

Brown Forman (BF.B)

Earnings Update | Underperform

Luis Green | June 10, 2022

Summary

Brown Forman had a solid quarter. The company benefited from the reopening of the economy as the on-premises channel and the gradual return of tourism and travel benefited strong demand. Brown Forman's results also benefited from cycling against overall lower comparisons in the prior fiscal year, notably in certain emerging markets and the travel retail channel.

Brown Forman's portfolio is well aligned with consumer trends, particularly premiumization and convenience in American Whiskey, tequila, and RTD categories, which management believes are high-growth categories with strong consumer demand. Tequila in particular has been one of the fastest-growing spirit categories.

Despite a successful quarter, the company's brand sales were impacted by supply chain disruptions related to glass supply. Gross margins improved YOY but are still down on a two-year basis. The margin expansion was due to pricing actions, and positive effects from divestitures, but it was offset by higher input costs and negative FX.

The increase in costs was driven by logistics costs to minimize supply chain disruptions and input cost headwinds related to grain and agave. Agave prices have come down from their peak to MXN 27 to 29 per kilo. There has been a greater demand for the tequila category, yes, it is a tailwind, but the company will have to source more on the spot market versus the percentage that they internally grow. There has also been a glass supply shortage and higher aluminum prices for BF.B's RTDs.

Some positives. The impact of the EU and UK tariffs on American Whiskey will be a significant tailwind as the EU tariffs were removed on January 1, 2022, and the UK tariffs were removed last week on June 1, 2022. Management plans to be more aggressive on price increases for FY 2023. BF.B also introduced Jack Daniel's Bonded and Triple Match whiskeys \$29.99 and \$32.99, respectively. They launched these new brands during March in the US but during FY 2023 they plan on launching them internationally. These new brands should benefit margins.

Rating

For my valuation analysis, I used a 5-year valuation mode, a two-stage DCF, and historical valuation metrics.

For the 5-year valuation model, I did three scenarios. I did one using the relative P/E median range of 18x, 25x, and 30x. I used another scenario using the average relative P/E of 17x, 21x, and 26x. Lastly, I used BF.B's 10-year historical P/E multiples of 26x, 30x, and 37x. Based on these scenarios you can expect a Base Case rate of return between 0.9% to 4.5% over the next 5-years. Meaning that there does not seem to be a margin of safety.

For the two-stage DCF, I increased the growth rate for my bear, base, and bull case to 8%, 11%, and 14%. I also increase the terminal rate to 6%. I lowered the discount rate to 9%. There does not appear to be any margin of safety.

Lastly, using the company's 10-year valuation metrics BF.B looks fully priced. Even on a forward basis, BF.B is still trading at 32x earnings.

As a result, I give BF.B an "Underperform" rating.

Key Risks

- Russia/Ukraine 2-point headwind on revenue growth for FY 2023 (not too significant)
- Inflationary pressures affecting discretionary income
- People having less money to go out and drink
- Will it affect the premiumization trend?
- Input costs continue to increase impacting margins
 - Prior to supply chain issues agave, wood, and grain costs were impacting the company's margins
 - Tariffs are already resolved, but higher input costs might not be transitory and may stay high for a while
- Due to higher costs gross margins hit a peak in 2015 at 69% and are currently now at 60%
 - BF.B divested lower margin brands focusing on premium and super-premium brands
 - BF.B is raising prices
 - Tariff issues have been resolved in the EU and the UK
 - However, supply chain issues continue to impact the business as well as other input costs
- Do not see agave costs coming down any time soon. This is one of the fastest-growing spirit categories. The increase in demand may result in lower supply. BF.B has been needing outside agave suppliers to meet demand.
- BF.B is fully priced. High multiples and not growing very fast
- Management's long-term revenue growth rate is in the mid-single digits

2022Q4 & FY 2022 Recap

Financial Highlights

Q4 2022 Results

- Reported sales of \$996M an increase of 23%
 - +27% on an organic basis
- Operating income of \$246M an increase of 46%
 - +62% on an organic basis
- Diluted EPS of \$0.31 increased by 26%

The company recognized a \$52M non-cash impairment charge for their Finland brand name. the impairment reflects a decline in their long-term outlook for Finlandia due to their suspension of operations in Russia, a key market for the brand.

Exhibit 1 – Q4 Financial Results

Three Months Ended	Q4 2022	Q4 2021	Q4 2020	1YR - CAGR	2YR-CAGR
Net sales	\$ 996	\$ 812	\$ 709	22.7%	18.5%
Cost of sales	\$ 370	\$ 314	\$ 256	17.8%	20.2%
Gross profit	\$ 626	\$ 498	\$ 453	25.7%	17.6%
Advertising expenses	\$ 127	\$ 121	\$ 75	5.0%	30.1%
SG&A expenses	\$ 195	\$ 211	\$ 167	-7.6%	8.1%
Gain on sale of business	\$ -	\$ -		0.0%	0.0%
Other expense (income)	\$ 58	\$ (2)	\$ 24		55.5%
Operating income	\$ 246	\$ 168	\$ 187	46.4%	14.7%
Non-operating postretirement expense	\$ 11	\$ 2	\$ 2	450.0%	134.5%
Interest expense	\$ 19	\$ 19	\$ 19	0.0%	0.0%
Income before income taxes	\$ 216	\$ 147	\$ 166	46.9%	14.1%
Income taxes	\$ 65	\$ 27	\$ 38	140.7%	30.8%
Net income	\$ 151	\$ 120	\$ 128	25.8%	8.6%
Diluted EPS	\$ 0.31	\$ 0.25	\$ 0.27	24.0%	7.2%
				<i>difference</i>	<i>difference</i>
Gross margin	62.85%	61.33%	63.89%	1.5%	-2.6%
Operating margin	24.7%	20.7%	26.4%	4.0%	-5.7%
Net margin	15.2%	14.8%	18.1%	0.4%	-3.3%
Tax rate	30.2%	18.4%	118.4%	11.8%	-100.0%
Cash dividends paid per share	\$ 0.1885	\$ 0.1795	\$ 0.1743	0.9%	0.5%
Payout ratio	60.8%	71.8%	64.6%	-11.0%	7.2%
Diluted shares outstanding	480,456	480,713	480,342	-0.1%	0.1%

FY 2022 Results

- Net sales increased by 14% to \$3,933M
 - +17% organic
- Gross margin of 60.8% expanded 30 basis points
 - Due to favorable price/mix
 - And divestitures
 - Largely offset higher costs
- Reported advertising expense increased 10%
- Operating income increased 3% to \$1,204M
 - +27% organic
- Diluted EPS decreased by 7% to \$1.74
 - Due to higher income taxes offset by the increase in reported income
 - FY 2021 included a \$0.26 per share benefit from the gain on the sale of the Early Times, Canadian Mist, and Collingwood brands and related assets

Exhibit 2 – FY 2022 Financial Results

2022 Full Year	2022	2021	2020	1YR - CAGR	2YR-CAGR
Net sales	\$ 3,933	\$ 3,461	\$ 3,363	13.6%	8.1%
Cost of sales	\$ 1,542	\$ 1,367	\$ 1,236	12.8%	11.7%
Gross profit	\$ 2,391	\$ 2,094	\$ 2,127	14.2%	6.0%
Advertising expenses	\$ 438	\$ 399	\$ 383	9.8%	6.9%
SG&A expenses	\$ 690	\$ 671	\$ 642	2.8%	3.7%
Gain on sale of business	\$ -	\$ (127)	\$ -	-100.0%	0.0%
Other expense (income)	\$ 59	\$ (15)	\$ 11		131.6%
Operating income	\$ 1,204	\$ 1,166	\$ 1,091	3.3%	5.1%
Non-operating postretirement expense	\$ 13	\$ 6	\$ 5	116.7%	61.2%
Interest expense	\$ 77	\$ 79	\$ 77	-2.5%	0.0%
Income before income taxes	\$ 1,114	\$ 1,081	\$ 1,009	3.1%	5.1%
Income taxes	\$ 276	\$ 178	\$ 182	55.1%	23.1%
Net income	\$ 838	\$ 903	\$ 827	-7.2%	0.7%
Diluted EPS	\$ 1.75	\$ 1.88	\$ 1.72	-6.9%	0.9%
Excluding divestiture gain	\$ 1.75	\$ 1.62	\$ 1.72	8.0%	0.9%
	\$0.26 gain			<i>difference</i>	<i>difference</i>
Gross margin	60.79%	60.50%	63.25%	0.3%	-2.7%
Operating margin	30.6%	33.7%	32.4%	-3.1%	1.2%
Net margin	21.3%	26.1%	24.6%	-4.8%	1.5%
Tax rate	24.8%	16.5%	18.0%	8.3%	-1.5%
Cash dividends paid per share	\$ 1.7360	\$ 0.7076	\$ 0.6806	102.8%	2.7%
Payout ratio	99.2%	37.6%	39.6%	61.6%	-1.9%
Diluted shares outstanding	480,565	480,677	480,409	0.0%	0.1%

FY 2022 Revenue Highlights

- Net sales growth of 14% and organically by 17%
- All geographic clusters contributed to strong net sales growth
- Jack Daniel's Tennessee Whiskey (JDTW) fueled overall company performance with 23% net sales growth
 - The previous year was tougher for JKTW since it was one of the largest on-premises brands in the world and it was impacted by the on-premises restrictions of COVID-19
- Premium bourbons, led by Woodford Reserve and Old Forester, grew reported net sales by 17%
- The tequila portfolio, driven by Herradura and el Jimador, grew net sales by 22%

FY 2022 Brand Results

- As the world continues to reopen, Brown Forman's spirit portfolio benefited from people going out more
- The Jack Daniel's family of brands delivered double-digit net sales of 15% fueled by strong demand for JDTW, higher volumes, and a favorable channel mix shift to the on-premises channel
 - Sales for Jack Daniel's family brands increased as they continued the international launch of Jack Daniel's Tennessee Apple and the international growth of Jack Daniel's RTDs
 - However, supply chain disruptions adversely impacted FY 2022 results for JDTW, Jack Daniel's Tennessee Honey, and Jack Daniel's Tennessee Fire
- Premium bourbons, propelled by Woodford Reserve and Old Forester, delivered 17% net sales growth
 - Gains for Woodford Reserve, the leader by volume and value in the super-premium American Whiskey category, were driven by higher volumes and pricing in the United States and higher volumes in the Travel Retail channel
 - Old Forester sustained double-digit reported net sales growth and surpassed 400K nine-liter cases in FY 2022
- Tequilas delivered double-digit net sales growth of 22% driven by the growth of Herradura and el Jimador, led by the United States

- Jack Daniel's RTDs grew by high-single digits on top of double-digit growth in the prior year. management stated that the majority of their RTD business is internationally driven by Australia and Germany.
- Jack Daniel's Tennessee Apple was introduced in October 2019 and is approaching 700K nine-lite cases, which is impressive, considering this brand has largely been built during the pandemic lockdowns and restrictions

FY 2022 Market Results

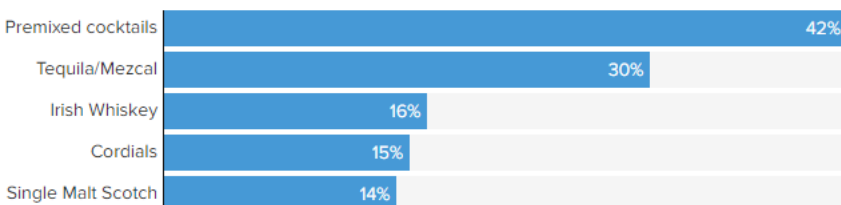
- Delivered broad-based growth across all geographic clusters and the Travel Retail channel
- Sales in the US grew by 10% (+12% organic)
 - Led by JDTW
 - Higher volumes and price increases for the company's premium bourbons, Woodford Reserve, and Old Forester
 - Volumetric growth of Herradura and el Jimador
 - Net increase in distributor inventories positively impacted sales
 - Offset by divestitures from last year and lower volumes relative to last year from JDTW which were impacted by supply chain issues
- Developed international markets net sales increased by 12% (+16% organic)
 - Broad-based volumetric growth from JDTW
 - Higher volumes and prices of Jack Daniel's RTDs
 - Net increase in distributor inventories
 - Offset by FX
- Emerging markets grew net sales by 24% (+29% organic)
 - Broad-based growth of JDTW
 - Continued launch of Jack Daniel's Tennessee Apple
 - Net increase in distributor inventories
 - Offset by negative FX
- Travel retail
 - The channel rebounded with reported net sales of 65% (+67% organic)
 - As the company cycled against declines last year

Tequila

- Tequila is the fastest-growing spirits category
- Herradura and el Jimador grew organic net sales by 28% and 27%, respectively.
- Collectively they have exceeded 2M nine-liter cases in FY 2022
- Tequila and mezcal were the second-fastest-growing spirits category in 2021, according to the Distilled Spirits Council of the US.

Fastest-growing spirits categories

Change in revenue, 2020 to 2021



- Source: Distilled Spirits Council of the U.S.
- Tequila could soon overtake vodka as America's favorite liquor, fueled by consumers' desire for pricey bottles of agave-based spirits
- Vodka remains king. According to DISCUS, the liquor sold 78.1M cases in 2021 more than double the volume of the next category: premixed cocktails. Tequila and mezcal scored a distant fourth at 26.8M cases.
- According to DISCUS, high-end tequilas are helping drive growth for the category. It is not margaritas, there are now high-end tequilas that you can sip and savor like other high-end products like whiskeys and cognacs, and bourbons.
- Diageo is forecasting that tequila sales will expand faster than the broader spirits industry for the next 5 to 10-years.

- Even Dwayne Johnson launched his own tequila brand named Teremana. Launched March 2020. Cost – Blanco 750ml \$29.99; reposado 750ml cost \$32.99. on pace to sell 300K nine-liter cases in its first year.
- You can buy el Jimador 750ml tequila for between \$19.99 and \$50, and Herradura which is more expensive ranges from \$40 to several hundred dollars.

The company's focus for the year was

- 1) Pricing
 - In the US they increased prices on Woodford Reserve, Old Forester, el Jimador, Herradura, Chambord, Jack Daniels, and Tennessee Whiskey
- 2) RTC expansion
 - Launched new routes to consumers with the addition of Taiwan, Belgium, and Luxembourg. The company wants to have control of their distribution, which gives them ownership of their business along the value chain
- 3) Emerging brand's growth
 - 4-years ago they created an emerging brand team in the US, which fueled the growth of brands like Old Forester, Chambord, and single malt scotches such as Glen Dronach, Benriach, and Glenglassaugh as well as Fords Gin.
 - In FY 2022, BF.B replicated this model in Europe and increased its footprint of the Woodford Reserve family brands, Chambord, the single malt scotches as well as tequilas.
- 4) Increased digital marketing and e-commerce capabilities
 - In FY 2022, made an investment to create an integrated marketing communications organization, the way consumers connect and engage with brands has evolved dramatically
 - By investing in IMC, the company plans to improve how they connect to consumers

Consumer mobility

- Monitor mobility trends observed by Google Mobility and Open Table
- Based on this data, the on-premises trends have fully bounced back after the Omicron disruption experienced in Q3 and have continued to hover around pre-COVID levels

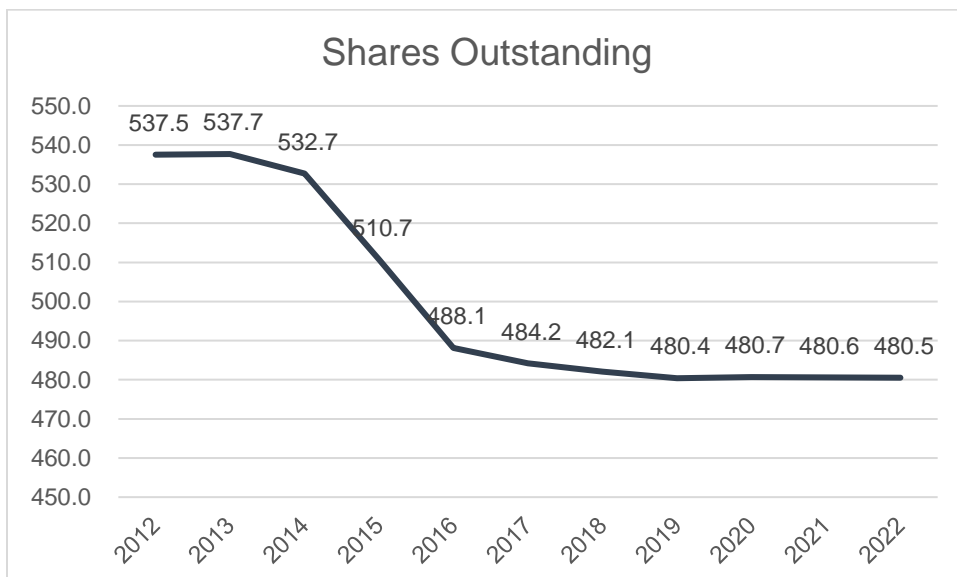
New Products

- Management expects to benefit in FY 2023 from the US national launch of Jack Daniel's bonded and Triple Match whiskeys
- They are working on strong price positioning
- They will launch these brands internationally later in FY 2023
- In March 2022 Brown Forman launched Jack Daniel's first super-premium line extension in 25-years
- Jack Daniel's Bonded \$29.99
- Jack Daniel's Triple Mash \$32.99
- <https://www.youtube.com/watch?v=yAWZVWNn1NE>

Capital Allocation

In FY 2022 the company returned \$831M to shareholders, which included a special dividend of \$1 per share or \$480M and \$351M in regular dividends.

The company did not repurchase any of its common stock during the year.



CAGR	10-year	5-year	3-year
Shares Outstanding	-1.11%	-0.15%	0.01%

Commentary & Outlook

FY 2023 Outlook

- Mid-single-digit organic revenue growth, which is management's projected long-term revenue growth rate
- Gross margin to expand slightly
 - Considering the effects of inflation and the removal of the EU and UK tariffs on American whiskey
- Mid-single-digit organic operating income growth
- Tax rate to be between 22% and 23%
- Capex to be in the range of \$190M to \$210M

For FY 2023, the company plans on stronger price increases.

Management remains cautious due to the potential impact of inflation and rising energy prices on consumer spending. So far, they have not seen any slowdown in the premiumization trends.

Distributor Inventories

In the first half of 2022, distributor inventories did not increase ahead of the important holiday season as usual, and they experienced stronger shipments in the second half of FY 2022 as supply chain challenges continue to ease. In the first half of 2023, they expect distributor inventories to return to more normalized levels. Therefore, they expect growth in the first half to benefit from the net change in distributor inventory while the second half will lap the increase in the net change in distributor inventory related to the rebuilding of inventory position in the prior period.

EU and UK Tariffs

The impact of the EU and UK tariffs on American Whiskey will be a significant tailwind as the EU tariffs were removed on January 1, 2022, and the UK tariffs were removed last week on June 1, 2022. It has been three years of being negatively impacted by EU and UK tariffs on American Whiskey.

[Interpretation of Financial Statements](#)

IOFS

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	LTM	Trend	Thresho
IOFS													
Revenue	2,849	2,991	3,134	3,089	2,994	3,248	3,324	3,363	3,461	3,461	3,749	-----■	
Gross Margin	68.6%	69.5%	69.7%	69.4%	67.5%	67.8%	65.2%	63.2%	60.5%	60.5%	60.4%	■■■■■	>20%
Operating Margin	31.5%	32.5%	32.8%	33.9%	33.7%	32.3%	34.4%	32.4%	30.0%	30.0%	30.0%	■■■■■	>10%
Net Margin	20.7%	22.0%	21.8%	34.5%	22.3%	22.1%	25.1%	24.6%	26.1%	26.1%	21.5%	-----■	
FCF Margin	15.4%	17.4%	15.4%	13.4%	18.1%	16.2%	20.4%	18.0%	21.7%	21.7%	22.4%	■■■■■	>10%
R&D + SG&A / Gross Inc	54.1%	54.0%	51.9%	51.5%	50.9%	53.1%	47.9%	48.2%	51.1%	51.1%	50.3%	■■■■■	<80%
D&A / Gross Inc	2.6%	2.4%	2.3%	2.6%	2.9%	2.9%	3.3%	3.5%	3.7%	3.7%	3.5%	■■■■■	<10%
Int Exp / Operating Inc	4.0%	2.7%	2.6%	4.4%	5.8%	6.5%	7.7%	7.5%	7.8%	7.8%	-	■■■■■	<15%
Capex / Net Income	16.4%	19.6%	18.3%	10.3%	17.2%	17.9%	14.5%	14.4%	7.2%	7.2%	7.2%	■■■■■	
Returns													
ROE	32.0%	36.0%	34.7%	61.6%	45.6%	53.4%	56.4%	45.7%	39.0%	39.0%	30.5%	-----■	>15%
ROE FCF	27.0%	25.6%	25.4%	26.5%	39.5%	39.9%	41.2%	30.6%	28.3%	28.3%	33.4%	-----■	
ROTE	172.3%	89.7%	99.6%	283.0%	#####	(612.8%)	335.3%	141.6%	75.2%	75.2%	73.6%	-----■	
ROIC	22.7%	23.3%	22.3%	34.7%	20.3%	19.4%	21.0%	19.1%	18.4%	18.4%	15.7%	-----■	>15%
ROCE	28.9%	29.1%	30.4%	46.4%	28.2%	26.8%	26.3%	23.4%	22.2%	22.2%	20.3%	-----■	>15%
ROA	16.6%	17.1%	16.5%	25.5%	15.2%	14.9%	16.5%	15.2%	14.7%	14.7%	12.4%	-----■	
Leverage & Liquidity													
Obligation Ratio ⁽¹⁾	1.8x	1.2x	2.3x	1.7x	4.1x	3.8x	3.0x	3.1x	2.0x	2.0x	2.5x	-----■	<5
Obligation Ratio FCF ⁽¹⁾	2.5x	1.6x	3.2x	4.5x	5.1x	5.2x	3.7x	4.2x	2.4x	2.4x	2.4x	-----■	
Payout Ratio	179.9%	35.4%	37.4%	24.9%	41.0%	107.8%	37.1%	39.3%	37.4%	37.4%	37.4%	-----■	
Per Share													
Revenue	\$5.30	\$5.56	\$5.88	\$6.05	\$6.13	\$6.71	\$6.90	\$7.00	\$7.20	\$7.20	\$7.80	-----■	
Owners Earnings	\$0.90	\$1.11	\$1.05	\$0.92	\$1.22	\$1.21	\$1.51	\$1.35	\$1.53	\$1.53	\$1.75	-----■	
Earnings	\$1.10	\$1.22	\$1.28	\$1.41	\$1.37	\$1.48	\$1.73	\$1.72	\$1.66	\$1.66	\$1.68	-----■	
Operating Cash Flow	\$1.00	\$1.21	\$1.14	\$1.03	\$1.34	\$1.35	\$1.66	\$1.51	\$1.70	\$1.70	\$1.93	-----■	
Free Cash Flow	\$0.82	\$0.97	\$0.91	\$0.81	\$1.11	\$1.08	\$1.41	\$1.26	\$1.56	\$1.56	\$1.75	-----■	
Dividends	\$0.39	\$0.44	\$0.48	\$0.52	\$0.56	\$0.61	\$0.65	\$0.68	\$0.71	\$0.71	\$0.71	-----■	
Book Value	\$3.05	\$3.81	\$3.65	\$3.16	\$2.85	\$2.74	\$3.45	\$4.13	\$5.55	\$5.55	\$5.26	-----■	
Tangible Book Value	\$0.64	\$1.38	\$1.32	\$0.76	-\$0.05	-\$0.24	\$0.52	\$1.22	\$2.51	\$2.51	\$2.29	-----■	
Diluted Shares	537	538	533	511	488	484	482	480	481	481	481	-----■	

- Margins have continued to tick down. Especially gross profit margins, which hit a peak of 69% in 2015 and are down currently to 60%.
- Operating and net margins have ticked down but not as severely as gross profit margins.
- FCF margins have actually been increasing over time
- The company expects to slightly expand margins in FY 2023 as they increase prices for their brands, benefit from divesting certain lower margin brands, and introduce other premium brands like Jack Daniel's Bonded and Triple Match. But the company will still be facing higher raw material costs, supply chain costs, and other inflationary pressures.

Valuation

	CAGR 2012-2022		
	10-year	5-year	3-year
Revenue	3.75%	5.61%	5.77%
SPS	4.96%	5.94%	5.89%
Net Income	5.03%	4.61%	0.12%
EPS	6.30%	5.02%	0.38%
FCF	5.94%	8.08%	5.53%
FCFPS	7.18%	8.38%	5.59%

	Difference between GAAP, NON-GAAP, and FCFPS							
	2015	2016	2017	2018	2019	2020	2021	2022
Value Line EPS	\$1.38	\$1.37	\$1.54	\$1.73	\$1.72	\$1.61	\$1.75	\$1.90
Diluted EPS	\$1.28	\$2.09	\$1.37	\$1.48	\$1.73	\$1.72	\$1.88	\$1.75
FCFPS	\$0.91	\$0.81	\$1.11	\$1.08	\$1.41	\$1.26	\$1.56	\$1.66

5 Year EPS Forecast												
Ticker:		BF.B										
Price:		\$68.45										
								P/E	Total Return Price	PV	5 YR Return	Annual Return
Bear	EPS	Actual										
		<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>					
		\$1.75	\$1.96	\$2.08	\$2.20	\$2.33	\$2.47	16.8x	\$45.34	\$29.47	(33.8)%	(7.9)%
			12%	6%	6%	6%	6%	20.8x	\$55.24	\$35.90	(19.3)%	(4.2)%
							25.6x	\$67.12	\$43.62	(1.9)%	(0.4)%	
Base	EPS	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>					
		\$1.75	\$2.00	\$2.15	\$2.33	\$2.51	\$2.71	21.0x	\$60.77	\$39.49	(11.2)%	(2.4)%
								26.0x	\$74.34	\$48.31	8.6%	1.7%
			14%	8%	8%	8%	8%	32.0x	\$90.62	\$58.90	32.4%	5.8%
Bull	EPS	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>					
		\$1.75	\$2.00	\$2.21	\$2.46	\$2.73	\$3.03	25.2x	\$80.09	\$52.05	17.0%	3.2%
								31.2x	\$98.26	\$63.86	43.6%	7.5%
			14%	11%	11%	11%	11%	38.4x	\$120.07	\$78.03	75.4%	11.9%

Discount rate:

9%

Total RoR Sensitivity				
\$1.75		Est. EPS growth rate		
		7%	9%	12%
P / E	21.0x	(7.9)%	(2.4)%	3.2%
	26.0x	(4.2)%	1.7%	7.5%
	32.0x	(0.4)%	5.8%	11.9%

Ticker: BF.B Price: \$68.45												
5 Year EPS Forecast												
								P/E	Total Return Price	PV	5 YR Return	Annual Return
Bear	EPS	Actual										
		2022	2023	2024	2025	2026	2027					
		\$1.75	\$1.96	\$2.08	\$2.20	\$2.33	\$2.47	20.8x	\$55.24	\$35.90	(19.3)%	(4.2)%
Base	EPS											
Bull	EPS											

Discount rate:
9%

Total RoR Sensitivity				
\$1.75		Est. EPS growth rate		
		7%	9%	12%
P/E	26.0x	(4.2)%	1.7%	7.5%
	30.0x	(1.6)%	4.5%	10.5%
	37.0x	2.4%	8.8%	15.1%

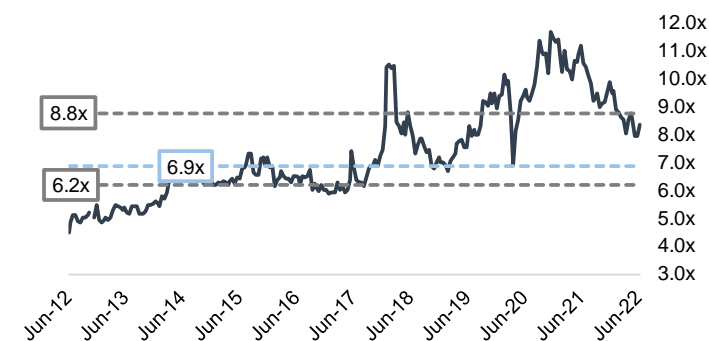
Two-Stage DCF

For the two-stage DCF, I increased the growth rate for my bear, base, and bull case to 8%, 11%, and 14%. I also increase the terminal rate to 6%. I lowered the discount rate to 9%. There does not appear to be any margin of safety.

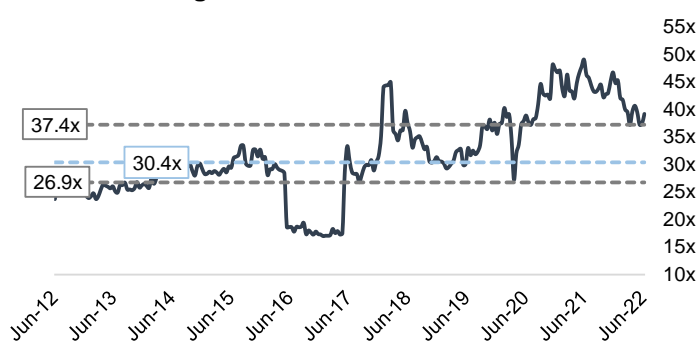
Bear Case		Base Case		Bull Case	
Current Price	\$68.45	Current Price	\$68.45	Current Price	\$68.45
Fair Value	\$30.37	Fair Value	\$37.43	Fair Value	\$46.16
MOS	-137.18%	MOS	-93.31%	MOS	-68.47%
EPS	\$1.75	EPS	\$1.75	EPS	\$1.75
GR	8.0%	GR	11.0%	GR	14.0%
DR	9%	DR	9%	DR	9%
Years	10	Years	10	Years	10
Terminal	6%	Terminal	6%	Terminal	6%

Valuebands | 10 Years

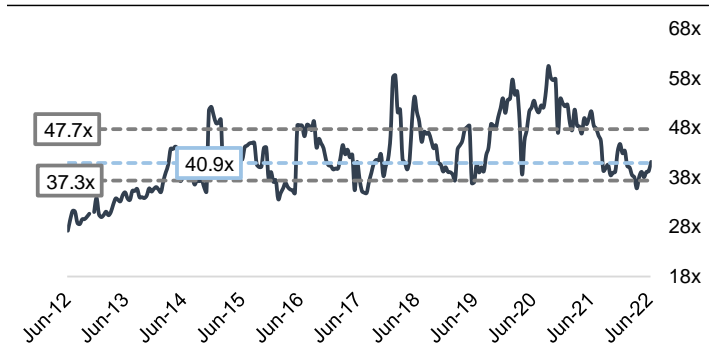
Price to Sales



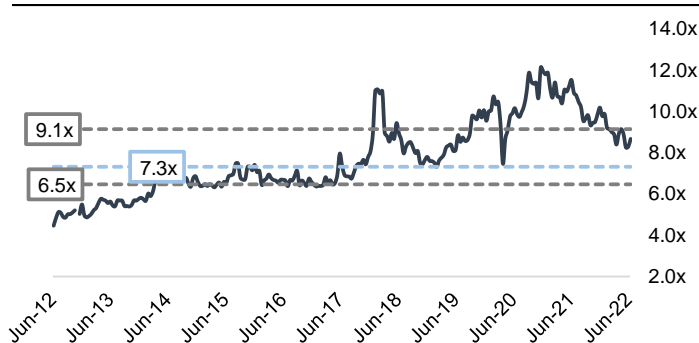
Price to Earnings



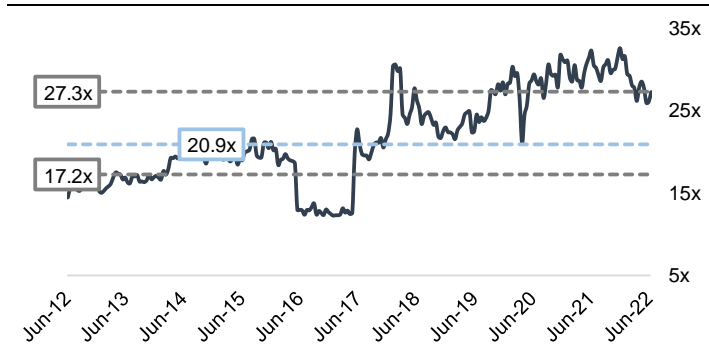
Price to Free Cash Flow



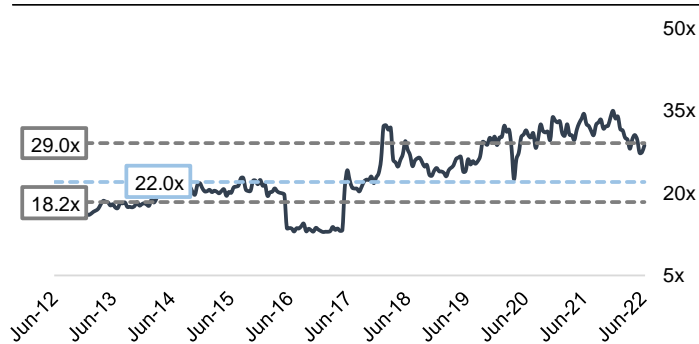
EV to Sales



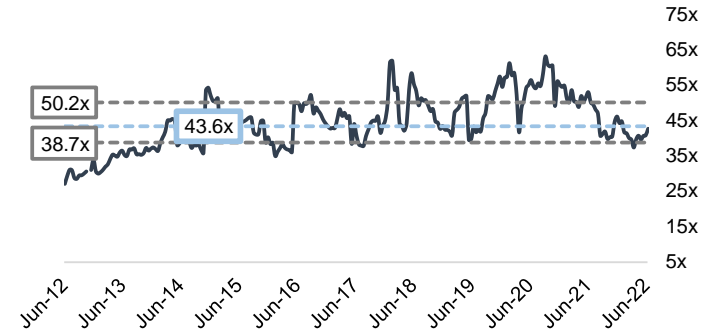
EV to EBITDA



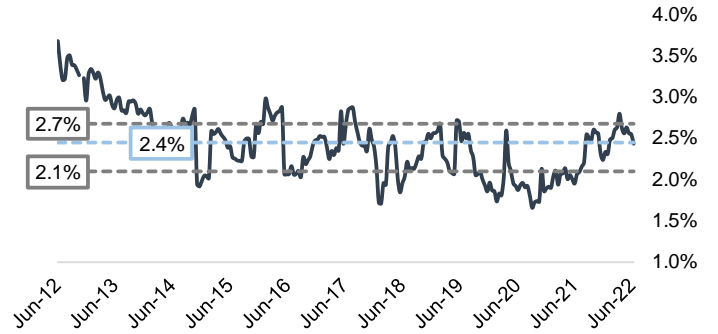
EV to EBIT



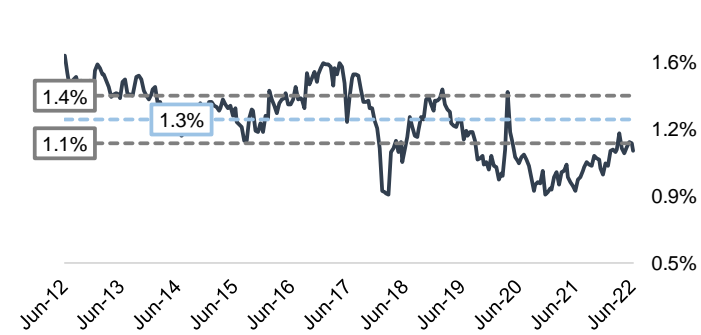
EV to Free Cash Flow



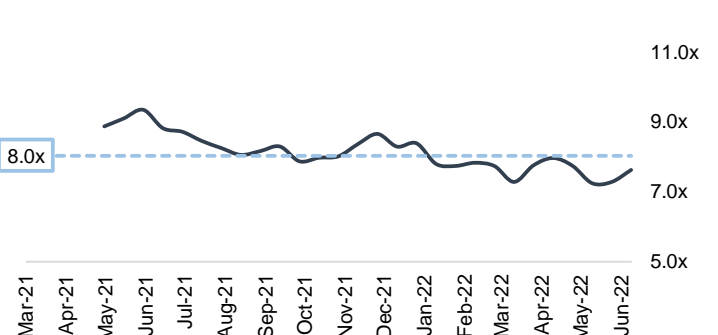
Free Cash Flow Yield



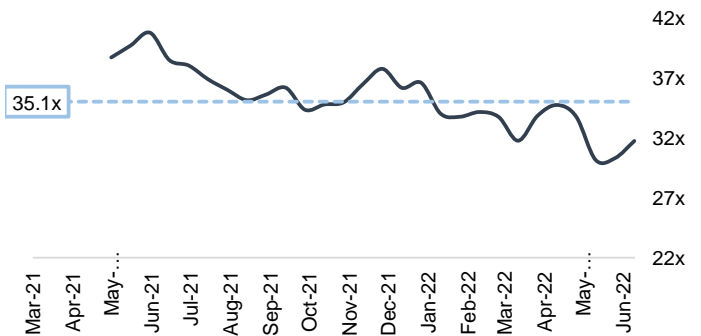
Dividend Yield



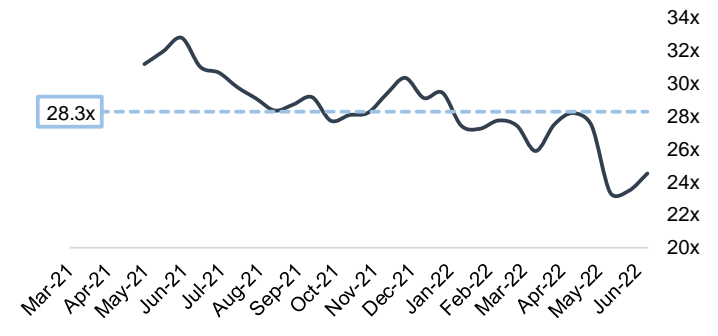
Forward Price to Sales



Forward Price to Earnings

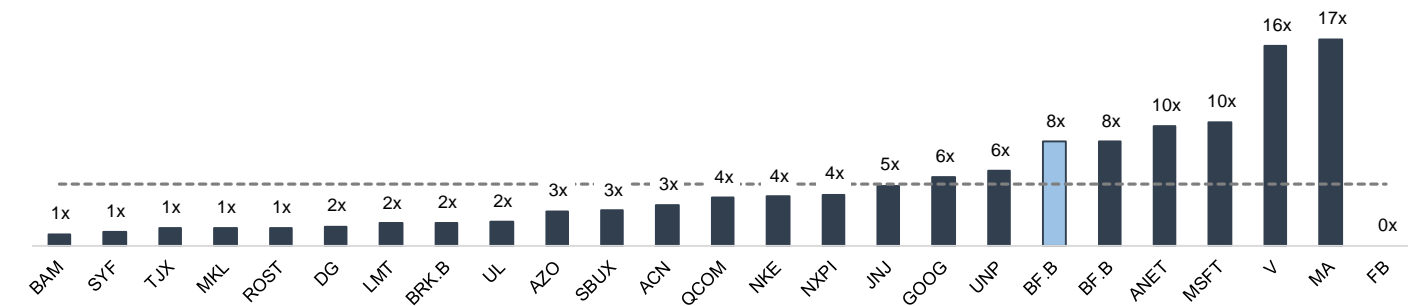


Forward EV to EBITDA

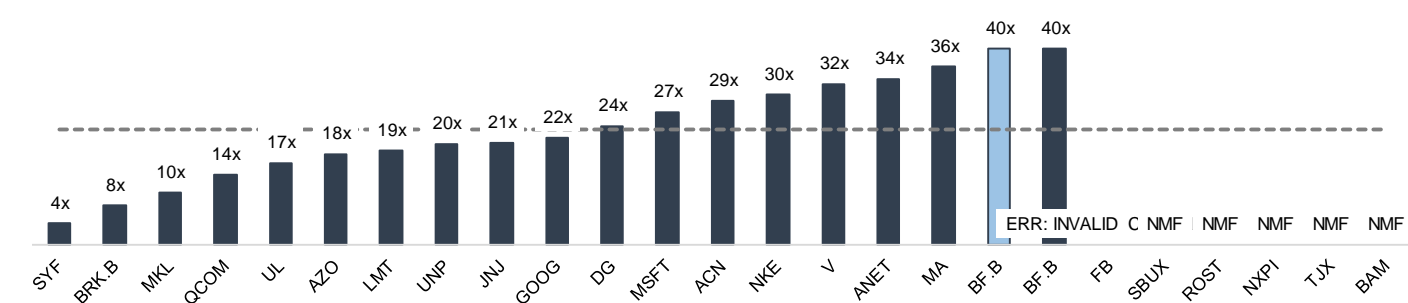


Intraportfolio

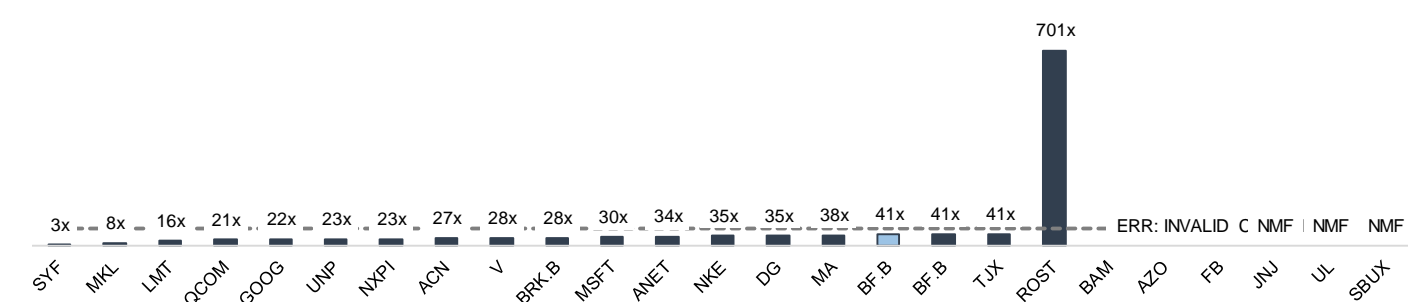
Price to Sales



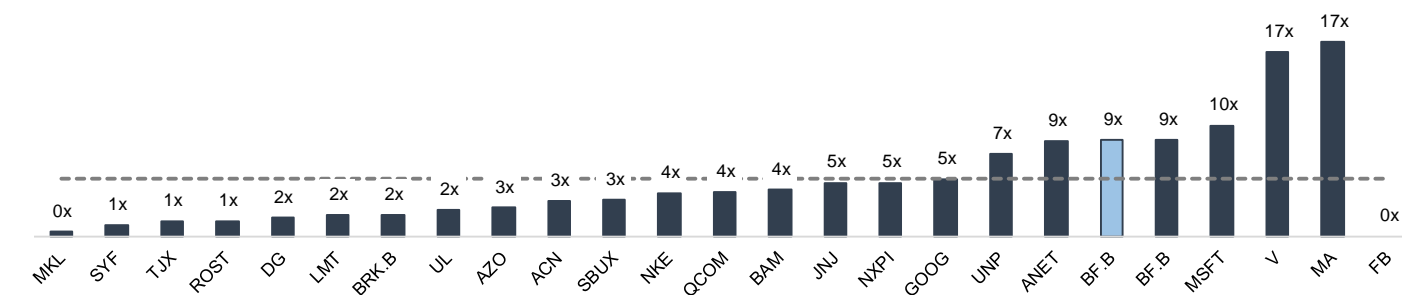
Price to Earnings



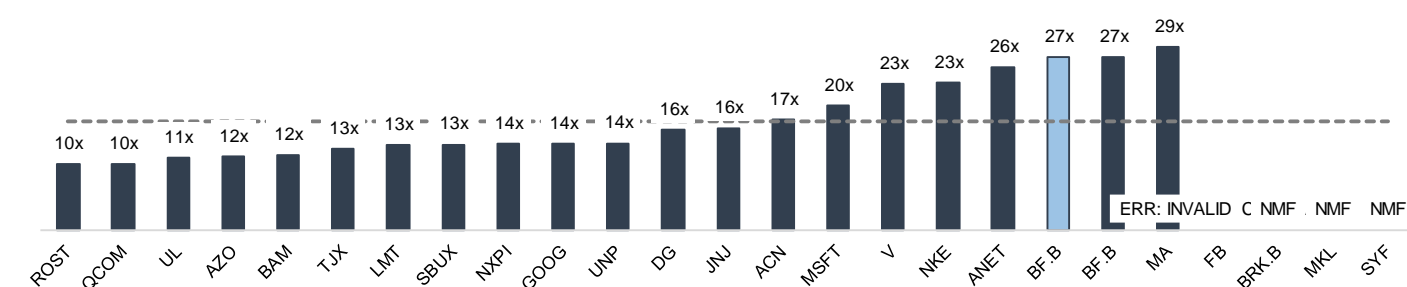
Price to Free Cash Flow



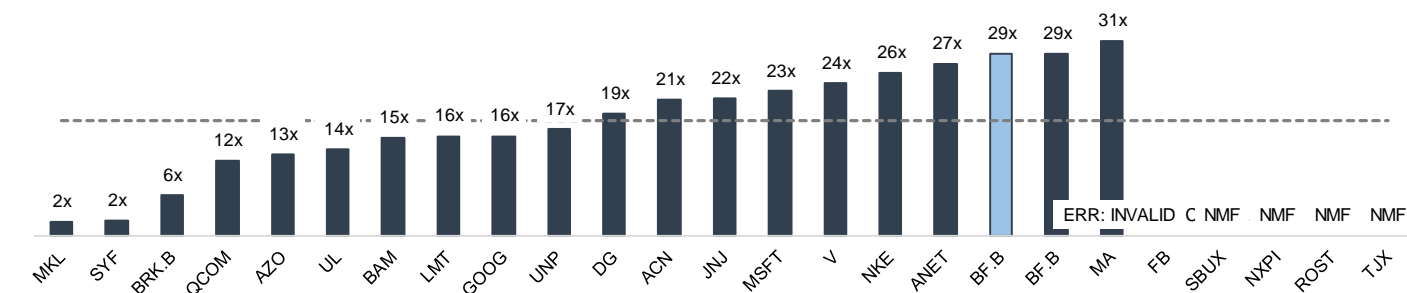
EV to Sales



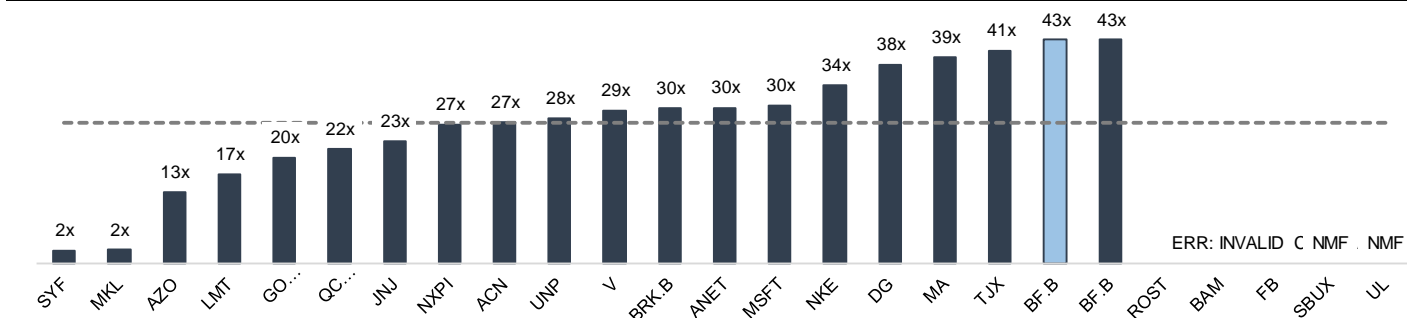
EV to EBITDA



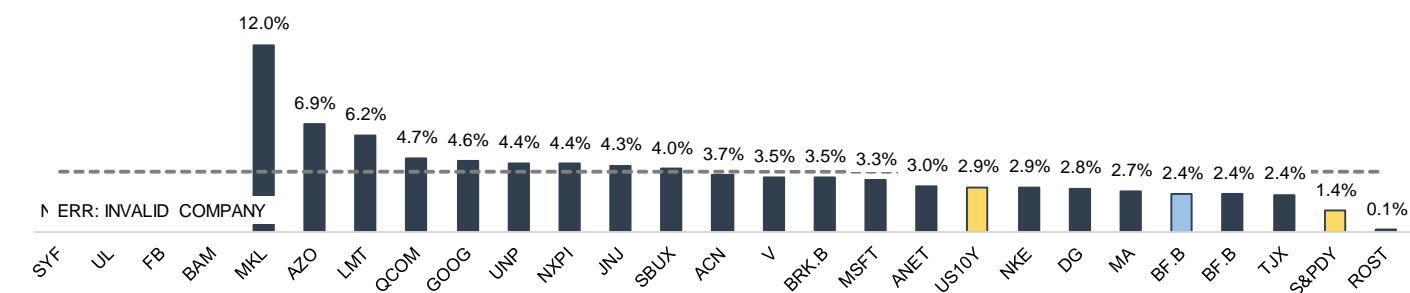
EV to EBIT



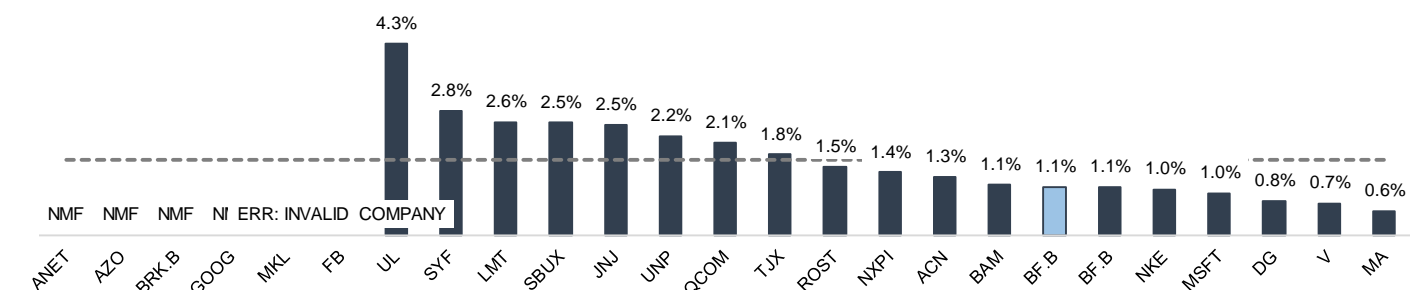
EV to Free Cash Flow



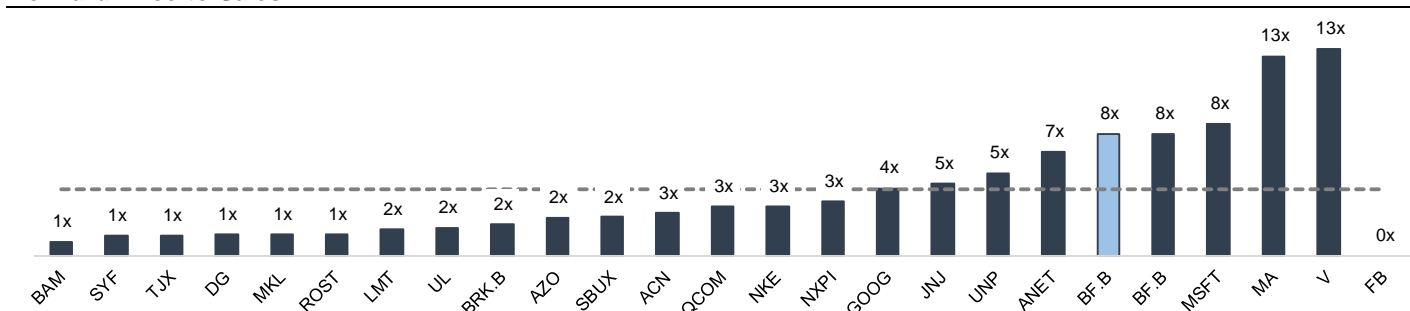
Free Cash Flow Yield



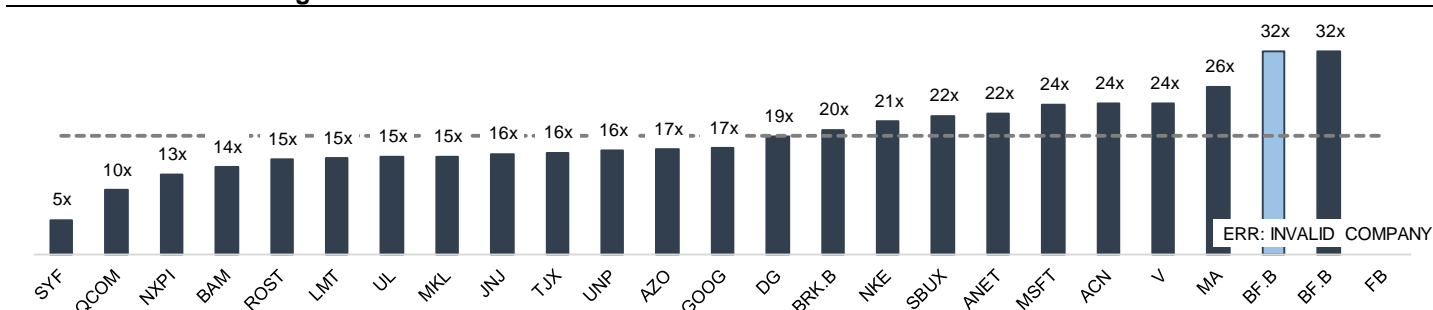
Dividend Yield



Forward Price to Sales



Forward Price to Earnings



Forward EV to EBITDA

