

# **Research Highlights**

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

# Morningstar Equity Research

May 14-18, 2018

#### Contents

## Research Highlights

- Berkshire Hathaway: Acquisitions, Repurchases, or Dividends?
- 3 First-Quarter Look at Our Agriculture Coverage
- 6 Initiating Coverage of U.K. Medical Technology Firm LivaNova

#### 7 Best Ideas

# **Highlighted Stocks**

- 9 Orsted ORSTED:DK
- 10 Sina SINA
- 11 MGM Resorts International MGM

#### Online

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

#### Dieclocuro

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

# Berkshire Hathaway: Acquisitions, Repurchases, or Dividends?

Over the past five years, our position on the analyst panel at wide-moat Berkshire Hathaway's annual meeting has allowed us to ask CEO Warren Buffett and Vice Chairman Charlie Munger questions about the inner workings and performance of Berkshire's operating companies and investments, the capital allocation decision-making at the parent company and subsidiary level, and long-term succession planning for Berkshire's managers.

The questions we asked at this year's annual meeting were primarily geared toward greater insight into the biggest capital allocation decision management will need to make in the near to medium term — namely, how Buffett and Munger expect to deploy Berkshire's growing cash hoard at a time asset valuations are high, interest rates are rising, corporate income tax rates are lower, and some of the company's more reliable capital expenditure outlets (BNSF and Berkshire Hathaway Energy) are expected to spend less longer term on capital improvements—and we came away with a few interesting nuggets of information.

- ► Berkshire has too much cash and not enough good options to deploy it. With the firm likely to generate \$5 billion—\$10 billion in free cash flows quarterly going forward, we expect during our five-year forecast period that Berkshire will reach the \$150 billion cash threshold Buffett said would be difficult to defend.
- ► Acquisitions and stock investments have been few and far between with valuations elevated. That said, we have identified more than a handful of potential targets that Berkshire could consider as the firm looks to deploy the \$80 billion—\$85 billion of dry powder it had on hand at the end of the first quarter.
- ▶ Share repurchases and dividends remain illusory. During the past decade, Berkshire has returned \$1.3 billion to shareholders via share repurchases. Absent any large acquisitions, we expect the firm to start returning more cash to shareholders. While share repurchases are the preferred option, a special one-time dividend could be the bitter pill Buffett has to swallow in the near to medium term.

  Berkshire's shares are slightly undervalued. At today's prices, Berkshire is trading at 90% of our fair value estimate of \$330,000 (\$220) per Class A (B) share, implying a double-digit gain from current prices. The company's willingness to buy back shares at prices below 1.2 times value which stood at \$211,184 (\$140.79) Class A (B) share at the end of the first quarter has effectively created a floor on the stock.

# First-Quarter 13-F

There were few big surprises in Berkshire's first-quarter 13-F filing. The company already announced in mid-February the sale of 35 million shares of Phillips 66 common stock for \$3.3 billion in a private transaction with the oil and gas company. Buffett had also alluded recently to the purchase of 74.2

million additional shares of Apple for an estimated \$12.5 billion, which lifted the tech giant to more than one fifth of Berkshire's equity portfolio, noting that the insurer eliminated its remaining stake in IBM as well (for an estimated \$314 million).

Berkshire also made large additions to existing stakes in Monsanto and Teva Pharmaceuticals, increasing its holdings in the former by more than 60% (acquiring an additional 7.3 million shares of the agricultural products firm for an estimated \$850 million) and more than doubling its stake in the latter (picking up 21.7 million more shares of the generic drug manufacturer for an estimated \$390 million). Other purchases during the quarter included 3.7 million shares of US Bancorp, 1.4 million shares of Bank of New York Mellon, and 0.5 million shares of Delta Air Line (for an estimated \$197 million, \$73 million and \$27 million, respectively).

While we knew about Berkshire trimming its Wells Fargo stake (selling 1.7 million shares for an estimated \$97 million during the period) to keep its holdings below 10% of the bank's total outstanding shares, we were surprised to see the insurer sell more than 80% of its position in Verisk Analytics (for an estimated \$128 million), while also eliminating its remaining stake in Graham Holdings (for an estimated \$62 million). As for the remaining sales, Berkshire sold 0.3 million shares of Charter Communications, 1.9 million shares of Liberty Global PLC, 0.5 million shares of United Continental, and 0.2 million shares of Sanofi-Aventis (for an estimated \$86 million, \$66 million, \$35 million and \$7 million, respectively).

These changes in the equity investment portfolio, as well as market movements, during the first quarter had a slight impact on Berkshire's top stock holdings. At the end of March, the company's top 5 positions—Apple (21.3%), Wells Fargo (12.7%), Bank of America (10.8%), Kraft Heinz (10.7%), and Coca-Cola (9.2—accounted for 64.6% of its \$188.9 billion portfolio, and its top 10 holdings—which included American Express (7.5%), US Bancorp (2.4%), Phillips 66 (2.3%), Moody's (2.1%), and Bank of New York Mellon (1.7—accounted for 80.7%.

Greggory Warren, CFA | greggory.warren@morningstar.com

# First-Quarter Look at Our Agriculture Coverage

Unfavorable weather weighed on first-quarter results for many of the agriculture companies we cover, as a delayed start to the U.S. planting season reduced sales across every crop input category. While seed sales should bounce back in the second quarter, we expect less total nitrogen and crop chemicals will be used in 2018 as the late start reduces midseason applications. However, stronger potash demand outside of North America should more than offset stagnant or slightly reduced demand in North America.

So far this year, potash and phosphate prices have been supported by reduced supply. In potash, new supply delays via lower-than-expected potash production from both SQM and K+S have led to a tighter market. We expect this dynamic to continue throughout the year, and we've raised our 2018 potash price forecast to \$270 per metric ton. Similarly, phosphate prices have also been supported by reduced supply as production has decreased in both the U.S. (from Mosaic) and China. Accordingly, we've raised our 2018 price forecast to \$380 per metric ton. Our long-term price forecast for potash and phosphate are unchanged at \$270 and \$350 per metric ton, respectively, in real terms.

From a valuation standpoint, potash producers are trading at a larger discount to fair value than the rest of our ag coverage, largely due to our long-term outlook that potash prices will remain flat, in real terms, while we forecast real price declines in nitrogen and phosphate. Nutrien and Mosaic offer the most upside based on current prices, as they trade at price/fair value ratios of 0.89 and 0.86, respectively. We view K+S as overvalued, as the firm's higher-cost potash and salt production will limit its earnings power. We also view CF as overvalued, given our forecast for lower nitrogen prices. Although we view Best Idea Compass Minerals as undervalued, we expect profitable growth to be driven primarily by the company's salt segment rather than its fertilizer business.

# Nutrien ★★★

Nutrien reported mixed first-quarter results, as strong potash and phosphate profits were offset by weak profits from the nitrogen and retail segment. Although the retail and nitrogen businesses will make up some of the lost sales in the second quarter, we slightly reduced our full-year outlook for both segments. However, the overall impact was largely offset by our increased near-term potash price forecast. After updating our 2018 outlook, we maintained our \$58 per share fair value estimate. Although the stock has risen over 10% since the company raised guidance in its earnings announcement, we still see over 12% upside. At current market prices of \$51.70, Nutrien is our preferred fertilizer stock.

# Mosaic ★★★

Mosaic reported somewhat disappointing first-quarter results, as the company's potash sales volumes fell due to near-term weather-related rail issues. As such, the firm was unable to fully take advantage of higher potash prices. Although we lowered our 2018 potash volume forecast for Mosaic to 8.40 million metric tons from 8.75, we think the company will benefit from higher near-term potash and phosphate prices. We left our \$32 per share fair value estimate unchanged and think Mosaic offers some upside at the current price of \$27.57.

# Compass Minerals International $\star\star\star\star$

Best Idea Compass Minerals reported mixed fertilizer results, as higher sulfate of potash volumes were offset by lower prices. Because most of Compass' Plant Nutrition North America volumes are shipped to the western U.S., the firm wasn't heavily affected by the colder spring in the Midwest. However, we continue to forecast sulfate of potash, or SOP, prices to fall in line with the marginal cost of production based on the production of SOP from standard potash. Regardless, we think Compass Minerals is undervalued and that higher deicing salt prices and lower salt unit production costs will boost profits for the salt segment, which generates the majority of companywide profits. At the current price of \$69.40 per share, we think Compass offers attractive risk-adjusted upside to our \$83 fair value estimate.

#### K+S AG ★★

K+S reported solid first-quarter results as the company ramps up its new lower-cost Bethune potash mine in Saskatchewan. Although the Bethune mine will lower K+S' position on the cost curve, the company will continue to sit on the upper half of the cost curve on a consolidated basis. The higher position on the cost curve will limit the company's profit growth as we forecast that potash prices will remain stable in real terms over the long term. Although we raised our fair value estimate to EUR 20 based on higher near-term potash prices, we view K+S as overvalued at the current price of EUR 25.69.

# CF Industries Holdings ★★

CF Industries' first-quarter results were derailed by the delayed start to the U.S. planting season. Although we expect some of the lost sales to be made up in the second quarter, we reduced our total volume forecast for 2018 to align with our outlook that farmers will use less total nitrogen in 2018. Although we maintained our fair value estimate of \$30 per share, we see CF as overvalued at the current price of \$41.74, as we forecast that nitrogen prices will decline in real terms over the next several years. Our negative outlook is based on our view that new supply from the Middle East as well as Chinese nitrogen plant restarts will outpace demand growth.

# SQM ★★★

SQM has yet to report earnings. The company is scheduled to report first-quarter results on May 23. However, based on other companies' commentary, we think SQM will report higher potash and specialty fertilizer prices, partially offset by lower potash volumes as the company converts more of its brine to lithium production rather than potash production. The stock currently trades at \$57.16 per share, which is slightly above our \$55 per share fair value estimate.

# Archer-Daniels Midland ★★★

Turning to ag companies we cover outside of the fertilizer space, Archer-Daniels Midland reported a mixed first quarter, as higher oilseeds profits were partially offset by reduced transportation results in the origination segment. Although the company is facing some near-term headwinds related to China's proposed tariffs on U.S. crops, favorable grain merchandising conditions will outweigh the impact of the tariffs. At the current price of \$44.41 per share, we view ADM as fairly valued, trading roughly in line with our \$46 per share fair value estimate.

# Bunge ★★★

Bunge began the year on a high note as higher soy crush margins led management to raise operating profit guidance. Similar to ADM, Bunge should realize higher near-term profits due to favorable grain merchandising conditions. However, Bunge should also benefit in the near term from China's proposed tariffs as the firm has a greater proportion of soybean processing operations in South America than ADM. At the current price of \$71.04, Bunge is trading slightly below our \$75 fair value estimate.

#### Monsanto ★★★

Monsanto reported mixed fiscal second-quarter results as lower corn seed volumes were offset by growth in all other segments. Bayer's proposed acquisition of Monsanto continues to move toward closing by the end of June. Reports indicate that Bayer and Monsanto have received U.S. Justice Department approval for the deal after Bayer agreed to divest additional agriculture assets. Monsanto's stock currently trades at \$125.29 per share, which is just shy of the all-cash offer price from Bayer of \$128. Our fair value estimate of \$128 per share reflects a 100% probability that the deal closes as planned.

## DowDuPont ★★★

DowDuPont's first-quarter results were heavily affected by the delayed start to the U.S. planting season. We think most of the company's seed volumes will be made up in the second quarter. However, we're less optimistic about demand for many of the company's crop chemicals, as now we think U.S. farmers are likely to use less crop chemicals this year. Trading at \$67.15 per share, DowDuPont is fairly valued relative to our \$64 per share fair value estimate.

## FMC ★★★

FMC reported solid first-quarter results as the company's crop chemicals segment grew sales by double digits on a pro forma basis in all geographical regions. Although the company had a strong first quarter in North America, second-quarter results are likely to be affected by the late planting season, as FMC sells its products through distributors and retailers. While the company has a bright medium-term outlook as it integrates the DuPont portfolio, we think it will have trouble replacing Rynaxypyr when it comes off patent in 2022 and we forecast a margin decline thereafter. Having raised our fair value estimate to \$80, we still view the company as modestly overvalued at the current prices of \$90.

Seth Goldstein, CFA | seth.goldstein@morningstar.com

# Initiating Coverage of U.K. Medical Technology Firm LivaNova

We are initiating coverage of LivaNova, a U.K.-based medical technology company, with narrow moat and stable trend ratings. We estimate fair value at \$87 per share, which puts shares in 3-star territory and values the business at a multiple of 24.5 times and 15.5 times our estimate of 2018 earnings and EBITDA, respectively. Formed through the 2015 merger of Cyberonics and Sorin, LivaNova benefits from the narrow-moat intangible assets built at each of the two precursor firms. While the early days after the merger were marred by stumbles in execution and a disjointed investment strategy, a leadership change in early 2017 signaled a new beginning for the company and its investors. Current CEO Damien McDonald has worked deftly to prune the firm's portfolio and sharpen its focus on more efficiently using its moatworthy assets. By expanding its investment behind the neuromodulation and cardiopulmonary segments while making strategic acquisitions to reload the firm's pipeline, McDonald has put LivaNova in a better position to compete. While the pipeline investments are early stage and won't reach potential commercialization until 2020 or beyond, we think the firm has a good chance of widening its moat as these assets begin to bear fruit.

We estimate that the firm will be able to grow revenue at an 8% compounded rate over our forecast period, driven by continued strength in neuromodulation and the effects of product upgrades in the firm's cardiopulmonary division. Additionally, we assume the firm can move toward a gross margin structure in the low 70% range, in line with peers in similar markets. Importantly, we anticipate 2018 to be the last year of substantial merger- and restructuring-related expenses, which should allow for cash conversion at the enterprise to improve in 2019 and beyond. As a result, we expect free cash flow to nearly double by 2022, nearing \$300 million in annual free cash generation, up from our \$150 million estimate for 2018.

## **Bulls Say**

- ► The firm has attracted impressive executive talent that should prove effective in optimizing the company's cost structure.
- ► To date, the firm has been managed fairly conservatively with a very low level of debt. This gives management ample dry powder to continue adding to the company's pipeline over time.
- ► LivaNova has developed expertise in smaller, more niche markets, which helps insulate the business from more intense competition seen elsewhere in med-tech.

#### Bears Say

- ► A lack of patent protection means LivaNova relies on other intangibles, such as clinical data and physician relationships, to maintain its narrow economic moat.
- ► Management has focused the company's pipeline on large but highly competitive markets such as mitral valve replacement. This pits LivaNova up against the likes of Medtronic and Edwards Lifesciences, firms with much larger development budgets.
- ► While recalls haven't been incredibly common, the FDA-mandated moratorium on LivaNova's heater-cooler sales have weighed on growth since the formation of the company.

**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	\$11.44	High	Narrow	0.67	4.55	Inton
Compass Minerals International (CMP)	****	\$83	\$69.2	High	Wide	0.83	2.34	Goldstein
Martin Marietta Materials (MLM)	***	\$265	\$213.51	High	Narrow	0.81	13.44	Inton
Communication Services								
BT Group (BT.A)	****	GBX 360	GBX 204.65	High	Narrow	0.57	20.31	C. Nichols
China Mobile (941)	***	HKD 102	HKD 73.4	Medium	Narrow	0.72	1502.90	Baker
Telefonica (TEF)	***	\$13	\$7.97	High	Narrow	0.61	41.38	C. Nichols
Telstra (TLS)	****	AUD 4.4	AUD 2.85	Medium	Narrow	0.65	33.90	Han
Consumer Cyclical								
Advance Auto Parts (AAP)	***	\$159	\$119.79	Medium	Narrow	0.75	8.87	Akbari
Bapcor (BAP)	***	AUD 7	AUD 6.5	Medium	Narrow	0.93	1.82	Ragonese
Bayerische Motoren Werke (BMW)	***	EUR 117	EUR 93.3	High	Narrow	0.80	60.70	Hilgert
Domino's Pizza Enterprises (DMP)	***	AUD 53	AUD 42.99	Medium	Narrow	0.81	3.77	Faul
General Motors (GM)	***	\$56	\$38.3	High	None	0.68	53.98	Whiston
Great Wall Motor (2333)	****	HKD 13.5	HKD 7.82	High	None	0.58	106.00	Hu
Hanesbrands (HBI)	****	\$29	\$18.14	Medium	Narrow	0.63	6.54	Hottovy
Mattel (MAT)	****	\$21.5	\$15.28	High	Narrow	0.71	5.26	Katz
TripAdvisor (TRIP)	***	\$56	\$48.85	High	Narrow	0.87	6.71	Wasiolek
Walt Disney (DIS)	***	\$130	\$104.34	Medium	Wide	0.80	155.52	Macker
Williams-Sonoma (WSM)	***	\$68	\$48.79	Medium	Narrow	0.72	4.06	Katz
WPP (WPP)	***	GBX 1500	GBX 1324	Medium	Narrow	0.88	16.74	Mogharabi
Consumer Defensive								Ü
G8 Education (GEM)	***	AUD 4	AUD 2.6	High	None	0.65	1.18	James
General Mills (GIS)	****	\$59	\$42.81	Low	Wide	0.73	24.41	Vora
Imperial Brands (IMB)	****	GBX 3900	GBX 2757.5	Low	Wide	0.71	26.30	Gorham
Kao (4452)	****	JPY 8800	JPY 7823	Low	Wide	0.89	3861.72	Wei
Mondelez International (MDLZ)	***	\$51	\$39.52	Medium	Wide	0.77	58.29	Lash
Procter & Gamble (PG)	****	\$98	\$73.96	Low	Wide	0.75	185.98	Lash
Reckitt Benckiser Group (RB.)	****	GBX 7300	GBX 5903	Low	Wide	0.81	41.59	Gorham
Energy								
Cenovus Energy (CVE)	***	\$21	\$14.32	Very High	None	0.68	17.60	Gemino
Enbridge (ENB)	****	\$64	\$42.19	Medium	Wide	0.66	71.92	Gemino
Enterprise Products Partners (EPD)	***	\$31	\$28.13	Low	Wide	0.91	61.12	Ellis
Royal Dutch Shell (RDS.B)	***	\$78	\$76.2	Low	None	0.98	317.85	Good
Total (TOT)	***	\$74	\$63.99	Medium	None	0.86	166.21	Good
Financial Services	^^^	Ψ	ψ00.00	Wicalam	140110	0.00	100.21	dood
American International Group (AIG)	***	\$76	\$54.79	Medium	None	0.72	49.18	Horn
Capital One Financial (COF)	****	\$126	\$96.74	Medium	Narrow	0.72	47.06	Plunkett
Credit Suisse Group (CSGN)	****	CHF 22	оро.74 СНҒ 16.65	High	Narrow	0.76	42.28	Scholtz
* * * * *		\$40	\$28.65	підіі Medium	Narrow	0.70		
Invesco (IVZ) Mitsubishi UFJ Financial Group (8306)	***						11.77	Warren
	***	JPY 880	JPY 723.5	Medium	None	0.82	9523.31	Wu
QBE Insurance Group (QBE)	***	AUD 13	AUD 10.46	High	Narrow	0.80	14.20	Ellis
Westpac Banking (WBC)	***	AUD 35	AUD 28.85	Medium	Wide	0.82	97.69	Ellis

Source: Morningstar. As of May 18, 2018

**Best Ideas** 

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

	Morningstar	Fair Value	Current	Uncertainty	Moat	Price / Fair		
Company and Industry	Rating	Estimate	Price	Rating	Rating	Value	Cap (B)	Analyst
Healthcare								
Allergan (AGN)	****	\$263	\$160.23	Medium	Wide	0.61	54.33	Waterhouse
McKesson (MCK)	***	\$210	\$150.99	Medium	Wide	0.72	31.16	Lekraj
Medtronic (MDT)	***	\$105	\$85.11	Medium	Wide	0.81	115.36	Wang
Ramsay Health Care (RHC)	***	AUD 82	AUD 63.81	Medium	Narrow	0.78	12.89	Kallos
Roche Holding (ROG)	****	CHF 325	CHF 224.55	Low	Wide	0.69	192.48	Andersen
Shire (SHP)	****	GBX 4890	GBX 4218	Medium	Narrow	0.86	38.55	Andersen
Industrials								
Anixter International (AXE)	****	\$107	\$61.9	Medium	Narrow	0.58	2.07	Bernard
Beijing Enterprises Holdings (392)	****	HKD 58	HKD 43.25	Medium	Narrow	0.75	54.58	Song
Brambles (BXB)	****	AUD 11.2	AUD 9.24	Medium	Wide	0.83	14.70	Fleck
CK Hutchison Holdings (1)	****	HKD 124	HKD 88.75	Medium	None	0.72	342.37	Tan
Fluor (FLR)	***	\$65	\$49.78	High	Narrow	0.77	7.00	Schoonmaker
G4S (GFS)	***	GBX 337	GBX 266	Medium	None	0.79	4.13	Field
GEA Group (G1A)	****	EUR 47	EUR 32.71	Medium	Wide	0.70	5.90	Molina
Grupo Aeroportuario del Pacifico (GAP B)	****	MXN 225	MXN 174.33	High	Wide	0.77	97.80	Higgins
Guangshen Railway (525)	***	HKD 6.8	HKD 4.56	High	None	0.67	38.42	Song
Johnson Controls International (JCI)	***	\$53	\$36.51	High	Narrow	0.69	33.82	Bernard
KION GROUP (KGX)	****	EUR 86	EUR 71.62	Medium	Narrow	0.83	8.45	Molina
Royal Philips (PHIA)	***	EUR 42	EUR 36.41	Medium	Narrow	0.87	33.31	Vonk
Sodexo (SW)	***	EUR 110	EUR 82.9	Medium	Narrow	0.75	12.29	Field
Stericycle (SRCL)	***	\$86	\$63.82	High	Narrow	0.74	5.46	Young
Real Estate		, , ,	*****					
AVEO Group (AOG)	***	AUD 3.1	AUD 2.67	Medium	None	0.86	1.55	Sherlock
Sun Hung Kai Properties (16)	***	HKD 153	HKD 127.4	Medium	Narrow	0.83	369.08	Zhong
Vornado Realty Trust (VNO)	***	\$84	\$66.25	Medium	None	0.79	12.60	Schwer
Welltower (WELL)	***	\$74	\$53.93	High	None	NA	20.06	Brown
Technology	^^^	Ψ/4	Ψ00.00	riigii	None	IVA	20.00	DIOWII
Guidewire Software (GWRE)	***	\$100	\$92.81	Medium	Wide	0.93	7.42	Nelson
Intel (INTC)	***	\$62	\$54.81	Medium	Wide	0.88	255.41	Davuluri
KLA-Tencor (KLAC)	***	\$125	\$113.24 \$93.37	High	Wide	0.91	17.65 21.88	Davuluri
Microchip Technology (MCHP)	***	\$112		Medium	Wide	0.83		Colello
Microsoft (MSFT)	***	\$117	\$96.18	Medium	Wide	0.82	738.97	Nelson
MYOB Group (MYO)	***	AUD 4.05	AUD 3.1	Medium	Narrow	0.77	1.86	James
Qualcomm (QCOM)	***	\$75	\$56.95	High	Narrow	0.76	84.44	Davuluri
Sabre (SABR)	***	\$27	\$23.7	Medium	Narrow	0.88	6.54	Wasiolek
Salesforce.com (CRM)	***	\$145	\$126.05	Medium	Wide	0.87	93.64	Nelson
Synaptics (SYNA)	****	\$64	\$42.85	Very High	None	0.67	1.48	Davuluri
TDK (6762)	***	JPY 11500	JPY 10410	High	None	0.91	1313.74	lto
Tencent Holdings (700)	****	HKD 641	HKD 411	High	Wide	0.64	3905.81	Tam
Utilities								
Contact Energy (CEN)	****	NZD 6.2	NZD 5.63	Medium	Narrow	0.91	4.03	Atkins
Dominion Energy (D)	****	\$84	\$63.68	Low	Wide	0.76	41.55	Fishman
FirstEnergy (FE)	***	\$40	\$33.25	Low	Narrow	0.83	15.86	Fishman
Gas Natural SDG (GAS)	***	EUR 23.5	EUR 22.41	Medium	Narrow	0.95	22.41	Fulop
SCANA (SCG)	****	\$57	\$34.02	Medium	Narrow	0.60	4.85	Miller

Source: Morningstar. As of May 18, 2018

# **Highlighted Stocks**

## Orsted ORSTED:DK

Morningstar				Fair Value	Current Und	ncertainty		Price/Fair	Market
Rating	Industry	Moat Trend	Currency	Estimate	Price Rati	iting	Moat Rating	Value	Cap (Bil)
***	Utilities	Stable	DKK	430	415.80 Lov	W	Narrow	0.97	172.98

Source: Morningstar. As of May 18, 2018

We see the shares as slightly undervalued and suitable for growth investors seeking minimum carbon exposure. On the other hand, the 2.4% dividend yield as of early May is well below the sector average.

# Analyst Note, May 14, 2018

We are initiating coverage of Orsted with a fair value estimate of DKK 430 per share, along with narrow moat and stable moat trend ratings. With offshore wind power accounting for 90% of the group's profits, Orsted has a unique business mix in the sector. We see the shares as slightly undervalued and suitable for growth investors seeking minimum carbon exposure. On the other hand, the 2.4% dividend yield as of early May is well below the sector average.

We assign a narrow moat to Orsted, as strong visibility provided by highly subsidized wind power activity gives us certainty that Orsted will earn more than its cost of capital 10 years from now. We calculate that subsidies granted to wind farms in operation and to be commissioned by 2022 have a weighted average remaining lifetime of 15 years before expiring. We ascribe a stable moat trend rating to the group. On the one hand, competition is intensifying as more funding schemes are now auction-based, which drives a decline in subsidies. On the other hand, increasing efficiency and bargaining power against suppliers drive lower construction costs.

We expect the group's recurring EBITDA, excluding construction contracts and farm-down gains, to grow by 12% annually on average though 2027, and for recurring net income to grow by 8% annually. The key growth driver will be new offshore wind farms. In addition to projects under construction to be commissioned by 2022, we factor in 2 GW of incremental capacity to be commissioned by 2025. Our forecasts are roughly in line with the company's consensus through 2020.

Our fair value estimate implies a rich 21.7 average P/E through 2022. We think this is justified by returns on capital well above the sector average and solid cash flow generation, evidenced by normalized free cash flow yield of 10%. We forecast a 8% average annual dividend growth through 2027.

Tancrede Fulop, CFA | tancrede.fulop@morningstar.com

SIIIA SIIVA									
Morningstar Rating	Industry	Moat Trend	Currency	Fair Value Estimate		Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
***	Technology	Stable	USD	131	89.94	Very High	Narrow	0.69	6.46

Source: Morningstar. As of May 18, 2018

C:-- CINIA

We think Sina is undervalued, as the market currently values Sina at only 56% of the company's net asset value (the sum of its 45.6% stake in Weibo and net cash excluding Weibo).

# Analyst Note, May 18, 2018

We have reduced narrow-moat Sina's fair value estimate to \$131 from \$136, predominantly due to the reduction in the operating margin assumptions of the non-Weibo business. We think Sina is undervalued, as the market currently values Sina at only 56% of the company's net asset value (the sum of its 45.6% stake in Weibo and net cash excluding Weibo). Other than the holding-company discount and concerns over corporate governance, the loss-making non-Weibo business is a drag on the value of Sina as a whole. Given the heavy investment in user growth in Sina mobile apps this year and uncertainty in the fintech business, we think a recovery in the non-Weibo business, a major catalyst for Sina, will not play out this year.

We now think our previous negative single-digit operating margin forecast for this segment in 2018 is unachievable and we anticipate margins of negative 28%. We note that the non-Weibo business' operating margin (including eliminations) was negative 40% in the first quarter compared with negative 13.3% in the fourth quarter. The poor performance in the non-Weibo operating margin was mainly due to investments in user growth and engagement for the news app and the finance app, and regulatory headwinds associated with the fintech business. Other reasons include the absence of the microloan business and related expenses in the first half of 2017 and some one-off bad debt from the microloan business. In the rest of the year, we anticipate better non-Weibo advertising revenue due to more favorable seasonality. We do not expect to see more bad-debt write-offs in the remainder of 2018.

Given the competitive landscape for the news app, a slowdown in mobile user growth in China, and uncertainty in the fintech business, we expect non-Weibo operating margin to improve only slowly to negative 23% in 2022.

We have also revised our non-Weibo non-advertising revenue growth forecast for 2018 from 10% previously to negative 5% to reflect the current regulatory headwinds. Our 10-year revenue CAGR forecast for the segment is now 6%. We think the fintech business will return to growth in 2020 as the regulatory challenges normalize.

Chelsey Tam | chelsey.tam@morningstar.com

## **MGM Resorts International MGM**

Morningstar				Fair Value	Current	Uncertainty		Price/Fair	Market
Rating	Industry	Moat Trend	Currency	Estimate	Price 1	Rating	Moat Rating	Value	Cap (Bil)
***	Consumer	Stable	USD	39.50	32.39	High	None	0.82	19.92

Source: Morningstar. As of May 18, 2018

In our view Las Vegas will remain a world destination resort due to its enclave of resorts and activities that continue to grow with the recent addition of professional sports.

# Analyst Note, May 16, 2018

Although the U.S. Supreme Court ruled this week that any state (not just Nevada) may allow betting on sporting events, we don't expect any meaningful impact to our respective \$39.50, \$175, and \$70 fair value estimates for no-moat MGM, narrow-moat Wynn, and narrow-moat Las Vegas Sands. Therefore, we think the market's muted response to the share prices of these companies was the correct one. We see MGM shares as undervalued.

We believe the ruling offers limited incremental opportunity for operators with regional gaming exposure (MGM gets 25% of its EBITDA from regional resorts versus negligible exposure for Wynn and Las Vegas Sands). While the ruling opens the \$150 billion illegal sports betting market, an estimate provided by the American Gaming Association, it would not surprise us if this marketplace refrained from now visiting regional casinos to place event wagers, as it would reduce privacy and subject gamblers to gaming taxes (Pennsylvania is levying a 34% tax on sports wagers) and integrity fees (leagues are expected to seek a portion of bets). Even if we assumed that one third of this illegal market converted to placing bets in supported facilities, the opportunity would be diluted not only by taxes and fees, but also by the lowhold mid-single-digit percentage sports betting has provided in Nevada. Further, this opportunity would be diluted as more states approve sports betting and potentially allow multiple properties to offer the service within their borders.

We also don't expect much impact to the Las Vegas gaming region (about 55%, 25%, and 10% of our estimated 2018 EBITDA for MGM, Wynn, and Las Vegas Sands, respectively). In our view Las Vegas will remain a world destination resort due to its enclave of resorts and activities that continue to grow with the recent addition of professional sports. Further, only 34% of Vegas' entertainment revenue came from gaming, with just 2% of that from sports betting, mitigating the risk of lost sales.

Dan Wasiolek | dan.wasiolek@morningstar.com

# **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 Economic Moat Stewardship Financial Health Moat Trend Morningstar Fair Value Uncertainty Morningstar Rating™ For Stocks ★★★★ Fundamental Analysis Valuation Margin of Safety

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.

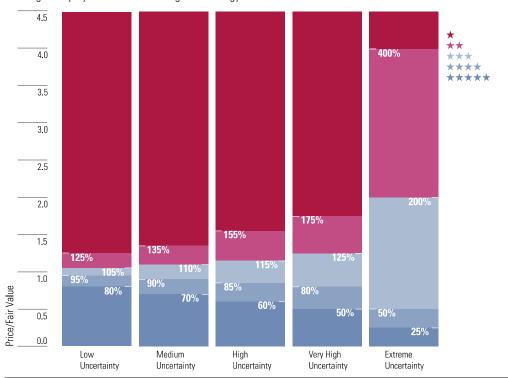
Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case and a 25% probability that the company will perform worse than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





#### **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.

# **General Disclosure**

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

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

The information, data, analyses, and opinions presented herein are not warranted to be accurate, correct, complete, or timely. Unless otherwise provided in a separate agreement, neither Morningstar, Inc. nor the Equity Research Group represents that the report contents meet all of the presentation and/or disclosure standards applicable in the jurisdiction the recipient is located.

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

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

Where this report is made available in a language other than English and in the case of inconsistencies between the English and translated versions of the report, the English version will control and supersede any ambiguities associated with any part or section of a report that has been issued in a foreign language. Neither the analyst, Morningstar, Inc., nor the Equity Research Group guarantees the accuracy of the translations.

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

#### **Conflicts of Interest**

- No interests are held by the analyst with respect to the security subject of this investment research report.
  - Morningstar, Inc. may hold a long position in the security subject of this investment research report that exceeds 0.5% of the total issued share capital of the security. To determine if such is the case, please click <a href="http://msi.morningstar.com">http://msi.morningstar.com</a> and <a href="http://msi.morningstar.com">http://msi.morningstar.com</a>.
- Analysts' compensation is derived from Morningstar, Inc.'s overall earnings and consists of salary, bonus, and in some cases restricted stock.
- Neither Morningstar, Inc. nor the Equity Research Group receives commissions for providing research nor do they charge companies to be rated.
- Neither Morningstar, Inc. nor the Equity Research Group is a market maker or a liquidity provider of the security noted within this report.
- ▶ Neither Morningstar, Inc. nor the Equity Research Group has been a lead manager or co-lead manager over the previous 12 months of any publicly disclosed offer of financial instruments of the issuer.
- Morningstar, Inc.'s investment management group does have arrangements with financial institutions to provide portfolio management/investment advice, some of which an analyst may issue investment research reports on. However, analysts do not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them.
- ► Morningstar, Inc. is a publicly traded company (ticker symbol: MORN) and thus a financial institution the security of which is the subject of this report may own more than 5% of Morningstar, Inc.'s total outstanding shares. Please access Morningstar, Inc.'s proxy statement, "Security Ownership of Certain Beneficial Owners and Management" section <a href="http://investorrelations.morningstar.com/sec.cfm?doctype=Proxy&year=&x=12">http://investorrelations.morningstar.com/sec.cfm?doctype=Proxy&year=&x=12</a>
- Morningstar, Inc. may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship, and website advertising.

Further information on Morningstar, Inc.'s conflict of interest policies is available from <a href="http://global.morningstar.com/equitydisclosures">http://global.morningstar.com/equitydisclosures</a>. Also, please note analysts are subject to the CFA Institute's Code of Ethics and Standards of Professional Conduct.

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

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

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

For Recipients in Canada: This research is not prepared subject to Canadian disclosure requirements.

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

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

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

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

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

# About Morningstar® Institutional Equity Research™

Morningstar Institutional Equity Research provides independent, fundamental equity research differentiated by a consistent focus on sustainable competitive advantages, or Economic Moats.

## For More Information

+1 312 696-6869 equitysupport@morningstar.com



22 West Washington Street Chicago, IL 60602 USA

©2018 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses, and opinions presented herein do not constitute investment advice; are provided solely for informational purposes and therefore are not an offer to buy or sell a security; and are not warranted to be correct, complete, or accurate. The opinions expressed are as of the date written and are subject to change without notice. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages, or other losses resulting from, or related to, the information, data, analyses, or opinions or their use. References to "Morningstar Credit Ratings" refer to ratings issued by Morningstar Credit Ratings, LLC, a credit rating agency registered with the Securities and Exchange Commission as a nationally recognized statistical rating organization ("NRSRO"). Under its NRSRO registration, Morningstar Credit Ratings issues credit ratings on financial institutions (e.g., banks), corporate issuers, and asset-backed securities. While Morningstar Credit Ratings issues credit ratings on insurance companies, those ratings are not issued under its NRSRO registration. All Morningstar credit ratings and related analysis are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Morningstar credit ratings and related analysis should not be considered without an understanding and review of our methodologies, disclaimers, disclosures, and other important information found at https://ratingagency.morningstar.com. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. The information contained herein is the proprietary property of Morningstar and may not be reproduced, in whole or in part, or used in any manner, without the prior written consent of Morningstar. To license the research, call +1 312 696-6869.