

Research Highlights

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

Morningstar Equity Research

Jan. 7-11, 2019

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U.S. Auto Industry Should Want USMCA to Be Ratified

On Nov. 30, 2018, the leaders of the United States, Canada, and Mexico signed the United States-Mexico-Canada Agreement on the sidelines of the G-20 summit in Argentina. President Donald Trump initiated this process in 2017 because he despises the North American Free Trade Agreement, in place since 1994. USMCA needs to be ratified by all three countries' legislatures to go into effect, and if ratified, it probably would not be effective until 2020, with some auto clauses not in full effect until the later of 2023 or three years after USMCA goes into effect. Ratification seems likely in Canada and Mexico, but the U.S. Congress, particularly the Democrat-controlled House of Representatives, has concerns about proper enforcement of USMCA's labor rights in Mexico. U.S. unions seem lukewarm on the agreement for now, as do some Democrats, but we think USMCA needs to be ratified. Trump intends to withdraw the U.S. from NAFTA to force Congress to vote for USMCA's ratification.

We think USMCA is a good deal for the U.S. auto industry and certainly better than no North American deal, which would mean World Trade Organization tariff rules apply, as well as the so-called chicken tax, which would result in a 25% tariff on pickup trucks imported into the U.S. General Motors and Fiat Chrysler Automobiles export pickups from Mexico into the U.S., and we do not think they would be able to continue to do so with the chicken tax, which would mean expensive U.S. plant retooling. FCA plans to move at least some of its Mexican pickup production to the U.S., but GM has no plans to do so.

USMCA still allows for the possibility of U.S. automotive tariffs under Section 232 of the Trade Expansion Act for vehicles imported from Canada or Mexico. We hope the Trump administration never imposes these tariffs, but if it does, USMCA allows for an annual exemption of 2.6 million vehicles for each of Canada's and Mexico's auto exports to the U.S. This setup is likely to be the best auto tariff protection the NAFTA region will see under Trump, so we think USMCA needs to be ratified. If it is not, and Section 232 tariffs are levied, we estimate a 1.7 million-unit annual decline in U.S. light-vehicle sales.

Regardless of USMCA's fate, we continue to see GM's stock as significantly undervalued. The company's November restructuring announcement is a bold move that potentially frees up an additional \$6 billion of free cash flow, and we think this has put the United Auto Workers union on the defensive for contract talks that begin this summer. The vehicles affected by the restructuring are car models that are out of favor as Americans keep buying more light trucks, so we do not see GM's move as a sign of trouble.

- USMCA still needs to be ratified even though each country's leader signed it. Ratification in the U.S. seems to be the tough hurdle as Democrats, who control the House of Representatives, are concerned

about enforcement measures still needed by Mexico on labor rights. Mexico's new president, Andrés Manuel López Obrador, may be receptive to these concerns, given his own populist platform.

- ▶ Trump intends to proceed with withdrawing the U.S. from NAFTA before USMCA is ratified. We think he wants to coerce Congress to vote for USMCA out of fear of having no trade deal at all. This may very well work, but there's also a legal debate on whether Trump has the authority to withdraw the U.S. Even if he does not, those who oppose withdrawing the U.S. from NAFTA may not have time to fight a court battle because USMCA must be ratified within 90 days of its submission to Congress. We think the U.S. needs to ratify this deal because for autos it is better than no North American trade pact.
- ▶ USMCA raises minimum North American content, as summarized in Exhibit 1. We don't expect U.S. automakers to have a problem complying, and we think German automakers or Toyota's Lexus brand's higher-end sedans and SUVs may just be willing to pay the 2.5% tariff they already pay rather than reconfigure global production. However, that premise will not work if the U.S. imposes 25% tariffs on foreign vehicles under national security risks as enabled by Section 232 of the Trade Expansion Act.
- ▶ Side letters to USMCA give Canada and Mexico some protection should the U.S. impose Section 232 auto tariffs. Each country would be able to export 2.6 million vehicles annually to the U.S. without Section 232 tariffs. Canada, due to losing production in recent times, appears to have no risk of hitting 2.6 million, but we estimate Mexico would reach the cap in 2021. We hope the White House is only using Section 232 as a hard-line negotiating tactic, but if these tariffs do become law, we think they will be removed once Trump leaves office.
- ▶ Also new to USMCA is a labor value clause that over time requires a sizable portion of a vehicle's assembly and parts to be from facilities where workers are paid at least \$16 an hour, several multiples more than what Mexican auto workers are paid. U.S. automakers would have an advantage over other automakers in meeting this requirement because some engineering, research and development, and IT work is counted, which the Detroit Three do heavily in the U.S. and Canada.
- ▶ GM remains on our Best Ideas list, and we believe it is significantly undervalued. The company's November restructuring announcement is not a sign of distress, in our opinion; it's GM showing why it's not like Old GM and being proactive in downsizing unprofitable or unpopular vehicle programs before a recession. These vehicles' sales are declining at a far greater rate than GM's overall U.S. sales because they are car models. Americans continue to increase their demand for light-truck models, and the car side of the market therefore needs to shrink, in our view.
- ▶ GM's move also puts the UAW on the defensive before contract talks even begin this summer. The UAW now must prioritize just keeping at least the Lordstown, Ohio, plant open instead of seeking large pay increases. We think it may not be possible to keep any of these plants open past 2019, but if it is, we think it will require a large concession by the UAW somewhere else, such as healthcare costs.

Pipeline Expansions Are Canada's Lifelines

Canada's oil supply continues to surpass expectations, and aided by technological advancements, namely solvent-assisted technology, there is no shortage of economic growth opportunities. But pipelines are operating at maximum capacity, leaving few options to move new supply out of the country. To make matters worse, needed expansion projects continue to hit road bumps. With limited market access, Canadian crude sold at record lows during the fourth quarter of 2018. To combat low prices, Canada's producers have turned to crude by rail, and the Alberta government ordered mandatory short-term production cuts. To date, Canada's heavy oil prices have rebounded, but the measures taken are a mere Band-Aid to a larger wound. Unless new pipes are built, Canada will continually suffer from low prices and won't be able to tap into its vast resource potential.

Fortunately for Canadian producers, we anticipate that all three of the major pipeline expansion projects will be placed into service by the end of 2022, but the window is narrowing for the Keystone XL. Once the projects are in service, Canada will have enough cost-efficient infrastructure in place to compete with other global supply sources at the top of the cost curve. Accordingly, we expect Canada to add supply of 1.3 million barrels of oil per day over the next decade, with more than 90% of that coming from oil sands production. In the world of Canadian infrastructure, wide-moat Enbridge sticks out as our top pick. Our top Canadian E&P pick is Cenovus Energy, which will be a major player in the new cost-lowering extraction technology. Owing to our differentiated Canadian outlook, both stocks trade at significant discounts to our fair value estimates.

Current Market Conditions: Pipelines Are Desperately Needed

- ▶ Canada's crude supply grew to record levels in 2018, but the country doesn't have the takeaway infrastructure to support this growth. As a result, the heavy oil discount widened to record levels in the fourth quarter of 2018, severely hampering producers' price realizations.
- ▶ Pipeline expansion projects have experienced setbacks from the U.S. and Canadian courts, pushing back expected in-service dates and even threatening construction of the Keystone XL and Trans Mountain Expansion.
- ▶ In hopes of increasing heavy oil pricing, the Alberta government announced mandatory production cuts in 2019, and producers have ramped up crude by rail commitments. The actions are having a positive impact on pricing, but relief is likely to be short-lived.
- ▶ Canada's shortage of economical takeaway infrastructure limits the sanctioning of the country's vast resource potential. The aforementioned actions are a small bandage for a larger wound, which can only be healed by pipeline expansion.

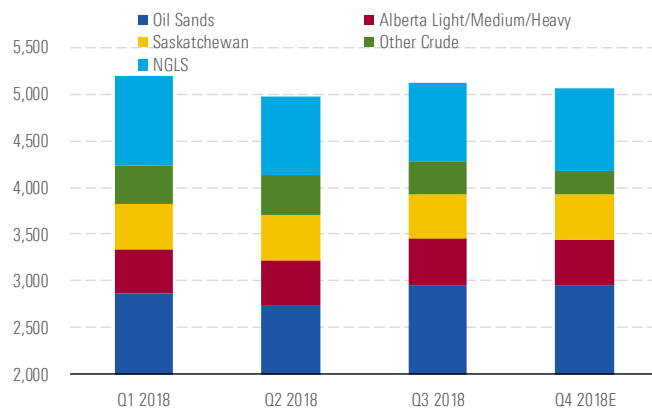
Outlook: Expanded Market Access and Lower Production Costs Aid Oil Sands Production Growth

- ▶ We expect the Trans Mountain Expansion, or TMX, Keystone XL, and Enbridge's Line 3 replacement to receive final approval and be placed into service by the end of 2022. Until 2022, we expect an increase in rail shipments, which will have a negative impact on oil sands producers' project economics, but not as severe as pure exposure to the heavy oil discount.

- ▶ Once these pipeline projects are placed into service, technological advancements — namely, solvent-assisted steam-assisted gravity drainage, or SA SAGD methods — will help oil sands production compete with other major marginal sources of global supply.
- ▶ Given our view on the improving cost structure associated with solvent-assisted technology, we think that Canadian crude supply will be higher than many expect. Our 2023 Canadian supply forecast is 5.7 mmbbl/d compared with the Canadian Association of Petroleum Producers' forecast of 5.5 mmbbl/d. Although we expect solvent-assisted technology to have a major impact on the country's supply growth, the most significant impact will come in the back half of the next decade when the technology is more widely implemented.
- ▶ Accordingly, we don't expect any pipeline egress problems for the next decade.
- ▶ Our analysis offers a scenario analysis in which the Keystone XL is not placed into service. Under this scenario, we expect an uptick in crude by rail shipments over the long term; our supply forecast to fall by 500 mmbbl/d; and the heavy oil discount to widen.

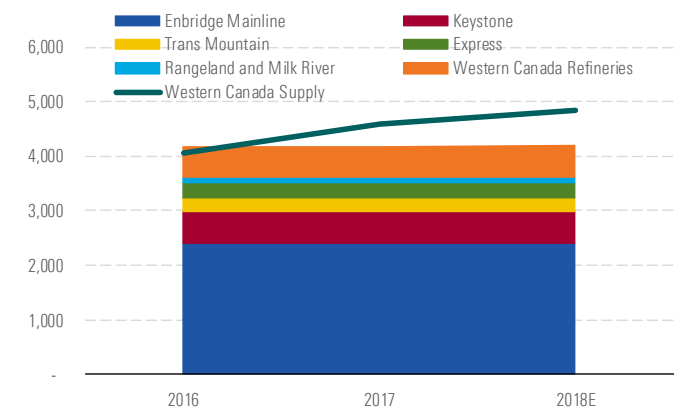
Exhibit 1 Pipelines Are Desperately Needed

Despite Disruptions, Canada's Supply Levels Remain High ...



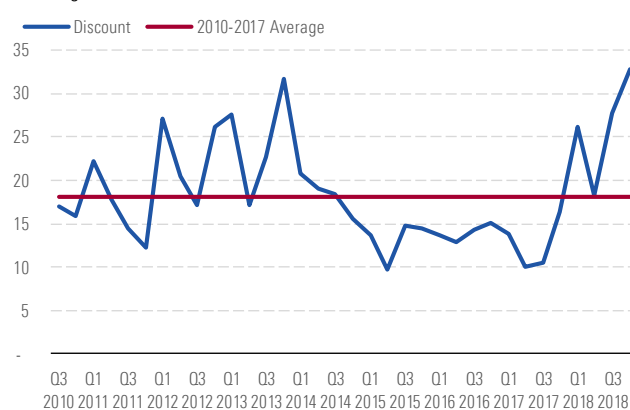
Source: Morningstar, IEA

... Existing Infrastructure Isn't Sufficient to Meet Growing Canada Supply ...



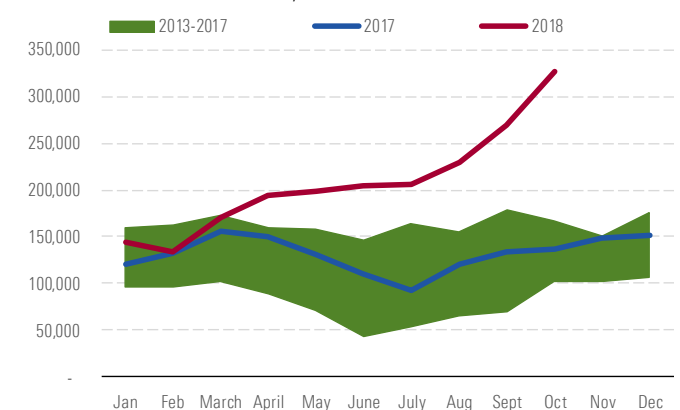
Source: Morningstar, IEA

... Causing Price Differentials to Blow Out ...



Source: Morningstar

... and Producers to Turn to Crude by Rail



Source: Morningstar, NEB

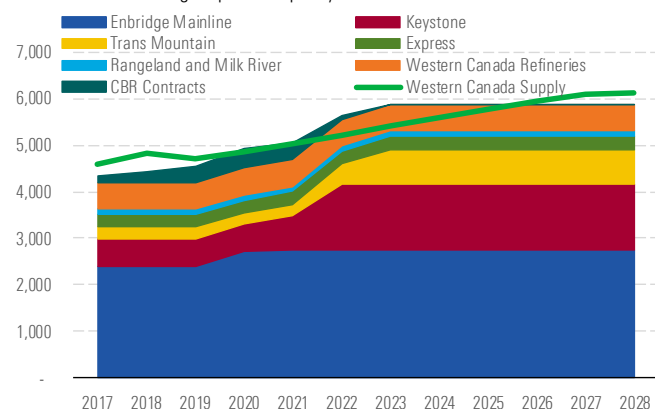
Exhibit 2 Expanded Market Access and Lower Production Costs Aid Oil Sands Production Growth

Expansion Projects Will Add Almost 2 mmbbl/d of New Pipeline Capacity ...

Operator	Pipeline	Capacity	Expected In-service Date
Enbridge	Mainline - Line 3 Replacement	370	2020
Canadian Government	Trans Mountain Expansion	590	2022
TransCanada	Keystone XL	830	2021
Total		1,790	

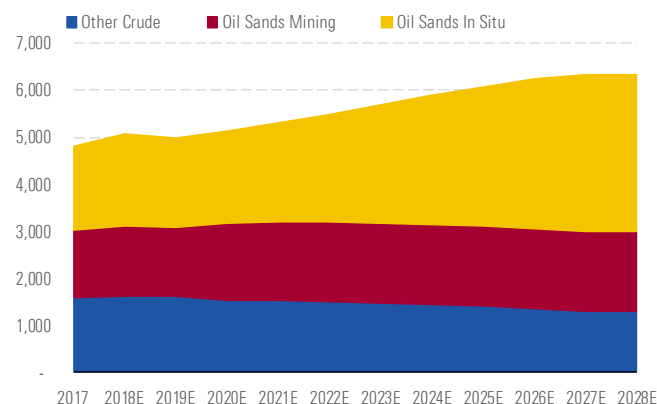
Source: Morningstar

Canada Will Have Enough Pipeline Capacity for the Next Decade ...



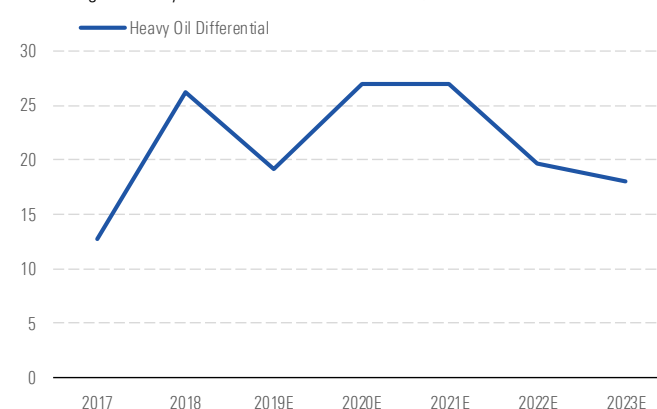
Source: Morningstar

... Allow SA SAGD Production to Take Off



Source: Morningstar, IEA

...Allowing the Heavy Oil Differential to Normalize at \$18/bbl



Source: Morningstar

Investment Implications: Top Canadian Picks Enbridge and Cenovus

- Wide-moat, Best Idea, and 5-star-rated Enbridge remains one of our top picks in the energy sector. At about \$33 (CAD 44) per share, we see 40% upside in the stock coupled with a 6.7% yield. We think that investors are mistakenly worried about underutilization of the Mainline while competing pipelines are placed into service. Even if the KXL and TMX are placed into service, we expect only minor underutilization of the Mainline until Canadian crude supply ramps up to our forecast levels. We expect all the major pipeline expansions to be operating near full capacity within the next decade, fueled by our above-consensus outlook for Canadian crude production.
- Best Idea Cenovus Energy represents one of our top picks in the Canadian energy sector. The stock is currently trading around a 45% discount to our fair value estimate. We believe the market is overlooking the immense growth potential in the company's oil sands reserves that can be brought on line with low-cost solvent-aided process technology. Consequently, we believe that the stock presents an attractive opportunity for long-term investors.

- ▶ We also see upside in 4-star-rated TransCanada (narrow moat), Imperial Oil, Canadian Natural Resources, Inter Pipeline, and Canadian Pacific Railway (wide moat).
- ▶ If the Keystone XL is not placed into service, Enbridge stands to benefit. Under this scenario, we expect lower fair values on the rest of the stocks highlighted in this report, but still see upside for each of them.

Exhibit 3 Midstream Stock Comparison: Enbridge Looks the Most Attractive

Ticker	General Information						Economic Moat				Dividend		Leverage		Valuation				Cash Flow	
	Market Cap.	Last Close	Fair Value	Price / FVE	Star Rating	Uncertainty Rating	ROIC		Moat Rating	Moat Trend	Dividend Yield		Net Debt		EV		Price Earnings		Distributable Cash Ratio	
							2018E	2022E			YE18E	19E	YE17	YE18E	2018E	2019E	2018E	2019E	2018E	2019E
	\$mm	\$/sh.	\$/sh.																	
ENB	88,395	43.72	62.00	0.71	★★★★★	Medium	8.4%	10.5%	Wide	Stable	6.1%	6.7%	4.9x	4.6x	15.4x	12.3x	26.2x	18.9x	1.7x	1.5x
IPL	7,994	20.17	25.00	0.81	★★★★	High	9.1%	8.5%	None	Stable	8.3%	8.5%	4.4x	4.6x	10.5x	10.0x	13.1x	13.3x	1.5x	1.5x
KEY	5,645	27.04	31.00	0.87	★★★	Very High	9.2%	11.5%	None	Stable	6.4%	6.6%	3.5x	3.6x	11.1x	9.1x	17.3x	14.9x	1.6x	1.7x
PPL	21,358	42.21	43.00	0.98	★★★	High	8.1%	9.3%	Narrow	Stable	5.1%	5.4%	3.1x	2.7x	13.2x	11.5x	33.8x	27.3x	1.6x	1.8x
TRP	47,082	51.54	72.00	0.72	★★★★	Medium	5.9%	6.7%	Narrow	Stable	5.4%	5.8%	6.0x	6.4x	12.0x	11.2x	14.8x	15.0x	1.7x	1.7x
Mean				0.82			8.1%	9.3%			6.3%	6.6%	4.4x	4.4x	12.4x	10.8x	21.0x	17.9x	1.6x	1.6x
Median				0.81			8.4%	9.3%			6.1%	6.6%	4.4x	4.6x	12.0x	11.2x	17.3x	15.0x	1.6x	1.7x

Source: Morningstar

Exhibit 4 Oil Sands Stock Comparison: Cenovus Is the King in the North

Ticker	General Information						Economic Moat				Dividend		Leverage		Valuation		Breakeven		
	Market Cap.	Last Close	Fair Value	Price / FVE	Star Rating	Uncertainty Rating	ROIC		Moat Rating	Moat Trend	Dividend Yield		Net Debt		EV		Breakeven		
							2019E	2023E			YE18	YE19E	YE18	YE19E	2019E	2020E	In Situ	Mining	Corporate
	\$mm	\$/sh.	\$/sh.														\$/boe WTI	\$/boe WTI	\$/boe WTI
CNQ	42,306	34.64	45.00	0.77	★★★★	High	7.2%	6.3%	None	Stable	3.7%	3.9%	1.7x	2.3x	7.8x	6.6x	40.6	29.8	30.4
CVE	12,657	10.30	19.00	0.54	★★★★	Very High	0.7%	4.7%	None	Positive	1.9%	1.9%	2.7x	2.4x	7.1x	7.2x	47.0	N/A	47.9
HSE	14,876	14.80	17.00	0.87	★★★★	High	8.5%	7.5%	None	Stable	2.7%	3.4%	0.5x	0.7x	4.7x	4.3x	61.8	N/A	42.2
IMO	27,768	35.03	46.00	0.76	★★★★	High	6.9%	12.0%	None	Stable	1.8%	2.2%	0.9x	1.1x	8.6x	7.2x	41.2	51.3	46.7
MEG	2,424	8.17	7.00	1.17	★★★	Extreme	-4.7%	-0.2%	None	Stable	0.0%	0.0%	4.2x	7.8x	12.0x	11.3x	51.6	N/A	51.6
SU	63,028	39.28	47.00	0.84	★★★★	High	9.1%	5.6%	None	Stable	3.7%	3.8%	0.9x	0.7x	6.5x	5.7x	36.4	39.6	36.5
Mean				0.82			4.6%	6.0%			2.8%	2.5%	1.8x	2.5x	7.8x	7.0x	46.4	40.3	42.6
Median				0.80			7.1%	6.0%			2.3%	2.8%	1.3x	1.7x	7.4x	6.9x	44.1	39.6	44.4

Source: Morningstar

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New Coverage of Asian Capital Equipment Sector

We are reinitiating coverage of the Asian capital equipment sector, with fair value estimates of JPY 2,750 (\$25) for narrow-moat Komatsu, JPY 1,750 for narrow-moat Kubota, HKD 3 (CNY 2.62) for no-moat Zoomlion, and CNY 6.40 for no-moat Sany. All four companies have a stable moat trend rating.

We see modest upside in construction and mining equipment manufacturer Komatsu, underpinned by its growth potential following the acquisition of Joy Global in 2017 and steady demand growth from China, Asia (excluding China and Japan), Europe, Oceania, and North America. In the long term, we believe Komatsu's superior product quality, brand name, continuous investments in research and development, focus on lowering the total cost of ownership for its machinery, extensive dealership network, and aftersales service will ensure its competitiveness and support its growth.

We also see modest upside in agricultural equipment manufacturer Kubota, underpinned by agricultural machinery demand growth in Asia and North America on the back of healthy consumer sentiment, recovering crop prices, increasing demand for food as population grows, and an increase in the mechanization of the agricultural industry. In the long term, we believe that Kubota's superior product quality, brand name, continuous investments in R&D, extensive dealership and service network, and expansion into the upland farming market will contribute to its growth.

As for the two Chinese construction machinery manufacturers, Zoomlion and Sany, we think Zoomlion's H shares are currently fairly valued while Zoomlion's A shares and Sany are overvalued. In the short term, demand for construction machinery in China is driven by growth from end-user demand and replacement demand. However, in the longer term, we expect infrastructure spending to slow as China transitions to a consumer-driven economy, leading to our bearish outlook for these companies.

Komatsu | ★★★

Komatsu is the second-largest construction equipment manufacturer in the world by revenue. Its core construction, mining, and utility equipment business contributes around 90% of revenue. The remainder comes from its retail finance business and industrial machinery and others, which includes metal forging, stamping presses, machine tools, and defense-related equipment. The Americas and Asia are the main markets for Komatsu, accounting for more than 80% of revenue, followed by Europe and the Commonwealth of Independent States.

Komatsu's superior product quality and brand name have helped to solidify its leading position in the construction machinery space globally with Interbrand ranking it in the top 20 of Japan's Best Global Brands for the past 10 years. Komatsu's focus on providing machinery with low total cost of ownership helps it to appeal to customers as the total cost of ownership includes not only the purchase costs but also all future costs comprising labor costs, maintenance and repair costs, spare parts, interest rates, insurance, depreciation, taxes, fuel consumption, and others. It constantly works together with its customers to provide suggestions and solutions to run its machinery in an efficient manner.

Bulls Say

- ▶ Improving global construction and mining activities supported by improving consumer sentiment, growing infrastructure spending, and improving commodity prices should drive demand for Komatsu's construction and mining equipment.
- ▶ Komatsu's strategy of offering higher-end products coupled with stable volume growth could support its operating margin.
- ▶ The acquisition of Joy Global could strengthen Komatsu's positioning and product offering in mining equipment, helping it to expand in this business segment.

Bears Say

- ▶ Intense competition from global peers and the emergence of local players could affect Komatsu's sales growth and profitability.
- ▶ The rising interest-rate environment in the U.S. could affect demand for Komatsu's equipment as customers may postpone their equipment purchases and opt for retrofitting their existing equipment.
- ▶ A slowdown in global infrastructure, real estate construction spending, and mining capital expenditures would reduce the demand for Komatsu's construction and mining equipment.

Kubota | ★★★

Kubota is one of the largest agricultural machinery manufacturers in the world; it focuses on tractors and rice farming equipment. While competitors such as John Deere and CNH focus more on large farm machinery, Kubota has been emphasizing machinery below 100 horsepower, a strategy that has turned out to be successful. Through the years, it has managed to build a strong brand name and achieve significant (if not leading) market shares in North America and Asia for its compact tractors, combine harvesters, and rice transplanting machinery.

In recent years, Kubota made a couple of small acquisitions aiming at obtaining key technologies and adding product lineups for the upland farming market, which is estimated to be 4 times larger than the rice cultivation farming market by land area, according to the company. This will see Kubota competing directly with entrenched peers such as John Deere and CNH. Nonetheless, by leveraging its strong brand name and established network in key regions, Kubota could gradually grow in this upland farming machinery space, in our opinion.

Continued investments in research and development, focusing on artificial intelligence technology and Internet of things, should also help to drive growth and improve the competitiveness of its products.

Bulls Say

- ▶ Rising food consumption on the back of a growing global population should drive demand for Kubota's agricultural machinery.
- ▶ The continuous decline in the agricultural industry workforce and the need to improve farm income and crop yield in emerging countries will push up demand for mechanization and benefit Kubota.
- ▶ Government subsidies and supportive policies for farmers will drive demand for Kubota's agricultural machinery.

Bears Say

- ▶ The rising interest-rate environment in the U.S. could affect Kubota's profitability as the firm may not be able to pass on the rising financing costs to the consumers in order to maintain its market share.
- ▶ Kubota's profitability is highly exposed to foreign exchange movements, as the factories in Japan are still supplying around half of the products or components sold overseas.
- ▶ A slowdown in global infrastructure and real estate construction spending would reduce the demand for Kubota's construction machinery and water and environment systems.

Zoomlion Industry Science and Technology | ★★

Zoomlion is a leading manufacturer of construction machinery in China, focused primarily on the construction and agriculture industries. Through the years, it managed to build up a significant market share for major products in the concrete and crane machinery industries in China.

Demand for Zoomlion's construction machinery mainly relies on infrastructure spending and real estate investment in China. In the near term, we expect demand for construction machinery to remain strong, driven by growth from end-user demand and replacement demand. The last time demand for construction equipment peaked was in 2009 to 2012. Given that typical machinery lasts about eight to 10 years, we expect the next replacement cycle to take place around 2017 to 2020, supporting demand in the near term. However, in the long term, as China transitions to a consumer-driven economy, we expect demand to weaken as the real estate and infrastructure sectors slow down.

To diversify, Zoomlion entered the agricultural machinery industry by acquiring Chery Heavy Industry in 2014. However, Chery's low margins and wide product range have weighed on Zoomlion's profitability in the past few years. To improve on its profitability and drive growth, the firm plans to streamline its operations and enhance its product quality in the next few years.

Bulls Say

- ▶ China's infrastructure spending could continue to support construction machinery demand, resulting in higher profitability for Zoomlion.
- ▶ The proceeds from the sale of its environmental and sanitary machinery business strengthens Zoomlion's balance sheet and enables it to continue to grow and improve its core construction and agricultural machinery businesses.
- ▶ Zoomlion and some of its end users continue to benefit from government subsidies.

Bears Say

- ▶ A significant slowdown in China's infrastructure spending and lower demand for housing would result in lower demand for construction machinery.
- ▶ Zoomlion's operations are mainly focused on China, with around 90% of sales in China. Any slowdown in China could negatively affect its profitability.
- ▶ During a cyclical downturn, Zoomlion could have trouble collecting receivables from the customers it provided financing services to, resulting in an increase in bad debt, which could adversely affect its earnings and balance sheet.

Sany Heavy Industry | ★★

Sany is a leading construction machinery manufacturer in China. Through the years, it managed to build a significant market share for major products in the excavator, concrete, and crane machinery industries in China, which includes excavators, pumps, mixing plants, truck cranes, and crawler cranes.

With around 70% of sales coming from China, demand for Sany's construction machinery would rely on the infrastructure spending and real estate investment in China. In the near term, we expect demand for construction machinery to remain strong driven by growth from end-user demand and replacement demand. The last time when demand for construction equipment peaked was in 2009 to 2012. Given that a typical machinery could last around eight to 10 years, we expect the next replacement cycle to take place around 2017 to 2020, supporting the demand for construction machinery in the near term. However, in the longer term, as China transitions to a consumer-driven economy from an investment-oriented economy, we expect demand to weaken as the real estate and infrastructure sectors slow down.

In order to expand and strengthen its market positioning overseas, Sany acquired Putzmeister, the world's largest concrete pump maker, in 2012. This move helps to solidify Sany's leading position in the concrete machinery space. This acquisition has not only helped Sany in terms of technological advancement, it also helped to penetrate large construction machinery markets such as Europe, the U.S., and Brazil.

Bulls Say

- ▶ China's infrastructure spending could continue to support construction machinery demand going forward, resulting in higher profitability for Sany.
- ▶ Sany's acquisition of Putzmeister in 2012, one of the world's largest concrete pump makers, could help to improve Sany's product quality and expand its overseas markets.
- ▶ Sany and some of its end customers continues to benefit from subsidies by the government.

Bears Say

- ▶ Lower demand for housing and a significant slowdown in China's infrastructure spending would result in weakening demand for construction machinery.
- ▶ Sany's operations are mainly focused on China, with around 70% of sales in China. Any slowdown in China could negatively affect its profitability.
- ▶ During cyclical downturn, customers that have entered into finance lease where Sany acts as the guarantor could have trouble repaying the lease, resulting in an increase in financial burden for Sany that could affect its earnings and balance sheet.

Best Ideas

Company and Industry	Morningstar Rating	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price / Fair Value	Market Cap (B)	Analyst
Basic Materials								
Cameco (CCJ)	★★★★★	\$19.5	\$12.28	High	Narrow	0.63	4.87	Inton
Compass Minerals International (CMP)	★★★★★	\$81	\$44.4	High	Wide	0.55	1.50	Goldstein
James Hardie Industries (JHX)	★★★★	AUD 21.2	AUD 15.33	Medium	Narrow	0.72	6.78	Slade
Martin Marietta Materials (MLM)	★★★★	\$240	\$179.53	High	Narrow	0.75	11.26	Inton
Communication Services								
BT Group (BT.A)	★★★★	GBX 360	GBX 233.55	High	Narrow	0.65	23.17	C. Nichols
China Mobile (941)	★★★★	HKD 97	HKD 80	Medium	Narrow	0.82	1638.04	Baker
Telefonica (TEF)	★★★★★	\$13	\$7.67	High	Narrow	0.59	39.82	C. Nichols
Telstra (TLS)	★★★★★	AUD 4.4	AUD 2.93	Medium	Narrow	0.67	34.85	Han
Vodafone Group (VOD)	★★★★	\$250	\$153.74	High	Narrow	0.61	41.08	C. Nichols
Consumer Cyclical								
Alibaba Group Holding (BABA)	★★★★	\$240	\$151.69	High	Wide	0.63	390.14	Hottovy
Anta Sports Products (2020)	★★★★★	HKD 55	HKD 35.15	Medium	Narrow	0.64	94.37	Su
Bayerische Motoren Werke (BMW)	★★★★	EUR 117	EUR 72.53	High	Narrow	0.62	47.19	Hilgert
Cie Financiere Richemont (CFR)	★★★★	CHF 90	CHF 67.64	High	Wide	0.75	38.19	Sokolova
Dufry (DUFN)	★★★★	CHF 144	CHF 99.76	High	Narrow	0.69	5.04	Sokolova
Expedia Group (EXPE)	★★★★	\$180	\$114.2	High	Narrow	0.63	17.01	Wasiolek
General Motors (GM)	★★★★	\$46	\$34.73	High	None	0.76	49.02	Whiston
Hanesbrands (HBI)	★★★★★	\$27	\$13.62	Medium	Narrow	0.50	4.91	Swartz
InvoCare (IVC)	★★★★★	AUD 16	AUD 10.63	Medium	Wide	0.66	1.17	Ragonese
Mattel (MAT)	★★★★★	\$21	\$11.9	High	Narrow	0.57	4.11	Katz
Norwegian Cruise Line Holdings (NCLH)	★★★★	\$69	\$46.17	High	Narrow	0.67	10.16	Katz
Walt Disney (DIS)	★★★★	\$130	\$112.8	Medium	Wide	0.87	167.92	Macker
WPP (WPP)	★★★★★	GBX 1450	GBX 880	Medium	Narrow	0.61	11.10	Mogharabi
Consumer Defensive								
Anheuser-Busch InBev (BUD)	★★★★★	\$118	\$70.76	Low	Wide	0.60	138.39	Gorham
G8 Education (GEM)	★★★★	AUD 3.5	AUD 2.77	High	None	0.79	1.26	James
General Mills (GIS)	★★★★★	\$57	\$41.42	Low	Wide	0.73	24.72	Vora
Imperial Brands (IMB)	★★★★★	GBX 3700	GBX 2419.5	Low	Wide	0.65	23.15	Gorham
Mondelez International (MDLZ)	★★★★	\$52	\$42.34	Medium	Wide	0.81	61.56	Lash
A2 Milk (ATM)	★★★★	AUD 13.7	AUD 11.35	High	Narrow	0.83	8.39	Fleck
Energy								
Cenovus Energy (CVE)	★★★★	\$19	\$10.85	Very High	None	0.57	13.33	Gemino
Diamondback Energy (FANG)	★★★	\$120	\$106.13	High	Narrow	0.88	17.41	Meats
Enbridge (ENB)	★★★★	\$62	\$45.9	Medium	Wide	0.74	92.80	Gemino
Enterprise Products Partners (EPD)	★★★★★	\$35.5	\$27.09	Low	Wide	0.76	59.13	Ellis
Royal Dutch Shell (RDS.B)	★★★★	\$83	\$62.78	Medium	Narrow	0.76	253.22	Good
Schlumberger (SLB)	★★★★	\$62	\$41.65	High	Narrow	0.67	57.68	Caldwell
Total (TOT)	★★★★★	\$77	\$54.96	Medium	None	0.71	143.33	Good
Woodside Petroleum (WPL)	★★★★	AUD 46.5	AUD 33.26	High	None	0.72	31.14	Taylor
Financial Services								
Agricultural Bank of China (601288)	★★★	CNY 4.2	CNY 3.53	High	Narrow	0.84	1220.25	Tan
Altaba (AABA)	★★★★	\$98	\$63.11	High	None	0.64	38.03	Mogharabi
American International Group (AIG)	★★★★★	\$76	\$41.42	Medium	None	0.55	36.64	Horn
BlackRock (BLK)	★★★★	\$500	\$399.5	Medium	Wide	0.80	63.39	Warren
Capital One Financial (COF)	★★★★★	\$127	\$79.95	Medium	Narrow	0.63	37.87	Plunkett

Source: Morningstar. As of Jan. 11, 2019

Best Ideas

Company and Industry	Morningstar Rating	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price / Fair Value	Market Cap (B)	Analyst
Financial Services, Continued								
Credit Suisse Group (CSGN)	★★★★★	CHF 22	CHF 11.66	High	Narrow	0.53	29.77	Scholtz
Link Administration Holdings (LNK)	★★★★	AUD 8.5	AUD 7.01	Medium	Narrow	0.82	3.71	James
Macquarie Group (MQG)	★★★★	AUD 135	AUD 113.21	Medium	Narrow	0.84	38.86	Ellis
Oversea-Chinese Banking Corp (O39)	★★★★	SGD 13.6	SGD 11.65	High	Narrow	0.86	49.51	Wu
Pendal Group (PDL)	★★★★	AUD 11	AUD 7.58	Medium	Narrow	0.69	2.41	Likos
Sumitomo Mitsui Financial Group (8316)	★★★★★	JPY 5960	JPY 3818	Medium	None	0.64	5342.91	Makdad
T. Rowe Price Group (TROW)	★★★★	\$120	\$92.29	Medium	Wide	0.77	22.21	Warren
Wells Fargo (WFC)	★★★★★	\$67	\$47.75	Medium	Wide	0.71	224.77	Compton
Westpac Banking (WBC)	★★★★	AUD 33	AUD 25.61	Medium	Wide	0.78	87.81	Ellis
Healthcare								
Allergan (AGN)	★★★★★	\$240	\$146.3	Medium	Wide	0.61	49.34	Waterhouse
DaVita (DVA)	★★★★★	\$81	\$55.16	Medium	Narrow	0.68	9.16	Strole
Medtronic (MDT)	★★★★	\$110	\$84.84	Medium	Wide	0.77	113.94	Wang
Roche Holding (ROG)	★★★★★	CHF 333	CHF 256.05	Low	Wide	0.77	218.29	Andersen
Industrials								
Anixter International (AXE)	★★★★★	\$107	\$58.12	Medium	Narrow	0.54	1.95	Bernard
Beijing Enterprises Holdings (392)	★★★★	HKD 58	HKD 42.75	Medium	Narrow	0.74	53.95	Song
CK Hutchison Holdings (1)	★★★★★	HKD 118	HKD 77.85	Medium	None	0.66	300.21	Tan
G4S (GFS)	★★★★★	GBX 337	GBX 209.5	Medium	None	0.62	3.25	Field
GEA Group (G1A)	★★★★★	EUR 45	EUR 24.11	Medium	Wide	NA	4.35	Molina
General Dynamics (GD)	★★★★	\$216	\$162.43	Medium	Wide	0.75	48.10	Higgins
Grupo Aeroportuario del Pacifico (GAP B)	★★★★	MXN 210	MXN 176.18	High	Wide	0.84	98.84	Higgins
Guangshen Railway (525)	★★★★★	HKD 6.3	HKD 3.03	High	None	0.48	26.17	Song
Johnson Controls International (JCI)	★★★★	\$46	\$31.88	High	Narrow	0.69	29.46	Bernard
Kion Group (KGX)	★★★★★	EUR 90	EUR 46.69	Medium	Narrow	0.52	5.50	Molina
Sodexo (SW)	★★★★	EUR 110	EUR 93.74	Medium	Narrow	0.85	13.65	Field
Stericycle (SRCL)	★★★★★	\$83	\$39.45	High	Narrow	0.48	3.57	Young
Real Estate								
Aveo Group (AOG)	★★★★★	AUD 2.3	AUD 1.55	Medium	None	0.67	0.89	Sherlock
CK Asset Holdings (1113)	★★★★	HKD 81	HKD 64.1	Medium	Narrow	0.79	236.75	Zhong
Macerich (MAC)	★★★★	\$59	\$45.99	High	Narrow	0.78	6.49	Brown
Sun Hung Kai Properties (16)	★★★★	HKD 153	HKD 122	Medium	Narrow	0.80	353.43	Zhong
Technology								
Applied Materials (AMAT)	★★★★	\$49	\$34.76	High	Wide	0.71	33.32	Davuluri
Intel (INTC)	★★★★	\$65	\$48.56	Medium	Wide	0.75	221.63	Davuluri
KLA-Tencor (KLAC)	★★★★	\$128	\$93.71	High	Wide	0.73	14.34	Davuluri
Lam Research (LRCX)	★★★★	\$185	\$144.57	High	Narrow	0.78	22.43	Davuluri
Microchip Technology (MCHP)	★★★★★	\$112	\$76.62	Medium	Wide	0.68	18.12	Colello
Murata Manufacturing (6981)	★★★★★	JPY 24000	JPY 13375	High	Narrow	0.56	2852.31	Ito
Skyworks Solutions (SWKS)	★★★★	\$105	\$68.59	High	Narrow	0.65	12.18	Colello
Tencent Holdings (700)	★★★★	HKD 499	HKD 331.2	High	Wide	0.66	3153.10	Tam
Utilities								
Dominion Energy (D)	★★★★	\$84	\$71.9	Low	Wide	0.86	55.83	Fishman
Enel (ENEL)	★★★★	EUR 5.7	EUR 5.25	Medium	None	0.92	53.38	Fulop
ENN Energy Holdings (2688)	★★★★	HKD 83	HKD 71.1	Medium	Narrow	0.86	79.92	Lee
Entergy (ETR)	★★★★	\$96	\$86.63	Low	Narrow	0.90	16.28	Fishman
Orsted (ORSTED)	★★★	DKK 450	DKK 445.7	Low	Narrow	0.99	187.21	Fulop

Source: Morningstar. As of Jan. 11, 2019

Highlighted Stocks

Polaris Industries PII

Morningstar Rating	Sector	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
★★★★	Consumer	Stable	USD	107	82.66	High	Wide	0.77	5.21

Source: Morningstar. As of Jan. 11, 2019

We expect Polaris' brand equity and cost advantages to continue to warrant a wide moat rating, despite business alterations and rising cyclicalities of sales. With shares trading at a 22% discount to our \$107 fair value estimate, we think investors have a sufficient margin of safety.

Select Report, Jan. 10, 2019

Just a decade ago, Polaris was a sub-\$2 billion revenue business, focused on its legacy product lines: off-road vehicles, snowmobiles, and Victory motorcycles. However, over the last decade, the company has become a serial acquirer of adjacent businesses, gathering sales from numerous new end markets and technologies (for example, nonpneumatic tires for its military business, parts, garments, and accessory producers for its powersports lines, and work vehicles for its industrial-type clients) while continuing to innovate on its heritage offerings. This has led to a rising sales base, which we estimate will exceed \$6 billion in fiscal 2018. While we think many of the company's smaller transactions have helped further stabilize the overall revenue base, turning Polaris into a diversified industrial, more recent transactions have moved Polaris' profile further back into the discretionary spending camp, particularly after acquiring Transamerican Auto Parts in 2016 and Boat Holdings in 2018. This supports our high uncertainty rating but doesn't change our five-year outlook for the business, which incorporates average organic sales growth around 2.8% and low-teens earnings growth post the Boat Holdings roll up (faster than consensus' mid-single-digit average EPS growth forecast), as we believe most of Polaris' transactions have been (and should continue to be) accretive to both top and bottom lines. We expect Polaris' brand equity and cost advantages to continue to warrant a wide moat rating, despite business alterations and rising cyclicalities of sales. With shares trading at a 22% discount to our \$107 fair value estimate, we think investors have a sufficient margin of safety to take a ride in shares.

- Transformational acquisitions have provided a new avenue for sales and profit growth at Polaris but have also potentially increased sales volatility with exposure to more cyclical businesses.
- Polaris' ROIC profile remains well above our weighted average cost of capital estimate, and we expect it will continue generating economic profit, reinforcing our view that the company's wide moat should remain intact.
- Recent stock market volatility has pressured shares, and we're now constructive on ownership, with the stock currently trading at a 22% discount to our \$107 fair value estimate and 12 times our 2019 EPS forecast.

Jaime M. Katz, CFA | jaime.katz@morningstar.com

DXC Technology DXC

Morningstar Rating	Sector	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
★★★★	Technology	Stable	USD	91	60.97	High	None	0.67	16.98

Source: Morningstar. As of Jan. 11, 2019

We think DXC is trading at a considerable discount to our fair value estimate, and the stock would suit risk-seeking investors looking for exposure to a beat-down global IT services provider.

Analyst Note, Jan. 7, 2019

DXC Technology announced that it will acquire global IT services provider Luxoft for \$2 billion. The purchase price, in which Luxoft shareholders will receive \$59 per share, represents an 86% premium to Friday's closing price, although it's only a 48% premium to Luxoft's average closing price over the last 90 days. Based on fiscal 2019 consensus estimates, the deal implies an adjusted price/earnings ratio of approximately 24.6 times and a price/sales ratio of 2.2 times. Based on IT services multiples for higher growth digital transformation providers, we don't see DXC as paying an exorbitant amount for Luxoft. With the deal expected to close at the end of June, pending regulatory approval, we reiterate our \$91 fair value estimate and economic moat rating of none. We think DXC is trading at a considerable discount to our fair value estimate, and the stock would suit risk-seeking investors looking for exposure to a beat-down global IT services provider.

The strategic rationale for the acquisition makes sense, and we believe that DXC needs to bolster its digital offerings globally to compete with the likes of Accenture or Cognizant. Namely, we think Luxoft's engineering, cloud, and DevOps services will help make DXC a more attractive vendor to the world's largest multinational firms. Luxoft's presence within the larger C-suite (not just IT professionals) will also help DXC broaden and deepen its relationships with clients, which is a highly valued asset in the IT services industry. Still, there remains an element of integration and cultural risk as DXC stitches together its sum of parts after multiple years of spin-offs and acquisitions. We think DXC's strategy to let Luxoft run more independently under the moniker "A DXC Technology Company" may help, though.

DXC remains our only no-moat IT services provider, and we see a high degree of risk with the firm as it rebuilds after spinning off from Computer Sciences Corporation (or CSC), continues to integrate HPE's Enterprise Services business, and recently removes its U.S. Public Sector (or USPS) business. CEO Mike Lawrie has a lot of work to do in order to consolidate and grow from here, but he has proven himself before with the turnaround of CSC. We give Lawrie credit but see a high degree of near-term volatility as DXC looks to establish itself in the upper echelons of the IT services market. For the time being, we remain comfortable with our no-moat rating for the firm.

Andrew Lange | andrew.lange@morningstar.com

Macy's M

Morningstar Rating	Industry	Moat Trend	Currency	Fair Value Estimate	Current Price	Uncertainty Rating	Moat Rating	Price/Fair Value	Market Cap (Bil)
★★★	Consumer	Stable	USD	29.50	25.41	High	None	0.86	8.03

Source: Morningstar. As of Jan. 11, 2019

Given our unchanged long-term outlook, we don't anticipate any material change to our \$29.50 fair value estimate and view the shares as modestly undervalued after their high-teens price downtick Jan. 10.

Analyst Note, Jan. 10, 2019

No-moat Macy's shares tumbled on results that implied a weaker-than-expected holiday season for the department store retailer. While updated full-year guidance still largely improved from the company's initial take at fiscal year-end, nearly all metrics were revised downward from Macy's third-quarter update, implying that the magnitude of December's slowdown was meaningful. With guidance now for flat full-year sales (from 0.3%-0.7% prior and our 2% decline), same-store sales growth of 2% (from 2.3%-2.5% prior and our 2.4% estimate), gross margin down (rather than up), and earnings per share of \$3.95-\$4.00 (from \$4.10-\$4.30 and versus our \$4.26 estimate), it appears traffic materially waned between Black Friday and the week before Christmas.

While the updated guidance implies that we are likely to reduce our 2018 outlook, it fails to alter our longer-term perspective on a business that lacks differentiation, has few switching costs, and lacks the ability to take pricing consistently, given the competitive retail landscape. Our outlook calls for 1% comp and revenue declines, 5 basis points of gross margin improvement, and inflated selling, general, and administrative expenses over 2019-23 as the company continues to build out Backstage, vendor direct, and store pickup capabilities while investing in Growth50 initiatives. This leaves little opportunity for operating leverage, in our opinion, so we have Macy's operating margin falling to around 5% over the next five years from our more than 7% estimate in 2018. Given our unchanged long-term outlook, we don't anticipate any material change to our \$29.50 fair value estimate and view the shares as modestly undervalued after their high-teens price downtick Jan. 10.

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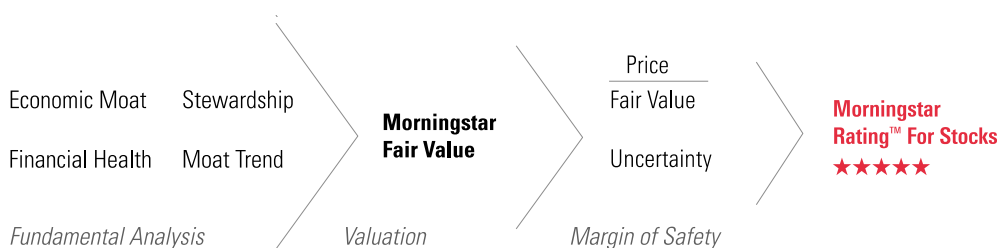
Research Methodology for Valuing Companies

Overview

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

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

Morningstar Research Methodology



Source: Morningstar.

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

Economic Moat

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

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

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

Estimated Fair Value

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

Our model is divided into three distinct stages:

Stage I: Explicit Forecast

In this stage, which can last 5 to 10 years, analysts make full financial statement forecasts, including items such as revenue, profit margins, tax rates, changes in working capital accounts, and capital spending. Based on these projections, we calculate earnings before interest, after taxes (EBI) and net new investment (NNI) to derive our annual free cash flow forecast.

Stage II: Fade

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

Stage III: Perpetuity

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

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

Uncertainty Around That Fair Value Estimate

Morningstar's uncertainty rating captures a range of likely potential intrinsic values for a company and uses it to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The uncertainty rating represents the analysts' ability to bound the estimated value of the shares in a company around the fair value estimate, based on the characteristics of the business underlying the stock, including operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, and other company-specific factors.

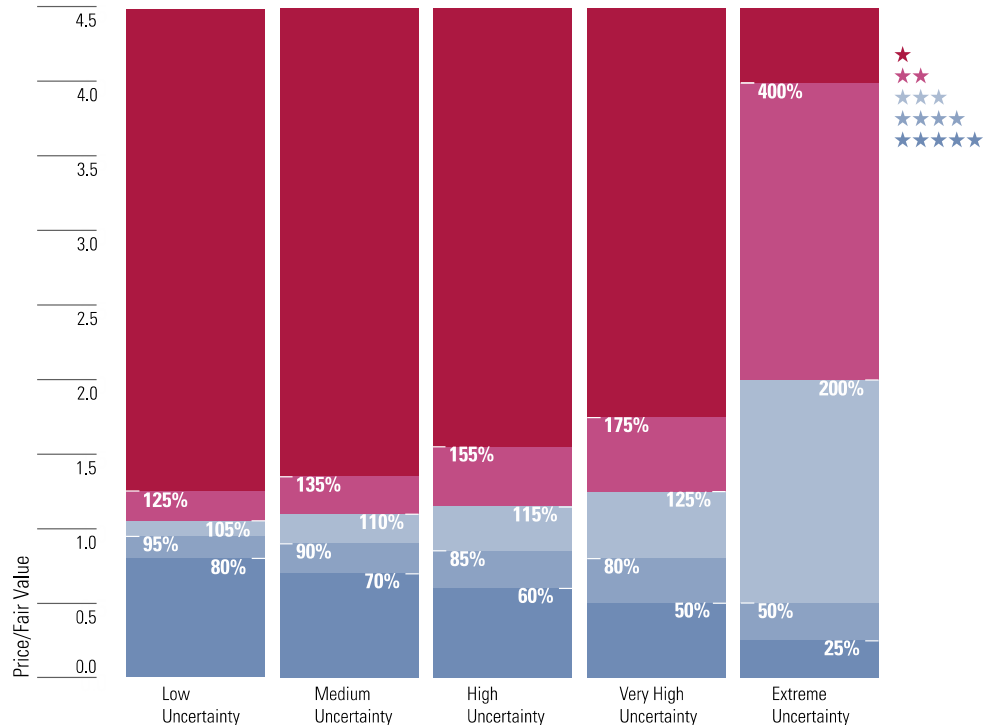
Analysts consider at least two scenarios in addition to their base case: a bull case and a bear case. Assumptions are chosen such that the analyst believes there is a 25% probability that the company will perform better than the bull case and a 25% probability that the company will perform worse than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

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

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

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

Morningstar Equity Research Star Rating Methodology



Market Price

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

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

Morningstar Star Rating for Stocks

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

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

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

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

The Morningstar Star Ratings for stocks are defined below:

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

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

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

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

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

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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