

### **Research Highlights**

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

#### Morningstar Equity Research

May 21-25, 2018

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

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#### **Valuations for Steel Companies Are Stretched**

The March 1 announcement that the United States would start imposing a 25% tariff on steel imports has shaken up the steel industry, serving as a boon for U.S. producers. Every operator in the U.S. steel supply chain under our coverage saw its stock price rise when the tariff program was announced. Subsequently, however, the exclusion of certain key trade partners and the extension of negotiating deadlines related to those exclusions have moderated exuberance about how much upside the tariffs will provide.

In the near term, the tariff program will continue to support elevated steel prices and provide a windfall for U.S. steelmakers from a profit perspective. However, with highly optimistic expectations for trade protection already baked in to share prices before the tariffs were announced, most U.S. steel supply chain companies that we cover have actually declined year to date.

Over a longer time horizon, we maintain a negative outlook for U.S. steelmaker profits. As uncertainty regarding steel-related trade frictions abates and trade flows stabilize, the near-record spread between U.S. prices and China mainland prices for benchmark steel product types should contract significantly. At the start of 2018, this spread for hot-rolled coil was roughly \$200, but it has expanded to \$450 in recent weeks. Accordingly, even if China mainland prices (as a rough proxy for global marginal cost) are unchanged, a normalization of this spread would represent significant downside for U.S. steel prices (even if tariffs keep it wider than we've witnessed in recent years).

Although steel tariffs will continue to boost short-term profitability for U.S. steelmakers, valuations are stretched. The dissonance between our outlook and consensus stems primarily from our bearish long-term outlook for Chinese steel demand growth. This is driven, in turn, by our below-consensus forecast for little to no fixed-asset investment growth in China over the medium term, as well as persistent global overcapacity.

#### AK Steel Holding ★★★

AK Steel reported disappointing earnings in the first quarter, with adjusted EBITDA down 33% year over year. The company failed to capitalize on higher steel prices due, in part, to an outage at its Middletown Works facility in Ohio. Shares traded sharply lower in reaction to the company's earnings release. At a current price of roughly \$4.50 per share, AK Steel is modestly overvalued relative to our \$4 fair value estimate. However, the company is currently the least overvalued steel name in our coverage.

#### U.S. Steel ★★★

U.S. Steel reported mixed first-quarter earnings, with shares down sharply as, similar to AK Steel, investors had expected that the company would better capitalize on high steel prices. With a costly reinvestment program underway that will require occasional outages as assets are revitalized, the company is unlikely to benefit from operating leverage to the same degree it normally would, all else equal. Additionally, we remain cautious about demand from the automotive end market over the medium term. Our 2018 adjusted EBITDA forecast sits just below the low end of management's guidance. Our fair value estimate of \$22 per share is materially lower than the current share price of \$35.70 per share.

#### ArcelorMittal ★★★

By contrast ArcelorMittal reported impressive first-quarter results, with a 13% increase in adjusted EBITDA versus the prior year period. We expect the company to outearn its cost of capital for the second year in a row, which would have seemed exceedingly unlikely as recently as early 2016. With first-quarter profitability having outpaced our expectations, we slightly raised our fair value estimate, although shares remain significantly overvalued.

#### Nucor ★★

Moving to minimill operators, Nucor also started 2018 on a positive note. Perhaps no company's management team has been more outspoken about the need for steel trade protection than Nucor and, indeed, the company is positioned to benefit significantly from the new tariff program. We expect higher near-term profits in 2018, but like most steelmakers we cover, forecast that margin contraction will take hold over our five-year explicit forecast period. Nucor remains overvalued, given our \$48 per share fair value estimate and a current price just above \$64 per share.

#### Steel Dynamics ★

Since the close of the first quarter, Steel Dynamics announced the acquisition of CSN Heartland's flat-roll facility. We think this acquisition will ultimately prove to be a modest drag on margins over the medium term, with margins returning to pre-acquisition levels in the long term. While we do see some avenues for synergy realization, we assume that this acquisition is value-neutral, with our fair value estimate of \$31 remaining unchanged. At a current price just below \$50 per share, Steel Dynamics is also overvalued.

#### Commercial Metals ★★

Commercial Metals reported soft first-quarter earnings due to margin compression across its flagship Americas Mills segment as well as its Americas Fabrication segment. We forecast mild margin expansion long term as the company integrates recently acquired assets from Brazilian steelmaker Gerdau. Shares currently trade at \$23.50 versus our fair value estimate of \$17.

#### Schnitzer Steel Industries ★

Schnitzer Steel, one of the largest players in the U.S. metals recycling industry, reported solid firstquarter results, with profits up 77% on a year earlier. Unlike steel prices, ferrous scrap prices have risen only slightly over the last year, limiting upside for Schnitzer's earnings power. Regardless, scrap flows remain strong, which has allowed Schnitzer to capitalize on the benefits of operating leverage amid higher processing volumes. Additionally, management has done a commendable job pushing through its cost-cutting program, which should help support profitability as our outlook for lower ferrous scrap and steel prices gradually takes hold.

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#### Undervalued BT Group Should Outlast Any Regulatory Concerns

BT Group is the incumbent telecom operator in the United Kingdom. In 2016 it bought EE, the largest wireless telecom operator in the country, creating the only company that owns fixed-line and wireless telephone networks in the U.K. The U.K. has been slow to move to convergence, but we believe this acquisition will lead BT to push convergence similar to leading operators in several other European countries. We think this ownership provides the firm with a competitive advantage over other operators. BT's stock price has been hammered due to issues at other units, including regulatory issues and concerns regarding its underfunded pension. However, we believe the market has overreacted to these issues and that the fundamental value in the company is being overlooked.

- ▶ BT has a narrow economic moat due to cost advantages associated with its fixed-line and wireless operations, as well as efficient scale in wireless.
- ► The firm is the only operator to own both fixed and wireless telephone networks in the U.K., which enables it to push convergence and capture greater value from each customer.
- ► The global services division continues to struggle, but this has become a much smaller part of the company due to the acquisition of EE, its shrinkage, and growth elsewhere.
- ▶ BT has an underfunded pension of GBP 6.4 billion pretax as of March 31, 2018, which significantly increases the firm's liabilities. We recognize concerns raised by the pension, but by our estimation, BT will continue to generate sufficient free cash flow to cover its high dividend, invest in the business, and handle its underfunded pension plan.
- ► The firm's acquisition of sports rights has been expensive, but these have helped to drive broadband subscriber growth and are beginning to generate revenue.
- Complaints from other operators and the 10-year regulatory review of the U.K. telecom market by Ofcom added uncertainty to the industry, which we believe is mostly settled.
- ▶ BT trades at a 44% discount to our fair value estimate, with an enterprise value/EBITDA multiple of 4.2, one of the lowest in our European telecom coverage, and yields 7.6%, our highest yield.

#### BT's Scale and Unique Assets Are Key to Its Narrow Moat Rating

BT is the only company in the U.K. to own both fixed-line and wireless telephone networks. Its scale as the largest fixed-line, broadband, and wireless telecom operator provides it with a narrow moat due to cost advantages. Additionally, it benefits from efficient scale, as the costs for a new entrant into wireless telecom would be such that the operator would have an extremely difficult time earning its cost of capital.

We have long been proponents of converged services, as noted in our May 28, 2015, report Convergence to Quad Play Reshapes Communications Markets. In this report, we stated that the U.K. and Italy were laggards in the move to convergence. Now, three years later, those two countries are beginning to focus on convergence and BT is best suited to prosper from these trends, as it is the only operator that owns both fixed-line and wireless networks in the country. In 2002, BT sold its stake in 02 (its original wireless business) to fend off bankruptcy following the collapse of the telecom bubble.

With BT having acquired EE in 2016, it once again owns both a fixed-line and wireless network. We have been disappointed with the slow rate at which the firm has integrated the two operations, but we believe this was partly due to ongoing reviews by Ofcom, the U.K. telecom regulator. In May, BT announced a much better integrated converged offering. We believe this will further the distinction between BT and other U.K. operators, as it will fully control the customer's experience. BT controls the quality of the network, its maintenance and upgrade schedule, billing of the customer, and opportunities to cross-sell other services. Experience from multiple operators in various countries shows that the more services a customer subscribes to, the lower the churn and the more valuable the customer becomes. This in turn enhances returns on capital and the company's moat. Still, BT's announcement has a twist: Rather than just bundling multiple services for a discounted price, BT plans to maintain high prices, but to entice customers to sign up for the bundled products by offering additional services and increased data allowance. This creates a "more-for-more" service rather than a discounted product. Given the lack of competitors in the U.K. converged marketplace, we think this strategy has a decent chance of success.

Ultimately, we believe the market is missing out on BT's economic moat, which will be strengthened by convergence. BT's stock price has been hammered due to issues at other units, including regulatory issues and concerns regarding its underfunded pension. However, we believe the market has overreacted to these issues and that the fundamental value in the company is being overlooked.

#### **Bulls Say**

- ▶ BT's sports channels provide a well-capitalized competitor to Sky and have signed enough exclusive content to break the latter firm's grip on sports in the U.K.
- ▶ BT has now passed 25 million premises with fibre, which increases its speeds and reduces the relative speed difference with Virgin Media. Transferring customers to faster broadband speeds should provide some revenue growth.
- ► The firm raised its dividend for the sixth year in a row in fiscal 2016 and still plans for a progressive dividend, but we expect future increases will be in the low-single-digit range.

#### **Bears Say**

- ► The British telecom market is very competitive. More than 100 companies offer DSL service.
- ▶ Despite more than GBP 4 billion in pension contribution since March 2012, the pension fund deficit remains at GBP 9.5 billion aftertax. With its new pension agreement, BT will pay GBP 250 million in fiscal 2017, and payments will increase to close to GBP 700 million annually for the next four years, with continued payments through 2030.
- ► The increased size of accounting restatements and lowered guidance for this year and next year generate questions regarding the firm's management.

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#### When It Comes to Productivity, Microsoft Office Still Excels

Before Office 365 was announced eight years ago, the durability of Microsoft's competitive advantage was increasingly uncertain. The firm had been slow to embrace the public cloud movement, faced a flagging PC market, and saw its moat under siege from a variety of new vendors including Amazon, Apple, Google, Red Hat, and Salesforce. One of the chief risks surrounding Microsoft was the future of its stalwart Office franchise, long viewed as a walled garden in the enterprise suddenly met by modern, cloud-based productivity offerings from firms such as Google, Dropbox, Slack, and others. These factors weighed heavily on our moat analysis, resulting in a negative moat trend rating for Microsoft overall.

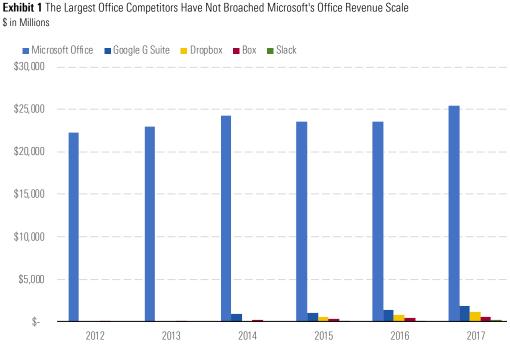
Fast-forward to today, and Microsoft's moat looks as wide as ever. We believe the firm's swift actions to introduce a broader, deeper, cloud-based version of its most important application franchise have mitigated customer switching risk and catalyzed a reversal of fortunes for the firm overall, resulting in our moat trend upgrade to stable from negative in 2016 and evidenced in the consolidated Office business' return to overall growth in fiscal 2017.

Today, we believe Office 365 represents one of the most important growth opportunities for Microsoft over the next 10 years as the firm converts enterprise customers from legacy Office to Office 365 while continuing to attract consumer subscribers with a device- and operating-system-agnostic approach. We think the productivity and collaboration market will be a \$75 billion opportunity in 2027, and we believe the move to a subscription model can yield significant uplift on revenue generated from enterprise customers.

As a result, we think Office will contribute roughly \$62 billion in revenue in fiscal 2027, representing nearly 30% of total Microsoft revenue (up from roughly 26% in fiscal 2017). We think the market is discounting the size of this opportunity, and we view Microsoft as one of the most attractive opportunities in software, with shares trading at a 20% discount to our \$122 fair value estimate.

- Microsoft's wide moat around Office is intact as the firm has mitigated switching risk with its cloud-based Office 365 offering, a principal reason for our 2016 moat trend upgrade to stable. We still see Office's wide moat stemming from significant customer switching costs, as well as a robust platform network effect with developers and end users.
- ► We think the additions of offerings such as Power BI, Yammer, Teams, and other applications are creating net new opportunities for Office in the enterprise.
- ► We think the on-demand nature of Office 365 and the lower total cost of ownership of the cloud-based productivity suite creates lower barriers to adoption for many potential Office customers, particularly in the small and medium-size business market.
- ▶ We estimate productivity and collaboration software will be a \$75 billion market opportunity in 2027. Microsoft has historically held upward of 90% share in this market, according to Gartner, though we think this share calculation fails to account for the revenue uplift Microsoft receives under the subscription model, opportunities for seat expansion with existing customers, greater ability to penetrate international and SMB markets, and potential for uplift in average revenue per user as enterprises move to higher-value bundles.

- ▶ We project annual Office revenue growth of 9% over the next 10 years, as the firm has multiple growth levers. The shift to Office 365 should help mitigate upgrade migration risk, as recurring payments could lead to a total lifetime revenue uplift of 1.5-3 times. Further, Office 365 helps to mitigate piracy risk; Office was one of the most pirated software applications in the world.
- ▶ We think Office 365 will contribute 28% of total revenue and 32% of gross profit in fiscal 2027, roughly in line with current contributions and trumped only by Microsoft Azure.



Source: Company filings, PitchBook, Gartner

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**Best Ideas** 

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

	Morningstar	Fair Value	Current	Uncertainty	Moat	Price /	Market	
Company and Industry	Rating	Estimate	Price	Rating	Rating	Fair Value	Cap (B)	Analyst
Basic Materials								
Cameco (CCJ)	***	\$17	\$10.64	High	Narrow	0.63	4.23	Inton
Compass Minerals International (CMP)	***	\$83	\$66.1	High	Wide	0.80	2.24	Goldstein
Martin Marietta Materials (MLM)	***	\$265	\$218.41	High	Narrow	0.82	13.75	Inton
Communication Services								
BT Group (BT.A)	****	GBX 360	GBX 203.15	High	Narrow	0.56	20.16	C. Nichols
China Mobile (941)	***	HKD 102	HKD 72.05	Medium	Narrow	0.71	1475.26	Baker
Telefonica (TEF)	***	\$13	\$7.77	High	Narrow	0.60	40.38	C. Nichols
Telstra (TLS)	****	AUD 4.4	AUD 2.87	Medium	Narrow	0.65	34.13	Han
Consumer Cyclical								
Advance Auto Parts (AAP)	****	\$159	\$125.17	Medium	Narrow	0.79	9.27	Akbari
Bapcor (BAP)	***	AUD 7	AUD 6.58	Medium	Narrow	0.94	1.84	Ragonese
Bayerische Motoren Werke (BMW)	***	EUR 117	EUR 87.5	High	Narrow	0.75	56.92	Hilgert
Domino's Pizza Enterprises (DMP)	***	AUD 53	AUD 45.82	Medium	Narrow	0.86	4.01	Faul
General Motors (GM)	***	\$56	\$38.39	High	None	0.69	54.11	Whiston
Great Wall Motor (2333)	****	HKD 13.5	HKD 7.81	High	None	0.58	104.40	Hu
Hanesbrands (HBI)	****	\$29	\$18.21	Medium	Narrow	0.63	6.56	Hottovy
Mattel (MAT)	***	\$21.5	\$15.09	High	Narrow	0.70	5.19	Katz
TripAdvisor (TRIP)	***	\$56	\$49.09	High	Narrow	0.88	6.75	Wasiolek
Walt Disney (DIS)	***	\$130	\$102.11	Medium	Wide	0.79	152.20	Macker
Williams-Sonoma (WSM)	***	\$68	\$51.96	Medium	Narrow	0.76	4.32	Katz
WPP (WPP)	***	GBX 1500	GBX 1273	Medium	Narrow	0.85	16.09	Mogharabi
Consumer Defensive								-
G8 Education (GEM)	***	AUD 4	AUD 2.58	High	None	0.65	1.17	James
General Mills (GIS)	****	\$59	\$42.2	Low	Wide	0.72	24.06	Vora
Imperial Brands (IMB)	****	GBX 3900	GBX 2761	Low	Wide	0.71	26.33	Gorham
Kao (4452)	***	JPY 8800	JPY 8301	Low	Wide	0.94	4097.67	Wei
Mondelez International (MDLZ)	***	\$51	\$39.56	Medium	Wide	0.78	58.35	Lash
Procter & Gamble (PG)	****	\$98	\$73.77	Low	Wide	0.75	185.50	Lash
Reckitt Benckiser Group (RB.)	****	GBX 7300	GBX 5981	Low	Wide	0.82	42.14	Gorham
Energy								
Cenovus Energy (CVE)	***	\$21	\$13.99	Very High	None	0.67	17.19	Gemino
Enbridge (ENB)	****	\$64	\$40.7	Medium	Wide	0.64	69.38	Gemino
Enterprise Products Partners (EPD)	***	\$31	\$27.98	Low	Wide	0.90	60.79	Ellis
Royal Dutch Shell (RDS.B)	***	\$78	\$72.72	Low	None	0.93	303.34	Good
Total (TOT)	***	\$74	\$61.04	Medium	None	0.82	161.32	Good
Financial Services	^^^	Ψ	ψ01.01	Widaiaiii	140110	0.02	101.02	0000
American International Group (AIG)	++++	\$76	\$53.71	Medium	None	0.71	48.21	Horn
Capital One Financial (COF)	**** ****	\$126	\$95.33	Medium	Narrow	0.76	46.21	Plunkett
Credit Suisse Group (CSGN)		CHF 22	CHF 16.15	High	Narrow	0.73	41.01	Scholtz
Invesco (IVZ)	***	\$40	\$28.29	Medium	Narrow	0.73	11.62	
, ,	***							Warren
Mitsubishi UFJ Financial Group (8306)	***	JPY 880	JPY 692.4	Medium	None	0.79	9113.95	Wu
QBE Insurance Group (QBE)	***	AUD 13	AUD 9.76	High	Narrow	0.75	13.25	Ellis
Westpac Banking (WBC)	***	AUD 35	AUD 28.29	Medium	Wide	0.81	95.79	Ellis

Source: Morningstar. As of May 25, 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	\$153.66	Medium	Wide	0.58	52.10	Waterhouse
McKesson (MCK)	***	\$210	\$144.03	Medium	Wide	0.69	29.72	Lekraj
Medtronic (MDT)	***	\$105	\$86.99	Medium	Wide	0.83	117.90	Wang
Ramsay Health Care (RHC)	***	AUD 82	AUD 61.5	Medium	Narrow	0.75	12.43	Kallos
Roche Holding (ROG)	****	CHF 325	CHF 217.6	Low	Wide	0.67	186.34	Andersen
Shire (SHP)	***	GBX 4890	GBX 4103	Medium	Narrow	0.84	37.50	Andersen
Industrials								
Anixter International (AXE)	****	\$107	\$61.1	Medium	Narrow	0.57	2.04	Bernard
Beijing Enterprises Holdings (392)	***	HKD 58	HKD 42.85	Medium	Narrow	0.74	54.08	Song
Brambles (BXB)	***	AUD 11.2	AUD 9.11	Medium	Wide	0.81	14.49	Fleck
CK Hutchison Holdings (1)	***	HKD 124	HKD 89.5	Medium	None	0.72	345.26	Tan
Fluor (FLR)	***	\$65	\$48.75	High	Narrow	0.75	6.85	Schoonmaker
G4S (GFS)	***	GBX 337	GBX 273.5	Medium	None	0.81	4.24	Field
GEA Group (G1A)	***	EUR 47	EUR 32.05	Medium	Wide	0.68	5.78	Molina
Guangshen Railway (525)	***	HKD 6.8	HKD 4.56	High	None	0.67	38.47	Song
Johnson Controls International (JCI)	***	\$53	\$34.42	High	Narrow	0.65	31.88	Bernard
KION GROUP (KGX)	***	EUR 86	EUR 71.36	Medium	Narrow	0.83	8.42	Molina
Royal Philips (PHIA)	***	EUR 42	EUR 35.88	Medium	Narrow	0.85	32.83	Vonk
Sodexo (SW)	***	EUR 110	EUR 85.02	Medium	Narrow	0.77	12.61	Field
Stericycle (SRCL)	***	\$86	\$63.25	High	Narrow	0.74	5.41	Young
Real Estate	222	φου	ψ00.20	riigii	IVAITOVV	0.74	0.41	roung
AVEO Group (AOG)	***	AUD 3.1	AUD 2.6	Medium	None	0.84	1.51	Sherlock
Sun Hung Kai Properties (16)	***	HKD 153	HKD 125	Medium	Narrow	0.82	362.12	Zhong
Vornado Realty Trust (VNO)	***	\$76	\$67.57	High	None	0.89	12.83	Schwer
Welltower (WELL)	***	\$74	\$56.25	High	None	0.76	20.92	Brown
Technology	222	Ψ7-τ	ψ00.20	riigii	None	0.70	20.02	DIOWII
Guidewire Software (GWRE)	***	\$100	\$92.59	Medium	Wide	NA	7.40	Nelson
Intel (INTC)	***	\$62	\$54.75	Medium	Wide	0.88	255.14	Davuluri
KLA-Tencor (KLAC)	***	\$125	\$113.53	High	Wide	0.91	17.70	Davuluri
	***	\$112	\$94.85	Medium	Wide	0.85	22.29	Colello
Microchip Technology (MCHP) Microsoft (MSFT)	****	\$122	\$98.31	Medium	Wide	0.81	755.34	Nelson
·	****	AUD 4.05	AUD 3.08	Medium	Narrow	0.76	1.85	James
MYOB Group (MYO)		\$75	\$59.08		Narrow	0.70	87.61	Davuluri
Qualcomm (QCOM)	***			High				
Sabre (SABR)	***	\$27	\$23.88	Medium	Narrow	0.88	6.58	Wasiolek
Salesforce.com (CRM)	***	\$145	\$128.74	Medium	Wide	0.89	95.64	Nelson
Synaptics (SYNA)	***	\$64	\$41.63	Very High	None	0.65	1.44	Davuluri
TDK (6762)	***	JPY 11500	JPY 10170	High	None	0.88	1283.45	Ito
Tencent Holdings (700)	***	HKD 641	HKD 404	High	Wide	0.63	3839.29	Tam
Utilities		1170.00	1170 5 04			0.04		4.11
Contact Energy (CEN)	***	NZD 6.2	NZD 5.64	Medium	Narrow	0.91	4.04	Atkins
Dominion Energy (D)	****	\$84	\$64	Low	Wide	0.76	41.76	Fishman
FirstEnergy (FE)	***	\$40	\$33.94	Low	Narrow	0.85	16.19	Fishman
Gas Natural SDG (GAS)	***	EUR 23.5	EUR 21.15	Medium	Narrow	0.90	21.15	Fulop
SCANA (SCG)	****	\$57	\$35.47	Medium	Narrow	0.62	5.06	Miller

Source: Morningstar. As of May 25, 2018

#### **Highlighted Stocks**

#### General Electric GE

Morningstar				Fair Value	Current L	Uncertainty		Price/Fair	Market
Rating	Industry	Moat Trend	Currency	Estimate	Price F	Rating	Moat Rating	Value	Cap (Bil)
***	Industrials	Stable	USD	19	14.60 H	High	Wide	0.77	126.81

Source: Morningstar. As of May 25, 2018

GE is known to be shopping its assets, so we doubt any buyer feels compelled to overpay. Still, the price does not seem wildly out of line, and this division contributes only 3% of total GE revenue.

#### Analyst Note, May 21, 2018

In CEO John Flannery's largest portfolio adjustment to date, General Electric will merge its locomotive manufacturing unit with Wabtec in exchange for \$2.9 billion in cash. GE shareholders will own 40.2% of the combined company and GE itself will own 9.9%, which it can sell after a lockup to raise capital. Current Wabtec shareholders retain 49.9% of the new firm. The deal is valued at \$11 billion (\$10 billion net of tax). GE expects transportation will produce EBITDA of \$0.75 billion in 2018 and \$0.9 billion-\$1.0 billion in 2019. We expect the deal will close in early 2019.

The transportation sale was telegraphed last fall and Wabtec was a rumored partner, so this is no surprise, but we think the market may reward any signs of execution on portfolio allocation. The enterprise value/2019 EBITDA multiple seems to be in the 9-10 range including claimed synergies and tax benefits, which is 4-5 turns lower than GE's forward EBITDA multiple, but this might be justified by the cyclicality of the business. GE is known to be shopping its assets, so we doubt any buyer feels compelled to overpay. Still, the price does not seem wildly out of line, and this division contributes only 3% of total GE revenue. We maintain our \$19 fair value estimate and wide moat rating.

The GE transportation business is attractive, but sales and margins gyrate due to big year-to-year swings in locomotive demand. In selling most of this unit, GE demonstrates it can take action, raises cash, and potentially decreases earnings variability. We doubt there are meaningful synergies with other GE segments. While this business is only about \$4 billion of GE's total \$122 billion in 2017 revenue, we like the duopoly structure of the diesel-electric locomotive market and the recurring revenue stream from servicing long-lived assets.

Flannery indicated in October that he plans to sell \$20 billion of assets, and in the first-quarter earnings release, he indicated he expected proceeds of \$5 billion-\$10 billion in 2018. Before the Wabtec deal, GE had announced transactions in industrial solutions and healthcare value-based care (around \$3 billion combined). Sale of the \$2 billion top-line lighting division could come at any time, for it has been assumed to be on the market for many months.

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#### Kion Group KGX:DE

Morningstar				Fair Value	Current	Uncertainty		Price/Fair	Market
Rating	Industry	Moat Trend	Currency	Estimate	Price	Rating	Moat Rating	Value	Cap (Bil)
****	Industrials	Stable	EUR	86	71.50	Medium	Narrow	0.83	8.42

Source: Morningstar. As of May 25, 2018

(Dandashly's) obvious weakness is his lack of logistics experience. At GE, he focused on the oil and gas end markets, which have no overlap with Dematic's business.

#### Analyst Note, May 22, 2018

John Baysore's decision to step down as Dematic's CEO is a loss to Kion's warehouse equipment division, in our view, but the potential risks to client relationships are partly hedged, with client management shared by regional presidents and the teams beneath them. We maintain our narrow moat rating and our EUR 86 fair value estimate, and view shares as attractively valued.

Dematic's client relationships are managed by regional teams, but in North America, where more than half of the firm's current orders are derived, we believe Baysore has a more involved role; as such, he will stay on as an advisor while new CEO Hasan Dandashly gets up to speed and Scott Watts, the North America president, takes over more of the client relationships.

Dandashly's background offers some advantages: 1) a software/automation background (his experience in industrial automation dates back to the 1990s); 2) prior divisional leadership (4 of his 20 years at GE involved divisional CEO roles); and 3) experience in running large and complex automation projects with a long service-led aftermarket (shared characteristics with the warehouse equipment business).

His obvious weakness is his lack of logistics experience. At GE, he focused on the oil and gas end markets, which have no overlap with Dematic's business. He will have a steep learning curve on Dematic's products and clients, but perhaps less so on technology. In that sense, he is a sharp contrast to Baysore, who has a background in welding but whom we view as a talented leader, having turned Dematic around from an ailing business in 2007 to its current industry-leading position.

However, Dematic's product portfolio and the warehouse equipment sector have changed over Baysore's tenure towards larger, more complex projects (for example, for large global e-commerce players such as Amazon and Zara), with software and automation playing a greater role--areas where Dandashly's project and software experience might be an advantage.

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Morningstar Rating	Industry	Moat Trend	Currency	Fair Value Estimate	Current Uncertainty Price Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
***	Technology	Stable	USD	322	243.78 High	Wide	0.76	83.79

Source: Morningstar. As of May 25, 2018

Data. DIDII

Although it is unfortunate that Baidu loses Lu's Al expertise, Haifeng Wang's promotion to senior vice president and general manager of Baidu's Al group ensures continuity of the Al business.

#### Analyst Note, May 21, 2018

We don't think the departure of Qi Lu, the chief operating officer and group president at wide-moat Baidu, will change the strategic direction of the company: refocusing on search, feeds, and artificial intelligence and reducing noncore operations such as online-to-offline services. Thus, we think the shares' 10% sell-off during the May 18 U.S. trading session was a market overreaction that provides long-term investors a good entry point. We reaffirm our fair value estimate at \$322 per ADR and believe the shares are undervalued.

While we acknowledge Lu's achievements in improving Baidu's financials since his appointment in January 2017, we do not think the improvement was solely due to his leadership. In 2017, total revenue was up 20% year over year versus 6% in 2016, while operating profit was up 56% versus negative 14% in 2016. We think the strong recovery in 2017 was at least partly due to the low base in 2016, when the medical scandal revolving around Wei Zexi in the second quarter of 2016 and subsequent tightened regulations led to reduced revenue. We also note that the rapidly growing feed product was introduced in the middle of 2016, before Lu's appointment.

Though Lu accelerated the strategic shift from the underperforming 020 businesses and the redeployment of resources to artificial intelligence, we highly doubt that Baidu will reinvest in nonsynergistic businesses and deviate from AI now that it is back on the right track. In the earnings transcripts, we noted a larger change in Baidu's attitude toward the weak 020 businesses several months after Lu joined, but management had already started to reduce spending on the 020 businesses before Lu came on board.

Although it is unfortunate that Baidu loses Lu's Al expertise, Haifeng Wang's promotion to senior vice president and general manager of Baidu's Al group ensures continuity of the Al business, in our view. Before the promotion, Wang was already overseeing the company's Al efforts (machine learning, Big Data, computer vision, natural language processing, speech technology, knowledge graph, robotics, and augmented reality) and reported to Lu. Therefore, we are not overly concerned about an absence of Al leadership at Baidu. Now that Wang reports to CEO Robin Li, we expect Li, who has a strong belief in the importance of Al, to be more involved in leading the Al business.

#### **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.

# Economic Moat Stewardship Financial Health Moat Trend Morningstar Fair Value Uncertainty Price Fair Value Morningstar Rating™ For Stocks ★★★★

Margin of Safety

Valuation

Source: Morningstar.

Fundamental Analysis

Morningstar Research Methodology

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.

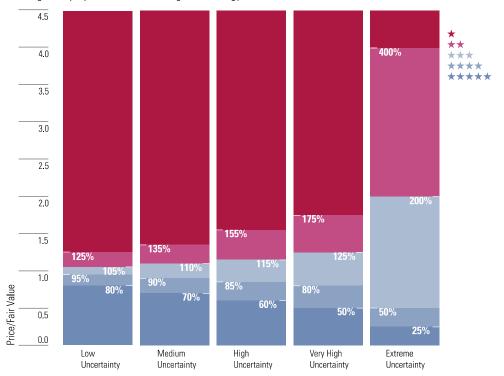
Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case and a 25% probability that the company will perform worse than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





#### **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.

#### **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 the 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.

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