Research Highlights

A weekly summary of our best ideas and developments in the companies we cover.

Morningstar Equity Research
June 18-22, 2018

Contents

Online
Interactive web-based models are available for our Best Ideas at Trefis.

Thoughts From the Video Game Conference

We recently attended E3, the premier video game conference, in Los Angeles, where we met with representatives from several companies across the industry. We walked away from the conference with increased confidence in both microtransactions and esports, particularly with respect to challenges to the recurrent revenue model and the emergence of new challengers in esports. We still think the trends toward microtransactions and esports are two of the most important within the industry, and we still view industry leaders under our coverage as net winners from these trends.

- Microtransactions continue to grow in importance to publishers' bottom line, despite the backlash from gamers. We expect that publishers will continue to use microtransactions to offset the expanding cost of developing games, but they must ensure that microtransactions don't overly affect game progression.
- More regulators are examining whether loot boxes should be regulated under gambling laws. Despite a blasé response from game companies at E3, we expect video game developers to adopt rules and guidelines to stave off more stringent regulation from authorities within the U.S. and internationally.
- *Fortnite* is emerging as a credible threat to the top esports titles, including *League of Legends*. The game's popularity and a $100 million prize pool should help *Fortnite* reach the esports pinnacle.
- We recently raised our fair value estimates for Activision Blizzard and EA on increased confidence around the long-term impact of microtransactions and fewer worries about the backlash against loot boxes. With the stocks still trading in 2-star territory with respect to our new fair value estimates, we would wait for a pullback before investing. We prefer Activision Blizzard to EA, given its much higher exposure to the potential esports opportunity.
- We significantly increased our fair value estimate for Take-Two to $114, as we are now incorporating the impact of the projected release of *Grand Theft Auto VI* in fiscal 2022. We believe that the game will launch around the launch of the next console generation, which we expect to occur in 2021 or 2022.
- We still view Ubisoft as overvalued, despite recently increasing our fair value estimate to EUR 66 due to increased conviction around the long-term growth of microtransactions and the impact of its recent deal with Tencent, which will open up the Chinese market to the firm.

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A New Look at Waste Connections

After reviewing Waste Connections' competitive positioning and transferring coverage to a new analyst, we are upgrading our economic moat rating to wide from narrow. The 2016 Progressive Waste merger added material goodwill to the balance sheet, pushing capital returns below the firm's historical run rate. Nonetheless, its myriad tuck-in deals have proved value-accretive, management is swiftly improving Progressive's profitability, and like Waste Management and Republic, Waste Connections' traditional solid waste operations enjoy robust competitive advantages rooted in intangible assets (regulatory permits) and cost advantage (route density), with the added benefit of focusing on less competitive secondary markets.

Regulatory permits create enormous structural barriers to entry for the firm's disposal operations, thus producing a strong intangible asset. Developing and operating a landfill requires a host of permits and federal and local government approvals (zoning, environmental protection) that are costly and challenging to secure. On top of that, "not in my backyard" opposition often generates formidable roadblocks to constructing new landfills as well. Waste Connections has also built meaningful cost advantages stemming from superior local route density relative to small waste haulers, most of which aren't vertically integrated. Scale matters in route-based businesses because it bestows greater utilization and leverage over a vast fixed-cost base.

We are also raising our fair value estimate to $59 from $57 because of the moat rating change, partly offset by recalibrating our midcycle operating margin forecast down slightly. That said, the shares are trading in modestly overvalued territory—a common theme among the waste firms we cover. Recycled commodity prices are depressed, but the industry leaders are seeing healthy growth within their traditional solid waste operations thanks to U.S. macroeconomic tailwinds, and this dynamic hasn't escaped investors.

Behind our $59 fair value estimate, we assume that Waste Connections can generate average organic top-line expansion near 4% over our five-year forecast horizon, with another 200- to 250-basis-point boost from tuck-in acquisitions (we look for roughly 350 basis points of deal-related growth in 2018). This reflects average organic traditional solid waste pricing gains near 2.5% (excluding fuel) and volume growth of 1.0%-1.5%. Core solid waste yields will be slightly higher than that this year (3.0%-3.5%) thanks to healthy open-market pricing and since inflation is on the rise (a large portion of the firm's municipal contract pricing is CPI indexed). Waste Connections' core yields have increased slightly less than 3% on average over the business cycle, and waste volume is generally linked to GDP growth, particularly in terms of housing starts. We are assuming recycled commodity prices stabilize by 2019, though volatility remains a risk that depends in large part on China's appetite for imported old corrugated cardboard and mixed paper in the years ahead.

In terms of profitability, we are baking in a midcycle adjusted operating margin near 20.7% (in 2022), which compares with 17.6% in 2017 and our 17.9% forecast for 2018. Our midcycle forecast implies the company successfully takes Progressive Waste's margins up to Waste Connections' historical level—Waste Connections posted a 21% average adjusted margin between 2010 and 2015. It also assumes management avoids overly complicated transactions in the years ahead and the firm secures favorable economics in its recycling business.

Bulls Say

- Waste Connections' traditional solid waste operations are enjoying solid pricing and volume tailwinds from healthy North American macroeconomic growth, including positive trends in U.S. housing starts.
- The firm's long-running focus on serving secondary (rural and suburban) markets helps minimize exposure to price competition.
- Waste Connections generates industry-leading operating margins, and it's making impressive progress applying its pricing discipline and robust operational know-how to the former Progressive Waste operations.

Bears Say

- Although it represents only a sliver of revenue, Waste Connections' recycling operations are grappling with depressed prices for old corrugated cardboard and mixed paper linked to recently implemented import restrictions in China.
- At Waste Connections' current size, acquisition activity may need to ramp up considerably in order to sustain historical growth levels, which could open up the temptation to overspend on a large deal.
- The tight U.S. labor market is driving up wages as the firm looks to recruit and retain qualified drivers, mechanics, and equipment operators.

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Trouble Brewing at Starbucks?

On the surface, Starbucks' strategic priorities that were announced on June 20 are positives. Beverage and food innovations emphasizing health and wellness and personalized marketing efforts through the digital platform should benefit comps over time. Store-base optimization (including 150 closings in the United States next year and exploring licensing opportunities in certain markets outside the U.S. and China) and reduced selling, general, and administrative expenses (by as much as 1 point as a percentage of system sales, compared with 4.5% year to date) are positioned to improve the bottom line. That said, like many investors, we are in the show-me camp after several quarters of operational missteps, and we wonder if more significant actions may be required.

Management's updated outlook—including third-quarter global comps of 1% and a $0.10 reduction in its full-year adjusted EPS range to $2.39-$2.43—isn't terribly surprising, given the April racial bias incident in Philadelphia and subsequent employee training efforts. Following the second-quarter update, we wrote that 3% full-year global comps were likely a best-case scenario and that other strategic efforts in the works (personalized happy hour, labor deployment) would probably weigh on margins.

However, while management said that comps trends had improved and are currently running around 3%, we find the decline in China segment comps to approximately flat growth from recent trends in the high single digits troubling, especially with management highlighting underperforming holiday items as one of the key reasons (in addition to Starbucks lacking delivery options and cannibalization from new stores).

While we're not ready to revisit the brand intangible asset behind our wide moat rating, we find the execution missteps frustrating and have decreased our fair value estimate to $64 per share from $68 following the company's updated fiscal 2018 outlook and other strategic priority plans.

We still view Starbucks' China and consumer packaged goods businesses as underappreciated assets and believe an increase in the company's cash return target ($25 billion now expected to be returned to shareholders during 2018-20, up from $20 billion announced in last month's Nestle partnership news) should be attractive to longer-term investors. Still, we also believe that if the impact of these strategic efforts is not apparent over the near term—particularly on the product innovation and digital marketing fronts in the U.S. and China—leadership changes may be required to accelerate turnaround efforts. We would also not be surprised to see more stores close after fiscal 2019; we plan to trim our five-year Americas segment annual unit growth forecast to 3.5% from 4.5%.

Bulls Say

- Starbucks continues to adapt to evolving consumer behaviors due to a brand that transcends channels and digital, social media, and loyalty program investments (including Mobile Order & Pay).
- Planned food/beverage innovations and upscale store redesigns can elevate the Starbucks customer experience, unlock new dayparts, and lift unit-level productivity metrics.
- Despite ambitious growth aspirations, we believe Starbucks can maintain a 50%-plus dividend payout ratio over the next decade, implying midteens average annual dividend growth.

Bears Say

- With minimal switching costs, there is little to prevent consumers from trading to rivals like Dunkin' Brands, Tim Hortons, or McDonald's. Joh. A. Benckiser's consolidation of Panera, Mondelez's coffee assets, D.E Master Blenders, Peet's, Caribou, Einstein Noah, and Keurig could evolve into a meaningful rival.
- Teavana, Princi, and Evolution Fresh may not evolve into successful complementary brands and could take management attention away from the core Starbucks brand.
- Commodity cost fluctuations and foreign currency volatility can negatively influence quarter-to-quarter results.

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Best Ideas

Interactive web-based models are available for our Best Ideas at Trefis.

Company and Industry	Morningstar Rating	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price / Fair Value	Market Cap (B)	Analyst
Basic Materials								
Cameco (CCJ)	★★★★	$17	$11.1	High	Narrow	0.65	4.54	Inton
Compass Minerals International (CMP)	★★★★	$83	$65.35	High	Wide	0.79	2.21	Goldstein
Martin Marietta Materials (MLM)	★★★★	$265	$224.64	High	Narrow	0.85	14.14	Inton
Communication Services								
BT Group (BT.A)	★★★★★	GBX 360	GBX 215.05	High	Narrow	0.60	21.34	C. Nichols
China Mobile (941)	★★★★	HKD 102	HKD 68.7	Medium	Narrow	0.67	1406.67	Baker
Telefonica (TEF)	★★★★★	$13	$7.45	High	Narrow	0.57	38.71	C. Nichols
Telstra (TLS)	★★★★★	AUD 4.4	AUD 2.68	Medium	Narrow	0.61	31.87	Han
Consumer Cyclical								
Advance Auto Parts (AAP)	★★★★	$157	$139.5	Medium	Narrow	0.89	10.33	Akbari
Bayerische Motoren Werke (BMW)	★★★★	EUR 117	EUR 81.22	High	Narrow	0.69	52.80	Hilgert
Domino's Pizza Enterprises (DMP)	★★★	AUD 53	AUD 53.43	Medium	Narrow	1.01	4.56	Faul
Expedia Group (EXPE)	★★★★	$180	$123.63	High	Narrow	0.69	18.56	Wasiolek
General Motors (GM)	★★★★	$56	$41.12	High	None	0.73	57.96	Whiston
Great Wall Motor (2333)	★★★★★	HKD 13.5	HKD 6.66	High	None	0.49	93.93	Hu
Hanesbrands (HBI)	★★★★	$29	$22.04	Medium	Narrow	0.76	7.94	Hottovy
InvoCare (IVC)	★★★★	AUD 15.5	AUD 13.66	Medium	Wide	0.88	1.50	Ragonese
Mattel (MAT)	★★★★	$21.5	$17.52	High	Narrow	0.81	6.03	Katz
Walt Disney (DIS)	★★★★	$130	$105.89	Medium	Wide	0.81	157.43	Macker
Williams-Sonoma (WSM)	★★★	$68	$64.21	Medium	Narrow	0.94	5.34	Katz
WPP (WPP)	★★★★	GBX 1500	GBX 1208.5	Medium	Narrow	0.81	15.25	Mogharabi
Consumer Defensive								
G8 Education (GEM)	★★★★	AUD 4	AUD 2.4	High	None	0.60	1.09	James
General Mills (GIS)	★★★★★	$59	$44.97	Low	Wide	0.76	25.64	Vora
Imperial Brands (IMB)	★★★★★	GBX 3900	GBX 2674	Low	Wide	0.69	25.50	Gorham
Kao (4452)	★★★	JPY 8800	JPY 8401	Low	Wide	0.95	4106.56	Wei
Mondelez International (MDLZ)	★★★★	$51	$40.74	Medium	Wide	0.80	60.09	Lash
PepsiCo (PEP)	★★★★	$123	$107.24	Low	Wide	0.87	152.05	Vora
Procter & Gamble (PG)	★★★★★	$98	$76.44	Low	Wide	0.78	192.22	Lash
Reckitt Benckiser Group (RB.)	★★★★	GBX 7300	GBX 6158	Low	Wide	0.84	43.48	Gorham
Energy								
Cenovus Energy (CVE)	★★★★	$21	$12.24	Very High	None	0.58	15.04	Gemino
Enbridge (ENB)	★★★★★	$64	$41.59	Medium	Wide	0.65	70.90	Gemino
Enterprise Products Partners (EPD)	★★★★	$31	$27.86	Low	Wide	0.90	60.53	Ellis
Royal Dutch Shell (RDS.B)	★★★★	$78	$70.02	Low	None	0.90	292.08	Good
Total (TOT)	★★★★	$74	$58.64	Medium	None	0.79	153.72	Good
Financial Services								
American International Group (AIG)	★★★★	$76	$54.25	Medium	None	0.71	48.70	Horn
Capital One Financial (COF)	★★★★	$123	$95.26	Medium	Narrow	0.77	46.34	Plunkett
Credit Suisse Group (CSGN)	★★★★	CHF 22	CHF 15.38	High	Narrow	0.70	39.06	Scholtz
Invesco (IVZ)	★★★★	$40	$27.03	Medium	Narrow	0.68	11.10	Warren
Mitsubishi UFJ Financial Group (8306)	★★★★	JPY 880	JPY 625.3	Medium	None	0.71	8213.20	Wu
QBE Insurance Group (QBE)	★★★★	AUD 13	AUD 9.64	High	Narrow	0.74	13.07	Ellis
Westpac Banking (WBC)	★★★★	AUD 35	AUD 29.38	Medium	Wide	0.84	99.49	Ellis

Source: Morningstar. As of June 22, 2018

Best Ideas

Interactive web-based models are available for our Best Ideas at Trefis.

Company and Industry	Morningstar Rating	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price / Fair Value	Market Cap (B)	Analyst
Healthcare								
Allergan (AGN)	★★★★★	$263	$172.49	Medium	Wide	0.66	58.49	Waterhouse
McKesson (MCK)	★★★★	$210	$146.46	Medium	Wide	0.70	29.55	Lekraj
Medtronic (MDT)	★★★★	$105	$86.3	Medium	Wide	0.82	116.87	Wang
Ramsay Health Care (RHC)	★★★★	AUD 82	AUD 56.11	Medium	Narrow	0.68	11.34	Kallos
Roche Holding (ROG)	★★★★★	CHF 325	CHF 219.85	Low	Wide	0.68	188.32	Andersen
Shire (SHP)	★★★★	GBX 4890	GBX 4088	Medium	Narrow	0.84	37.36	Andersen
Industrials								
Allegion (ALLE)	★★★★	$91	$77.88	Medium	Wide	0.86	7.40	Bernard
Anixter International (AXE)	★★★★★	$107	$65.05	Medium	Narrow	0.61	2.17	Bernard
Beijing Enterprises Holdings (392)	★★★★	HKD 58	HKD 40.6	Medium	Narrow	0.70	51.24	Song
Brambles (BXB)	★★★★	AUD 11.2	AUD 9.04	Medium	Wide	0.81	14.38	Fleck
CK Hutchison Holdings (1)	★★★★	HKD 124	HKD 84.8	Medium	None	0.68	327.13	Tan
G4S (GFS)	★★★★	GBX 337	GBX 266.5	Medium	None	0.79	4.14	Field
GEA Group (G1A)	★★★★★	EUR 47	EUR 30.61	Medium	Wide	0.65	5.52	Molina
Grupo Aeroportuario del Pacifico (GAP B)	★★★★	MXN 216	MXN 186.59	High	Wide	0.86	104.68	Higgins
Guangshen Railway (525)	★★★★	HKD 6.8	HKD 4.35	High	None	0.64	35.21	Song
Johnson Controls International (JCI)	★★★★	$53	$34.33	High	Narrow	0.65	31.80	Bernard
KION GROUP (KGX)	★★★★	EUR 90	EUR 66.38	Medium	Narrow	0.74	7.84	Molina
Royal Philips (PHIA)	★★★★	EUR 42	EUR 35.93	Medium	Narrow	0.86	34.15	Vonk
Sodexo (SW)	★★★★	EUR 110	EUR 85.86	Medium	Narrow	0.78	12.73	Field
Stericycle (SRCL)	★★★★	$86	$63.17	High	Narrow	0.73	5.41	Young
Real Estate								
AVEO Group (AOG)	★★★★	AUD 3.1	AUD 2.35	Medium	None	0.76	1.36	Sherlock
Sun Hung Kai Properties (16)	★★★★	HKD 153	HKD 121.9	Medium	Narrow	0.80	353.14	Zhong
Welltower (WELL)	★★★★	$74	$58.8	High	None	NA	21.87	Brown
Technology								
Intel (INTC)	★★★★	$62	$52.19	Medium	Wide	0.84	243.21	Davuluri
KLA-Tencor (KLAC)	★★★	$125	$110.31	High	Wide	0.88	17.16	Davuluri
Microchip Technology (MCHP)	★★★★	$112	$98.7	Medium	Wide	0.88	23.20	Colello
Microsoft (MSFT)	★★★★	$122	$101.14	Medium	Wide	0.83	777.08	Lange
MYOB Group (MYO)	★★★★	AUD 3.82	AUD 2.86	Medium	Narrow	0.75	1.71	James
Qualcomm (QCOM)	★★★★	$75	$58.75	High	Narrow	0.78	87.12	Davuluri
Salesforce.com (CRM)	★★★★	$158	$137.88	Medium	Wide	0.87	102.43	Lange
Synaptics (SYNA)	★★★	$64	$52.61	Very High	None	0.82	1.82	Davuluri
TDK (6762)	★★★	JPY 12500	JPY 11490	High	None	0.92	1450.04	Ito
Tencent Holdings (700)	★★★★	HKD 641	HKD 397.4	High	Wide	0.62	3776.57	Tam
Utilities								
Dominion Energy (D)	★★★★★	$84	$66.6	Low	Wide	0.79	43.48	Fishman
FirstEnergy (FE)	★★★★	$40	$35.15	Low	Narrow	0.88	16.76	Fishman
Gas Natural SDG (GAS)	★★★	EUR 23.5	EUR 21.63	Medium	Narrow	0.92	21.63	Fulop
SCANA (SCG)	★★★★★	$57	$36.55	Medium	Narrow	0.64	5.21	Miller

Source: Morningstar. As of June 22, 2018

Highlighted Stocks

Ball BLL

Morningstar Rating	Industry	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
★★★	Consumer	Stable	USD	38	35.92	Medium	Narrow	0.95	12.32

Source: Morningstar. As of June 22, 2018

We think the market is too worried about the impacts of metal tariffs on can manufacturers. The largest potential threat would be a switch from aluminum to glass, which we think is unlikely.

Analyst Note, June 22, 2018
Amid concerns about recent weakness in the food-can industry, Ball has announced that it is selling its tinplate food and aerosol assets into a joint venture with Platinum Equity. Flat to negative growth in food-can volumes has been a recent headwind to this capital-intensive business. Platinum's $600 million pretax payment to Ball for 51% of the business suggests a fairly high 24-25 times enterprise value/EBIT multiple, but we estimate that the assets sold demand relatively less incremental capital than the rest of Ball's business, commanding a premium multiple to the entire company. We believe this deal is value-neutral for shareholders and reiterate our $38 fair value estimate and narrow moat rating.

Platinum will have a 51% controlling stake in the JV, while Ball retains the remainder. In 2017, the assets generated $746 million in sales and operating income of $48 million. After the deal closes, Ball's profits from the business will move from the food and household packaging segment to equity income. Ball plans to use the cash from the deal to increase share repurchases in 2018, to roughly $675 million. With the stock currently trading below our fair value estimate after the tariff-driven sell-off of can manufacturers, we view repurchases as favorable to shareholders.

More broadly, we think the market is too worried about the impacts of metal tariffs on can manufacturers. The largest potential threat would be a switch from aluminum to glass, which we think is unlikely. Cans will remain the more economical package, per unit, even as aluminum prices rise because of the significantly better pack density of aluminum cans versus bottles. Over the past decade, many beer companies have implemented a mix shift to aluminum cans from glass bottles, and we expect this to continue. Ball currently trades slightly below our fair value, but if the stock continues to fall, investors should consider this high-quality name.

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Patterson PDCO

Morningstar Rating	Industry	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
★★★★	Healthcare	Negative	USD	31	24.61	Medium	Narrow	0.79	2.20

Source: Morningstar. As of June 22, 2018

There has been increased competition from online-based wholesale players that can source consumables from the cheapest suppliers nationwide. We don't believe this trend will dissipate anytime soon, and we think this has forced Patterson to adjust its sales and pricing strategies.

Analyst Note, June 21, 2018
We find Patterson's efforts to recalibrate its operations in order to deal with a shifting dental supply market a positive development. However, we believe the fundamentals of the industry have permanently changed and that the company will now have to operate in a dental supply market that is likely to yield lower profit. This is especially the case for dental consumables (fillings, gauze, latex gloves, disinfectants, swabs), where Patterson and its peers are facing significant pressure from alternative sourcing options, particularly online vendors.

Given these headwinds, we recently downgraded our moat rating to narrow from wide and lowered our moat trend rating to negative from stable over concerns that Patterson's competitive position in the dental wholesaling market has significantly deteriorated; the company's performance over the past several quarters solidifies our outlook. After factoring in these latest developments, we are leaving our moat and trend ratings intact and are reiterating our $31 fair value estimate.

From what we can gather, there has been increased competition from online-based wholesale players that can source consumables from the cheapest suppliers nationwide. We don't believe this trend will dissipate anytime soon, and we think this has forced Patterson to adjust its sales and pricing strategies. This dynamic was reflected in the company's sales and profit performance for the fiscal fourth quarter, as total revenue declined 3% and operating margins compressed 371 basis points to 2.95%. The headwinds were especially harsh for the dental segment, with consumables sales dropping 6.32% and equipment sales dropping 20%. Profit margins for this segment also compressed 578 basis points to 8.44%.

Recently appointed CEO Mark Walchirk said the management team is making progress in restructuring the entire operation and expects profit growth to resume during the latter part of the year. Even though we applaud the new management team for taking significant steps in trying to turn around Patterson, we believe the centerpiece of any strategy will need to deal with a weaker pricing and lower profit environment. Recognizing this dynamic, management said it will seek to build and push its own line of private-label consumable products, with the intention that it will encompass a growing percentage of overall sales mix.

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Magellan Financial Group MFG:AU

Morningstar Rating	Industry	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
★★★★	Financial	Stable	AUD	27	23.76	Medium	Narrow	0.88	4.19

Source: Morningstar. As of June 22, 2018

Clearly, the fight for the retail investment dollar remains intense.

Analyst Note, June 19, 2018

Narrow-moat-rated Magellan Financial Group heads into the close of fiscal 2018 with assets under management, or AUM, of about AUD 67 billion—approximately 30% higher than year-end fiscal 2017. We adjust our forecast AUM upwards to incorporate recent market performance and fund flow trends; however, our fair value estimate is unchanged at AUD 27. The stock is currently undervalued, trading approximately 16% below our valuation.

A higher proportion of lower-margin wholesale AUM flows relative to higher-margin retail AUM flows will continue to put pressure on management fees for Magellan, should this trend continue. As at the end of May 2018, the breakdown between retail and wholesale AUM was 28% and 72%, respectively. At the same time last year, the retail component was 2.2% more than now.

Clearly, the fight for the retail investment dollar remains intense. This is reflected in our falling average base management fee assumption from 66 basis points at year-end fiscal 2017 to 60 basis points at year-end fiscal 2022. Our average base fee assumption is a weighted blend between the retail fees and wholesale fees. The former is assumed to be about 1.22% at year-end fiscal 2018, slowly falling to 1.15% in fiscal 2022. On the other hand, wholesale fees taper off from current levels of about 40 basis points towards 37 basis points at the end of fiscal 2022. These assumptions are a key driver of our valuation, so any move sharper than we anticipate in either direction will have a material impact on the valuation in the opposite direction.

Monthly flows this fiscal year paint a concerning picture for Magellan with respect to the retail AUM composition. Excluding the AUD 1.55 billion Magellan Global Trust, or MGG, IPO in late 2017, retail flows have been weak for the group. For the fiscal year to date, average monthly retail flows are approximately AUD 34 million when we remove MGG from calculations. This number drops to AUD 17 million per month for the seven months since the MGG IPO. Including MGG, fiscal 2018 monthly retail flows increase to about AUD 177 million. Average monthly institutional flows, on the other hand, remain materially higher at AUD 252 million over the same period.

But there is a lot to like about this narrow-moat global asset manager. A strong brand, its ability to leverage off high switching costs, and the tailwind of a growing pool of self-managed superannuation fund assets to target should continue to benefit the firm in the near term.

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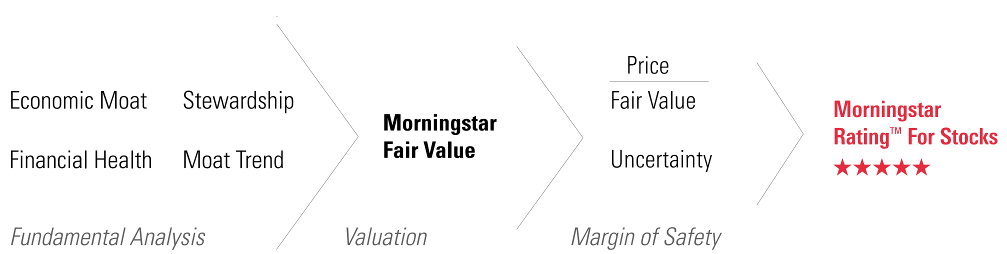
Research Methodology for Valuing Companies

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, in-depth 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 short-term market price movements), but we believe these negatives are mitigated by deep analysis and our long-term 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.

Morningstar Research Methodology



Source: Morningstar.

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 single-point star rating.

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 (ROIC) over and above our estimate of a firm's cost of capital, or weighted average cost of capital (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 their cost of capital more quickly than companies with moats.

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 where we see signs of deterioration.

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 5 to 10 years, analysts make full financial statement forecasts, including items such as revenue, profit margins, tax rates, changes in working capital accounts, and capital spending. Based on these projections, we calculate earnings before interest, after taxes (EBI) and 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.

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 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, and other company-specific factors.

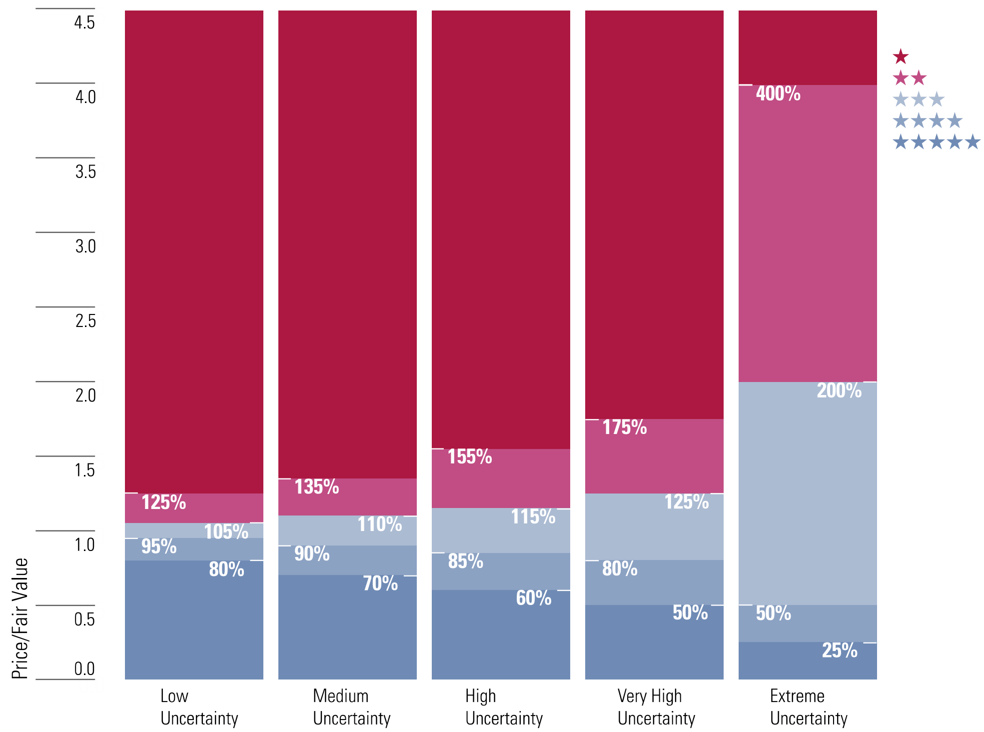
Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case and a 25% probability that the company will perform worse than the bear case. The distance between the bull and bear cases is an important indicator of the uncertainty underlying the fair value estimate.

Our recommended margin of safety widens as our uncertainty regarding 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.

- Low: Margin of safety for 5-star rating is a 20% discount and for 1-star rating is a 25% premium.
- Medium: Margin of safety for 5-star rating is a 30% discount and for 1-star rating is a 35% premium.
- High: Margin of safety for 5-star rating is a 40% discount and for 1-star rating is a 55% premium.
- Very high: Margin of safety for 5-star rating is a 50% discount and for 1-star rating is a 75% premium.
- Extreme: Margin of safety for 5-star rating is a 75% discount and for 1-star rating is a 300% premium.

Morningstar Equity Research Star Rating Methodology



Market Price

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

For more details about our methodology, please go to http://global.morningstar.com/equitydisclosures.

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 recalculated 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.

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.

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