2023 BROOKS CASE COMPETITION

TO: THE JUDGES

FROM: BRENNAN RZEWUSKI AND MACLAIN PETRI **SUBJECT:** ANALYSIS OF QUANT AND FOOTPRINT

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ESG STRATEGY & IMPORTANCE

The overall ESG strategy is a strong investment strategy that has been shown to improve long-term financial performance being viewed as more sustainable while reducing liability, enhancing reputation/investor confidence, and improving overall risk management. On the contrary, ESG uses many different metrics and standards making it difficult to measure, as well as investment managers run the risk of lower returns due to the smaller pool of companies to choose from leading to missed opportunities.

Principals' stance on ESG shows their beliefs in supporting people, the planet, and their businesses. In order to foster a more secure world, Principal stays mindful of the impact it has and thus wouldn't align itself with a company that doesn't fit its beliefs.

ESG METRICS OVERVIEW & CULTURAL FIT

	PFG	Quant	Footprint
Environmental	0.20 (Below Median)	.78 (Above Median)	3.56 (Leading)
Social	2.24 (Above Median)	2.53 (Above Median)	4.41 (Leading)
Governance	7.20 (Above Median	6.29 (Above Median)	5.05 (Below Median)
ESG Total avg. Scores	3.21	3.20	4.34

As displayed in the table above we can see that Footprint leads with the highest overall average ESG score of 4.34. This aligns with Principal due to leading in environmentally sustainable finance where Principal ranks below the median. In addition, to leading in the social metrics as well.

Culturally, Principal has goals for 2035 relating to cutting down emissions by a 40% reduction and a 100% reduction by 2050. So, both Quant and Footprint are good cultural fits due to excluding companies or restricting investments in certain companies that do not align themselves with ESG values. It is noted that Footprint has created a portfolio of companies with 60% less greenhouse gas emissions, and Quant also employs a "Fossil Fuel Free" investment policy, restricting investments in coal/oil/gas industries which stands strong with Principal's goals with the reduction of emissions.

FINANCIALS

Table 2. Quant Financials

	2021	2022	2023 Forecasted
ROE	18.42%	11.89%	16.57%
ROA	9.03%	6.54%	9.61%
Equity Multiplier	2.041	1.818	1.724
Asset Utilization	0.2	0.2	0.2
Profit Margin	45.14%	32.69%	48.05%

Table 3. Footprint Financials

	2021	2022	2023 Forecasted
ROE	20.34%	16.06%	21.03%
ROA	9.15%	6.91%	8.83%
Equity Multiplier	2.222	2.326	2.381
Asset Utilization	0.2000	0.2000	0.2000
Profit Margin	45.8%	34.5%	44.2%

As displayed you can see a similar trend in both Quant and Footprint's financial analysis through the Dupont identity seeing a decrease in 2022 but forward projected forecasts for 2023. Footprint has higher ROE percentages and ROA percentages but in 2023 is forecasted to produce a lower ROA than Quant. Another notable detail is profiting margins and how Quant's forecasted margin for 2023 is projected to be higher than Footprints, this could be because of the higher expense ratio.

While Footprint has higher revenue and net income, if you focus on % of sales Quant is expected to have higher growth and a better margin profile than Footprint in 2023 (this aligns with the context given regarding the higher expense ratio for Footprint causing investors to leave/have hesitations)

It looks like the better margins in 2023 are driven by the "misc. expense" line item which wouldn't count on driving better margins going forward. This means that while quant might look better in 2023, the true go-forward profile for Footprint is better.

Discounted Cash Flow Models:

To determine the beta to use in our models we first determined the weight of both companies' funds based on the percent of their total AUM that was in each. We then multiply each by the beta of their benchmark and added them together to get the beta.

Once we had the beta, we used it to determine our cost of equity and then could calculate our WACC. We then needed to determine what growth rates to use for our discounted cash flow model. We chose to project out 5 years and determine a terminal value in year five. To determine the appropriate growth rates to use we looked at the historical performances of our benchmark funds. We then added or subtracted any additional performance that our company's fund achieved. Then, we gave each a weight based on the percent of AUM that was in each fund. This allowed us to get an accurate estimate of each company's 1-year, 3-year, 5-year, and 10-year performance. For the first-year projection in our DCF, we chose to use our 1-year performance. For the 2nd and 3rd years, we chose to use the 3-year performance, for our 4th and 5th-year performance we used our 5-year performance, and to get our terminal value we use the 10-year performance. After creating our models, we determined that Footprint value is \$419.3 million, and Quants is \$329.4 million.

Since Quant's minimum bid price is \$86.6 million more than we would be willing to pay for it, we suggest not purchasing their company. Footprint on the other hand is undervalued by \$82.3 million so we think that it would be a good acquisition.