Research Highlights

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

Morningstar Equity Research
Oct. 1-5, 2018

Contents

Investors' Views Need to Evolve Along With the Restaurant Industry

By now, it's clear that the restaurant industry isn't immune to the digital disruption that we've seen across retail over the past two decades, and with 2018 continuing to be a transformational year for online grocery, restaurant operators will encounter many challenges in the years to come. In fact, we believe that to survive long-term, these companies must reinvent themselves with respect to menu innovations, restaurant designs, operational technologies, and channel diversification strategies to accommodate consumers' evolving preferences.

With the restaurant industry rapidly changing, investors' approach to looking at the industry must also evolve. Metrics like average unit volumes, same-restaurant sales, and returns on invested capital are still relevant, but with changes in consumer eating habits, new front- and back-of-house technologies, the blurring lines between on- and off-premises sales, and supply chain innovations, investors must also update the metrics they use to benchmark both public and private restaurant operators.

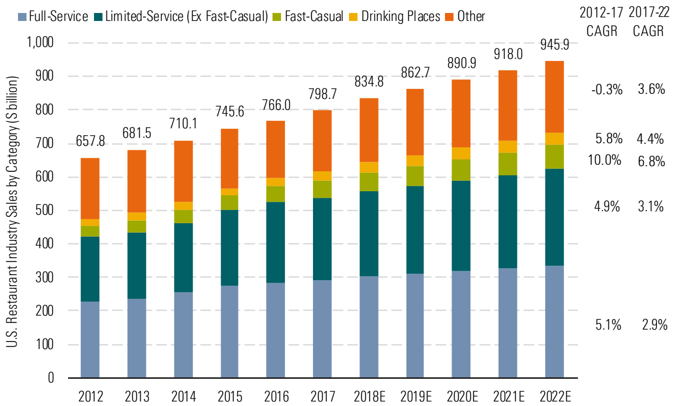
Building off our 2015 and 2016 Observers, we spent time with several public and private restaurant operators and technology leaders over the past 12 months to develop a broader set of performance indicators that investors should be using to benchmark restaurant companies. Although we see potentially turbulent times ahead for much of the restaurant industry, we believe these metrics can help investors better identify economic moats in the industry and distinguish longer-term winners and losers.

10 Predictions for the Restaurant Industry

- **The ripple effect from online grocery will become more pronounced for restaurants.** Amazon grabbed a lot of headlines when it announced that it was acquiring Whole Foods in June 2017. We really haven't seen a meaningful impact on restaurants due to online grocery yet, as industry traffic was already weak (and has only modestly improved since then). However, with Amazon finding ways to bring Prime memberships into its physical stores through discounts at Whole Foods (including Prime Day promotions) and other tactics that grocery stores and mass merchants will likely deploy as countermeasures, we expect restaurant traffic across all tiers to remain uneven into 2019.
- **Expect additional restaurant closures and decelerating industry growth.** With restaurants already dealing with stagnant traffic trends and likely to face labor, rent, and food cost inflation in the years to come, Starbucks and Chipotle probably won't be the last to announce restaurant closures in 2018. We expect the number of restaurants to decrease by 0.6% over the next five years in the U.S., with casual dining and smaller quick-service restaurant chains being the hardest hit. This will result in average industry sales growth slowing from 4.0% from 2012-17 to 3.4% from 2017-22.

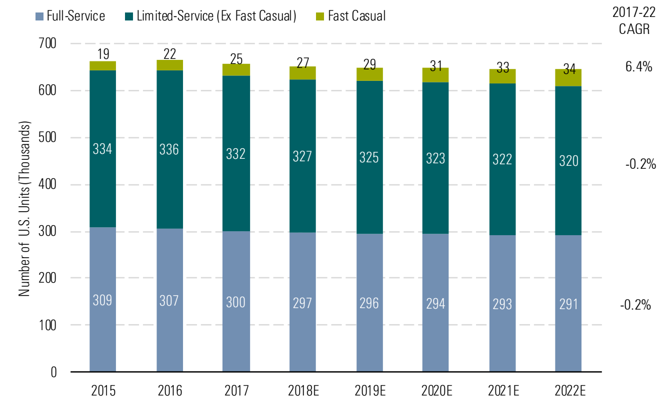
Exhibit 1 Investing in Public and Private Restaurants Requires a New Set of Benchmarks

Our Projections Assume Several Industry Changes the Next Several Years



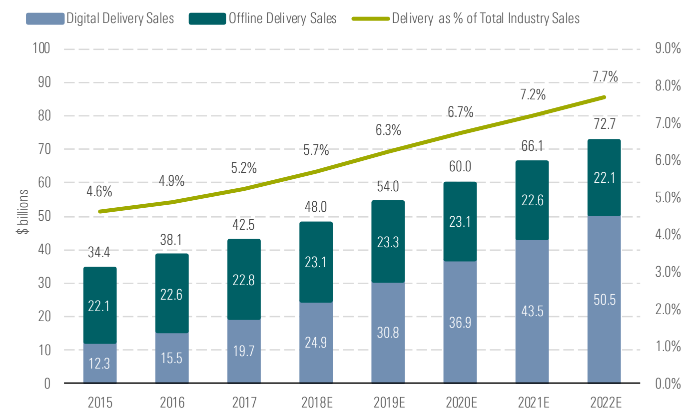
Source: National Restaurant Association, U.S. Census Bureau, Technomic, Morningstar estimates

We Forecast Declining Industry Unit Counts the Next Five Years



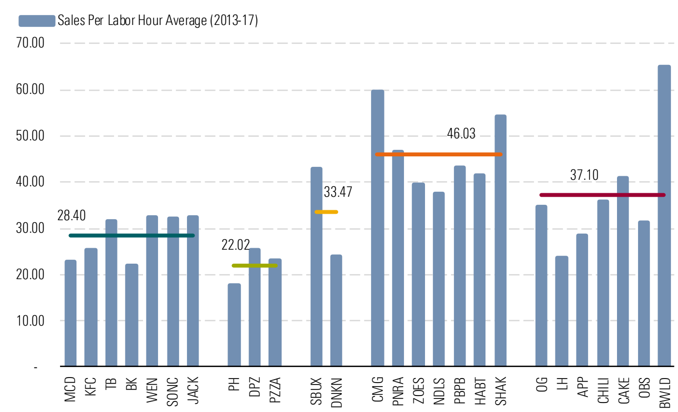
Source: NPD Group ReCount, National Restaurant Association, NRN, Technomic, Morningstar

Increased Demand for Off-Premises Solutions Reshaping Restaurants…



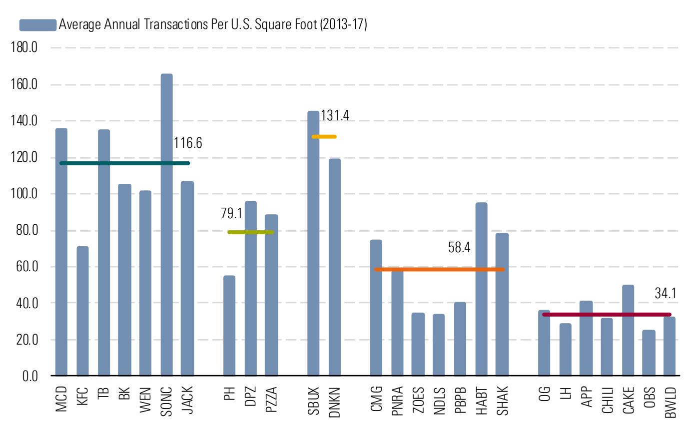
Source: NPD Group, eMarketer, National Restaurant Association, Morningstar estimates

…And Balancing Sales With Labor Costs Is Critical



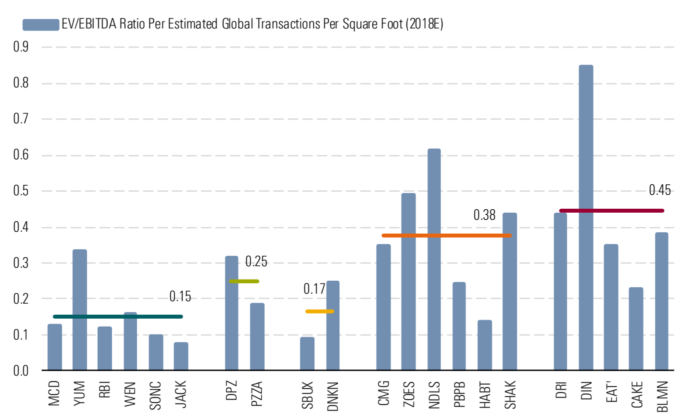
Source: Morningstar estimates, company filings

Transactions Per Square Foot Accounts for Many Industry Trends…



Source: Company filings, Nation's Restaurant News. eMarketer, Morningstar estimates

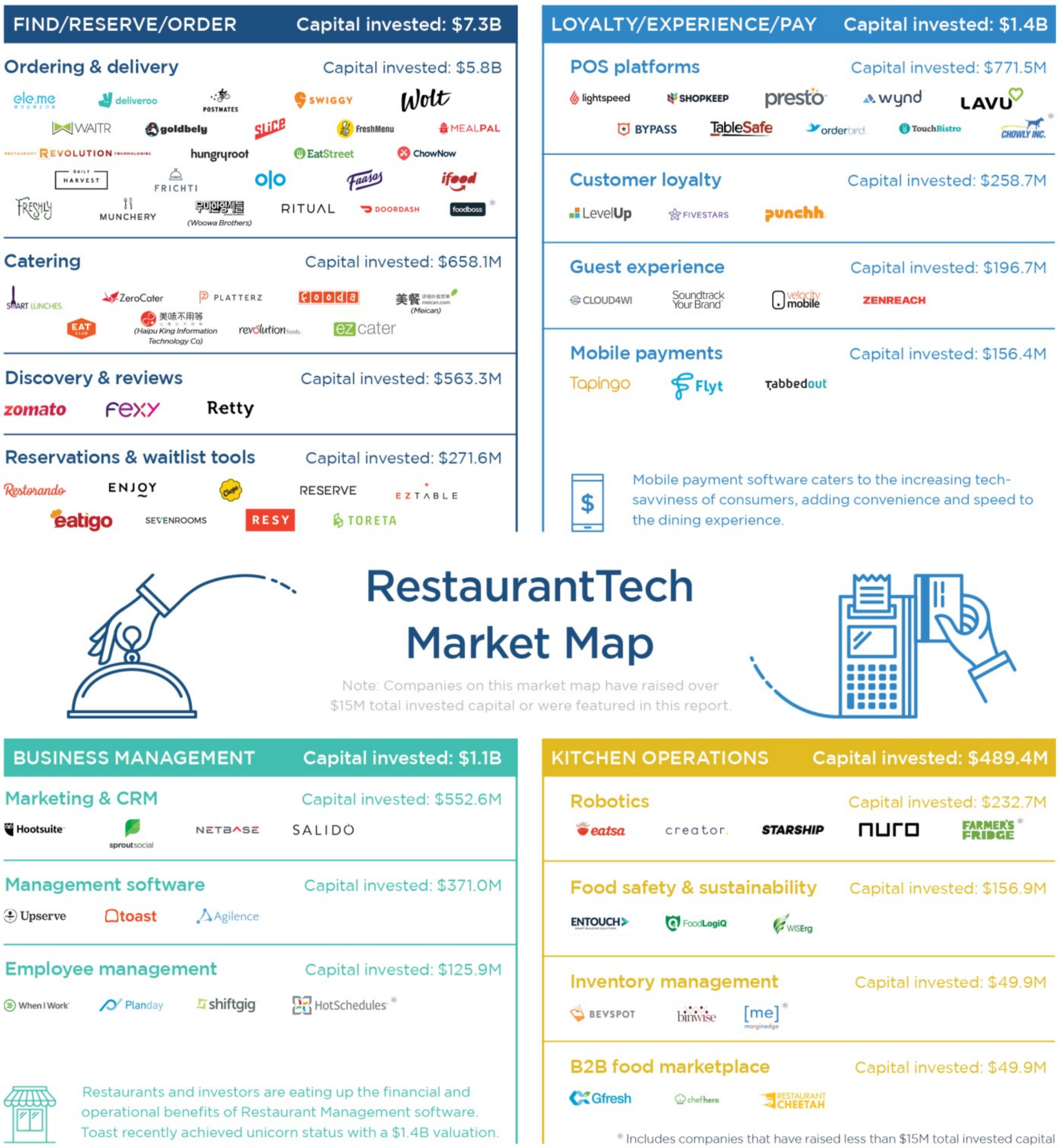
…and EV/EBITDA to Transactions/Sq. Ft. Offers New Valuation Approach



Source: Morningstar estimates, company filings

- **But there is room to grow for concepts that have adapted to evolving consumer preferences.** While we expect industry growth to slow over the next five years, we don't expect an outright restaurant recession. In fact, we see growth opportunities for those chains that continue to adjust to evolving consumer preferences. The blueprint to remaining relevant will differ for each operator, but we believe the most successful restaurant concepts will be those that identify specific consumer needs—often boiling down to convenience versus experience—and then structure their menu, operations, and technologies to best address them. With the rise digital technologies, increasing demand for off-premises restaurant substitutes, and changing consumer attitudes about health/wellness and food sourcing, we believe restaurant layouts will look very different five years from now, with transactions per square foot being one of the best benchmarks operators and investors can use to monitor a concept's ability to make necessary changes.
- **The recent pullback in valuations has created buying opportunities.** After peaking in 2017, restaurant industry valuations have contracted as refranchising has subsided and restaurants reinvent themselves amid rapidly changing consumer preferences. While the industry strikes us as fairly valued at current levels, there are a handful of restaurant concepts that screen well using our new benchmarks.
- **Starbucks' recovery will be volatile, but there is still a long-term investment case to be made.** Of any restaurant we cover, Starbucks will probably garner the most investor scrutiny over the near future, with still-sluggish U.S. sales, new sources of competition in China, its recent consumer packaged goods partnership with Nestle, questions about the current executive team, and the potential headline risks associated with former CEO Howard Schultz's political aspirations. While each of these risks brings its own set of executional challenges, and management changes are possible in the near future, we believe the company is positioned for a comeback through restaurant layout changes that emphasize convenience at some stores, experience at others and menu innovations that focus on health/wellness and authenticity.
- **Early technology adopters will start to see sustained guest traffic improvements in 2019.** There have been several developments in restaurant technology in the past several years, including new point-of-sale systems; mobile ordering/delivery capabilities; mobile-enhanced loyalty programs; back-of-house solutions that include labor staffing and inventory management; and automation for food preparation processes. Outside of mobile ordering and delivery, the technology hasn't had a material impact on sales or profitability so far, but we anticipate a more pronounced contribution in 2019 for restaurants that understand the specific value proposition and have invested in appropriate front- and back-of-house technologies.
- **The restaurant tech boom will continue over the next several years.** As industry valuations have pulled back and operators increasingly embrace technology to mitigate costs, it's not surprising that we now find ourselves in the early stages of a restaurant technology boom. We're seeing funding for technology solutions across virtually every restaurant function, including discovery, ordering, guest experience, payments, business management, and kitchen operations. We've worked with our counterparts at PitchBook to develop a restaurant technology market map to give restaurant operators and investors a better idea of the different technologies that are being incubated across the broader landscape (Exhibit 2).

Exhibit 2 PitchBook Restaurant Tech Market Map



Source: PitchBook, Morningstar

- **Delivery and to-go orders will become even more meaningful to restaurants.** We believe the rise in delivery/off-premises solutions will be one of the most meaningful restaurant industry developments over the past two decades. Each restaurant's approach to delivery and to-go orders will depend on cuisine type, geography, and daypart capabilities, but we believe the incremental transaction per square foot and average ticket increase opportunities make this a worthwhile area of investment. Finding the right partner is key—especially with restaurant delivery aggregators likely to consolidate in the years to come—but we believe restaurants that have integrated off-premises services into their operations will outperform.
- **Restaurant mergers will accelerate, and a large strategic deal may still be done before the year is up.** With interest rates rising, fewer refranchising opportunities, and restaurant balance sheets already highly leveraged, restaurant mergers and acquisitions slowed in the first half of 2018. However, with industry valuations retreating, restaurant transactions have reaccelerated the past few months, including First Watch, Bravo Brio, Modern Market, Costa, Zoe's Kitchen, and Sonic. Based on expectations of sluggish traffic and increased cost pressures, we wouldn't be surprised to see additional small- to mid-cap restaurant chains escape public scrutiny and explore go-private transactions. We also believe conditions are favorable for a strategic or financial brand consolidator looking to add a new franchised concept.
- **What will be the next restaurant tech IPO?** We're not expecting any significant restaurant industry IPOs this year or in 2019—fast-casual pizza chains Blaze or MOD are likely next in the pipeline, but not until 2020 at best—but with restaurant technology firms starting to gain adoption and consolidate, we're probably not too far from another restaurant technology IPO. Some private companies are likely to sit tight until Uber's (and by extension UberEats) rumored IPO in the second half of 2019, but don't be surprised to see IPO speculation for other restaurant technology firms like Toast (which completed a $115 million Series D transaction in July), Olo, or HotSchedules as we approach 2019.

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Companies in a Good Position to Capitalize on 5G

The fifth generation of wireless technology, or 5G, is close upon us as enterprises and consumers continue their insatiable demand for more data, faster speeds, and greater connectivity. As wireless networks have continued to improve for the past three decades, radio frequency chipmakers have prospered, and we see another step up for the RF industry as 5G comes on line.

5G content per device (especially in smartphones) remains uncertain today, but what is certain, in our view, is that RF complexity (and thus higher dollar content per device) will only increase with the rollout to 5G. A constant fear in the RF space is that mobile device titans like Apple and Samsung may push back on price. RF leaders have created enough value in 4G that they were well rewarded for their cutting-edge products, and we think this will continue into 5G. RF firms may also benefit from a wider array of smart devices that are connected to the Internet with greater reliability and lower latency. We foresee RF leaders faring well in 5G thanks to new technologies and integration within devices, as well as the natural addition of RF content due to a greater number of frequency bands in 4G/5G devices.

Across our coverage, we see several undervalued names that appear poised to profit from 5G. Even with concerns about U.S.-China trade war tariffs or the quantities of Apple's iPhone units sold, these RF leaders should see long-term upside. We like Qorvo's product breadth and its position in smartphone RF content and semiconductors going into wireless infrastructure. Skyworks Solutions has long been an RF leader thanks to its peerless integration of a wide array of components, which should remain valuable in a 5G world. Broadcom also appears undervalued because of nonwireless factors, but it should continue to dominate a niche as the leading RF filter supplier. Finally, Murata Manufacturing is undervalued but has 5G opportunities in both filters and multilayer ceramic capacitors.

- 5G will differ from 4G and earlier generations in two ways. First, it will be the first network that doesn't solely have the smartphone in mind, as a wide array of devices are expected to connect to the Internet via 5G. Second, 5G is about far more than just a faster data connection, as greater reliability, lower latency, and always-on connectivity are perhaps even more important.
- The three primary use cases for 5G are enhanced mobile broadband, massive "Internet of Things" connectivity, and mission-critical control. We foresee inherent conflicts between each type of technology, as some require faster data speeds while others seek greater reliability. These issues should create complexity in the 5G network and, ultimately, opportunities for RF chipmakers to solve such challenges and reap the rewards of their innovations.
- 5G smartphone architectures remain uncertain, but we have a high degree of confidence that RF content will only be more, not less, complex going forward. This should enable RF leaders to earn higher dollar content per device, fend off pricing pressure, and establish even stronger relationships with smartphone leaders like Apple, which would be welcome for Skyworks and Qorvo in particular.
- In the United States, Qorvo is perhaps best positioned to prosper in 5G, given its product breadth in smartphone RF content and also its history as a supplier into infrastructure and defense systems that use advanced materials and technologies needed in 5G.

- Skyworks has long been an RF leader thanks to its peerless integration of a wide array of components. Such integration should remain valuable in a 5G world, and we don't foresee the company losing its leadership position anytime soon.
- Broadcom also appears undervalued to us. The firm has not been vocal about its 5G aspirations but should continue to dominate a niche as a leading RF filter supplier. While its acquisition of CA remains strategically shaky, we think it is financially sound and the firm has been overly penalized.
- Qualcomm's focus on 5G development is not limited to simply RF, but some early products such as millimeter wave antenna modules appear promising and may encroach upon larger incumbent RF players. That said, it's hard to predict whether the firm's spat with Apple will keep Qualcomm out of any lucrative RF opportunities in future iPhones, regardless of its advanced technologies.
- Murata Manufacturing appears to have promising 5G opportunities leveraging its rich product portfolio. Its expertise in multilayer ceramics and substrates will enable the company to grasp more growth opportunities in the RF space than in 4G, such as dielectric and low-temperature co-fired ceramic filters, both of which may emerge as options for 5G devices. Taiyo Yuden may benefit from similar trends by expanding its revenue from RF filters, but we prefer Murata from a moat as well as a valuation perspective.

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New Fair Values in Housing and Related Sectors

After taking a fresh look at the assumptions underlying our housing starts projections and considering recent trends in key housing data, we've lowered our expectations for new construction over the next decade. We now expect about 15 million cumulative housing starts between 2018 and 2027, about a 10% reduction from our previous forecast of approximately 16.8 million. Our updated assumptions result in a number of changes across our housing and housing-related coverage.

However, with some housing experts proclaiming that the housing market has peaked, we believe our revised forecast is still optimistic. Indeed, we still see several more years of solid residential construction ahead, driven by the large and aging millennial population, continued job and wage growth, and an increased supply of entry-level homes.

Our revised forecast calls for total starts to improve from 1.28 million in 2018 to 1.61 million in 2022 before moderating to 1.47 million by 2027. Previously, we projected total starts to grow from 1.30 million in 2018 to 1.93 million in 2021 and then moderate to 1.52 million by 2027. The main factors behind our moderated forecast are slower population growth driven by reduced immigration and a more difficult affordability environment than we had previously envisioned.

We've lowered by about 2% the fair value estimates of D.R. Horton (to $45 from $46), NVR ($2,400 from $2,450), PulteGroup ($32.50 from $33), and Toll Brothers ($48 from $49). We weren't convinced these builders were positioned to maintain market share during a rapid v-shaped recovery to over 1.9 million starts by 2021, but we believe they can maintain or grow market share in a housing market that recovers at a milder pace over the next few years. Our now upward-revised market share assumptions lessened the impact of our lower starts forecast. We've reduced our fair value estimate for Lennar by about 8% to $69 per share, but most of this reduction was due to refined modeling of the recent CalAtlantic merger.

Also as a result of our revised assumptions, because of their high exposure to new-home construction, we reduced the fair values of wood-products companies by about 15%-25%. After removing our previously anticipated period of elevated pricing as capacity grew strained, our medium-term cash flow outlooks have been reduced considerably. Canfor's fair value estimate falls to CAD 24 per share from CAD 31, while West Fraser's declines to CAD 59 from CAD 79. Louisiana Pacific's fair value estimate declines to $18.50 from $25, and Norbord's falls to CAD 38 from CAD 46. Lastly, timber producer Weyerhaeuser's fair value estimate declines to $23 from $29.50, and Rayonier's falls to $26 from $30. Our moat and trend ratings are unchanged.

As well, we've also slightly reduced near-term estimates for Martin Marietta and Vulcan Materials due to the impact of Hurricane Florence. Summit Materials and U.S. Concrete have a smaller and nonexistent presence, respectively, in affected areas. Nevertheless, the impact is minor compared with the impact of the reduced housing forecast.

We've reduced our fair value estimates by about 2%. Narrow-moat Martin Marietta's fair value falls to $260 per share from $265, narrow-moat Vulcan's falls to $135 per share from $138, and narrow-moat

Summit's falls to $26.50 per share from $27. No-moat U.S. Concrete's fair value falls by a slightly larger percentage to $73 per share from $75 due to a larger exposure to residential construction.

Our fourth-quarter U.S. housing outlook, which we expect to publish in late October, will provide investors with a more detailed review of our housing forecast revisions as well our top picks in housing-related sectors.

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Best Ideas

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)	★★★★★	$19.5	$12.23	High	Narrow	0.63	4.60	Inton
Compass Minerals International (CMP)	★★★★	$83	$66.41	High	Wide	0.80	2.25	Goldstein
Martin Marietta Materials (MLM)	★★★★	$260	$186	High	Narrow	0.72	11.72	Inton
Communication Services								
BT Group (BT.A)	★★★★	GBX 360	GBX 227.7	High	Narrow	0.63	22.59	C. Nichols
China Mobile (941)	★★★★	HKD 100	HKD 77.55	Medium	Narrow	0.78	1587.87	Baker
Comcast (CMCSA)	★★★★	$42	$35.21	Medium	Wide	0.84	161.33	Macker
Telefonica (TEF)	★★★★★	$13	$6.92	High	Narrow	0.53	35.93	C. Nichols
Telstra (TLS)	★★★★	AUD 4.4	AUD 3.25	Medium	Narrow	0.74	38.65	Han
Consumer Cyclical								
Alibaba Group Holding (BABA)	★★★★	$240	$156.13	High	Wide	0.65	401.56	Hottovy
Bayerische Motoren Werke (BMW)	★★★★	EUR 117	EUR 78.26	High	Narrow	0.67	50.89	Hilgert
Expedia Group (EXPE)	★★★★	$185	$126.94	High	Narrow	0.69	18.97	Wasiolek
General Motors (GM)	★★★★	$45	$34.25	High	None	0.76	48.32	Whiston
Hanesbrands (HBI)	★★★★★	$27	$17.23	Medium	Narrow	0.64	6.21	Hottovy
InvoCare (IVC)	★★★★	AUD 17	AUD 11.95	Medium	Wide	0.70	1.31	Ragonese
Mattel (MAT)	★★★★	$21.5	$14.52	High	Narrow	0.68	5.00	Katz
Norwegian Cruise Line Holdings (NCLH)	★★★★	$69	$55.05	High	Narrow	0.80	12.19	Katz
Walt Disney (DIS)	★★★★	$130	$116.13	Medium	Wide	0.89	172.71	Macker
WPP (WPP)	★★★★	GBX 1500	GBX 1137.5	Medium	Narrow	0.76	14.35	Mogharabi
Consumer Defensive								
A2 Milk (ATM)	★★★★	AUD 14.6	AUD 10.59	High	Narrow	0.73	7.65	Fleck
G8 Education (GEM)	★★★★★	AUD 3.5	AUD 2.04	High	None	0.58	0.93	James
General Mills (GIS)	★★★★★	$58	$43.34	Low	Wide	0.75	25.84	Vora
Imperial Brands (IMB)	★★★★★	GBX 3700	GBX 2646	Low	Wide	0.72	25.24	Gorham
Kao (4452)	★★★	JPY 8800	JPY 8871	Low	Wide	1.01	4323.91	Wei
Mondelez International (MDLZ)	★★★★	$52	$42.37	Medium	Wide	0.81	62.14	Lash
PepsiCo (PEP)	★★★★	$123	$106.61	Low	Wide	0.87	150.49	Vora
Procter & Gamble (PG)	★★★★	$97	$81.92	Low	Wide	0.84	203.91	Lash
Reckitt Benckiser Group (RB.)	★★★	GBX 7300	GBX 6855	Low	Wide	0.94	48.47	Gorham
Energy								
Cenovus Energy (CVE)	★★★★	$21	$13.23	Very High	None	0.63	16.26	Gemino
Enbridge (ENB)	★★★★★	$64	$43.83	Medium	Wide	0.68	75.58	Gemino
Enterprise Products Partners (EPD)	★★★★	$35.5	$29.13	Low	Wide	0.82	63.39	Ellis
Royal Dutch Shell (RDS.B)	★★★★	$83	$71.23	Medium	Narrow	0.86	287.10	Good
Total (TOT)	★★★★	$77	$64.4	Medium	None	0.84	169.23	Good
Woodside Petroleum (WPL)	★★★★	AUD 46.5	AUD 39	High	None	0.84	36.51	Taylor

Source: Morningstar. As of Oct. 5, 2018

Best Ideas

Company and Industry	Morningstar Rating	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price / Fair Value	Market Cap (B)	Analyst
Financial Services								
Agricultural Bank of China (601288)	★★★	CNY 4.2	CNY 3.89	High	Narrow	0.93	1345.77	Tan
American International Group (AIG)	★★★★	$76	$53.9	Medium	None	0.71	47.89	Horn
BlackRock (BLK)	★★★★	$570	$474.15	Medium	Wide	0.83	76.13	Warren
Capital One Financial (COF)	★★★★	$127	$96.63	Medium	Narrow	0.76	46.23	Plunkett
Credit Suisse Group (CSGN)	★★★★	CHF 22	CHF 14.19	High	Narrow	0.65	36.19	Scholtz
Mitsubishi UFJ Financial Group (8306)	★★★★	JPY 880	JPY 732.7	Medium	None	0.83	9582.75	Wu
Pendal Group (PDL)	★★★★	AUD 11	AUD 8.65	Medium	Narrow	0.79	2.43	Likos
Westpac Banking (WBC)	★★★★	AUD 35	AUD 27.49	Medium	Wide	0.79	93.09	Ellis
Healthcare								
Allergan (AGN)	★★★★	$263	$191.86	Medium	Wide	0.73	65.13	Waterhouse
McKesson (MCK)	★★★★★	$210	$132.26	Medium	Wide	0.63	26.42	Lekraj
Medtronic (MDT)	★★★	$105	$96.98	Medium	Wide	0.92	130.97	Wang
Ramsay Health Care (RHC)	★★★★	AUD 76	AUD 55.72	Medium	Narrow	0.73	11.26	Kallos
Roche Holding (ROG)	★★★★★	CHF 337	CHF 244.5	Low	Wide	0.73	208.99	Andersen
Industrials								
Anixter International (AXE)	★★★★★	$107	$68.29	Medium	Narrow	0.64	2.29	Bernard
Beijing Enterprises Holdings (392)	★★★★	HKD 58	HKD 42.4	Medium	Narrow	0.73	53.51	Song
CK Hutchison Holdings (1)	★★★★	HKD 118	HKD 85.15	Medium	None	0.72	328.36	Tan
G4S (GFS)	★★★★	GBX 337	GBX 235	Medium	None	0.70	3.65	Field
GEA Group (G1A)	★★★★★	EUR 47	EUR 29.43	Medium	Wide	0.63	5.31	Molina
General Dynamics (GD)	★★★	$220	$205.91	Medium	Wide	0.94	61.01	Higgins
Grupo Aeroportuario del Pacifico (GAP B)	★★★	MXN 217	MXN 202	High	Wide	0.93	113.32	Higgins
Guangshen Railway (525)	★★★★★	HKD 6.5	HKD 3.33	High	None	0.51	28.02	Song
Johnson Controls International (JCI)	★★★★	$53	$36.37	High	Narrow	0.69	33.64	Bernard
Kion Group (KGX)	★★★★★	EUR 90	EUR 51.74	Medium	Narrow	0.57	6.09	Molina
Royal Philips (PHIA)	★★★	EUR 42	EUR 37.42	Medium	Narrow	0.89	34.86	Vonk
Sodexo (SW)	★★★★	EUR 110	EUR 88.12	Medium	Narrow	0.80	12.83	Field
Stericycle (SRCL)	★★★★	$86	$54.51	High	Narrow	NA	4.68	Young
Real Estate								
AVEO Group (AOG)	★★★★	AUD 2.8	AUD 1.99	Medium	None	0.71	1.16	Sherlock
Sun Hung Kai Properties (16)	★★★★	HKD 153	HKD 109.6	Medium	Narrow	0.72	317.51	Zhong
Welltower (WELL)	★★★	$74	$62.21	High	None	0.84	23.14	Brown
Technology								
Intel (INTC)	★★★★	$65	$48.13	Medium	Wide	0.74	221.93	Davuluri
Microchip Technology (MCHP)	★★★★★	$112	$71.43	Medium	Wide	0.64	16.83	Colello
Murata Manufacturing (6981)	★★★★	JPY 24000	JPY 17110	High	Narrow	0.71	3648.73	Ito
MYOB Group (MYO)	★★★★	AUD 3.82	AUD 2.98	Medium	Narrow	0.78	1.79	James
Synaptics (SYNA)	★★★★	$64	$41.86	Very High	None	0.65	1.46	Davuluri
Tencent Holdings (700)	★★★★★	HKD 590	HKD 305	High	Wide	0.52	2903.77	Tam
Utilities								
Dominion Energy (D)	★★★★	$84	$70.69	Low	Wide	0.84	46.21	Fishman
Enel (ENEL)	★★★★	EUR 5.7	EUR 4.46	Medium	None	0.78	45.34	Fulop
FirstEnergy (FE)	★★★★	$41	$37.14	Low	Narrow	0.91	18.05	Fishman
Scana (SCG)	★★★★★	$56	$38.76	Medium	Narrow	0.69	5.53	Miller

Source: Morningstar. As of Oct. 5, 2018

Highlighted Stocks

CoreSite Realty COR

Morningstar Rating	Industry	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
★★★	Real Estate	Stable	USD	110	105.46	Medium	Narrow	0.96	3.64

Source: Morningstar. As of Oct. 5, 2018

CoreSite counts over 450 network providers as customers, and we believe that all companies that need Internet connections—none more than the major cloud providers—will always have a need for those difficult-to-develop buildings.

Analyst Note, Oct. 3, 2018
We are initiating coverage on CoreSite with a narrow moat, stable moat trend, and fair value estimate of $110 per share, which implies an EV/adjusted EBITDA multiple of 17 and a price/AFFO multiple of 24 based on our 2018 forecast. We view the stock as fairly valued at current levels, but we would jump at this name on a material pullback.

CoreSite operates carrier hotels and prioritizes interconnection, which we think makes the firm's business much more attractive than nearly all competitors over the long term. Most data center providers emphasize providing space for tenants and are riding the current wave the cloud has sparked—cloud providers' use of third-party data centers has been exploding, and cloud customers often become tenants on the same campuses to maximize the performance of their hybrid cloud solutions.

While CoreSite has benefited from that trend, it is not aggressively expanding its footprint to simply accommodate cloud providers and the tenants that would then follow, which we think is smart, as we find that to be a less competitively advantaged business. Rather, it focuses on having highly connected buildings where networks exchange the traffic that underlies the Internet. CoreSite counts over 450 network providers as customers, and we believe that all companies that need Internet connections--none more than the major cloud providers--will always have a need for those difficult-to-develop buildings.

CoreSite operates exclusively in eight U.S. cities and generates over 75% of its annualized rent from just Silicon Valley, Los Angeles, and Northern Virginia, three of the most critical cities in the world powering the Internet. While it has not foreclosed the possibility of expanding internationally or to other markets, its priority is to add depth to current markets rather than look for new ones.

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General Electric GE

Morningstar Rating	Industry	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
★★★★	Industrials	Stable	USD	16.10	13.22	High	Narrow	0.82	110.03

Source: Morningstar. As of Oct. 5, 2018

Whether it's Culp or anyone else at the helm, GE will need time to turn the (power) segment around, and we expect a long road to recovery.

Analyst Note, Oct. 1, 2018
In a management shakeup that surprised us as to timing but not as to selection, John Flannery has been fired from his post as General Electric's chief executive officer. Replacing him is former lead director Lawrence Culp. We are increasing our fair value estimate slightly, to $16.10.

In our June 26 note, "GE Begins Its Great Unwind," we had speculated that if Flannery fell short, Culp could be a replacement. In this instance, Flannery's pedigree helping turn around GE Healthcare could not spare him. At 14 months, Flannery had a radically shorter tenure as CEO compared with predecessor Jeff Immelt's approximately 16 years. We did not foresee this. The board reportedly expressed frustration over the slow pace of change at GE Power, a sentiment we share.

We believe the power market still faces severe secular threats from renewables and overcapacity, so we would expect far more cost-out actions. That said, whether it's Culp or anyone else at the helm, GE will need time to turn the segment around, and we expect a long road to recovery. We do not foresee a recovery in revenue at GE Power until 2022 (from 2017 levels), and unlike management's prior guidance, we model only a 3-point margin recovery at the segment profit level (to 8.6%, as opposed to the 10% management guided to).

Until we hear reason to think otherwise, we are leaving our estimates in place.

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TransCanada TRP

Morningstar Rating	Industry	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
★★★★	Energy	Stable	USD	56	41.56	Medium	Narrow	0.74	37.86

Source: Morningstar. As of Oct. 5, 2018

The market continues to overlook the positive impact the growth portfolio will have on cash flows and the balance sheet.

Analyst Note, Oct. 2, 2018
Narrow-moat TransCanada announced that it is moving forward with the Coastal GasLink pipeline, which will transport 2 billion cubic feet per day of natural gas from the Montney formation in western Canada to the newly approved LNG Canada export facility. The pipeline will cost CAD 6.2 billion to build, but TransCanada is exploring funding options for a possible joint venture. We expect the pipeline to be placed into service by the beginning of 2024, and it is fully underpinned by 25-year take-or-pay contracts.

The CAD 40 billion LNG Canada project received the green light on Oct. 1. The project will export liquefied natural gas from the west coast of Canada to Asian markets, where we expect demand for LNG to increase from approximately 20 billion cubic feet per day to almost 50 bcf/d by 2025.

We think this is a good move for TransCanada as it positions the company to add to its impressive growth portfolio with a fully secured pipeline that positions the company to take advantage of increasing Asian LNG demand. Accordingly, we are slightly raising our fair value estimate to $56 (CAD 72) from our previous estimate of $54 (CAD 71). Additionally, Coastal GasLink will provide another commercially secured growth project to underpin dividend growth.

The stock is up 1% on the news of the project, and we still see plenty of upside. With its 4-star rating and narrow moat, TransCanada's stock offers 35% upside and an attractive dividend yield. The market continues to overlook the positive impact the growth portfolio will have on cash flows and the balance sheet, and it places too much emphasis on less important outside factors such as the widening of the heavy oil discount, the Federal Energy Regulatory Commission's proposed tax regulations, and rising interest rates.

The time is right for long-term investors to capitalize on the stock's considerable upside while collecting a steady stream of growing income.

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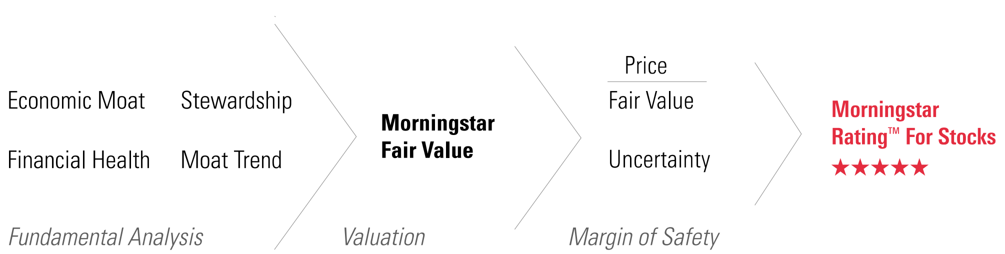
Research Methodology for Valuing Companies

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.

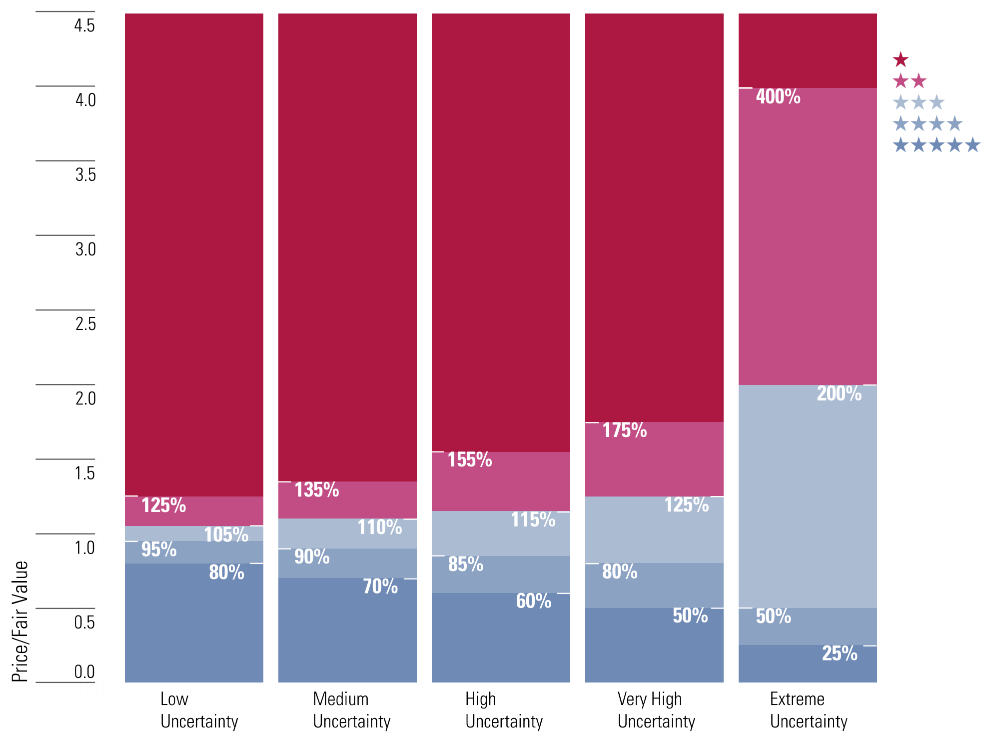
Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case and a 25% probability that the company will perform worse than 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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