Methodology for Chocolate Giants press release

Company selection

The analysis covers the world's six largest chocolate manufacturers (measured in tonnage of cocoa purchased) as identified in the 2022 Cocoa Barometer¹. The sample includes four public and two private companies.

Public companies: Nestle, Mondelez, Hershey, Lindt

Private companies: Mars, Ferrero

Methodological approach and sources

Public companies:

Publicly available financial information, as reported by the companies on their websites (annual financial statements), was used to calculate the companies' profitability. Since the companies in the sample are highly diversified, financial data pertaining to 'confectionary' or 'chocolate' was identified where available. Operating profit (vs. net income) was used to capture the financial performance of the companies' confectionary/chocolate business segments. Where only revenue data was available for companies' confectionary/chocolate business segments (vs. operating profit), the segments' operating profit was estimated by multiplying the companies' overall operating profit with the share of confectionary/chocolate revenue of company total revenue.

The profit numbers cited in Oxfam's press release are the sum of operating profits (reported and estimated) for the four companies between 2020 and 2022. The profit growth percentage represents the average profit growth for the four companies between 2020 and 2022. However, this does not mean that each company had a profit growth.

To calculate the percentage of net profits paid out to shareholders, Oxfam used the following formula: Total Dividends Paid + Repurchase of Common and Preferred Stock / Net Income. The payout ratio cited in Oxfam's press release represents the average ratio of the four companies for 2022. However, this does not mean that each company had the cited payout ratio.

Private companies:

The data on billionaire wealth is based on *Forbes*' "The World's Real-Time Billionaires" list². *Forbes* uses net wealth (assets minus debt) to calculate the wealth of billionaires. We compared the annual *Forbes* list published in March 2020 with *Forbes*' Real-Time list on April 15, 2023. To account for inflation and work in the same price-level, all wealth levels are inflated to March 2023 (most recent available when figures were calculated) prices using the US Consumer Price Index (CPI)³.

Oxfam understands that some private corporations have concerns about *Forbes*' estimates of owners' wealth as proxy of a company's performance. However, it is the best estimate available given the lack of public data on private corporations, despite their impacts on environmental, social and governance (ESG) issues.

¹ https://cocoabarometer.org/wp-content/uploads/2022/12/Cocoa-Barometer-2022.pdf

² https://www.forbes.com/real-time-billionaires

³ https://www.bls.gov/news.release/cpi.t01.htm

Methodological caveats

Estimating the exact amount of profits a company derived from the sale of chocolate products is difficult with publicly available data for two reasons. First, isolating the financial data for companies' confectionary segments still include some non-chocolate products. Second, applying companies' overall operating profit margin to their confectionery/chocolate segments risks being inaccurate since there are many factors that could lead to a decline of a company's overall operating profit that are unrelated to a company's confectionery/chocolate business.

For private companies, using family wealth as proxy for companies' profits carries the obvious caveat that individuals' wealth growth also has other sources than the performance of the companies they own.

Aggregated company data

| Aggregated chocolate companies (public) | | | | | | | | | | |
|--|--------------|--------------|--------------|--|---|--|--|--|--|--|
| | 2020 | 2021 | 2022 | Cumulative operating profits 2020 - 2022 | Cumulative operating profit growth 2020 - 2022 | | | | | |
| Revenue (chocolate / confectionery) | \$ 28,563.69 | \$ 31,542.28 | \$ 33,572.75 | \$ 14,846.21 | 16% | | | | | |
| Operating profit (chocolate / confectionery) | \$ 4,424.16 | \$ 5,285.80 | \$ 5,136.25 | | | | | | | |
| Shareholder payout ratio (2020-2022) | 102% | 99% | 139% | | | | | | | |
| Average shareholder payout ratio (2020- 2022) | | | | 113% | | | | | | |

| Aggregated chocolate companies (private) | | | | | | | | | | |
|--|-------|---|-------|-------------------|-------------|--------|------|--|--|--|
| Wealth March 2020 (nominal) | | Wealth March 2020 (in March 2023 prices) | | Wealth April 2023 | | Growth | | | | |
| \$ | 100.6 | \$ | 117.6 | \$ | 156.9 | \$ | 39.3 | | | |
| | | | | Wealth g | growth rate | 33% | | | | |