % of Revenue	*0.70%*	*0.51%*	*1.14%*	*1.61%*	*3.81%*	*0.89%*	*3.02%*	***0.97%***
EBIT	**149.20**	**114.50**	**177.20**	**154.60**	**257.40**	**114.80**	**449.20**	
EBIT Margins	*8.97%*	*6.83%*	*9.93%*	*8.51%*	*12.48%*	*4.13%*	*13.91%*	***9.79%***
Income Tax Expense	**26.20**	**0.90**	**41.10**	**23.00**	**52.30**	**51.00**	**80.80**	
Tax Rate (%)	*17.56%*	*0.79%*	*23.19%*	*14.88%*	*20.32%*	*44.43%*	*17.99%*	***24.16%***
Net Operating Profit After Tax (NOPAT)	**123.00**	**113.60**	**136.10**	**131.60**	**205.10**	**63.80**	**368.40**	
Depreciation & Amortisation	**265.90**	**271.70**	**287.10**	**277.70**	**306.60**	**366.70**	**412.20**	
As % of Revenue	*15.98%*	*16.21%*	*16.09%*	*15.29%*	*14.87%*	*13.19%*	*12.76%*	***14.44%***
CapEx	39.40	143.20	110.40	145.20	142.70	144.00	250.60	
CapEx as % of Revenue	*2.37%*	*8.54%*	*6.19%*	*8.00%*	*6.92%*	*5.18%*	*7.76%*	***7.48%***
Change in NWC	**51.70**	**91.70**	**79.20**	**100.40**	**117.20**	**212.50**	**19.70**	
Change in NWC as % of Revenue	3.11%	5.47%	4.44%	5.53%	5.68%	7.64%	0.61%	***4.78%***
Unlevered Free Cash Flows	**297.80**	**150.40**	**233.60**	**163.70**	**251.80**	**74.00**	**510.30**	

Chris Byrne: christopher.byrne3@ucdconnect.ie
Gavin Kennelly: gavin.kennelly@ucdconnect.ie

Forecast Note

Some of our 2024 figures were forecasted using financial data from the first three quarters of 2024. We adjusted for seasonality by analysing typical Q4 changes from the other three quarters in past years, enabling us to derive an estimate for Q4 2024 and the full-year projection.

In addition, SIG acquired a private company, Scholle IPN, a bag-in-box packaging company in 2022. This new revenue stream now accounts for roughly 20% of SIG's total revenue. Since this company was private we have very limited access to historical bag-in-box revenue.

Revenue

SIG's revenue is split between aseptic carton paper packaging and bag-in-box packaging. Aseptic paper packaging refers to cartons designed to store liquid food and beverages for long periods without refrigeration, using a sterilization process to maintain product safety and quality. These packages are primarily made of multiple layers, combining paperboard, aluminium foil, and plastic to provide strength and barrier protection. Examples include cartons of milk or orange juice. Bag-in-box packaging consists of a durable, flexible plastic bag contained within a corrugated cardboard box. This type of packaging is primarily used for liquid products and offers excellent storage efficiency, easy dispensing, and reduced packaging waste. Examples include soda syrups for dispensers and wine.

Historically, there has been volatile revenue growth, so we decided to create a regression model for the aseptic carton paper packaging which contributes 80% of total revenue.

To carry out a revenue regression for the aseptic carton segment we looked at the correlation between changes in key variables and the yearly changes in our revenues, the results of which are presented in Figure 1.

From our results, it is clear there is a strong relationship between the change in SIG's revenues and the variables highlighted in green (global milk consumption, EU paper & paperboard PPI, glass packaging revenues, can shipments, and flexible plastics revenues). However, we also used global real GDP and beverage packaging consumption in our models given their perceived importance on yearly changes in revenues.

	Correlation
Revenues Growth	1
OECD Real GDP	0.295353439
China Real GDP	-0.381246641
Global Real GDP	0.233400481
US Milk Consumption	-0.419978747
EU Milk Consumption	0.386355136
China Milk Consumption	0.516008516
Global Milk consumption	0.612861012
Beverage Packg Consumption	0.472492552
EU Paper & Paperboard PPI	0.76499825
Glass Packaging	0.622912973
Can Packaging Shipments	0.529956458
Flexible Plastic Revenues	0.727788785

Figure 1: Correlation with Aseptic Carton Revenue

We then took these variables and made ten different models to forecast the changes year on year in revenues. These models were compared based on their goodness of fit (R-squared), goodness of fit in relation to complexity (adjusted R-squared) and Variance Inflator Factor (VIF) to check for multicollinearity. We believe this will give us the truest model that is not prone to an inflated R squared.

Chris Byrne: christopher.byrne3@ucdconnect.ie
Gavin Kennelly: gavin.kennelly@ucdconnect.ie

	R-Squared	Adjusted R-Squared	VIF (Multicollinearity)
Model 1	0.611	0.319	2.57
Model 2	0.977	0.839	43.48
Model 3	0.922	0.818	12.82
Model 4	0.977	0.919	43.48
Model 5	0.93	0.754	14.29
Model 6	0.843	0.726	6.37
Model 7	0.843	0.726	6.37
Model 8	0.842	0.635	6.33
Model 9	0.747	0.557	3.95
Model 10	0.843	0.726	6.37

Figure 2: Regression Model accuracy

From our 10 models we believed that model 9 is the most applicable, given the high R-squared and lack of multicollinearity issues. This model had the following independent variables, measured in year-on-year changes; global real GDP, EU paper and paperboard PPI and global beverage packaging consumption. The model coefficients are shown in figure 3 across.

Regression model	
Constant	-0.0442
Global Real GDP	-0.7448
EU Paper and Paperboard	0.8839
Packaging Consumption	1.5912

Figure 3: Regression Model

To forecast global real GDP into the future we took the same forecast we used for our industry report. This was done by taking the OECD real output forecasts and combining them with the IMF forecasts for China's real output to give us a proxy global figure. You can see the backtests of forecasts in *Figure 4.* One thing to note is that the IMF has an upward bias of roughly 100 bps for their forecasts, so the Chinese real output forecasts were reduced by this amount (a shortcoming of our original forecast). Once we were sure that these forecasts were accurate, we used a weighted average growth rate for global GDP, where the weights were based on these regional historical contributions to global GDP (65% OECD and 35% China).

Global beverage packaging consumption and the PPI were grown based on their average year-on-year growth rate. Global packaging consumption is growing at a heightened rate of 5.74%; however, this is roughly in line with analyst consensus growth for the industry as a whole, so we thought although a high growth rate, a justified one.

Figure 4: % change GDP growth vs IMF Forecast[1]

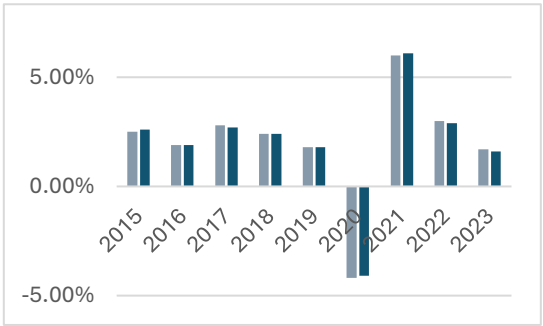


Figure 5[2]*: % Change Real Output vs OECD forecast*

[1] Diaz, C. (2023, April 10). *How accurate are the IMF's global growth projections?* Retrieved from Quartz: https://qz.com/how-accurate-are-the-imfs-global-growth-projections-1850319360

[2] OECD. (2024, 29 09). *OECD Real Output Forecast*. Retrieved from OECD: https://www.oecd.org/en/data/indicators/real-gdp-forecast.html

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	2024	2025	2026	2027	2028	2029	2030
Global Real GDP		*1.86%*	*1.98%*	*1.97%*	*1.93%*	*1.89%*	*1.86%*
Packaging Consumption		*5.74%*	*5.74%*	*5.74%*	*5.74%*	*5.74%*	*5.74%*
PPI		*1.74%*	*1.74%*	*1.74%*	*1.74%*	*1.74%*	*1.74%*
Total Growth Rate		***4.87%***	***4.77%***	***4.78%***	***4.81%***	***4.84%***	***4.86%***

Figure 6: Total Aseptic Carton Packaging Revenue

SIG Group's bag-in-box revenue stems from a recent acquisition in June 2022. SIG acquired Scholle IPN, a leading innovator of sustainable packaging systems and solutions for food and beverages, specifically bag-in-box and spouted pouch packaging. Scholle IPN was a private company and it was very difficult to access information relating to their revenue. Considering we only have access to one and a half years of data relating to their bag-in-box, we analysed company guidance, industry analysis and consensus opinions on how the company will grow their bag-in-box revenue stream. Historically, the global bag-in-box was valued at USD 1.6 billion in 2019, and in 2023 it was valued at USD 4.35 billion. This equates to a 28.41% 4 year CAGR showing the exponential growth associated with this industry. Below is a table representing some of the reports we have found associated with industry growth.

Reporter	Forecasted growth
Management guidance[3]	*4 – 6%*
Barclays	*5.5%* ***(CAGR 2021-26)***
Grand View Research[4]	*6.9%* ***(CAGR 2024-30)***
Fortune Business Insights[5]	*6.22%* ***(CAGR 2024-32)***
Polaris Market Research[6]	*6.6%* ***(CAGR 2022-30)***
IMARC[7]	*6.6%* ***(CAGR 2024-32)***
Fact.MR[8]	*5.8%* ***(CAGR 2024-34)***
Allied Market Research[9]	*5.8%* ***(CAGR 2022-31)***

Figure 7: Total Bag-in-box Revenue Predictions

Since there is variation around 6% and there is not too much historical data available, we decided to be prudent and do a sensitivity test using managements guidance of 4-6%. We believe that it is unlikely that management are going to over-estimate revenue growth predictions as they will want to beat their own forecasts, and since the upper bound of their forecasted growth is in line with global industry forecasts, we thought this was a very reasonable way of estimating SIG's bag-in-box revenue growth potential. For 2024, we forecasted revenue growth based on the first 3 quarters of 2024. The first half of 2024 saw a 12% decrease in bag-in-box revenue because of a temporary softness in demand, particularly in the foodservice sector impacting sales volume. They also had some operational challenges from relocating operations in Canada to the US leading to capacity constraints, affecting production schedules and in turn output.

[3] https://api.sig.biz/media/r5alrshw/sig-annual-report-2023.pdf
[4] https://www.grandviewresearch.com/industry-analysis/bag-in-box-containers-market
[5] https://www.fortunebusinessinsights.com/bag-in-box-container-market-102313
[6] https://www.polarismarketresearch.com/industry-analysis/bag-in-box-containers-market
[7] https://www.imarcgroup.com/bag-in-box-container-market
[8] https://www.factmr.com/report/bag-in-box-containers-market
[9] https://www.alliedmarketresearch.com/bag-in-box-container-market-A13467

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Cost of Goods sold

For calculating cost of goods sold, we took a 5-year average as a percentage of revenue. Since 2018 COGS has only varied 3%, it was therefore acceptable to take an average as a percentage of revenue.

Operating Expenses

Operating expenses included personnel expenses, marketing & sales expenses, general & administrative expenses and other operating expenses. Similarly to COGS, this has had very little variation as a percentage of revenue historically. We also took a 5 year average for operating expenses.

Taxation

We adopted the recommended effective tax rate supplied in SIG's annual reports which was 27%.

Depreciation & Amortization

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Depreciation & Amortization (D&A)	**265.90**	**271.70**	**287.10**	**277.70**	**306.60**	**366.70**	**412.20**
As % of Revenue	*15.98*	*16.21*	*16.09*	*15.29*	*14.87*	*13.19*	*12.76*
Depreciation	**163.20**	**172.30**	**177.20**	**160.20**	**194.80**	**228.90**	**257.70**
As % of Revenue	*9.81%*	*10.28%*	*9.93%*	*8.82%*	*9.45%*	*8.23%*	*7.98%*
Amortization	**102.70**	**99.40**	**99.90**	**100.00**	**111.80**	**137.80**	**154.50**
As % of Revenue	*6.17%*	*5.93%*	*5.60%*	*5.51%*	*5.42%*	*4.96%*	*4.78%*

Figure 8: Historical Depreciation and Amortization

For D&A, we derived market price by taking a historical average from the past 5 years. However, with further analysis we noticed a decreasing trend in D&A YoY. We broke D&A into depreciation and amortization and found each as a % of revenue. Our results showed that while depreciation stays relatively constant, amortization has clearly been decreasing YoY. This could be as a consequence of revenue growth outpacing amortization expenses. Their intangibles currently consist of Goodwill, Trademarks, Customer relationships, and Technology. The graph shows this decreasing trend as a percentage of revenue, and this decrease represents a 4.13% average decrease YoY. In forecasting Amortization we decided to continue decreasing amortization as a percentage of revenue by this figure. In forecasting depreciation, we turned to management guidance which estimates an average annual decrease in depreciation of €10 million over the next 2 years, and then we took an average which we combined with our amortization figures to get to a total D&A figure.

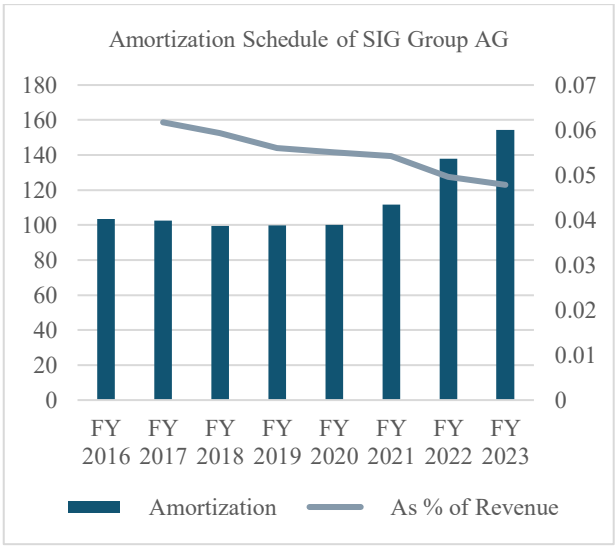

Figure 9: Amortization schedule

Chris Byrne: christopher.byrne3@ucdconnect.ie
Gavin Kennelly: gavin.kennelly@ucdconnect.ie

	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	**3,230.30**	**3,424.12**	**3,629.57**	**3,847.34**	**4,078.18**	**4,322.87**	**4,582.24**	**4,857.18**
Depreciation and Amortization	**412.20**	**411.47**	**404.13**	**434.27**	**452.92**	**472.58**	**493.29**	**515.12**
D&A as % of Revenue		*12.02%*	*11.13%*	*11.29%*	*11.11%*	*10.93%*	*10.77%*	*10.61%*
Depreciation	**257.70**	**247.70**	**237.70**	**265.14**	**281.05**	**297.91**	**315.78**	**334.73**
D as % of Revenue		*7.23%*	*6.55%*	*6.89%*	*6.89%*	*6.89%*	*6.89%*	*6.89%*
Amortization	**154.50**	**163.77**	**166.43**	**169.13**	**171.88**	**174.67**	**177.50**	**180.39**
A as % of Revenue		*4.78%*	*4.59%*	*4.40%*	*4.21%*	*4.04%*	*3.87%*	*3.71%*

Figure 10:Forecasted Depreciation and Amortization

Capital Expenditure

Capital Expenditure was calculated as an average percentage of revenue. It was very consistent YoY apart from 2022. In 2022, SIG made 3 acquisitions with a total acquisition cost of over €1.5 billion (Scholle IPN acquisition representing €1.36 billion of this) and in 2022 capital expenditure dipped to 5% of revenue, and we believe it is due to spending on acquisitions rather than capital expenditure. For this reason when we were calculating our 5 year average, we left out 2022 and took 2018-2021, and 2023. This gave us a more accurate representation of capital expenditure at 7.48% of revenue.

Change in Net Working Capital

For Change in Net Working Capital (NWC) for the purpose of calculating market value, we used the average change in NWC taken from Bloomberg data which was 4.78% of revenue. We delved into change in NWC further and we noticed from looking at the financial statements that operational net working capital was not coinciding with this Bloomberg forecast. Operational change in NWC which was made up of accounts receivable, inventories, other current assets, and accounts payable was consistently a negative percentage of revenue. We excluded other current liabilities because it was made up of contingent considerations and derivative liabilities which are not operational in theory. The table below outlines our findings.

Net Working Capital	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Current Assets							
Accounts Receivable	287.30	242.70	271.60	222.00	279.90	460.30	422.70
Inventories	122.40	144.40	167.20	170.70	194.50	402.70	384.40
Other Current Assets	28.20	19.20	22.20	28.50	40.40	26.80	23.40
Total Current Operational Assets	**437.90**	**406.30**	**461.00**	**421.20**	**514.80**	**889.80**	**830.50**
Current assets growth	*0.41%*	*-7.22%*	*13.46%*	*-8.63%*	*22.22%*	*72.84%*	*-6.66%*
Current Liabilities							
Accounts Payable	410.10	440.60	492.30	501.20	666.30	1,036.80	1,006.40
Total Current Operational Liabilities	**410.10**	**440.60**	**492.30**	**501.20**	**666.30**	**1,036.80**	**1,006.40**
Net working Capital	27.80	-34.30	-31.30	-80.00	-151.50	-147.00	-175.90
Change in NWC	-2.00	-62.10	3.00	-48.70	-71.50	4.50	-28.90
Change in NWC % of revenue	*-0.12%*	*-3.71%*	*0.17%*	*-2.68%*	*-3.47%*	*0.16%*	*-0.89%*

Figure 11:Operational Change in Net Working Capital

Chris Byrne: christopher.byrne3@ucdconnect.ie
Gavin Kennelly: gavin.kennelly@ucdconnect.ie

The group has an asset backed securitization program under which it sells a portion of its aseptic carton packaging trade receivables, and they have plans to expand this securitization program. A securitization program allows them to convert their trade receivables into cash sooner at a lower value than what they would have received if they waited for the debtor to pay. They do this by selling their trade receivables to a special purpose entity which is not controlled by SIG. This program will undoubtedly impact their trade receivables in the future. We decided to take a 5 year average which was -1.34% because operational NWC stayed consistently negative within a small range.

Debt to Equity

In 2015, SIG was bought by a private equity firm and under their guidance they IPOed in September 2018. This private equity company has since fully divested in SIG, and they completed this divestiture by 2020. This has caused the debt to equity of SIG to be quite volatile over our period. However, since 2018 we have seen a relatively stable ratio for SIG varying from 0.62 to 0.83. Looking at it in nominal terms, SIG has had an increase in its equity and debt figure in 2022 to fund multiple acquisitions. We do not see any M&A on the horizon for SIG, so we considered it reasonable to assume a constant D/E ratio into the future and therefore we used the weighted average cost of capital to discount our future cash flows.

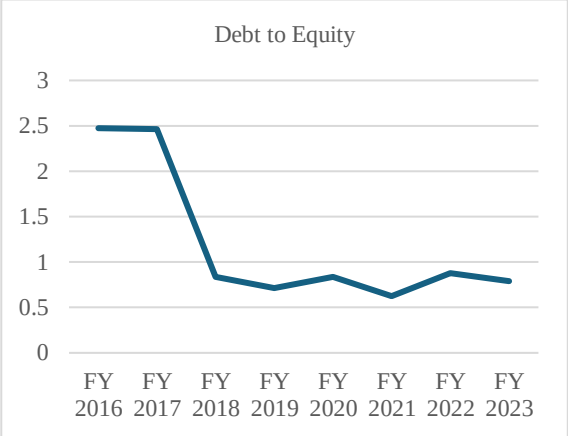

Figure 12: Debt to Equity

Weighted Average Cost of Capital

To calculate our cost of equity, we utilized the CAPM formula. We used Aswath Damodaran's equity risk premium for Western Europe[10] which was 5.89%. We then took the 10 year German Bund[11] at 2.26% as our risk free rate.

Due to the IPO of SIG in 2018, we had a suboptimal amount of data to do a 60-month rolling beta. We thus conducted a 60-month, 48-month and 36-month rolling beta. We have seen SIG betas trend upwards over our period, and we believe this is due to M&A activity undertaken by by SIG in recent years. To account for this, we decided to take the most recent 48-month rolling beta at 0.904 as our beta for our analysis. We then inserted everything into the CAPM formula to get a cost of equity of 7.58%. We got our cost of debt by adding the together the risk free rate and the company default spread associated with SIG, knowing they have a BBB- credit rating[12]. This cost of debt came to exactly 4.00%. Inserting both the cost of equity and cost of debt into the WACC formula, along with their given weights and the corporate tax rate of 27%, resulted in a WACC of 5.52%.

Finally to get to our stock price we had to translated our values from Euro to Swiss Franc. We used the most up-to-date exchange rate which was €1 for every 0.93 CHF[13].

[10] https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html
[11] https://www.cnbc.com/quotes/DE10Y-DE
[12] https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ratings.html
[13] https://www.ecb.europa.eu/stats/policy_and_exchange_rates/euro_reference_exchange_rates/html/eurofxref-graph-chf.en.html

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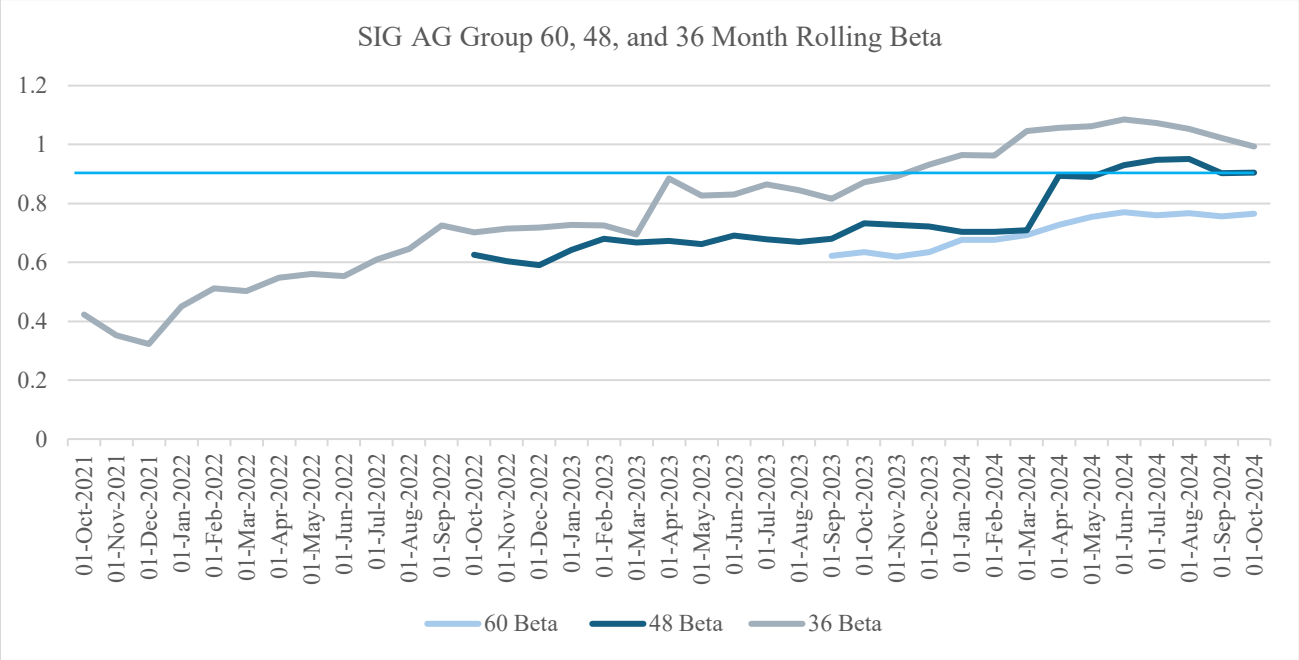

Figure 13: Rolling Beta

Chris Byrne: christopher.byrne3@ucdconnect.ie
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SIG Discounted Cash Flow Model

Unlevered Free Cash Flows	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Aseptic Carton Business	**2,626.30**	**2,688.36**	**2,821.97**	**2,956.58**	**3,097.90**	**3,246.91**	**3,404.06**	**3,569.50**
Growth Rate		2.36%	*4.97%*	*4.77%*	*4.78%*	*4.81%*	*4.84%*	*4.86%*
Bag in Box	**604.00**	**572.15**	**595.03**	**618.83**	**643.59**	**669.33**	**696.10**	**723.95**
		-5.27%	*4%*	*4%*	*4%*	*4%*	*4%*	*4%*
Revenue	**3,230.30**	**3,260.51**	**3,417.00**	**3,575.41**	**3,741.49**	**3,916.24**	**4,100.17**	**4,293.45**
Growth Rate		*0.94%*	*4.80%*	*4.64%*	*4.64%*	*4.67%*	*4.70%*	*4.71%*
COGS	**2,468.90**	**2,525.91**	**2,647.14**	**2,769.86**	**2,898.52**	**3,033.90**	**3,176.39**	**3,326.12**
COGS % of Revenue		*77.47%*	*77.47%*	*77.47%*	*77.47%*	*77.47%*	*77.47%*	*77.47%*
Gross Profit	**761.40**	**734.60**	**769.86**	**805.55**	**842.97**	**882.34**	**923.78**	**967.33**
Gross Margin		*22.53%*	*22.53%*	*22.53%*	*22.53%*	*22.53%*	*22.53%*	*22.53%*
Other Operating Income	**97.60**	**31.66**	**33.18**	**34.72**	**36.33**	**38.03**	**39.82**	**41.69**
Other Operating Income as % of Revenue		*0.97%*	*0.97%*	*0.97%*	*0.97%*	*0.97%*	*0.97%*	*0.97%*
Operating Expenses	**153.50**	**483.63**	**506.84**	**530.34**	**554.97**	**580.89**	**608.18**	**636.84**
Operating Expenses as % of Revenue		*14.83%*	*14.83%*	*14.83%*	*14.83%*	*14.83%*	*14.83%*	*14.83%*
EBIT		**282.64**	**296.20**	**309.93**	**324.33**	**339.48**	**355.42**	**372.18**
EBIT growth Rate			*4.80%*	*4.64%*	*4.64%*	*4.67%*	*4.70%*	*4.71%*
Taxation	**80.80**	**76.31**	**79.97**	**83.68**	**87.57**	**91.66**	**95.96**	**100.49**
Tax Rate		*27.00%*	*27.00%*	*27.00%*	*27.00%*	*27.00%*	*27.00%*	*27.00%*
Net Operating Profit After Tax (NOPAT)		**206.32**	**216.23**	**226.25**	**236.76**	**247.82**	**259.46**	**271.69**
Depreciation and Amortization	**454.30**	**391.81**	**380.46**	**403.58**	**415.53**	**428.13**	**441.39**	**455.33**
D&A as % of Revenue		*12.02%*	*11.13%*	*11.29%*	*11.11%*	*10.93%*	*10.77%*	*10.61%*
Capital Expenditure	**250.60**	**243.93**	**255.64**	**267.49**	**279.91**	**292.99**	**306.75**	**321.21**
CapEx as % of Revenue		*7.48%*	*7.48%*	*7.48%*	*7.48%*	*7.48%*	*7.48%*	*7.48%*
Change in NWC Forecast	**-32.20**	**-43.78**	**-45.88**	**-48.01**	**-50.24**	**-52.59**	**-55.06**	**-57.65**
Change in NWC as % of Revenue		*-1.34%*	*-1.34%*	*-1.34%*	*-1.34%*	*-1.34%*	*-1.34%*	*-1.34%*
Free Cash Flow to the Firm		**397.99**	**386.94**	**410.35**	**422.62**	**435.55**	**449.16**	**463.47**
Present Value		**397.99**	**366.69**	**368.54**	**359.70**	**351.30**	**343.33**	**335.73**

Chris Byrne: christopher.byrne3@ucdconnect.ie
Gavin Kennelly: gavin.kennelly@ucdconnect.ie

Company Assumptions	
Risk Free Rate	2.26%
Market Risk Premium	5.89%
Cost of Debt	4.00%
Cost of Equity	7.58%
Debt to Equity	0.780
Debt Weight	0.44
Equity Weight	0.56
Net Debt	2451.80
Shares Outstanding	382.27
Current Market Price	17.39
WACC	5.52%
Beta	0.90
Long Term Growth Rate	2.00%
Tax Rate	27.00%
Unlevered Beta	0.58
Unlevered Cost of Equity	5.65%

Gordon Growth Model	EURO
Terminal Value FCF	472.74
Long Term Growth Rate	2.00%
Terminal Value	13,426.28
Present Value of Terminal Value	9,725.73
Enterprise Value	
FCF 2024 - 2030	2,523.27
Terminal FCF	9,725.73
Enterprise Value FY24	12,249.00

Final Value	EURO
Enterprise Value FY24	12,249.00
Debt	2451.80
Implied Equity Value	9,797.20
Shares Outstanding	382.27
Share Value Euro	25.63
Share Value CHF	23.83

Chris Byrne: christopher.byrne3@ucdconnect.ie
Gavin Kennelly: gavin.kennelly@ucdconnect.ie

Why the market is mispriced

SIG accounting policies make determining its intrinsic value a complicated endeavour. However, we believe that the following line-item differences potentially explain why our valuation is above the current market value. To derive the market price, many line items are accounted for using a simple 5 year average % of revenue and having developed a DCF using this method, we derived a price of 17.16 CHF (market price on 12/02/2024: 17.39 CHF). However, after making the necessary adjustments, that we will explain below, we believe that SIG's share price should be closer to 23.83 – 24.37 CHF.

Revenue

When the company's revenue stream grows at 4%, holding all else as an average % of revenue, you will arrive at the market price. This 4% figure represents the lower bound of management earnings guidance for the medium term. However, our aseptic carton regression suggests a growth rate much closer to 5%. This regression forecast accompanied by average industry growth rates of 5.4% for aseptic carton and 6.2% bag-in-box is evidence that the 4% growth rate may be pessimistic.

We have opted to grow revenues at a rate of 4.5 – 5% which is a result of our regression model for aseptic cartons and sensitivity test for bag-in-box. We do firmly believe this growth rate can be sustained in the medium term.

Accounting Policies

Change in NWC caused a significant deviation from the markets valuation. Bloomberg's historical data on change in net working capital has a 6% swing against our findings. We believe the market has not properly delved into SIG's net working capital situation. We do not believe the securitization programme has been adequately accounted for in change in NWC since that is reducing their trade receivables and increasing their liquidity by taking a small hit on the total trade receivables value.

Overall, SIG's market price appears low due to overly conservative market assumptions and insufficient consideration of key factors impacting its intrinsic value. Our analysis identifies differences in both the revenue growth assumptions and the NWC adjustments as primary drivers of the potential mispricing. By incorporating both of these adjustments into our discounted cash flow model, we estimate SIG's intrinsic value to be in the range of 23.83–24.37 CHF, significantly higher than the market price of 17.39 CHF.

Chris Byrne: christopher.byrne3@ucdconnect.ie
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SIG Discounted Cash Flow Model: Market Value

Unlevered Free Cash Flows	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Revenue	**3,230.30**	**3,359.51**	**3,493.89**	**3,633.65**	**3,778.99**	**3,930.15**	**4,087.36**	**4,250.85**
Growth Rate		*4.00%*	*4.00%*	*4.00%*	*4.00%*	*4.00%*	*4.00%*	*4.00%*
COGS	**2,468.90**	**2,602.60**	**2,706.71**	**2,814.98**	**2,927.58**	**3,044.68**	**3,166.47**	**3,293.13**
COGS % of Revenue		*77.47%*	*77.47%*	*77.47%*	*77.47%*	*77.47%*	*77.47%*	*77.47%*
Gross Profit	**761.40**	**756.91**	**787.18**	**818.67**	**851.42**	**885.47**	**920.89**	**957.73**
Gross Margin		*22.53%*	*22.53%*	*22.53%*	*22.53%*	*22.53%*	*22.53%*	*22.53%*
Other Operating Income	**97.60**	**32.63**	**33.93**	**35.29**	**36.70**	**38.17**	**39.69**	**41.28**
Other Operating Income as % of Revenue		*0.97%*	*0.97%*	*0.97%*	*0.97%*	*0.97%*	*0.97%*	*0.97%*
Operating Expenses	**153.50**	**498.31**	**518.25**	**538.98**	**560.54**	**582.96**	**606.28**	**630.53**
Operating Expenses as % of Revenue		*14.83%*	*14.83%*	*14.83%*	*14.83%*	*14.83%*	*14.83%*	*14.83%*
EBIT		**291.22**	**302.87**	**314.98**	**327.58**	**340.68**	**354.31**	**368.48**
EBIT growth Rate			*4.00%*	*4.00%*	*4.00%*	*4.00%*	*4.00%*	*4.00%*
Taxation	**80.80**	**78.63**	**81.77**	**85.05**	**88.45**	**91.98**	**95.66**	**99.49**
Tax Rate		*27.00%*	*27.00%*	*27.00%*	*27.00%*	*27.00%*	*27.00%*	*27.00%*
Net Operating Profit After Tax (NOPAT)		**212.59**	**221.09**	**229.94**	**239.13**	**248.70**	**258.65**	**268.99**
Depreciation and Amortization	**454.30**	**485.16**	**504.57**	**524.75**	**545.74**	**567.57**	**590.27**	**613.88**
D&A as % of Revenue		*14.44%*	*14.44%*	*14.44%*	*14.44%*	*14.44%*	*14.44%*	*14.44%*
Capital Expenditure	**250.60**	**251.33**	**261.39**	**271.84**	**282.72**	**294.03**	**305.79**	**318.02**
CapEx as % of Revenue		*7.48%*	*7.48%*	*7.48%*	*7.48%*	*7.48%*	*7.48%*	*7.48%*
Change in NWC	**- 32.20**	**160.63**	**167.05**	**173.73**	**180.68**	**187.91**	**195.43**	**203.25**
Change in NWC as % of Revenue		*4.78%*	*4.78%*	*4.78%*	*4.78%*	*4.78%*	*4.78%*	*4.78%*
Free Cash Flow to the Firm		**285.79**	**297.22**	**309.11**	**321.47**	**334.33**	**347.70**	**361.61**
Present Value		**285.79**	**281.67**	**277.61**	**273.61**	**269.66**	**265.78**	**261.95**

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Shares Outstanding	382.27
Current Market Price	17.39
WACC	5.52%
Beta	0.90
Long Term Growth Rate	2.00%
Tax Rate	27.00%
Unlevered Beta	0.58
Unlevered Cost of Equity	5.65%

Gordon Growth Model	EURO
Terminal Value FCF	368.84
Long Term Growth Rate	2.00%
Terminal Value	10,475.57
Present Value of Terminal Value	7,588.30
Enterprise Value	
FCF 2024 - 2030	1,916.06
Terminal FCF	7,588.30
Enterprise Value FY24	9,504.35

Final Value	EURO
Enterprise Value FY24	9,504.35
Debt	2,451.80
Implied Equity Value	7,052.55
Shares Outstanding	382.27
Share Value Euro	18.45
Share Value CHF	17.16

Chris Byrne: christopher.byrne3@ucdconnect.ie
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