January 2019

Barry Callebaut

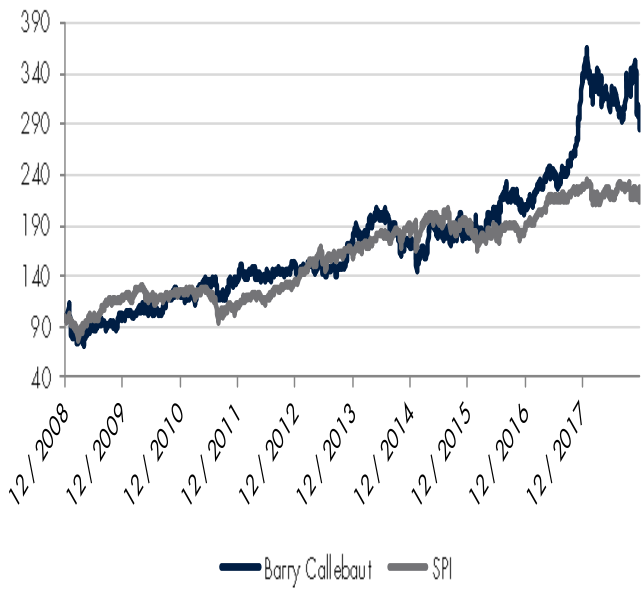
Market profile

Country	Switzerland
Sector	Consumer, Non-Cyclical
Market cap (CHF m)	8'826
52-week high / low (CHF)	1570 / 2078
Price per share (CHF)	1586

Key metrics (CHF)

	2018	2019e	2020e
EPS	64.55	72.13	77.75
PE	26.8x	22.3x	20.7x
EV/EBITDA	11.4x	10.5x	9.9x
Dividend yield	1.2%	1.5%	1.8%

Evolution of stock price with respect to benchmark (rebased)
Source: IAM



Executive summary

Barry Callebaut is the world's leading manufacturer of high-quality chocolate and cocoa. The company is vertically integrated with a strong position in cocoa-origin countries. The annual sales for the company in FY2018 (ending in August) were CHF 6.9 billion. The group employs more than 11'500 people operating out of more than 30 countries. Worldwide, Barry Callebaut operates 59 production facilities. Overall, the group has comprehensive competencies in the art of making chocolate and cocoa products - from sourcing and processing cocoa beans to producing the finest chocolates, including chocolate fillings, decorations and compounds.

While consumers don't recognize the Barry Callebaut brand, their chocolate is present inside 25% of all consumer products around the world containing cocoa or chocolate.

Barry Callebaut serves various customers segments through three different product groups:

1. Food Manufacturers Products (outsourcing for industrial customers)
2. Cocoa Products (of which 40% of the revenues are generated with the other segments of the group)
3. Gourmet & Specialties Products (for artisans, chocolatiers, pastry chefs, bakers…)

The company has obtained the European Commission's approval concerning a health claim on its Acticoa cocoa powder and dark chocolate, whereby cocoa flavanols contribute to normal blood circulation in the human body by helping to maintain the elasticity of blood vessels.

A major avenue of growth for Barry Callebaut comes from the emerging markets. In general, cocoa and chocolate-product makers such as Barry Callebaut are expanding production and marketing to capitalize on booming emerging-market demand.

Barry Callebaut

Daniel Pfund, Senior Financial Analyst **January 2019**

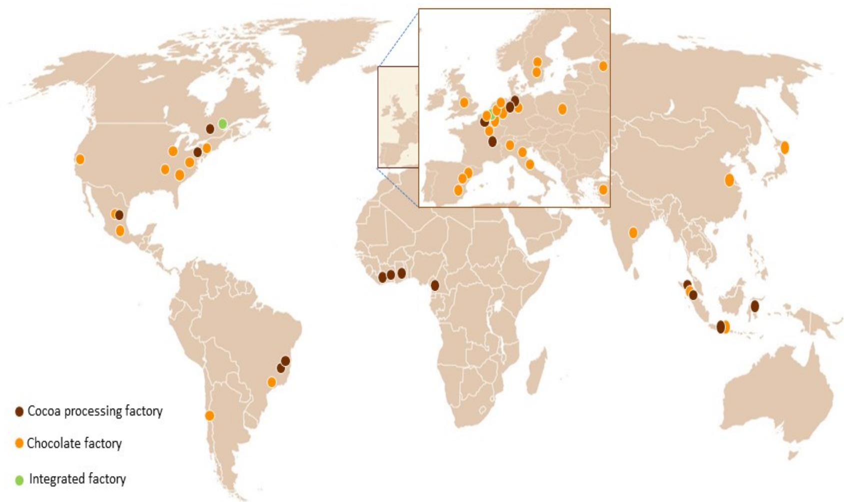
Company description

Barry Callebaut is a business to business chocolate and cocoa manufacturer with global headquarters in Zürich, Switzerland.

The group is the world's leading manufacturer of high-quality chocolate and cocoa. Barry Callebaut is the heart and engine of the chocolate industry and its mission is to be number one in all attractive customer segments. The company is vertically integrated with a strong position in cocoa-origin countries. The annual sales for the company in FY2018 (ending in August) were CHF 6.9 billion. The group employs more than 11'500 people operating out of more than 30 countries. Worldwide, Barry Callebaut operates 59 production facilities. Overall, the group has comprehensive competencies in the art of making chocolate and cocoa products - from sourcing and processing cocoa beans to producing the finest chocolates, including chocolate fillings, decorations and compounds.

As a business-to-business company, the Barry Callebaut group serves the entire food industry, from global and local food manufacturers to artisanal and professional users of chocolate, such as chocolatiers, pastry chefs, bakers, hotels, restaurants or caterers. While consumers don't recognize the Barry Callebaut brand, their chocolate is present inside 25% of all consumer products around the world containing cocoa or chocolate.

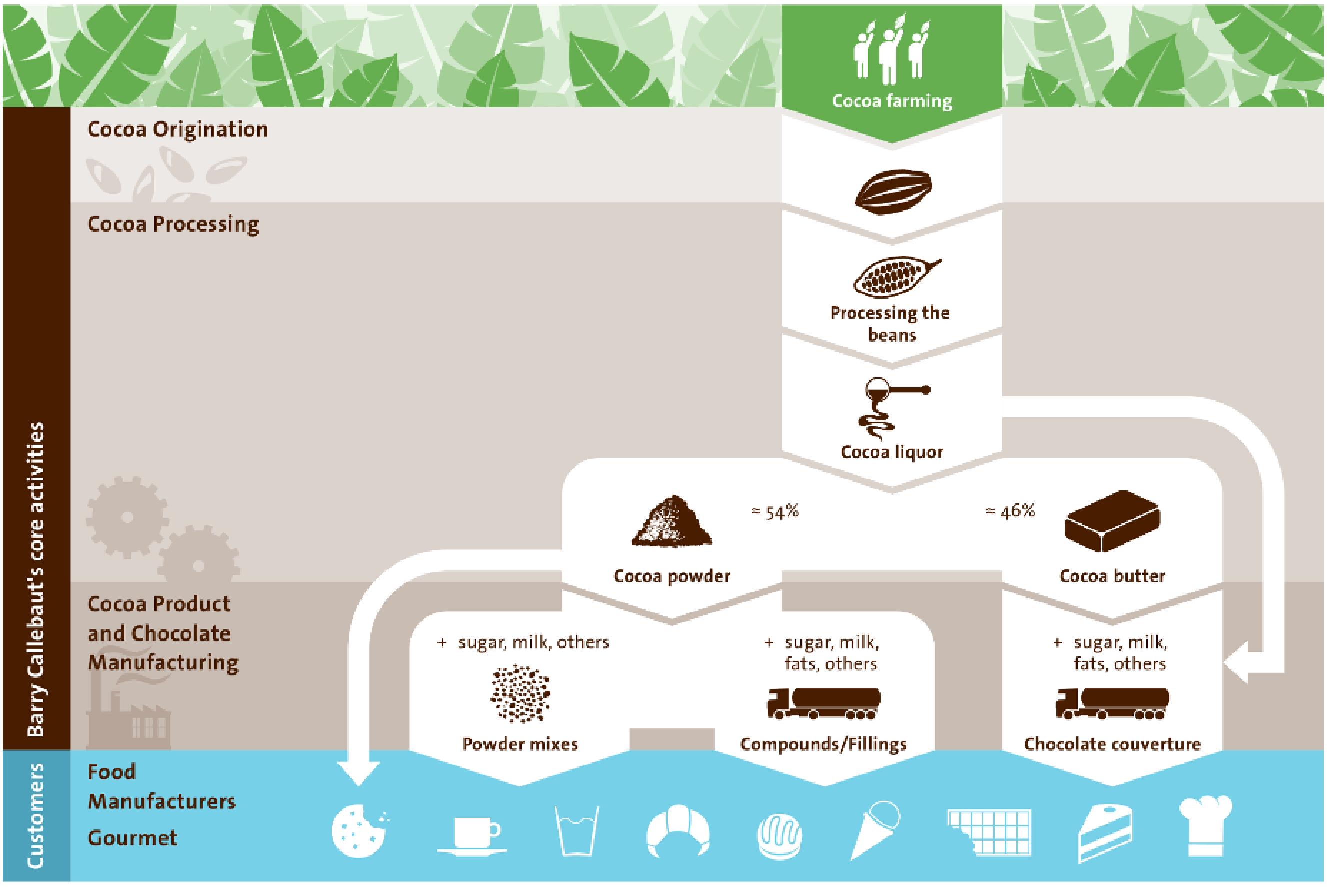
Fig.1: Location of assets
Source: Company data



The Barry Callebaut Group masters every step in the value chain from the sourcing of raw materials to the production of the finest chocolates. As the company does not own any cocoa plantations, they must source this important raw material, the cocoa bean, directly through well-established presences in cocoa origin countries from cooperatives, intermediaries and government bodies.

In order to accommodate price fluctuations in raw materials, most of Barry Callebaut's business is based on a cost-plus pricing system that passes on raw material costs directly to their customers.

Fig.2: Barry Callebaut value chain
Source: Company data



Cocoa beans (inputs) are processed to produce both coca powder (54% of the output) and cocoa butter (46% of the output).

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The remaining industrial business was initially integrated into Van Houten and then into a new holding company, Callebaut AG in 1994.

In 1996 the Belgian chocolate producer Callebaut and the French chocolate company Cacao Barry joined forces, creating a new company called Barry Callebaut.

In 1998, Barry Callebaut was listed on the Swiss stock exchange. J Jacobs Holding sold 30% of the company to the public.

History of the company

In 1982 Klaus J. Jacobs merged Jacobs AG with Interfood (Tobler-Suchard) to create Jacobs Suchard AG, Europe's number-one chocolate and coffee business. The consumer activities of Jacobs Suchard were sold to Philip Morris in 1990 (which in 2007 spun off its food division, Kraft Foods, which was ultimately renamed Mondelez in 2012 after having spun-off the grocery business as Kraft).

Geographic exposure

Barry Callebaut is organized into four different regions:

1. EMEA (Europe, Middle East, Africa)
2. Americas
3. Asia Pacific
4. The globally managed Global Cocoa business is reported as a separate segment like a region.

Barry Callebaut serves various customers segments - from global and local food manufacturers to artisanal and professional users of chocolate - through three different product groups:

1. Food Manufacturers Products (outsourcing for industrial customers)
2. Cocoa Products (of which 40% of the revenues are generated with the other segments of the group)

Fig.3: Sales breakdown
Source: Company data

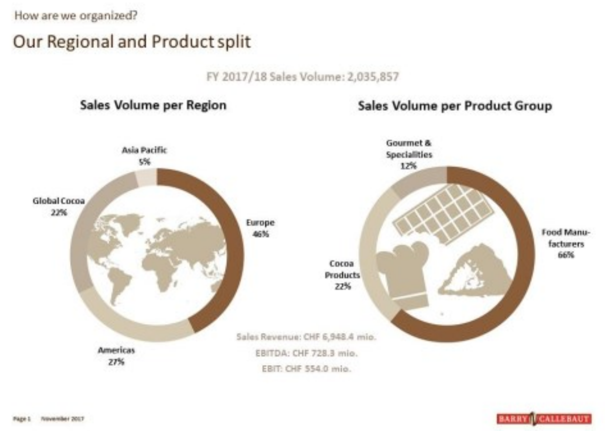


Fig.4: Barry Callebaut's competitive positioning
Source: Company data

3. Gourmet & Specialties Products (for artisans, chocolatiers, pastry chefs, bakers...)

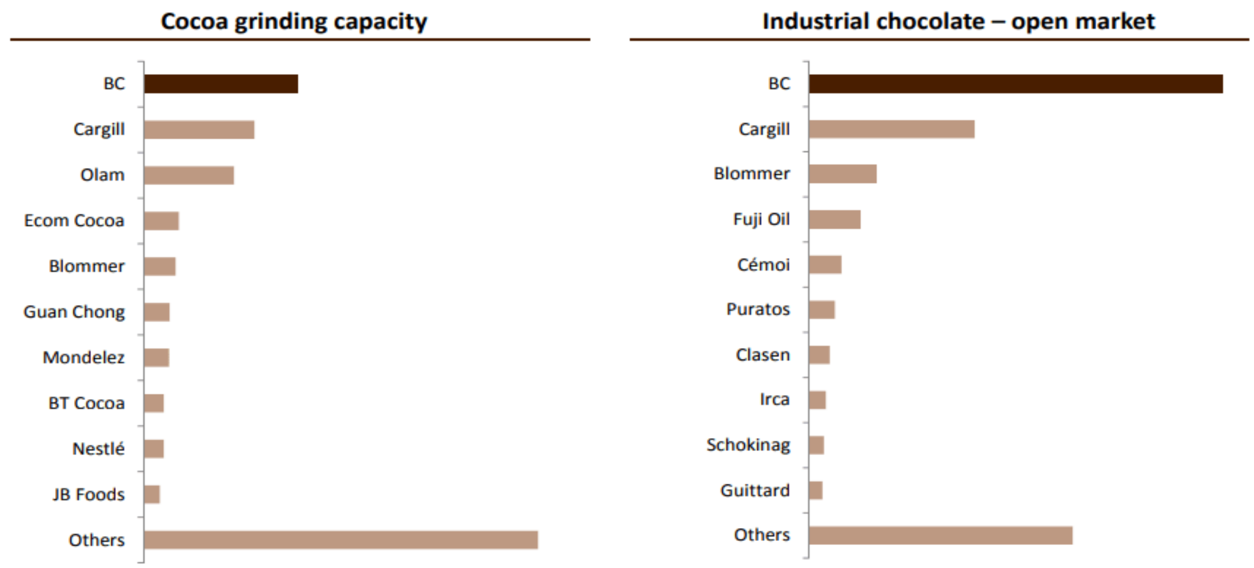
Industry Overview & Competitive positioning

Barry Callebaut is uniquely positioned in industrial chocolate and cocoa markets. With more than 175 years of chocolate heritage, the group has an unparalleled blend of expertise in cocoa and chocolate. Through their leadership in innovation and renovation of products, they help their customers grow their business. Thanks to Barry Callebaut's cost leadership, the company has become the preferred outsourcing partner to the food industry.

Barry Callebaut (abbreviated BC in the following chart) is the world's largest cocoa grinder as well as industrial chocolate producer.

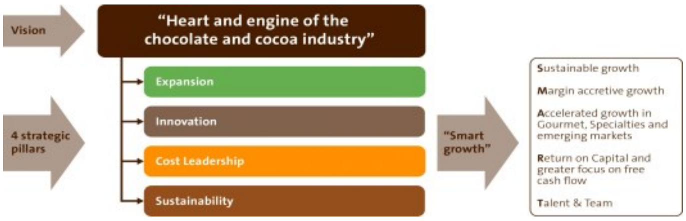
The Barry Callebaut group aims to outperform the global chocolate and cocoa market. This ambitious long-term strategy is based on four pillars:

1. Expansion
2. Innovation
3. Cost Leadership
4. Sustainability



Notes: Olam incl. ADM; Cargill incl. ADM chocolate business; Fuji Oil incl. Harald
Sources: Proprietary estimates

Fig.5: Barry Callebaut long term strategy
Source: Company data



Barry Callebaut has given a medium term guidance for investors:

- Average volume growth 4-6%
- EBIT growth on average above volume growth (in local currencies and barring any unforeseen events)

This medium term guidance expires in FY2019 (end of August). In the past, the company has updated their medium term guidance one year ahead of expiry. However, this time the company has not updated investors at their full year results in November. This was received as a negative signal and the share price has fallen, albeit with the overall market.

It is true that mainstream chocolate confectionery volumes have been under pressure in the developed world amid a lifestyle shift towards healthier diets and as governments implement initiatives to tackle obesity. But other applications for chocolate (accounting for almost half of the market) are growing faster. Additionally, Barry Callebaut's dominant market position enables market share gains amid ongoing outsourcing by confectionery majors. Finally, it is interesting to note that Barry Callebaut has obtained the European Commission's approval concerning a health claim on its Acticoa cocoa powder and dark chocolate, whereby cocoa flavanols contribute to normal blood circulation in the human body by helping to maintain the elasticity of blood vessels. The company has been carrying out over 20 human clinical studies concerning research on cocoa flavanols since 2005, so one can indulge without guilt.

Barry Callebaut also puts a strong emphasis on sustainability. The company publishes a yearly sustainability report, and is proud to state that 44% of cocoa beans and 44% of other chocolate ingredients are sourced through sustainability programs. The company's goal is to make sustainable chocolate the norm by 2025. We note however that other companies are already ahead of Barry Callebaut: Lindt & Sprungli announced 79% sustainable cocoa sourcing, and Hershey announced 75%, with both targeting 100% by 2020.

Barry Callebaut's sustaibability program is called Forever Chocolate and has four ambitious targets, to be achieved by 2025, that address the largest sustainability challenges in the chocolate supply chain:

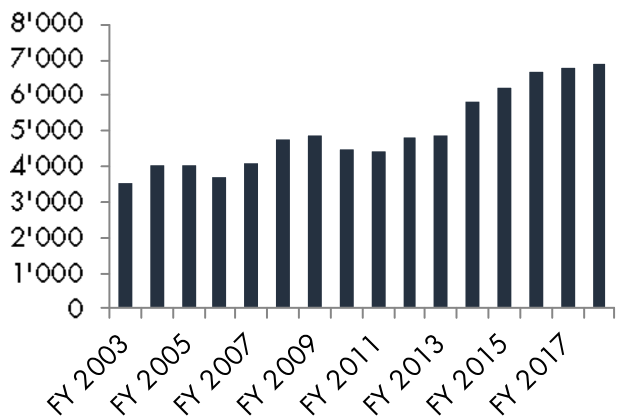
1. Lift more than 500'000 cocoa farmers out of poverty
2. Eradicate child labor from its supply chain
3. Become carbon and forest positive
4. Have 100% sustainable ingredients in all its products

It is not a surprise that Barry Callebaut is making all these sustainable efforts. Indeed, as it does not own any cocoa trees itself, the company is highly reliant on the availability of raw materials. As the biggest actor in the industry, it is Barry Callebaut's responsibility to lead in this important security of long-term sourcing. The company is also part of the 25 most sustainable listed companies in Switzerland (the SXI Switzerland Sustainability 25 Index).

Financial analysis

Growth

Fig.6: Revenues
Source: Company data



The following figure depicts Barry Callebaut's top-line growth.

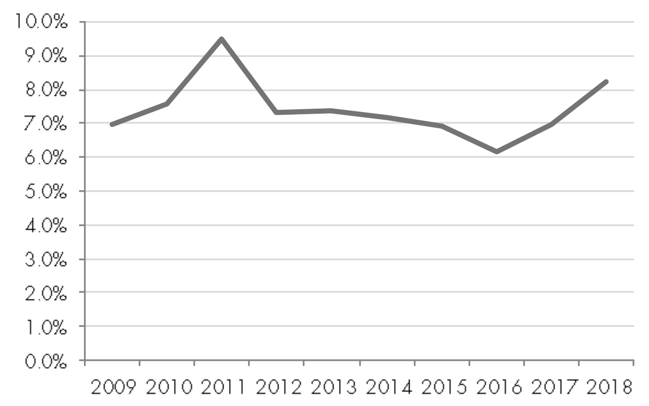
As we can see, the top-line has grown at 4.5% compound annual rate in the last 15 years. Barry Callebaut states that they are growing faster than the market. Typically in 2018, Barry Callebaut grew volumes by 6.3%, while the market grew only 1.8% according to Nielsen data. Unfortunately, sales grew at a much slower 0.1% because of the lower raw material prices, which Barry Callebaut passes on to the customer.

Margins

Over time, operating margin has fluctuated roughly in the 6% to 9% region. This is very low compared to consumer goods companies which have a direct relationship to end clients. For example, Nestlé and Lindt & Sprungli have reached operating margins above 14%.

This low operating margin is even more surprising when you consider the high capital intensity of Barry Callebaut's business. The company essentially operates a fixed cost business, but fortunately in an acyclical end-demand environment.

Fig.7: EBIT margin
Source: Company data



Operating margins (adjusted EBIT) are shown in the following graph.

Barry Callebaut does not give guidance on future margins, so it is difficult to see a long-term increase. The company's goal is to grow EBIT faster than volume growth, which implies an increase in margin.

Hopefully the company will issue a future return on invested capital (ROIC) guidance as this would align management's interests with shareholders'. Strangely enough, Barry Callebaut has started using ROIC as a long-term incentive target for management in 2017, but has never disclosed the targeted value. The ROIC target is half of the long-term incentive plan; the other half being the relative share price total return over a three year period compared to listed peers (which the company disclosed as AAK, Aryzta, Hershey, Kellogg's, Kerry, Lindt & Sprungli, Mondelez, Nestlé, Olam, Petra Foods, and Unilever).

Dividend

Fig.8: Dividend per share
Source: Company data

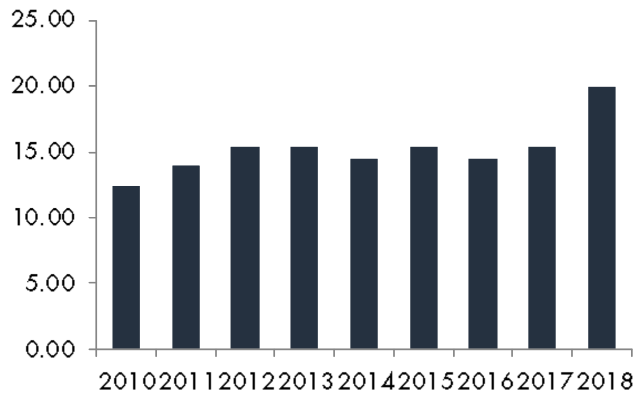
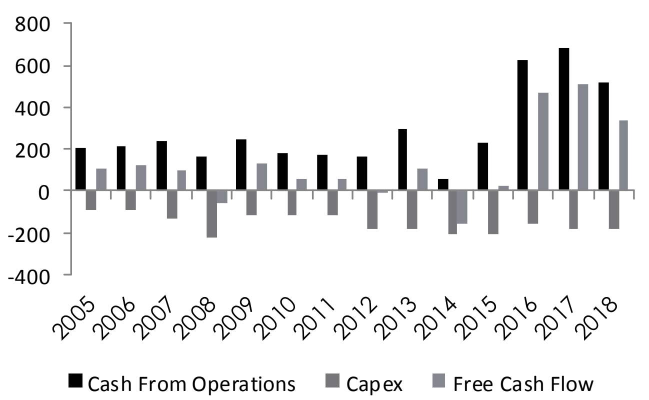


Figure 8 shows Barry Callebaut's dividend history.

The dividend has not been a particular focus in the past, lingering around 15 CHF per share. In the last two years however, the company has increased the dividend significantly, to 20 CHF last year then 24 CHF for this year, which was just recently approved at the general assembly. The payout ratio remains conservative however around 35%, so the company still has room to grow the dividend faster than the earnings growth.

Free Cash Flow

Fig.9: Operating cash flow, capex and free cash flow
Source: Company data



The following figure shows Barry Callebaut's operating cash flows, capex and free cash flow over time.

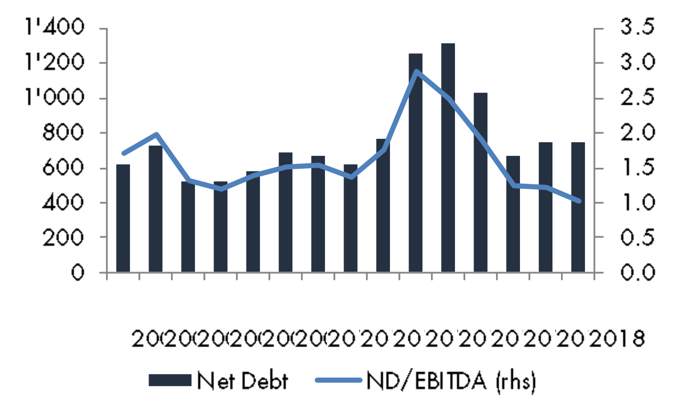
As we can see, the company has delivered mild free cash flow until 2015. From 2016, the company has made a big effort to increase free cash flow, and has started using the ROIC criteria to incentivize management. Capex has remained fairly stable, so it's really the operating cash flow that has increased, and the company has focused on reducing the working capital. Unfortunately, we don't know how much the lower cocoa prices have influenced the working capital, so it's difficult to judge management's efforts.

We must also note that Barry Callebaut's balance sheet position does not reflect the true trade receivables situation, as the company engages in an asset-backed securitization program, whereby it factors about half of its trade receivables to an external company at a fairly high discount of 6%.

Balance Sheet

The following chart shows Barry Callebaut's net debt (ND) as well as a common indebtness ratio (ND/

Fig. 10: Net debt and Net debt/EBITDA
Source: Company data



EBITDA).

The company's debt has been revised to investment grade by Moody's in September 2018, which is justified as the company's ND/EBITDA ratio has now reached a low point of 1.0x. Although the balance sheet is not pristine, the debt situation is clearly under control.

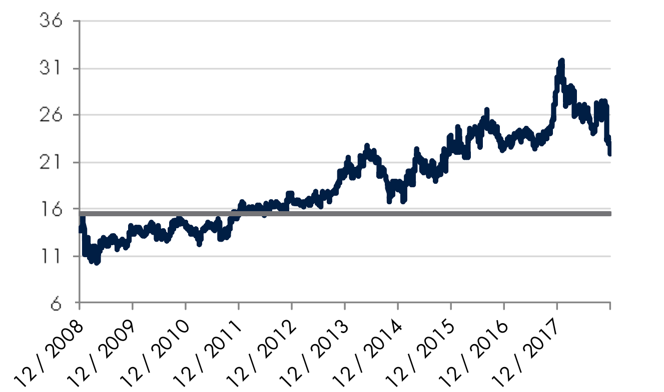
Investment case

A major avenue of growth for Barry Callebaut comes from the emerging markets. In general, cocoa and chocolate-product makers such as Barry Callebaut are expanding production and marketing to capitalize on booming emerging-market demand. Among markets with a chocolate volume of at least 25 million metric tons, growth may be the fastest in Chile, the Philippines and India, about 3.5x faster than worldwide through 2023, Euromonitor data shows. This is from a low base, as Indians eat about 10x less chocolate than developed markets, or just 0.1 kg per capita. Western Europe and North America make up 50% of all consumption, preferring cocoa-rich treats. Barry Callebaut's growth is the fastest in the Asia Pacific region, with volumes growing 16.2% in last fiscal year.

Valuation

The following chart depicts Barry Callebaut's next 12

Fig. 11: 12M forward P/E over last decade
Source: IAM



months forward P/E multiple over the last decade.

While a part of the multiple re-rating can be attributed to lower interest rates, a big part of that re-rating should be attributed to the company's rising free cash flow and steady growth.

The last three years show that a renewed attention to free cash flow has rewarded shareholders with a higher multiple. We think this is likely to continue, especially if the company announces a new return on investment target at its next results. The market has been disappointed by the lack of new targets at its last fiscal year results, and hopefully management has taken note.

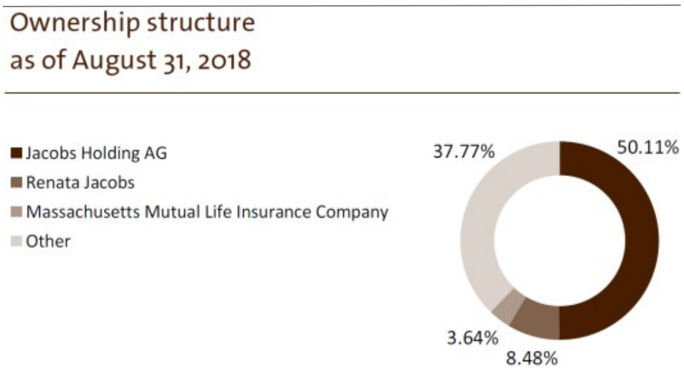
Risks

Consumer staples such as Barry Callebaut have historically been negatively correlated to interest rates. Over the last decade, interest rates have come down steadily, which has helped staple companies' valuation multiples expand. Indeed, these companies are seen as bond proxies due to their stable (or in most cases growing) dividends. We could see a decline in the shares of companies in this sector should interest rates rise again. Of course, this risk is not specific to Barry Callebaut, and would affect all defensive companies.

Barry Callebaut disclosed that their biggest customer accounted for 10.9% of revenues in their last fiscal year (unnamed, but most likely Mondelez, formerly known as Kraft Foods, producer of Toblerone, which was sold by Jacobs Suchard in 1990). All other customers are below the 10% threshold. The company also disclosed in their annual report that the ten biggest customers represent 33% of trade receivables. Other big customers are likely Hershey, Unilever and Nestlé.

The Jacobs family still holds a majority of the company through a holding company (50.1%). The widow of Klaus Jacobs (Renata Jacobs) holds another subsequent

Fig.12: Shareholder ownership structure
Source: Company data



8.5%, while their 2 children (Nicolas and Lavina) own together 1.8%.

At the end of August 2018, the public free float was only 41.4%, which reflects the family holdings. Nevertheless, the three Jacobs families have been selling shares recently (150'000 shares sold in November 2018, representing 2.7% of the total shares outstanding) which has resulted in the free float going up to 43.7%. The three families are not allowed to sell further shares until the 15th of March 2019, due to a lock-up agreement.

Fig.13: Jacobs Holding AG ownership structure
Source: Company data