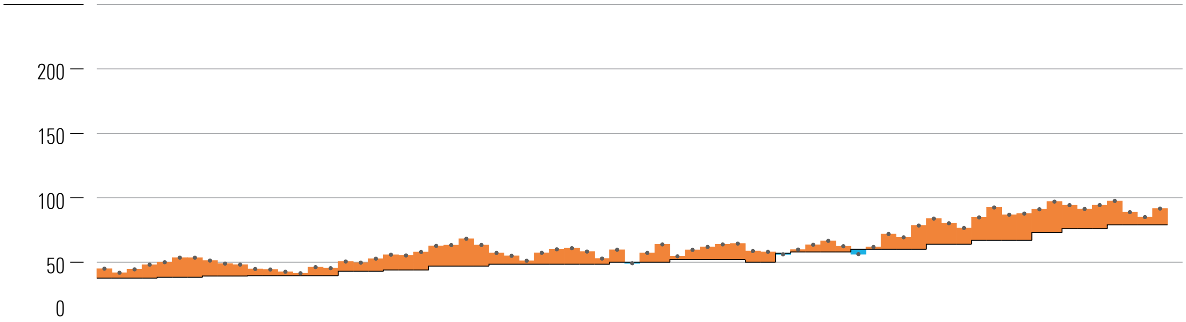
Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

Price vs. Fair Value



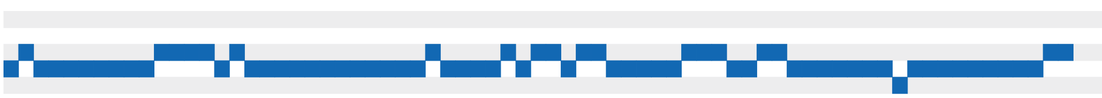
Last Close: 91.63

Fair Value: 79.00
10 Aug 2021 21:28, UTC

Over Valued
Under Valued

	2016	2017	2018	2019	2020	YTD	
	1.12	1.35	0.98	1.10	1.38	1.16	Price/Fair Value
	-10.70	42.74	-22.23	29.11	45.52	-0.92	Total Return %

Morningstar Rating



Total Return % as of 5 Nov 2021. Last Close as of 5 Nov 2021. Fair Value as of 10 Aug 2021 21:28, UTC.

Contents

Important Disclosure

The conduct of Morningstar's analysts is governed by Code of Ethics/Code of Conduct Policy, Personal Security Trading Policy (or an equivalent of), and Investment Research Policy. For information regarding conflicts of interest, please visit: http://global.morningstar.com/equitydisclosures.

The primary analyst covering this company does not own its stock.

[1]The ESG Risk Rating Assessment is a representation of Sustainalytics' ESG Risk Rating.

Monster Beverage Posts Solid Sales but Lackluster Profitability Amid Cost Pressure; Shares Rich

Analyst Note Zain Akbari, CFA, Equity Analyst, 4 Nov 2021

Our $79 per share valuation of narrow-moat Monster should rise by a low- to mid-single-digit percentage after its third-quarter earnings announcement, mostly on account of the time value of money as strong sales were offset by supply chain and aluminum can cost pressure. We view the challenges as transitory, and so our long-term forecasts (mid- to high-single-digit percentage top line growth against mid-30s adjusted operating margins) remain in place. We suggest investors await a more attractive entry point before building a position.

Sales have risen 21% year to date (13% in the quarter), ahead of our prior 18% full-year target, driven by strong performance in the core Monster energy drinks segment (up 14% in the third quarter), despite persistent challenges in meeting customer demand as a result of the ongoing aluminum can shortage and procurement, production, and shipping disruptions. The firm's operating margin is down around 260 basis points year-to-date, a more severe decline than our prior 140 basis point full-year expectation. We attribute the challenges to the ongoing recovery from the pandemic and expect Monster's profitability to rebound as conditions normalize. Nevertheless, near-term dynamics should remain challenging as transportation inefficiencies permeate throughout the company's operations.

The resilience of customer demand should bode well for Monster at home and abroad, as the company continues to innovate (for example, through the launch of energy seltzers in the United States under the

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS Page 2 of 22

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

Sector
Consumer Defensive

Industry
Beverages - Non-Alcoholic

Business Description

Monster Beverage is a leader in the energy drink subsegment of the beverage industry. The Monster trademark anchors its portfolio, and notable offerings include Monster Energy and Monster Ultra. The firm has also started to incubate new trademarks for emerging enclaves of the energy space, like Reign in performance energy. It is primarily a brand owner, outsourcing most of its manufacturing processes to third-party copackers. It primarily uses the Coca-Cola bottling system for distribution after a strategic agreement in which Coke became Monster's largest shareholder (roughly 19%) and that also included the exchange of certain businesses between the two firms. Most of Monster's revenue is generated in the United States, though international geographies are increasing in the mix.

True North brand). With demand high and supply low, we expect reduced promotional activity and Monster's pricing power to help offset the higher cost environment over time. Longer-term, we still expect Monster to spend behind its brands, with advertising expenditures (which we expect to average nearly 10% of sales long-term) helping to protect Monster's economic returns despite persistent beverage industry competition.

Business Strategy & Outlook Zain Akbari, CFA, Equity Analyst, 10 Aug 2021

After helping pioneer the U.S. energy drink industry two decades ago, Monster continues to extract outsize growth and stellar profitability from this market. We think that despite relying almost entirely on a Monster trademark that is not easily parlayed into other beverage segments, the firm will continue innovating in the energy category and expanding the range of occasions for which the drinks are consumed. This dynamic is evidenced by the recently launched Reign brand, and should support high-single-digit growth longer term.

Crucial to Monster's positioning in the market is its partnership with Coca-Cola. Being able to rely on the widest moat in beverages for distribution, merchandising, and retailer negotiation reinforces and perpetuates the benefits of its resonant brand, in our view. With its entire U.S. footprint and most international territories fully incorporated into the Coke system, strategic and logistic planning should become more seamless, allowing products to be scaled more quickly, particularly in international markets (over 35% of sales). Despite the inevitable complexity of appealing to distinct local palates, we believe Monster's continued geographic diversification should augment its positioning.

Given the importance of the Coke relationship, the launch of Coke Energy products following arbitration between the two parties was a significant development. Still, it has proved to be far from an existential threat, garnering trivial share in the markets where it launched (and recently discontinued in the U.S.). Irrespective of Coke's future plans for energy, we expect Monster to maintain its foothold, particularly among core consumers with whom the cachet of the brand has compounded over years.

In addition to a seemingly more tenuous Coke relationship, Monster must contend with an intense competitive environment. While Red Bull remains the most formidable rival, Monster is also beleaguered by a number of both established and upstart firms looking to carve out niches in the energy space. Nevertheless, structural advantages and an experienced management team should allow the firm to navigate an evolving competitive landscape.

Bulls Say Zain Akbari, CFA, Equity Analyst, 31 Aug 2021

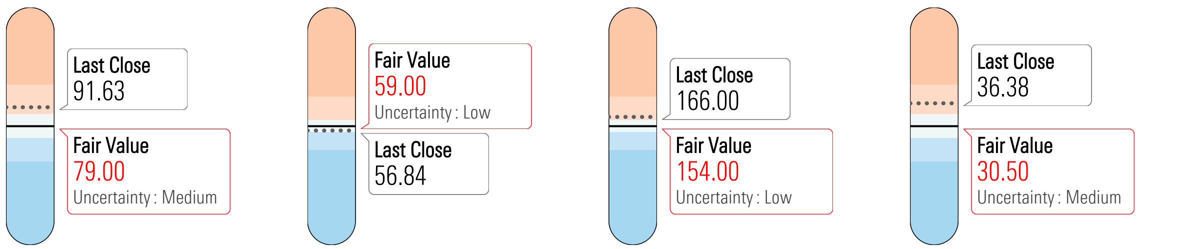
- Monster is a leading pure-play incumbent in a secularly advantaged beverage category that is growing in the high single digits, meaningfully above the broader industry average (low single digits).
- Monster's strategic partnership with Coca-Cola aligns its fortunes with the widest moat in nonalcoholic

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS Page 3 of 22

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

Competitors



	Monster Beverage Corp MNST	Coca-Cola Co KO	PepsiCo Inc PEP	Keurig Dr Pepper Inc KDP
Economic Moat	Narrow	Wide	Wide	Narrow
Moat Trend	Stable	Stable	Stable	Negative
Currency	USD	USD	USD	USD
Fair Value	79.00 10 Aug 2021 21:28, UTC	59.00 3 Nov 2021 14:09, UTC	154.00 6 Oct 2021 21:36, UTC	30.50 4 Aug 2021 19:07, UTC
1-Star Price	106.65	73.75	192.50	41.18
5-Star Price	55.30	47.20	123.20	21.35
Assessment	Fairly Valued 4 Nov 2021	Under Valued 4 Nov 2021	Fairly Valued 4 Nov 2021	Over Valued 4 Nov 2021
Morningstar Rating	★★5 Nov 2021 21:24, UTC	★★★★5 Nov 2021 21:24, UTC	★★★5 Nov 2021 21:24, UTC	★★5 Nov 2021 21:24, UTC
Analyst	Zain Akbari, Equity Analyst	Erin Lash, Sector Director	Erin Lash, Sector Director	Rebecca Scheuneman, Equity Analyst
Capital Allocation	Standard	Exemplary	Exemplary	Standard
Price/Fair Value	1.16	0.96	1.08	1.19
Price/Sales	9.11	6.49	2.97	4.15
Price/Book	7.86	11.02	14.31	2.10
Price/Earning	30.48	27.88	27.99	29.88
Dividend Yield	—	2.95%	2.55%	1.87%
Market Cap	46.43 Bil	244.48 Bil	227.18 Bil	51.26 Bil
52-Week Range	80.51—99.89	48.11—57.56	128.32—164.56	27.12—37.11
Investment Style	Large Core	Large Core	Large Core	Large Value

beverages, affording it top-tier store positioning and merchandising.

- International expansion through Coke's bottling system offers material runway for growth.

Bears Say Zain Akbari, CFA, Equity Analyst, 31 Aug 2021

- The firm's business model has relatively less operating leverage because of its outsourcing.
- Additional forays into the energy category by Coke could strain the partnership with Monster, which the latter disproportionately relies on.
- Monster's lack of portfolio diversification could be an albatross, particularly as the energy category matures.

Economic Moat Zain Akbari, CFA, Equity Analyst, 10 Aug 2021

We see several dynamics, undergirded by various intangible assets, that should allow Monster Beverage to extract economic rents from the market, and we believe the firm warrants a narrow economic moat rating. At a high level, factors that are inherent to its position in a secularly advantaged

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

beverage category, as well as its specific business model, facilitate durable competitive advantages, in our view. Still, other factors that we consider equally structural restrict the width of the firm's moat and dampen our confidence that excess returns can persist over 20 years, preventing us from assigning Monster a wide moat rating.

Most moatworthy companies in the consumer packaged goods industry boast strong brands, and virtually every other competitive benefit that can accrue along the supply chain bears a clear nexus to the firm's trademarks. We believe this holds true with nonalcoholic beverages more broadly, as well as energy drinks, where Monster competes. In this regard, energy drinks are quite conducive to branded offerings. Like other beverage categories, consumption tends to be conspicuous in many social and location contexts, and though ingredients are similar across products, the ultimate taste is distinct. Thus, a typical energy drink consumer will usually have a preference. Moreover, private-label penetration is quite low. Globally, on a unit basis, private-label penetration is in the midsingle digits, comparable to carbonated soft drinks and well below the low teens to mid-20s, which is typical for other areas of consumer packaged goods. In the U.S., where Monster is predominantly exposed, private-label penetration is markedly lower, below 1% by our estimates.

Against this backdrop, we believe the Monster trademark and its resonance with energy drink consumers is similar to the relationships other leading beverage brands enjoy with their core consumers, such as Coke and Pepsi in colas or Gatorade in sports drinks. While Monster was not the first energy drink (this distinction belongs to privately held Red Bull, its main rival), the firm was still fairly prescient in anticipating the addressable market opportunity and helped pioneer the category, particularly in the U.S. The brand's stalwart positioning is reflected in its market share, which, on a unit basis, sits at roughly 14% globally and 40% in the U.S., both leadership positions (ahead of Red Bull in the low teens and high 20s, respectively). On a value basis, Red Bull becomes the global share leader (roughly 20% versus Monster in the mid- to high teens), but Monster maintains its advantage in the U.S.

From our vantage point, an equally important pillar of Monster's intangible assets is its distribution agreement with Coca-Cola, through which the firm sells finished goods to bottlers/distributors aligned with the Coke system, which then sell and deliver drinks to retailers, negotiate shelf space and store positioning, and provide some marketing support. As part of the deal, consummated in 2015, Coke purchased a material ownership stake in Monster (19% currently) and acquired its nonenergy brands, while Monster received Coke's energy portfolio. The agreement has allowed Monster to be integrated into the most formidable beverage distribution system on the planet, facilitating availability in more than 155 countries with minimal capital investment by Monster. It would be fair to look incredulously at this arrangement and wonder why Coke would choose to meaningfully augment the competitive positioning of a competitor, but we see five structural factors that help explain it and give us confidence in the durability of the relationship.

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

First, and most important, is the cachet of the Monster brand, which should help ensure sufficient and sustained end demand for its beverages such that neither Coke nor its bottlers need to worry about inventory builds or sell-through. Second, and along similar lines, Monster energy drinks were around for over a decade before 2015 and were able to carve out nontrivial market share without this agreement. Against that backdrop, we think Coke views the distribution partnership as supportive of a rational competitive environment. Third is the contractual nature of the agreement, which spans 20 years and continues thereafter unless mutually terminated by both parties. Fourth, these are quid pro quo transactions that yield lucrative economics in their own right. In addition to better capacity utilization and distribution density, it is important to remember that Coke and its bottlers perform these activities at a margin. Admittedly, the margin that accrues is likely much lower than the corporate average for both Coke and its independent bottlers, given that finished goods distribution adds the least value along the supply chain. Still, because energy drinks cost more than soft drinks and some other noncarbonates, these activities yield solid dollar profits and free cash flow. Last is system alignment, which is particularly germane to Coca-Cola since it has refranchised most of its U.S. soft drink bottling operations. Its bottlers are extremely motivated to distribute Monster products, given the strong demand and consequent profitability. A corollary of Coke's refranchising is that it has to work doubly hard to ensure its system remains properly incented. With energy drinks representing one of the fastest-growing segments in the beverage industry, terminating the Monster agreement would hurt utilization rates, route efficiency, and profitability of the bottlers that Coke relies on, particularly at the local retail level. While the impact to Coke's overall competitive positioning would probably be immaterial, it would still have a deleterious effect on the system's alignment and execution.

Inextricably linked to a strong brand and distribution prowess are the competitive benefits that accrue downstream. In this regard, Monster's retail entrenchment is underpinned by the resonance of its brand, which ensures continued end-consumer demand, as well as its agreement with Coca-Cola, where the entity with the most clout in the nonalcoholic beverage industry secures shelf space and store positioning on its behalf. Some would argue that Monster not owning its distribution detracts from its ability to cultivate relationships with retailers, which is probably true in some instances, such as those related to data-sharing and strategizing. Though Coke does not own most of its bottlers, it tacitly exercises control similar to ownership, since it controls the lion's share of its bottlers' volumes. In fact, Coke typically pays for and implements the back-end technology infrastructure, communication, and business process systems many of its bottlers use. Consequently, data related to inventory, promotion responsiveness, merchandising and displays, and the like are flowing through servers and systems owned by Coca-Cola. This is certainly not the case for Monster. While the firm is likely looped in regarding high-level data points and category trends, it would have limited access to more granular data that underpins strategic planning with retailers. In this regard, we think certain dynamics that allow wide-moat firms to perpetuate their advantages, such as data feedback loops and being able to dictate

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

in-store category strategies that prioritize their own brands, do not materialize for Monster in the same way. That said, we believe that as it relates to the more immediate retail dynamics of store positioning and slotting fees, Monster's products benefit from similar positioning as proprietary Coke brands. In fact, we would expect this to be a stipulation of their agreement and would be surprised if there were explicit flexibility in the contract allowing Coke to treat Monster's products dramatically different than its own during negotiations with retailers. From our vantage point, the agreement essentially allows Monster to reap the benefits of the Coke system's clout without having to fully incur the increasingly cumbersome time and expense of negotiating appropriate economic terms with retailers.

On a per-ounce basis, based on the channels we've looked at in the U.S., Monster seems to be priced modestly below Red Bull. However, one could argue this is warranted, given Monster's market share lead. In our view, discerning the relative impacts on economic profit generation becomes a byzantine analysis, as it is difficult to find the inflection point where the drawbacks of price disparities are superseded by the benefits of volume superiority. As it relates to pricing more generally, these dynamics in the beverage space continue to be obfuscated by a number of factors, including unilateral decisions by retailers to support their own economics as well as the rise in online commerce and the attendant growth in the use of behavioral algorithms that make it difficult to discern what each consumer pays for a particular product. Nevertheless, we see Monster as a price leader in the energy space owing to its category leadership and believe that any broad price increases across the category are likely to be instigated by either Monster or Red Bull.

Compared with soft drinks and certain still drinks, the regulatory landscape plays an important role in the competitive dynamics that support Monster's moat. Because energy drinks typically contain high levels of compounds that are thought to alter natural bodily functions, such as caffeine, ephedrine, guarana, and ginseng, they tend to be more heavily scrutinized by regulators. While this certainly represents a risk, we think that, given Monster's position as a leading operator, it also augments its competitive positioning. Upstarts seeking to disrupt this market would likely need to develop novel ingredient compositions that would have to undergo more-rigorous inspection from regulators than, say a new soda. This limits the ability of new entrants to gain share, as Monster would have more time to pivot its portfolio through either replication or innovation and the ability to scale its new products' distribution more broadly.

These structural dynamics, combined with sublime profitability and an asset-light business model, allow Monster to boast adjusted returns on invested capital of 30%-40%, appreciably above those of wide-moat firms like Pepsi and Coke (in the mid- to high teens). Still, we reiterate that we believe Monster's moat is constrained to narrow, as a number of factors detract from our confidence in the durability of these returns. The most salient of these is the firm's obvious lack of portfolio diversification, as it is primarily leveraged to the energy drink category. Even as the company continues to innovate and expand into categories such as coffee-based and hydration-oriented drinks, the fact is that its brands broadly target similar occasions. The inability to use its most resonant trademark into completely greenfield opportunities places a ceiling on monetizing and entrenching its intangible assets, in our view.

As it relates to its strategic distribution relationship, despite the contractual nature of the agreement, we believe there are subtle ways that Coke or its authorized bottlers could undermine Monster's go-to-market efforts. These could include marginally decreasing its visibility in the supply chain, giving suboptimal efforts toward the products' promotions, or intruding on the drinks' functional messaging by introducing products in separate categories that purport to offer similar benefits (mental and physical stimulation). These risks are exacerbated by recent developments in the energy category. In the 2015 agreement between the two parties, while Coke agreed not to launch new trademarks in the energy category, there was an exception that allowed for the development and marketing of an energy product under the Coca-Cola trademark. Coke exercised this right in 2018, developing Coke Energy. Monster disputed Coke's interpretation of the exception, and the two mutually agreed to submit the issue to arbitration, where Coke prevailed. Coke Energy has already launched in markets across Europe and North America, and Coke, for its part, has publicly reaffirmed its commitment to the Monster partnership, indicating that, as the product is targeted toward a different type of consumer, it expects Coke Energy to add to the category rather than cannibalize Monster's sales. We never considered Coke Energy an existential threat, and thus far this has proved to be the case, with the brand topping out a low-single-digit market share in the markets where it's available. Monster's resonance with its core consumer has undoubtedly compounded over time, and staunch patrons of incumbents like Monster probably look askance at Coke's entry into the category, which should continue to make customer acquisition more difficult for the latter. Nonetheless, this is a significant development as, particularly at the margin with the incremental consumer that the energy category is targeting, less brand equity has been built by the incumbents. This implies that competition is likely to be more robust among this cohort, placing ceilings on pricing power and floors on customer acquisition costs. The confluence of these dynamics, some yet to come to fruition and some already manifested, limit our confidence in excess returns over 20 years.

Moreover, we do not see a sufficiently discernible cost advantage that would expand the avenues through which Monster could reinforce its competitive positioning and give us more confidence in the sustainability of its economic rents. Our view is that the energy drink industry is too small for any pure-play to merit a cost advantage moat source. Despite being a leading incumbent, Monster's operations are patently subscale from a unit perspective when considered through the lens of the broader beverage industry (energy drinks represent only a low-single-digit percentage of total volume globally). This reality is crystallized through the firm's minuscule manufacturing footprint and need to outsource the lion's share of its production processes and distribution. With scale the only way to plausibly develop a cost advantage in this space, that Monster (and many of its pure-play peers, for that matter) does not own most aspects of its production or distribution implies that its ability to reduce per-unit fixed costs through greater volumes is negligible. In short, there is little labor or overhead that it can leverage. Additionally, Monster and its energy peers are limited in their ability to reduce variable costs through procurement leverage, given that there is material overlap in the requisite input costs (packaging and sweeteners, for example) across different beverage categories, which means the firms' buying power still pales in comparison to numerous other behemoths in the industry.

Ultimately, Monster has carved out a sustainable competitive position in an attractive enclave of the nonalcoholic beverage market, and we believe it deserves a moat. Still, numerous structural limitations on the length of time the firm can be expected to earn economic rents make a narrow moat rating appropriate, in our view.

Fair Value and Profit Drivers Zain Akbari, CFA, Equity Analyst, 31 Aug 2021

Our fair value estimate stands at $79 per share. Our model still reflects higher taxes as we incorporate Morningstar's probability-weighted house view of an increase in the U.S. federal tax rate to 26%. Consumer demand remains vibrant in 2021, and operating margins, which outperformed in 2020 due to the dearth of available marketing occasions, will likely sustain without commensurate brand investment over the medium term. Even as we model 140 basis points of margin contraction in 2021 as the firm is beleaguered by multiple layers of cost pressure, we expect these to be transitory. Longer term, our valuation remains predicated on robust sales growth, modest margin expansion, and stakeholder alignment after fully transitioning to the Coke bottling system. Our fair value implies a 2021 price/ earnings multiple of 29.5.

Regarding the top line, we model a compound annual growth rate of roughly 10.2% through 2025, primarily reflecting healthy volume gains, particularly in international markets as resources are poured into innovation within functional adjacencies and raising consumer awareness. We expect the Monster Energy segment (over 90% of revenue) to dramatically outperform the strategic brands segment (housing certain affordability-oriented brands, such as Predator, as well as trademarks acquired from Coke in 2015, such as NOS), with the latter growing low single digits due to its relatively lower brand cachet.

We expect gross margins to widen modestly to 60.4% in 2025 versus 59.2% in 2020. They are hitting a near-term nadir, weighed down by tight aluminum can supply (which increases inbound freight costs) and commodity inflation in 2021, as well as a number of structural factors, including expansion into countries with lower price points and higher customer acquisition costs and portfolio mix-shifts toward structurally lower-margin products (such as protein/dairy-based energy drinks). However, we foresee

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS Page 9 of 22

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

the gross margin expanding as Monster gains scale in newer markets, optimizes inbound freight logistics, and benefits from more favorable product mix dynamics (such as the growth of Reign Performance Energy). We expect operating margins can sustain at the anomalous 2020 level (35.5%) longer term, as gross margin pressure subsides, administrative costs are leveraged, and outbound freight costs are optimized through technology-enabled capabilities and a denser copacking footprint.

Risk and Uncertainty Zain Akbari, CFA, Equity Analyst, 10 Aug 2021

There are numerous factors that could undermine Monster's competitive positioning. Prominent among these are ESG risks due to potential negative externalities that can accompany energy drink consumption. For example, as some of the product's more potent ingredients, such as guarana or ginseng, receive closer scrutiny from health experts and regulators, several go-to-market restrictions could come to fruition. While some of the more Draconian regulations have been implemented in lower-priority markets in the Middle East and Eastern Europe, North America is not immune to shifts in public sentiment. In Canada, for example, promotions of energy drinks to children 12 years and younger is prohibited.

Similarly, as energy evolves and health-consciousness grows, category growth is beginning to come from more functional and nutritiously robust pockets. As Monster invests more in these segments, its unit economics could deteriorate. For example, the firm recently had to reduce juice content in some of its products to improve margins.

It would be remiss of us not to highlight Monster's strategic reliance on Coke as a tail risk. It is not completely outside the realm of possibility that a shift in competitive dynamics could force Coke to develop rationales for terminating their agreement. This would be a multiyear ordeal, but it would still be tremendously disruptive for Monster, in our view.

Finally, the increasingly viral nature of the media creates omnipresent ESG risk in the form of potential brand degradation, in our view. We believe these risks become near existential for the most consumer-oriented firms that rely on brand resonance most heavily. Anything that is not consistent with the zeitgeist can give rise to the possibility that a company's business model will be disrupted. With Monster's almost singular reliance on its namesake trademark, these risks are particularly stark, and we believe the firm has to work doubly hard to maintain the integrity of its brand.

Capital Allocation Zain Akbari, CFA, Equity Analyst, 3 Mar 2021

We deem Monster's capital allocation rating to be Standard, informed by the three analytical pillars of our framework. Ultimately, we don't believe the firm rates demonstrably positive or negative relative to these guideposts. The balance sheet is pristine, and we expect it to remain so, supported by the operating profile of the business as well as the predilections of management. Nevertheless, we believe

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS Page 10 of 22

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

that the company's investments, in the aggregate, rate as neutral, and we also take a mixed view of its philosophy around shareholder distributions.

As management teams shape the strategic direction of any company, they are understandably core to our investment appraisals. At Monster's helm are CEO Rodney Sacks and CFO Hilton Schlosberg, who led a consortium to purchase Monster's predecessor entity, Hansen's Natural, in 1992 after emigrating from their native South Africa. Since they introduced the Monster energy drink in 2002, we believe the two men have done a commendable job of steering the company and allowing it to carve out a sustainable leadership position in energy. As the energy category continues to evolve and, in some instances, mature, the company remains committed to trialing various innovation platforms, both in the nonalcoholic as well as alcoholic spaces. The firm's innovation prospects will vary by geography, in our view, but we have a constructive view of the fact that the two company stalwarts are not resting on their laurels. The firm continues to parlay the Monster trademark into line extensions that bring new consumers into the category (such as Monster Watermelon, Fiesta, and Rosa), while also making calculated bets with new trademarks for attractive energy subsegments (like Reign). There have been and will continue to be gaffes (such as Café Monster in the U.S.), but we expect management to continue to lean into innovation nonetheless.

The company has been inactive on the merger and acquisition front, with the most meaningful structural changes to its business occurring in 2015 through the strategic agreement with Coca-Cola. The deal was multifaceted, with Coke acquiring an ownership stake in Monster, Monster transferring its nonenergy portfolio to Coke, Coke transferring its energy brands to Monster, and most important in our view, Coke becoming Monster's global preferred distribution partner. While Coke's energy brands (such as NOS and Full Throttle) did not add meaningful value, being able to jettison a nonenergy portfolio with weak brand equity and growth prospects was beneficial to Monster, in our view. Monster also bought American Fruits and Flavors, its primary flavor supplier, in 2016 for roughly $700 million. We do not view this deal as meaningful, with AFF representing less than 1% of total revenue. There were countervailing margin effects, as the firm was able to remove AFF's margin on prior Monster sales from its cost structure, but had to consolidate AFF's sales to independent third parties that boast operating margins below the corporate average.

Sacks and Schlosberg exercise outsize influence, with each beneficially owning close to 10% of outstanding shares and occupying board seats (with Sacks serving as chairman). Still, despite the largely captive board, the fact that they both derive the majority of their net worth from Monster's equity sufficiently aligns their interests with those of common shareowners, in our view. Moreover, a lead independent board director is elected annually, which we believe reduces the likelihood of malfeasance.

Regarding distributions, Monster has never paid a dividend, as it is a staunch proponent of share repurchases, buying back between $500 million and $2 billion worth of stock over the past few years. From our vantage point, a large portion of these buybacks have been executed at prices above intrinsic value, and we would prefer more discipline and prudence in this regard. The firm's indiscriminate share buybacks underpin our mixed view on its shareholder return philosophy. Nevertheless, we do not expect the firm to reverse its stance on dividends for the foreseeable future, and forecast continued repurchase authorizations (we model $1 billion-$2 billion in buybacks throughout our explicit forecast).

Analyst Notes Archive

Monster Delivers Strong Q2 Despite Onerous Supply Chain Constraints; Market Still Overexuberant

Nicholas Johnson, CFA, Equity Analyst, 5 Aug 2021

The bandwagon of bulls in narrow-moat Monster's camp has only gotten fuller in recent months, as many investors have become increasingly enamored with its innovation slate and the attendant growth prospects. With this as the backdrop for its second-quarter earnings print, the firm showcased commendable execution, culminating in modest beats on the top and bottom lines relative to FactSet consensus. Still, while the firm's business has been inoculated from the broader economic disruption wrought by the pandemic, the same cannot be said of the rampant logistics and raw material inflation plaguing its industry. Profitability (particularly gross margin) remains challenged, and at least for now, the light at the end of the tunnel seems more like a flicker. We plan to raise our $76 fair value estimate by a low- to mid-single digit percentage, reflecting time value along with vibrant consumer demand, slightly offset by near-term margin pressure, but the shares still aren't a bargain. Despite a growth profile that is unparalleled across soft drinks, and which has accelerated during COVID-19, the long-term assumptions embedded in its valuation continue to stretch credulity, in our view.

Revenue increased 33.6% year over year to $1.46 billion, driven by a 38% uptick in shipment volume. While the year-ago comp was quite weak, annualized growth on a two-year stack (over 18%) represents the most cogent evidence of the commercial momentum in the business, fueled by accelerated secular trends in the energy category as well as strong innovation (such as the forthcoming True North).

Gross margins have been under structural pressure for some time, as international sales (where the firm often contends with less brand equity and more consolidated distributors) have outperformed relative to the U.S. These structural pressures have been exacerbated by a slew of supply chain challenges, including shortages and inflation (particularly for aluminum), and inbound freight increases.

Buoyant Industry Demand Supports Strong Q1 Results at Monster; Shares Rich as Cost Headwinds Linger Nicholas Johnson, CFA, Equity Analyst, 7 May 2021

The bandwagon of bulls in narrow-moat Monster's camp has only gotten fuller in recent months, as many investors have become increasingly enamored with its innovation slate and the attendant growth prospects. With this as the backdrop for its first-quarter earnings print, the firm delivered mixed results, as revenue was ahead but earnings behind relative to FactSet consensus. While the firm's business has been inoculated from the broader economic disruption wrought by the pandemic, the same cannot be said of the rampant logistics and raw material inflation plaguing its industry (which drove the bottom-line miss). We plan to decrease our 2021 gross margin estimate to 58% (currently 59% versus 59.2% in 2020), but this should be more than superseded by time value as well as top-line outperformance, culminating in a mid-single-digit increase to our $73 fair value estimate. Shares were down 5% after hours, but still look rich to us. Despite a growth profile that is unparalleled across soft drinks, and which has accelerated during COVID-19, the long-term assumptions embedded in its valuation continue to stretch credulity, in our view.

Revenue increased 17% year over year to $1.24 billion, driven by a 20% uptick in shipment volume. While Monster's top-line momentum has been stellar throughout the pandemic, it's worth noting that its formidable competitor, Red Bull, has been growing at an even more torrid clip and gaining share. While management attributes this to the shift of Red Bull's mixology-oriented on-premises consumption to the off-premises, we find this to be a moot point. Red Bull's broader spectrum of consumption occasions and consumer affinity is noteworthy, irrespective of channel.

Sublime Execution Continuing to Drive Upside at Monster, but Valuation Remains Tenuous in Our View Nicholas Johnson, CFA, Equity Analyst, 26 Feb 2021

Robust growth in syndicated energy drink data, speculation around a potential foray into alcoholic seltzer, and a plethora of sell-side bulls all catapulted narrow-moat Monster's stock to new highs in the months leading up to its fourth-quarter earnings print. Ultimately, the firm's execution remains undaunted by pandemic disruption, as it delivered a record quarter ahead of FactSet consensus on both the top and bottom lines (though the latter was largely due to a nonrecurring tax benefit). We plan to raise our $67 fair value estimate by a high-single-digit percentage to reflect time value after rolling our model, as well as elevated near-term sales momentum. In our view, however, current valuation levels still border on untenable, given the rosy assumptions necessary to justify them.

Revenue was $1.2 billion for the quarter, up close to 18% year over year, underpinned by equivalent growth in the Monster energy segment. Depletions in North America remain strong, and with the backdrop in international markets becoming more favorable, momentum looks set to sustain in 2021 (revenue was up a superb 18% during the month of January). Management was typically opaque in their commentary around potential seltzer launches this year, but we deduced from the tenor of the commentary that a nonalcoholic, energy-oriented product is much more likely than an alcoholic variant. While the firm didn't completely disavow the possibility for hard seltzer, it acknowledged the crowdedness of the category. We think this will start to disincentivize new entry, particularly as there is, in our view, a structural limit on how much heterogeneity can be accommodated under such a simple product framework (spiked water).

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS Page 13 of 22

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

Operating margins remained extraordinarily healthy (expanding 240 basis points to 33.6% in the quarter) despite ongoing structural pressure at the gross profit line (as international markets continue to outpace growth in the U.S.).

Monster Results Continue to Wow Investors in Q3, but We Remain Scared by Current Valuation Levels Nicholas Johnson, CFA, Equity Analyst, 5 Nov 2020

Narrow-moat Monster has picked up quite a few bulls lately, as many investors have become increasingly enamored with its innovation slate and the attendant growth prospects. With this as the backdrop for its third-quarter earnings print, the firm extended its string of consensus beats, with steady results that continue to bely the shocks to supply and demand spurred by the pandemic. We plan to raise our fair value estimate by a low- to mid-single-digit percentage to reflect time value as well as higher near-term margins facilitated by social lockdowns. Nevertheless, we still don't see any value in the shares. Despite a growth profile that is unparalleled across soft drinks, the long-term assumptions embedded in its valuation continue to stretch credulity, in our view.

Revenue increased 9.9% year over year to $1.25 billion, driven by 9.6% growth in the Monster Energy segment (94% of sales; housing Monster trademark drinks as well as Reign). The strategic brands segment returned to growth, up 12%. Despite resilient growth in the U.S. energy category, Monster has been losing share to Red Bull this year. Management attributes this to a strong innovation pipeline, as well as a distribution system that, when the pandemic hit, was more nimble than the Coca-Cola bottling system through which Monster goes to market. We don't view these dynamics as indicative of competitive weakness (short-term market share will always oscillate), but we like leadership's response to Red Bull's salvo, specifically its launch of Monster Watermelon in October and its recent hiring of a chief field execution officer.

Gross margins remain under structural pressure, but operating margins were up 190 basis points (to 36.8%) in the quarter on the back of lower advertising and sponsorship costs. While we expect this to persist through 2020, we believe it will have to put promotional spending back into the business longer term in order to continue to differentiate within a maturing energy category.

Monster's Resilience and Execution Are Impeccable, but We Still Look Incredulously at Its Valuation Nicholas Johnson, CFA, Equity Analyst, 5 Aug 2020

The recent surge in narrow-moat Monster's share price, and the rally's catalysts, set the stage for an eventful second-quarter earnings print. Despite low expectations, the firm delivered top- and bottom-line beats relative to our estimates. Management's constructive commentary regarding innovation and business momentum yielded the most salient takeaways, however. On valuation, we plan to raise our $60 fair value estimate by a mid-single-digit percentage to reflect less COVID-19 disruption. The firm's financially attractive business model and growth profile have historically compelled markets to confer a

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

high multiple to its stock. This does not mean the shares have been perennially overvalued, but today, with current multiples even more elevated than they've been historically, the valuation looks stretched to us.

Revenue fell a measly 1% year over year to $1.09 billion (we expected declines in the mid-single digits), as resilience in developed markets offset weakness in some developing markets. These geographic dynamics, in addition to pullbacks in marketing, also bolstered margins (operating margins widened 290 basis points to 37.2%). We expect these benefits to be fleeting though: advertising will ramp in the back half of 2020, and much of Monster's long-term growth will come from less profitable developing markets. We don't think investors are paying enough attention to the structural differences in how the company splits profits along the value chain internationally. While it historically dealt with smaller Coke bottlers willing to accept lower margins in the U.S., it has had to negotiate with more scaled bottlers internationally (where Coke's bottling territories are consolidated among a handful of players). There are structural forces driving the difference between Coke's distribution in the U.S. and abroad, and so while we expect Monster's margins to improve, its growing international exposure should levy a ceiling on the extent of this improvement

Monster Escapes COVID-19 in Q1, but Will Be Walloped in Q2 Given Convenience Channel Exposure

Nicholas Johnson, CFA, Equity Analyst, 8 May 2020

In typically laconic fashion, narrow-moat Monster was the only one of its peers flying under the radar, heading into its first-quarter earnings print having provided no commentary on coronavirus business pressure. With its exposure to on-the-go channels such as convenience stores well understood, we think the market was looking for insight into: channel offsets that could cushion the convenience exposure, and margin prospects, given its largely variable cost model. Investors received mixed signals, as though results were stellar (top- and bottom-line beats relative to CapIQ consensus), management alluded to material weakness in the second quarter despite some offsets in e-commerce. We plan to take down our 2020 estimates (previously calling for 9%-10% growth), but will maintain our $60 fair value estimate as the pandemic should not beget structural change in the firm's trajectory. Still, we believe the robust growth and margin profile is fully priced in, and would point investors seeking beverage exposure toward wide-moat Coca-Cola.

Revenue came in at $1.06 billion, an increase of 12% versus a year ago, driven by trademark Monster internationally and Reign in the U.S. For April, management indicated that net sales were down 20%, though it took heart in depletions that were more resilient and that sales through Amazon were up over 100%. Still, with the preponderance of sales coming from the convenience/gas channel, we expect the top line to be materially impacted as long as confinement remains the modus operandi.

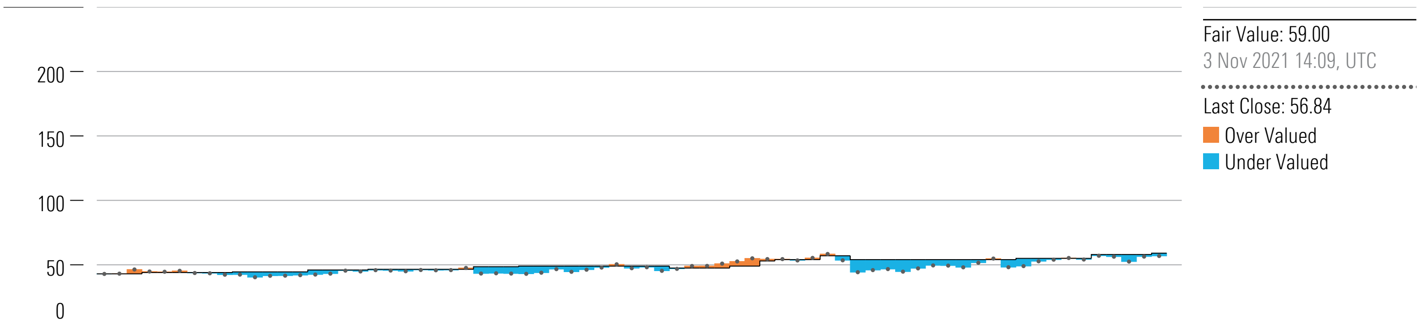
With the top line still being led by international markets, gross margins remained under structural pressure. Operating margins, however, widened 150 basis points to 34.4%, because of solid expense control and a reprieve in sponsorship payments. Going forward, management has proved remarkably adept at running its production and distribution through an efficient web of outsourcing agreements, which we think will mitigate the margin impact of COVID-19.

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

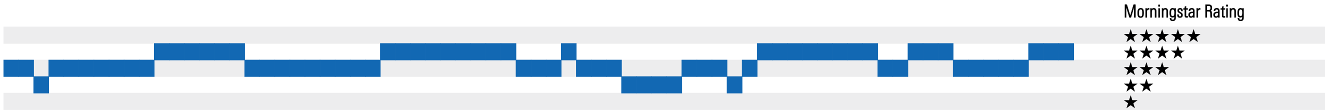
Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Competitors Price vs. Fair Value

Coca-Cola Co KO

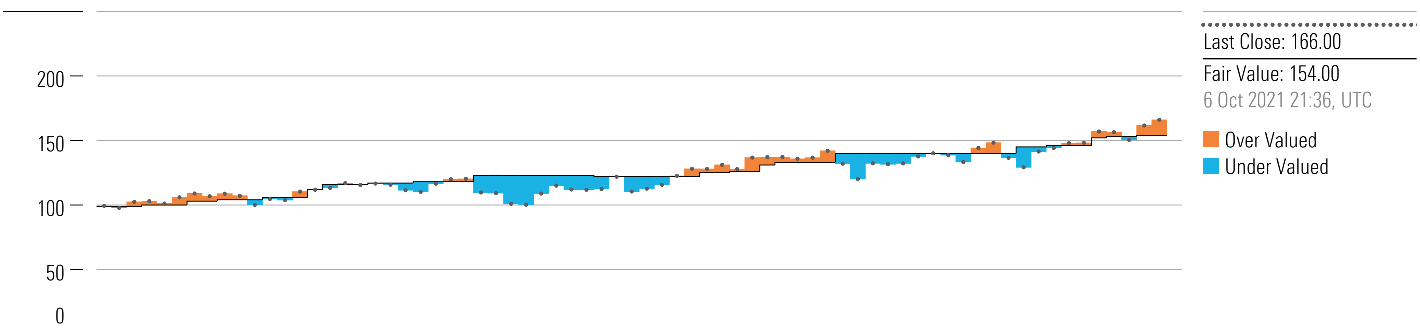


	2016	2017	2018	2019	2020	YTD
Price/Fair Value	0.93	0.99	0.97	1.03	1.02	0.96
Total Return %	-0.23	14.23	6.60	20.27	2.04	5.94

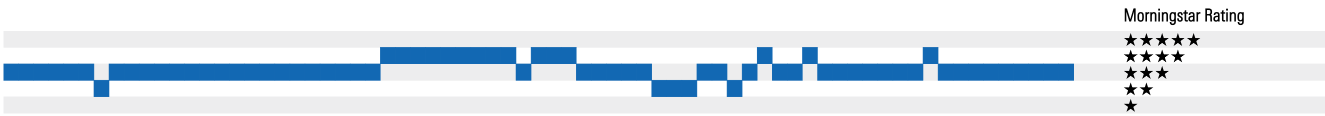


Total Return % as of 5 Nov 2021. Last Close as of 5 Nov 2021. Fair Value as of 3 Nov 2021 14:09, UTC.

PepsiCo Inc PEP



	2016	2017	2018	2019	2020	YTD
Price/Fair Value	0.99	1.02	0.91	1.03	1.06	1.08
Total Return %	7.68	17.64	-4.88	27.14	11.45	14.07

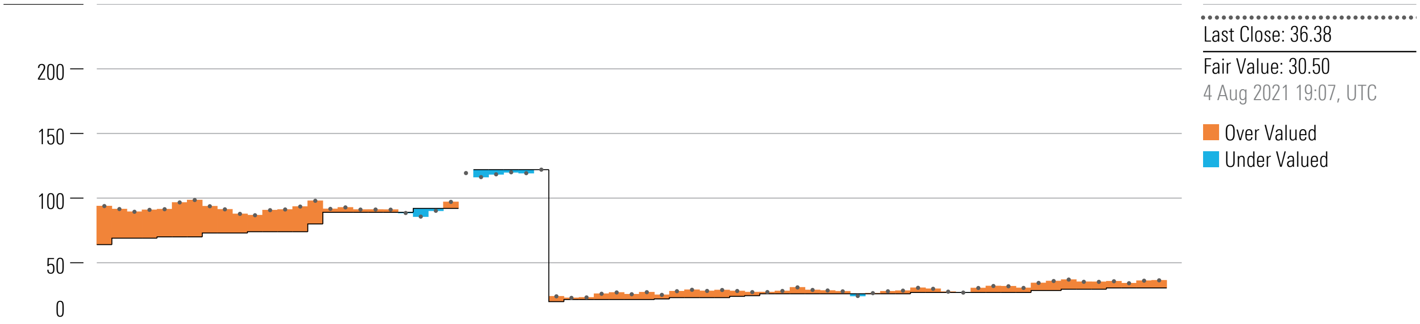


Total Return % as of 5 Nov 2021. Last Close as of 5 Nov 2021. Fair Value as of 6 Oct 2021 21:36, UTC.

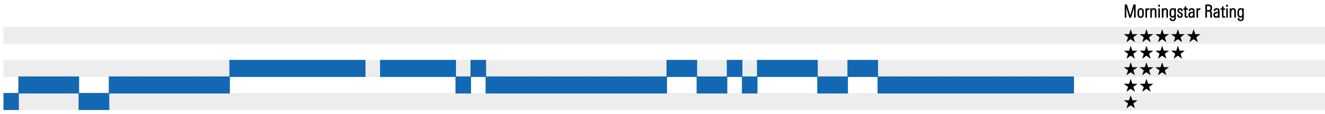
Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS Page 17 of 22

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Keurig Dr Pepper Inc KDP



	2016	2017	2018	2019	2020	YTD
Price/Fair Value	1.23	1.06	1.19	1.11	1.19	1.19
Total Return %	-0.44	9.61	34.06	15.25	12.61	15.80



Total Return % as of 5 Nov 2021. Last Close as of 5 Nov 2021. Fair Value as of 4 Aug 2021 19:07, UTC.

Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS

Monster Beverage Corp MNST ★★ 5 Nov 2021 21:24, UTC

Last Price	Fair Value Estimate	Price/FVE	Market Cap	Economic Moat™	Moat Trend™	Uncertainty	Capital Allocation	ESG Risk Rating Assessment[1]
91.63 USD 5 Nov 2021	79.00 USD 10 Aug 2021 21:28, UTC	1.16	46.43 USD Bil 4 Nov 2021	Narrow	Stable	Medium	Standard	3 Nov 2021 05:00, UTC

Morningstar Historical Summary

Financials as of 30 Jun 2021

Fiscal Year, ends 31 Dec	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD	TTM
Revenue (USD Mil)	1,703	2,061	2,246	2,465	2,723	3,049	3,369	3,807	4,201	4,599	2,706	5,148
Revenue Growth %	30.6	21.0	9.0	9.7	10.5	12.0	10.5	13.0	10.3	9.5	25.5	19.5
EBITDA (USD Mil)	474	571	596	773	763	1,126	1,248	1,341	1,468	1,694	968	1,857
EBITDA Margin %	27.8	27.7	26.5	31.4	28.0	36.9	37.0	35.2	34.9	36.8	35.8	36.1
Operating Income (USD Mil)	456	551	573	748	732	1,085	1,199	1,284	1,403	1,633	940	1,801
Operating Margin %	26.8	26.7	25.5	30.3	26.9	35.6	35.6	33.7	33.4	35.5	34.8	35.0
Net Income (USD Mil)	286	340	339	483	547	713	821	993	1,108	1,410	719	1,538
Net Margin %	16.8	16.5	15.1	19.6	20.1	23.4	24.4	26.1	26.4	30.7	26.6	29.9
Diluted Shares Outstanding (Mil)	560	549	520	523	578	600	577	564	547	535	535	535
Diluted Earnings Per Share (USD)	0.51	0.62	0.65	0.92	0.95	1.19	1.42	1.76	2.03	2.64	1.34	2.88
Dividends Per Share (USD)	—	—	—	—	—	—	—	—	—	—	—	—

Valuation as of 29 Oct 2021

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Recent Qtr	TTM
Price/Sales	5.3	4.7	5.4	7.8	10.3	9.2	11.0	7.6	8.5	11.2	9.2	8.8
Price/Earnings	31.7	28.4	35.7	43.3	51.8	39.8	46.3	29.3	31.9	41.7	30.9	29.5
Price/Cash Flow	29.6	33.7	34.1	39.8	122.0	97.1	34.2	27.5	30.1	40.0	31.4	30.1
Dividend Yield %	—	—	—	—	—	—	—	—	—	—	—	—
Price/Book	8.6	13.6	11.8	13.1	6.5	7.4	9.5	6.9	8.3	10.5	8.0	7.6
EV/EBITDA	15.5	14.8	18.0	22.2	36.0	22.0	27.7	19.1	22.3	28.3	0.0	0.0

Operating Performance / Profitability as of 30 Jun 2021

Fiscal Year, ends 31 Dec	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD	TTM
ROA %	23.4	28.3	27.5	28.8	14.6	14.7	18.4	21.3	22.9	24.8	10.8	25.1
ROE %	31.7	41.9	41.4	38.5	17.3	17.5	22.7	26.5	28.5	30.2	13.0	30.4
ROIC %	31.7	41.9	41.4	38.5	17.3	17.5	22.7	26.5	28.5	30.2	13.0	30.4
Asset Turnover	1.4	1.7	1.8	1.5	0.7	0.6	0.8	0.8	0.9	0.8	0.4	0.8

Financial Leverage

Fiscal Year, ends 31 Dec	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Recent Qtr	TTM
Debt/Capital %	—	—	—	—	—	—	—	—	—	—	—	—
Equity/Assets %	71.9	61.8	69.9	78.1	86.3	80.2	81.3	79.8	81.0	83.2	83.5	—
Total Debt/EBITDA	—	—	—	—	—	—	—	—	—	—	—	—
EBITDA/Interest Expense	—	—	—	—	—	—	—	—	—	—	—	—

Morningstar Analyst Historical/Forecast Summary as of 29 Aug 2021

Financials

			Estimates		
Fiscal Year, ends 31 Dec	2019	2020	2021	2022	2023
Revenue (USD Mil)	4,201	4,599	5,431	6,057	6,526
Revenue Growth %	10.3	9.5	18.1	11.5	7.7
EBITDA (USD Mil)	1,468	1,694	1,931	2,192	2,387
EBITDA Margin %	34.9	36.8	35.6	36.2	36.6
Operating Income (USD Mil)	1,403	1,633	1,850	2,101	2,289
Operating Margin %	33.4	35.5	34.1	34.7	35.1
Net Income (USD Mil)	1,108	1,410	1,426	1,601	1,721
Net Margin %	26.4	30.7	26.3	26.4	26.4
Diluted Shares Outstanding (Mil)	547	535	531	523	511
Diluted Earnings Per Share(USD)	2.03	2.64	2.68	3.06	3.36
Dividends Per Share(USD)	0.00	0.00	0.00	0.00	0.00

Forward Valuation

			Estimates		
	2019	2020	2021	2022	2023
Price/Sales	8.1	10.6	8.9	8.0	7.4
Price/Earnings	31.3	35.0	34.2	29.9	27.3
Price/Cash Flow	33.7	37.1	34.0	29.8	27.3
Dividend Yield %	—	—	—	—	—
Price/Book	—	—	—	—	—
EV/EBITDA	22.3	28.3	24.6	21.7	19.9

Research Methodology for Valuing Companies

Overview

At the heart of our valuation system is a detailed projection of a company's future cash flows, resulting from our analysts' research. Analysts create custom industry and company assumptions to feed income statement, balance sheet, and capital investment assumptions into our globally standardized, proprietary discounted cash flow, or DCF, modeling templates. We use scenario analysis, indepth competitive advantage analysis, and a variety of other analytical tools to augment this process. Moreover, we think analyzing valuation through discounted cash flows presents a better lens for viewing cyclical companies, high-growth firms, businesses with finite lives (e.g., mines), or companies expected to generate negative earnings over the next few years. That said, we don't dismiss multiples altogether but rather use them as supporting cross-checks for our DCF-based fair value estimates. We also acknowledge that DCF models offer their own challenges (including a potential proliferation of estimated inputs and the possibility that the method may miss shortterm market-price movements), but we believe these negatives are mitigated by deep analysis and our longterm approach.

Morningstar's equity research group ("we," "our") believes that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate, in Morningstar terminology. Five-star stocks sell for the biggest risk adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth.

Four key components drive the Morningstar rating: (1) our assessment of the firm's economic moat, (2) our estimate of the stock's fair value, (3) our uncertainty around that fair value estimate and (4) the current market price. This process ultimately culminates in our singlepoint star rating.

1. Economic Moat

The concept of an economic moat plays a vital role not only in our qualitative assessment of a firm's long-term investment potential, but also in the actual calculation of our fair value estimates. An economic moat is a structural feature that allows a firm to sustain excess profits over a long period of time. We define economic profits as returns on invested capital (or ROIC) over and above our estimate of a firm's cost of capital, or weighted average cost of capital (or WACC). Without a moat, profits are more susceptible to competition. We have identified five sources of economic moats: intangible assets, switching costs, network effect, cost advantage, and efficient scale.

Companies with a narrow moat are those we believe are more likely than not to achieve normalized excess returns for at least the next 10 years. Wide-moat companies are those in which we have very high confidence that excess returns will remain for 10 years, with excess returns more likely than not to remain for at least 20 years. The longer a firm generates economic profits, the higher its intrinsic value. We believe low-quality, no-moat companies will see their normalized returns gravitate toward the firm's cost of capital more quickly than companies with moats.

When considering a company's moat, we also assess whether there is a substantial threat of value destruction, stemming from risks related to ESG, industry disruption, financial health, or other idiosyncratic issues. In this context, a risk is considered potentially value destructive if its occurrence would eliminate a firm's economic profit on a cumulative or midcycle basis. If we deem the probability of occurrence sufficiently high, we would not characterize the company as possessing an economic moat.

To assess the sustainability of excess profits, analysts perform ongoing assessments of the moat trend. A firm's moat trend is positive in cases where we think its sources of competitive advantage are growing stronger; stable where we don't anticipate changes to competitive advantages over the next several years; or negative when we see signs of deterioration.

2. Estimated Fair Value

Combining our analysts' financial forecasts with the firm's economic moat helps us assess how long returns on invested capital are likely to exceed the firm's cost of capital. Returns of firms with a wide economic moat rating are assumed to fade to the perpetuity period over a longer period of time than the returns of narrow-moat firms, and both will fade slower than no-moat firms, increasing our estimate of their intrinsic value.

Our model is divided into three distinct stages:

Stage I: Explicit Forecast

In this stage, which can last five to 10 years, analysts make full financial statement forecasts, including items such as revenue, profit margins, tax rates, changes in workingcapital accounts, and capital spending. Based on these projections, we calculate earnings before interest, after taxes (EBI) and the net new investment (NNI) to derive our annual free cash flow forecast.

Stage II: Fade

The second stage of our model is the period it will take the company's return on new invested capital—the return on capital of the next dollar invested ("RONIC")—to decline (or rise) to its cost of capital. During the Stage II period, we use a formula to approximate cash flows in lieu of explicitly modeling the income statement, balance sheet, and cash flow statement as we do in Stage I. The length of the second stage depends on the strength of the company's economic moat. We forecast this period to last anywhere from one year (for companies with no economic moat) to 10–15 years or more (for wide-moat companies). During this period, cash flows are forecast using four assumptions: an average growth rate for EBI over the period, a normalized investment rate, average return on new invested capital (RONIC), and the number of years until perpetuity, when excess returns cease. The investment rate and return on new invested capital decline until a perpetuity value is calculated. In the case of firms that do not earn their cost of capital, we assume marginal ROICs rise to the firm's cost of capital (usually attributable to less reinvestment), and we may truncate the second stage.

Stage III: Perpetuity

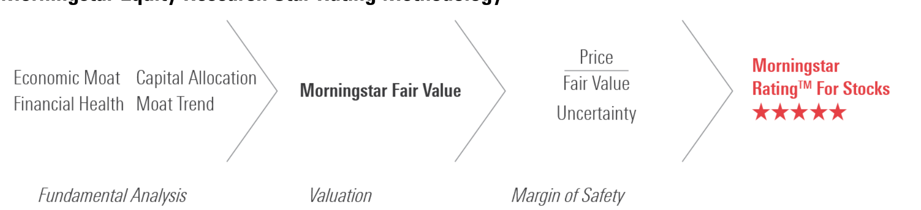
Once a company's marginal ROIC hits its cost of capital, we calculate a continuing value, using a standard perpetuity formula. At perpetuity, we assume that any growth or decline or investment in the business neither creates nor destroys value and that any new investment provides a return in line with estimated WACC.

Because a dollar earned today is worth more than a dollar earned tomorrow, we discount our projections of cash flows in stages I, II, and III to arrive at a total present value of expected future cash flows. Because we are modeling free cash flow to the firm—representing cash available to provide a return to all capital providers—we discount future cash flows using the WACC, which is a weighted average of the costs of equity, debt, and preferred stock (and any other funding sources), using expected future proportionate long-term, market-value weights.

3. Uncertainty Around That Fair Value Estimate

Morningstar's Uncertainty Rating captures a range of likely potential intrinsic values for a company and uses it to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The Uncertainty Rating represents the analysts' ability to

Morningstar Equity Research Star Rating Methodology



Morningstar Equity Analyst Report | Report as of 5 Nov 2021 23:06, UTC | Reporting Currency: USD | Trading Currency: USD | Exchange: NASDAQ - ALL MARKETS Page 20 of 22

Research Methodology for Valuing Companies

bound the estimated value of the shares in a company around the Fair Value Estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, exposure to material ESG risks, and other company-specific factors.

Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case, and a 25% probability that the company will perform worse than the bear case. The distance between the bull and bear cases is an important indicator of the uncertainty underlying the fair value estimate. In cases where there is less than a 25% probability of an event, but where the event could result in a material decline in value, analysts may adjust the uncertainty rating to reflect the increased risk. Analysts may also make a fair value adjustment to reflect the impact of this event.

Our recommended margin of safety widens as our uncertainty of the estimated value of the equity increases. The more uncertain we are about the estimated value of the equity, the greater the discount we require relative to our estimate of the value of the firm before we would recommend the purchase of the shares. In addition, the uncertainty rating provides guidance in portfolio construction based on risk tolerance.

Our uncertainty ratings for our qualitative analysis are low, medium, high, very high, and extreme.

	Margin of Safety	
Qualitative Analysis Uncertainty Ratings	★★★★★Rating	★Rating
Low	20% Discount	25% Premium
Medium	30% Discount	35% Premium
High	40% Discount	55% Premium
Very High	50% Discount	75% Premium
Extreme	75% Discount	300% Premium

4. Market Price

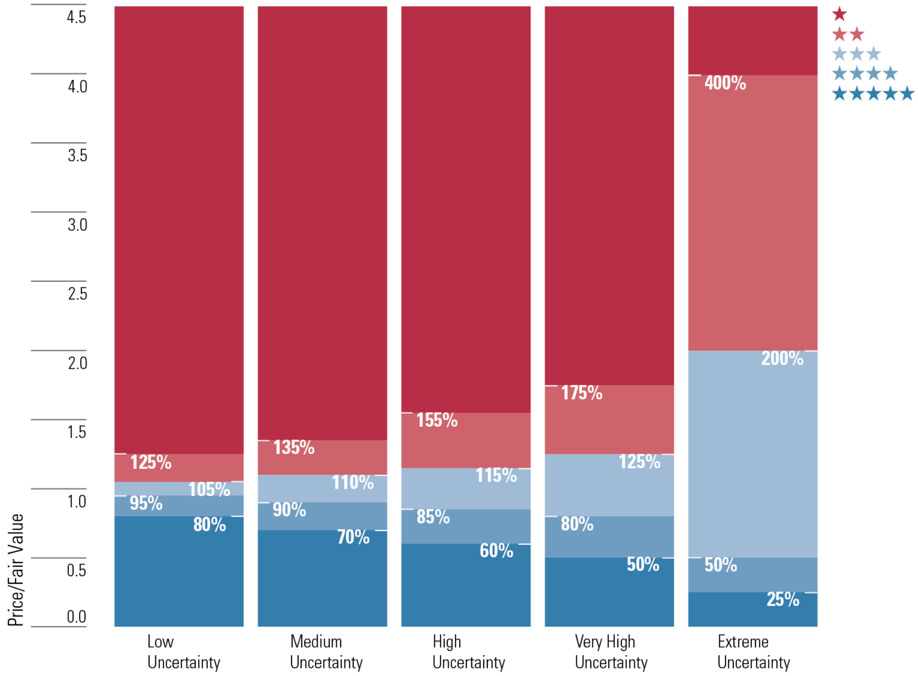
The market prices used in this analysis and noted in the report come from exchange on which the stock is listed which we believe is a reliable source.

For more details about our methodology, please go to https://shareholders.morningstar.com.

Morningstar Star Rating for Stocks

Once we determine the fair value estimate of a stock, we compare it with the stock's current market price on a daily basis, and the star rating is automatically re-calculated at the market close on every day the market on which the stock is listed is open. Our analysts keep close tabs on the companies they follow, and, based on thorough and ongoing analysis, raise or lower their fair value estimates as warranted.

Morningstar Equity Research Star Rating Methodology



Please note, there is no predefined distribution of stars. That is, the percentage of stocks that earn 5 stars can fluctuate daily, so the star ratings, in the aggregate, can serve as a gauge of the broader market's valuation. When there are many 5-star stocks, the stock market as a whole is more undervalued, in our opinion, than when very few companies garner our highest rating.

We expect that if our base-case assumptions are true the market price will converge on our fair value estimate over time generally within three years (although it is impossible to predict the exact time frame in which market prices may adjust).

Our star ratings are guideposts to a broad audience and individuals must consider their own specific investment goals, risk tolerance, tax situation, time horizon, income needs, and complete investment portfolio, among other factors.

The Morningstar Star Ratings for stocks are defined below:

★★★★★ We believe appreciation beyond a fair risk adjusted return is highly likely over a multiyear time frame. Scenario analysis developed by our analysts indicates that the current market price represents an excessively pessimistic outlook, limiting downside risk and maximizing upside potential.

★★★★ We believe appreciation beyond a fair risk-adjusted return is likely.

★★★ Indicates our belief that investors are likely to receive a fair risk-adjusted return (approximately cost of equity).

★★ We believe investors are likely to receive a less than fair risk-adjusted return.

★ Indicates a high probability of undesirable risk-adjusted returns from the current market price over a multiyear time frame, based on our analysis. Scenario analysis by our analysts indicates that the market is pricing in an excessively optimistic outlook, limiting upside potential and leaving the investor exposed to Capital loss.

Other Definitions

Last Price: Price of the stock as of the close of the market of the last trading day before date of the report.

Capital Allocation Rating: Our Capital Allocation (or Stewardship) Rating represents our assessment of the quality of management's capital allocation, with particular emphasis on the firm's balance sheet, investments, and shareholder distributions. Analysts consider companies' investment strategy and valuation, balance sheet management, and dividend and share buyback policies. Corporate governance factors are only considered if they are likely to materially impact shareholder value, though either the balance sheet, investment, or shareholder distributions. Analysts assign one of three ratings: "Exem-

Research Methodology for Valuing Companies

plary", "Standard", or "Poor". Analysts judge Capital Allocation from an equity holder's perspective. Ratings are determined on a forward looking and absolute basis. The Standard rating is most common as most managers will exhibit neither exceptionally strong nor poor capital allocation.

Capital Allocation (or Stewardship) analysis published prior to Dec. 9, 2020, was determined using a different process. Beyond investment strategy, financial leverage, and dividend and share buyback policies, analysts also considered execution, compensation, related party transactions, and accounting practices in the rating.

Capital Allocation Rating: Our Capital Allocation (or Stewardship) Rating represents our assessment of the quality of management's capital allocation, with particular emphasis on the firm's balance sheet, investments, and shareholder distributions. Analysts consider companies' investment strategy and valuation, balance sheet management, and dividend and share buyback policies. Corporate governance factors are only considered if they are likely to materially impact shareholder value, though either the balance sheet, investment, or shareholder distributions. Analysts assign one of three ratings: "Exemplary", "Standard", or "Poor". Analysts judge Capital Allocation from an equity holder's perspective. Ratings are determined on a forward looking and absolute basis. The Standard rating is most common as most managers will exhibit neither exceptionally strong nor poor capital allocation.

Capital Allocation (or Stewardship) analysis published prior to Dec. 9, 2020, was determined using a different process. Beyond investment strategy, financial leverage, and dividend and share buyback policies, analysts also considered execution, compensation, related party transactions, and accounting practices in the rating.

Sustainalytics ESG Risk Rating Assessment: The ESG Risk Rating Assessment is provided by Sustainalytics; a Morningstar company.

Sustainalytics' ESG Risk Ratings measure the degree to which company's economic value at risk is driven by environment, social and governance (ESG) factors.

Sustainalytics analyzes over 1,300 data points to assess a company's exposure to and management of ESG risks. In other words, ESG Risk Ratings measures a company's unmanaged ESG Risks represented as a quantitative score. Unmanaged Risk is measured on an open-ended scale starting at zero (no risk) with lower scores representing less unmanaged risk and, for 95% of cases, the unmanaged ESG Risk score is below 50.

Based on their quantitative scores, companies are grouped into one of five Risk Categories (negligible, low, medium, high, severe). These risk categories are absolute, meaning that a 'high risk' assessment reflects a comparable degree of unmanaged ESG risk across all subindustries covered.

The ESG Risk Rating Assessment is a visual representation of Sustainalytics ESG Risk Categories on a 1 to 5 scale. Companies with Negligible Risk = 5 Globes, Low Risk = 4, Medium Risk = 3 Globes, High Risk = 2 Globes, Severe Risk = 1 Globe. For more information, please visit sustainalytics.com/esg-ratings/

Ratings should not be used as the sole basis in evaluating a company or security. Ratings involve unknown risks and uncertainties which may cause our expectations not to occur or to differ significantly from what was expected and should not be considered an offer or solicitation to buy or sell a security.

Risk Warning

Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. A security investment return and an investor's principal value will fluctuate so that, when redeemed, an investor's shares may be worth more or less than their original cost. A security's current investment performance may be lower or higher than the investment performance noted within the report. Morningstar's Uncertainty Rating serves as a useful data point with respect to sensitivity analysis of the assumptions used in our determining a fair value price.

General Disclosure

Unless otherwise provided in a separate agreement, recipients accessing this report may only use it in the country in which the Morningstar distributor is based. Unless stated otherwise, the original distributor of the report is Morningstar Research Services LLC, a U.S.A. domiciled financial institution.

This report is for informational purposes only and has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient. This publication is intended to provide information to assist institutional investors in making their own investment decisions, not to provide investment advice to any specific investor. Therefore, investments discussed and recommendations made herein may not be suitable for all investors: recipients must exercise their own independent judgment as to the suitability of such investments and recommendations in the light of their own investment objectives, experience, taxation status and financial position.

The information, data, analyses and opinions presented herein are not warranted to be accurate, correct, complete or timely. Unless otherwise provided in a separate agreement, neither Morningstar, Inc. or the Equity Research Group represents that the report contents meet all of the presentation and/or disclosure standards applicable in the jurisdiction the recipient is located.

Except as otherwise required by law or provided for in a separate agreement, the analyst, Morningstar, Inc. and the Equity Research Group and their officers, directors and employees shall not be responsible or liable for any trading decisions, damages or other losses resulting from, or related to, the information, data, analyses or opinions within the report. The Equity Research Group encourages recipients recipients of this report to read all relevant issue documents (e.g., prospectus) pertaining to the security concerned, including without limitation, information relevant to its investment objectives, risks, and costs before making an in vestment decision and when deemed necessary, to seek the advice of a legal, tax, and/or accounting professional.

The Report and its contents are not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Morningstar, Inc. or its affiliates to any registration or licensing requirements in such jurisdiction.

Where this report is made available in a language other than English and in the case of inconsistencies between the English and translated versions of the report, the English version will control and supersede any ambiguities associated with any part or section of a report that has been issued in a foreign language. Neither the analyst, Morningstar, Inc., or the Equity Research Group guarantees the accuracy of the translations.

This report may be distributed in certain localities, countries and/or jurisdictions ("Territories") by independent third parties or independent intermediaries and/or distributors ("Distributors"). Such Distributors are not acting as agents or representatives of the analyst, Morningstar, Inc. or the Equity Research Group. In Territories where a Distributor distributes our report, the Distributor is solely responsible for complying with all applicable regulations, laws, rules, circulars, codes and guidelines established by local and/or regional regulatory bodies, including laws in connection with the distribution third-party research reports.

Conflicts of Interest

- No interests are held by the analyst with respect to the security subject of this investment research report.

Research Methodology for Valuing Companies

- Morningstar, Inc. may hold a long position in the security subject of this investment research report that exceeds 0.5% of the total issued share capital of the security. To determine if such is the case, please click http://msi.morningstar.com and http://mdi.morningstar.com.
- Analysts' compensation is derived from Morningstar, Inc.'s overall earnings and consists of salary, bonus and in some cases restricted stock.
- Neither Morningstar, Inc. or the Equity Research Group receives commissions for providing research nor do they charge companies to be rated.
- Neither Morningstar, Inc. or the Equity Research Group is a market maker or a liquidity provider of the security noted within this report.
- Neither Morningstar, Inc. or the Equity Research Group has been a lead manager or co-lead manager over the previous 12-months of any publicly disclosed offer of financial instruments of the issuer.
- Morningstar, Inc.'s investment management group does have arrangements with financial institutions to provide portfolio management/investment advice some of which an analyst may issue investment research reports on. However, analysts do not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them.
- Morningstar, Inc. is a publicly traded company (Ticker Symbol: MORN) and thus a financial institution the security of which is the subject of this report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s proxy statement, "Security Ownership of Certain Beneficial Owners and Management" section https://shareholders.morningstar.com/investor-relations/financials/sec-filings/default.aspx
- Morningstar, Inc. may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship and website advertising.

Further information on Morningstar, Inc.'s conflict of interest policies is available from https://shareholders.morningstar.com. Also, please note analysts are subject to the CFA Institute's Code of Ethics and Standards of Professional Conduct.

For a list of securities which the Equity Research Group currently covers and provides written analysis on please contact your local Morningstar office. In addition, for historical analysis of securities covered, including their fair value estimate, please contact your local office.

For Recipients in Australia: This Report has been issued and distributed in Australia by Morningstar Australasia Pty Ltd (ABN: 95 090 665 544; ASFL: 240892). Morningstar Australasia Pty Ltd is the provider of the general advice ('the Service') and takes responsibility for the production of this report. The Service is provided through the research of investment products.

To the extent the Report contains general advice it has been prepared without reference to an investor's objectives, financial situation or needs. Investors should consider the advice in light of these matters and, if applicable, the relevant Product Disclosure Statement before making any decision to invest. Refer to our Financial Services Guide (FSG) for more information at http://www.morningstar.com.au/fsg.pdf.

For Recipients in Hong Kong: The Report is distributed by Morningstar Investment Management Asia Limited, which is regulated by the Hong Kong Securities and Futures Commission to provide services to professional investors only. Neither Morningstar Investment Management Asia Limited, nor its representatives, are acting or will be deemed to be acting as an investment professional to any recipients of this information unless expressly agreed to by Morningstar Investment Management Asia Limited. For enquiries regarding this research, please contact a Morningstar Investment Management Asia Limited Licensed Representative at https://shareholders.morningstar.com.

For recipients in India: This Investment Research is issued by Morningstar Investment Adviser India Private Limited. Morningstar Investment Adviser India Private Limited is registered with the Securities and Exchange Board of India (Registration number INA000001357) and provides investment advice and research. Morningstar Investment Adviser India Private Limited has not been the subject of any disciplinary action by SEBI or any other legal/regulatory body. Morningstar Investment Adviser India Private Limited is a wholly owned subsidiary of Morningstar Investment Management LLC. In India, Morningstar Investment Adviser India Private Limited has one associate, Morningstar India Private Limited, which provides data related services, financial data analysis and software development. The Research Analyst has not served as an officer, director or employee of the fund company within the last 12 months, nor has it or its associates engaged in market making activity for the fund company.

*The Conflicts of Interest disclosure above also applies to relatives and associates of Manager Research Analysts in India # The Conflicts of Interest disclosure above also applies to associates of Manager Research Analysts in India. The terms and conditions on which Morningstar Investment Adviser India Private Limited offers Investment Research to clients, varies from client to client, and are detailed in the respective client agreement.

For recipients in Japan: The Report is distributed by Ibbotson Associates Japan, Inc., which is regulated by Financial Services Agency. Neither Ibbotson Associates Japan, Inc., nor its representatives, are acting or will be deemed to be acting as an investment professional to any recipients of this information.

For recipients in Singapore: For Institutional Investor audiences only. Recipients of this report should contact their financial professional in Singapore in relation to this report. Morningstar, Inc., and its affiliates, relies on certain exemptions (Financial Advisers Regulations, Section 32B and 32C) to provide its investment research to recipients in Singapore.