Intel Corp INTC [Nasdaq] | ★★★

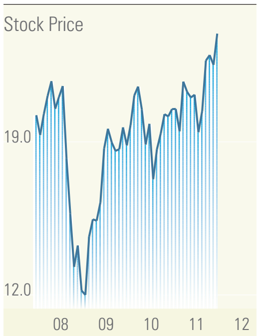
Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Stewardship	Morningstar Credit Rating	Industry
26.55 USD	26.00 USD	18.20 USD	35.10 USD	Medium	Wide	B	AA	Semiconductors

The build-out of the cloud should drive significant demand for Intel's server processors.

by Andy Ng
Senior Stock Analyst
Analysts covering this company do not own its stock.

Pricing data through February 01, 2012. Rating updated as of February 01, 2012.

Currency amounts expressed with "$" are in U.S. dollars (USD) unless otherwise denoted.



Thesis Jan. 20, 2012

Intel holds long-term advantages over smaller rival Advanced Micro Devices in the microprocessor industry. While there have been rising fears that Intel may have trouble competing against emerging processor design firm ARM, we believe such panic has been blown out of proportion.

Intel is the dominant force in the roughly $30 billion computer processor market. It has benefited tremendously from the proliferation of personal computers in the past few decades. Intel has long held the lead in microprocessor technology and performance, while AMD has mostly been an also-ran. Although AMD has periodically emerged as a threat, such occurrences are few and far between. After being caught off-guard several years ago when AMD narrowed the competitive gap between the two firms, Intel has gone on an impressive streak of out-innovating its smaller foe while reasserting its stranglehold on the microprocessor market.

The runaway success that Intel has had in the processor market can be traced back to the firm's economic moat. As the world's largest semiconductor company, Intel has a massive research and development budget that is unmatched. In addition, the firm has the financial resources to invest in cutting-edge semiconductor manufacturing technologies. These advantages enable Intel to push processor performance and lower manufacturing costs at a much faster pace than AMD. Although AMD has shown it can trump Intel in a particular processor generation, it has never been able to maintain its lead in successive generations.

Intel continues to go full throttle and has laid out aggressive plans to introduce new chip architectures every two years, in an effort to widen its lead over AMD in the processor performance race. In 2011, the firm launched its Sandy Bridge chips, which combine both computer and graphics processors onto the same silicon, and has begun to further push the envelope of semiconductor fabrication technologies, as it ramps up manufacturing of cutting-edge, 22-nanometer (circuit size) Ivy Bridge chips.

We believe the biggest obstacle facing Intel in the coming years is the maturation of the PC market, which could pose challenges for growth. In addition, the firm has begun to see the emergence of a new competitor in ARM, whose processor designs populate most smartphones and tablets. The line between PCs and mobile devices has been blurring, with ARM attempting to move upstream, while Intel tries to extend its presence downstream with its Atom chips. The emergence of the tablet has provided a battleground for the two, and ARM has been much more successful than Intel so far.

Although there is the risk that ARM-based tablets will eventually become powerful enough to cannibalize low-end PCs, which in turn would cut into Intel's processor sales, we believe ARM's threat to Intel has been overblown. ARM has been highly successful in chips for mobile devices and tablets because of the low power consumption of its designs, something that Intel has been unable to match despite being able to offer higher processor performance. Nonetheless, we expect Intel's Atom processors to become much more competitive on the power efficiency front in the next couple of years, which should allow the firm to achieve design wins in tablets and smartphones and ultimately encroach upon ARM's turf. Intel also bolstered its capabilities as a chip supplier for mobile devices when it bought Infineon's wireless chip business in 2011. In addition, the firm recently announced partnerships with Motorola Mobility and Lenovo to supply some of their upcoming smartphone models with Atom processors.

No matter how successful Intel ends up faring against ARM in tablets, we believe the mass proliferation of these devices will ultimately be beneficial to Intel. The emergence of tablets is part of the trend toward cloud computing, where computing tasks are offloaded onto the

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Close Competitors	Currency(Mil)	Market Cap	TTM Sales	Oper Income	Net Income
Intel Corp	USD	135,193	51,569	16,901	12,762
Advanced Micro Devices Inc	USD	4,809	6,526	710	1,043

Morningstar data as of February 01, 2012.

"cloud" and users access the cloud with an interface such as a tablet. As adoption of tablets and other mobile devices continues to rise, it will require substantial server build-outs to create the infrastructure necessary for the cloud. This will provide significant long-term tailwinds for the growth of Intel's server processor segment, which is the firm's most lucrative business.

Valuation, Growth and Profitability

Our fair value estimate is $26 per share. In our model, we forecast that revenue will decline 7% in 2012. We think Intel will face headwinds during the year due to the PC supply chain problems resulting from hard disk drive shortages, the potential for uncertain macroeconomic conditions to affect global PC demand and, most importantly, the threat that rival AMD may win market share from Intel in PC microprocessors. Nonetheless, we expect Intel's business to rebound in 2013, and we project that revenue will grow 10% for the year. Over the long run, we think Intel can grow in the upper single digits on average annually. Our assumptions are based on our projections for the processor market as well as other segments, including chipsets, motherboards, and flash memory. We believe the firm's server processor segment will be Intel's fastest-growing business, as the trend toward cloud computing will require substantial server build-outs. Although Intel has been widening its chip performance lead compared with AMD in recent years, we think that AMD will be more competitive in 2012, thanks to its new Fusion products, and we project that Intel will lose some market share to its smaller rival in the near term. Nonetheless, we believe Intel's dominant position over AMD remains intact over the long run. Profitability has improved over the past several years, partly as a result of the firm's cost-cutting work, and we think Intel's operating margin will come in at 22% in 2012. We forecast that operating margins will trend toward the mid-20s over the long term.

Risk

The semiconductor industry is cyclical, which causes fluctuations in Intel's financial performance. Intel must hold onto its technology lead in order to maintain its position as the behemoth of the microprocessor market. Failure to do so would result in share loss to AMD.

Bulls Say

- Intel is the largest semiconductor company in the world. The firm has sustained its position at the forefront of technology by investing heavily in R&D.
- The firm holds roughly four fifths market share in the microprocessor space.
- Intel has an immense budget for capital expenditures, allowing it to maintain the most cutting-edge semiconductor manufacturing technologies in the world.
- Intel's platform strategy, in which processors are bundled with chipsets, allows the firm to incorporate more features into its products.
- The firm subsidizes marketing efforts by customers when they highlight the Intel brand. As a result, it benefits from powerful brand recognition.

Bears Say

- Growth of the PC industry has slowed from the heady rates of the 1990s. As a result, Intel's opportunities to expand may be limited.

- Intel must successfully maintain its technology lead in the processor market. Any missteps by the firm could cause market share loss to AMD.
- AMD's purchase of ATI in 2006 has given Intel's smaller rival the know-how and technology to offer platform solutions as well.
- ARM-based processors power most of the mobile devices, including smartphones and tablets, on the market today. The firm is becoming a bigger competitive threat to Intel.

Financial Overview

Financial Health: Intel is in excellent financial shape. At the end of 2011, the firm had $10.2 billion in cash and short-term investments compared with $7.3 billion in debt.

Company Overview

Profile: Intel is the largest chipmaker in the world. It develops and manufactures microprocessors and platform solutions for the global personal computer market. Intel pioneered the x86 architecture for microprocessors.

Management: President and CEO Paul Otellini became CEO in 2005. Otellini has been with Intel since 1974; before taking the helm, he had been president and COO since 2002. Stacy Smith became CFO in 2007. Smith joined Intel in 1988 and has held various positions, including finance, information technology, and sales and marketing roles, at the company. Former CFO Andy Bryant remains at Intel and now holds the position of chief administrative officer. Jane Shaw, a retired pharmaceutical executive, serves as chairwoman. We like the separation of the chairman and CEO positions. The outside director compensation consists of cash and an equity-based component.

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Analyst Notes

Jan. 19, 2012

Intel Reports Solid 4Q Results

Intel reported solid fourth-quarter results, particularly when considering that disruptions in the PC supply chain have caused PC manufacturers to temporarily cut back on demand for microprocessors. For the quarter, revenue was $13.9 billion, down 2% sequentially, but at the upper range of management's forecast of $13.4 billion-$14.0 billion provided in December, when Intel lowered its fourth-quarter outlook in light of the PC supply chain problems. The recent flooding in Thailand has damaged a large portion of the PC hard disk drive manufacturing base, which has resulted in a shortage of HDD components in the PC supply chain. The limited availability of HDDs has forced computer makers to temporarily reduce the production of PCs, which in turn is causing them to cut back on microprocessor demand. As a result, Intel's PC chip segment saw revenue decline 4% from the third quarter to $9.0 billion. Despite the supply chain disruptions, the firm believes end-market PC demand remained healthy in the fourth quarter. Intel's server processor business appears to have escaped unscathed from the HDD shortages, as the segment saw revenue grow 8% sequentially to $2.7 billion. The firm continues to benefit from the buildout of the Internet and cloud infrastructure, which has been driving strong demand for server chips. On the profitability front, gross margin rose to 64.5% from 63.4% in the third quarter, as Intel managed to lower manufacturing costs. Operating income came in at $4.6 billion, down slightly from $4.8 billion last quarter.

For the first quarter, management expects revenue to be between $12.3 billion and $13.3 billion, which at midpoint would represent a sequential decline of 8%. Intel typically sees a seasonal sales drop in the first quarter, but the projected decline will be greater than usual, as the PC industry will continue to be affected by the limited availability of HDDs for the foreseeable future. Intel has been benefiting from several tailwinds in recent years, namely rising PC demand in emerging markets and growth in server processor sales. The firm is hoping to maintain its momentum in the upcoming quarters with releases of new server processors for the Romley platform and new Ivy Bridge processors, as well as the Ultrabook initiative, where the firm has been working closely with PC makers to create notebooks similar to Apple's MacBook Air. Nonetheless, we are somewhat cautious about our business outlook for Intel in 2012. The firm's business is highly cyclical, and we believe that uncertain macroeconomic conditions could put a damper on near-term global PC demand. More importantly, we currently project that rival Advanced Micro Devices will take market share from Intel in PC microprocessors, thanks to the success of AMD's new Fusion processors. However, these concerns are more short-term in nature and don't alter our long-term thesis on Intel. Over the long run, we continue to believe that Intel is well positioned for growth, particularly in the server processor business. The proliferation of smartphones and tablets will continue to drive the cloud infrastructure buildout, which will propel demand for Intel's server chips over time.

Dec. 12, 2011

Intel Lowers 4Q Outlook

On Monday, Intel lowered its forecast for the fourth quarter, as PC makers are cutting back on near-term microprocessor demand in light of supply constraints for hard disk drives. The firm now expects revenue of $13.4

Analyst Notes (continued)

billion-$14.0 billion, versus a previous outlook of $14.2 billion-$15.2 billion. It forecasts gross margins to be about 64.5%, down from a prior expectation of 65%. The recent flooding in Thailand has caused industrywide disruptions to PC hard disk drive production, which has resulted in shortages of HDDs in the PC supply chain. The limited availability of HDDs is now forcing PC makers to cut back on computer production, which in turn is causing them to cut back on microprocessor demand.

On a slightly more positive note, management said the current near-term slowdown is entirely being driven by supply chain disruptions, as end market PC sales remain healthy and are actually expected to grow sequentially in the fourth quarter. For the time being, the firm anticipates that the HDD shortages will continue into the first quarter and that demand for microprocessors from PC manufacturers should rebound as disk drive supply recovers in the first half of 2012. We expect to maintain our fair value estimate, as the issues appear to be short-term in nature.

Oct. 18, 2011

Intel's Third Quarter is Another for the Record Books

Intel reported impressive third-quarter results, as the firm achieved record revenue and profitability. We will likely raise our fair value estimate by several dollars as we update our valuation model to take into account the latest results. For the quarter, revenue came in at $14.2 billion, up 9% sequentially, and an increase from sales of $11.1 billion a year ago. Intel benefited from record microprocessor shipments, as PC demand was particularly strong in the enterprise segment and in emerging markets, while the consumer PC segment in mature markets remained soft. The firm also reported that notebook PC units grew double-digits quarter over quarter and year over year, while server processor demand remained strong. Revenue from McAfee and Infineon's wireless chip business, both of which Intel acquired in the first quarter of this year, contributed $1.1 billion in revenue, compared with about $1 billion in the second quarter.

On the profitability front, gross margin widened quarter over quarter, to 63.4% from 60.6%, driven by higher manufacturing volumes, lower unit costs, and lower startup costs from Intel's production ramp of the firm's next-generation 22-nanometer (circuit size) manufacturing process. Operating income came in at $4.8 billion, versus $3.9 billion last quarter.

For the fourth quarter, management expects revenue to be between $14.2 billion and $15.2 billion. At the midpoint of $14.7 billion, sales would be up 3% sequentially. Although this would be below seasonality, the outlook indicates that Intel anticipates another excellent quarter.

Intel appears to be defying the slowdown in business conditions that is weighing on firms in other segments of the chip industry, thanks largely to its beneficial exposure to PC growth in such emerging countries as China and Brazil. Nonetheless, management noted that macroeconomic concerns in Europe are prompting caution in their outlook for the business environment. Given the cyclicality of Intel's business, we believe that the threat of an economic slowdown will pose a risk to the firm in the upcoming quarters. That notwithstanding, we continue to believe that Intel has solid long-term growth prospects, especially in the firm's lucrative server processor segment. Additionally, we believe the continued proliferation of tablets and smartphones will inevitably necessitate considerable investment in the infrastructures of both the Internet and the cloud. We think this trend should keep

Analyst Notes (continued)

demand for Intel's server chips healthy, and sustainable.

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Intel Corp INTC

Sales USD Mil	Mkt Cap USD Mil	Industry	Sector
51,569	135,193	Semiconductors	Technology

Intel is the largest chipmaker in the world. It develops and manufactures microprocessors and platform solutions for the global personal computer market. Intel pioneered the x86 architecture for microprocessors.

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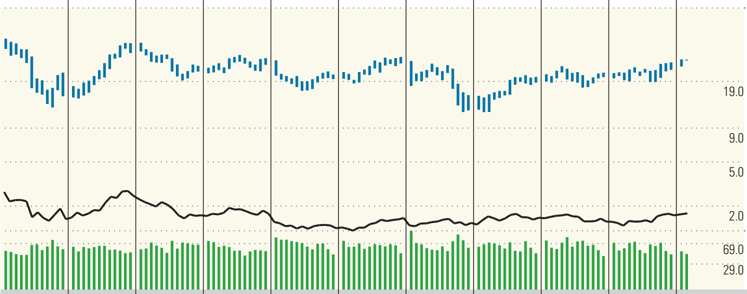
Morningstar Rating	Last Price	Fair Value	Uncertainty	Economic Moat™	Stewardship Grade
★★★	26.55	26.00	Medium	Wide	B

per share prices in USD

36.78	34.51	34.60	28.84	26.63	27.99	26.34	21.27	24.37	25.78	27.00	Annual Price High
12.95	14.88	19.64	21.89	16.75	18.75	12.06	12.05	17.60	19.16	24.25	Low
											Recent Splits



Price Volatility
Monthly High/Low
Rel Strength to S&P 500
52 week High/Low
27.00 - 19.16
10 Year High/Low
36.78 - 12.05
Bear-Market Rank
6 (10=worst)
Trading Volume Million

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	YTD	Stock Performance
-50.2	106.4	-26.5	8.1	-17.3	33.9	-43.0	43.0	6.2	19.0	9.5	Total Return %
-26.8	80.0	-35.5	5.1	-30.9	30.4	-4.5	19.6	-6.6	19.0	4.2	+/- Market
0.4	16.6	-7.2	-4.5	-11.7	27.1	1.4	-21.9	-11.3	22.9	-3.2	+/- Industry
0.5	0.3	0.7	1.3	2.0	1.7	3.7	2.8	3.0	3.2	3.0	Dividend Yield %
103151	209351	147895	150484	116762	155881	81539	112669	115896	123481	135193	Market Cap USD Mil

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TTM	Financials
26539	26764	30141	34209	38826	35382	38334	37586	35127	43623	51569	Revenue USD Mil
49.2	49.8	56.7	57.7	59.4	51.5	51.9	55.5	55.7	65.3	62.5	Gross Margin %
2256	4382	7533	10130	12090	5652	8216	8954	5711	15588	16901	Oper Income USD Mil
8.5	16.4	25.0	29.6	31.1	16.0	21.4	23.8	16.3	35.7	32.8	Operating Margin %
1291	3117	5641	7516	8664	5044	6976	5292	4369	11464	12762	Net Income USD Mil
—	0.46	0.85	1.16	1.40	0.86	1.18	0.92	0.77	2.01	2.31	Earnings Per Share USD
—	0.08	0.08	0.16	0.32	0.40	0.45	0.55	0.56	0.63	0.73	Dividends USD
—	6759	6621	6494	6178	5880	5936	5748	5645	5696	5524	Shares Mil
5.35	5.79	6.10	6.00	6.37	7.31	7.11	7.55	8.97	9.06	9.06	Book Value Per Share USD
8654	9129	11515	13119	14823	10620	12625	10926	11170	16692	19883	Oper Cash Flow USD Mil
-7309	-4703	-3656	-3843	-5818	-5779	-5000	-5197	-4515	-5207	-9789	Cap Spending USD Mil
1345	4426	7859	9276	9005	4841	7625	5729	6655	11485	10094	Free Cash Flow USD Mil

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TTM	Profitability
2.8	7.0	12.4	15.8	18.0	10.4	13.4	9.9	8.4	19.7	19.5	Return on Assets %
3.5	8.7	15.4	19.7	23.2	13.8	17.6	12.9	10.8	25.2	27.2	Return on Equity %
4.9	11.6	18.7	22.0	22.3	14.3	18.2	14.1	12.4	26.3	24.7	Net Margin %
0.57	0.60	0.66	0.72	0.81	0.73	0.74	0.71	0.68	0.75	0.79	Asset Turnover
1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.5	Financial Leverage

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	09-11	Financial Health
11063	12330	16003	16052	11960	9766	15314	12053	13566	22284	14789	Working Capital USD Mil
1050	929	936	703	2106	1848	1980	1886	2049	2077	7076	Long-Term Debt USD Mil
35830	35468	37846	38579	36182	36752	42762	39088	41704	49430	46117	Total Equity USD Mil
0.03	0.03	0.02	0.02	0.06	0.05	0.05	0.05	0.05	0.04	0.15	Debt/Equity

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TTM	Valuation
33.9	37.7	20.2	17.8	23.5	22.6	15.9	26.5	10.5	10.5	11.5	Price/Earnings
—	—	—	—	—	—	—	—	—	0.6	0.8	P/E vs. Market
3.9	7.0	4.4	4.0	3.4	4.1	2.2	3.3	2.8	2.6	2.8	Price/Sales
2.9	5.5	3.8	4.2	3.2	3.6	2.1	2.7	2.3	2.7	2.9	Price/Book
11.5	18.4	11.6	10.5	11.3	12.5	7.7	10.3	7.2	6.7	7.4	Price/Cash Flow

Growth Rates Compound Annual

Grade: C	1 Yr	3 Yr	5 Yr	10 Yr
Revenue %	24.2	4.4	2.4	2.6
Operating Income %	172.9	23.8	5.2	4.1
Earnings/Share %	161.0	19.4	7.5	2.9
Dividends %	12.5	11.9	14.5	24.6
Book Value/Share %	18.8	7.0	8.4	4.9
Stock Total Return %	27.2	30.3	6.9	-1.4
+/- Industry	26.2	-0.4	2.8	-0.7
+/- Market	25.9	13.3	8.7	-2.3

Profitability Analysis

Grade: B	Current	5 Yr Avg	Ind	Mkt
Return on Equity %	27.2	16.1	21.6	22.4
Return on Assets %	19.5	12.4	13.2	9.5
Fixed Asset Turns	2.6	2.2	3.4	7.5
Inventory Turns	5.2	4.7	4.6	15.9
Revenue/Employee USD K	625.1	472.3*	—	1048.4
Gross Margin %	62.5	56.0	50.7	38.3
Operating Margin %	32.8	22.6	19.0	16.6
Net Margin %	24.7	17.1	16.8	11.1
Free Cash Flow/Rev %	19.6	18.8	14.4	0.1
R&D/Rev %	15.0	0.2	—	9.8

Financial Position

Grade: A	12-10 USD Mil	09-11 USD Mil
Cash	5498	7057
Inventories	3757	3959
Receivables	2867	3821
Current Assets	31611	26698
Fixed Assets	17899	22157
Intangibles	4531	15583
Total Assets	63186	70551
Payables	2290	2999
Short-Term Debt	38	66
Current Liabilities	9327	11909
Long-Term Debt	2077	7076
Total Liabilities	13756	24434
Total Equity	49430	46117

Valuation Analysis

	Current	5 Yr Avg	Ind	Mkt
Price/Earnings	11.5	17.2	13.8	14.4
Forward P/E	10.1	—	—	13.7
Price/Cash Flow	7.4	8.9	8.9	7.3
Price/Free Cash Flow	14.5	15.3	19.7	16.9
Dividend Yield %	3.0	—	2.0	2.0
Price/Book	2.9	2.7	2.9	1.9
Price/Sales	2.8	3.0	2.3	1.2
PEG Ratio	1.0	—	—	1.5

*3Yr Avg data is displayed in place of 5Yr Avg

Quarterly Results

Revenue USD Mil	Dec 10	Mar 11	Jun 11	Sep 11
Most Recent Period	11457.0	12847.0	13032.0	14233.0
Prior Year Period	10569.0	10299.0	10765.0	11102.0

Rev Growth %	Dec 10	Mar 11	Jun 11	Sep 11
Most Recent Period	8.4	24.7	21.1	28.2
Prior Year Period	28.5	44.1	34.2	18.2

Earnings Per Share USD	Dec 10	Mar 11	Jun 11	Sep 11
Most Recent Period	0.56	0.56	0.54	0.65
Prior Year Period	0.40	0.43	0.51	0.52

Industry Peers by Market Cap

	Mkt Cap USD Mil	Rev USD Mil	P/E	ROE%
Intel Corp	135193	51569	11.5	27.2
Advanced Micro Devic	4809	6526	4.9	88.5

Major Fund Holders

	% of shares
	—
	—
	—
	—

TTM data based on rolling quarterly data if available; otherwise most recent annual data shown.

Morningstar's Approach to Rating Stocks

Our Key Investing Concepts

- Economic Moat™ Rating
- Discounted Cash Flow
- Discount Rate
- Fair Value
- Uncertainty
- Margin of Safety
- Consider Buying/Consider Selling
- Stewardship Grades

At Morningstar, we evaluate stocks as pieces of a business, not as pieces of paper. We think that purchasing shares of superior businesses at discounts to their intrinsic value and allowing them to compound their value over long periods of time is the surest way to create wealth in the stock market.

We rate stocks 1 through 5 stars, with 5 the best and 1 the worst. Our star rating is based on our analyst's estimate of how much a company's business is worth per share. Our analysts arrive at this "fair value estimate" by forecasting how much excess cash--or "free cash flow"--the firm will generate in the future, and then adjusting the total for timing and risk. Cash generated next year is worth more than cash generated several years down the road, and cash from a stable and consistently profitable business is worth more than cash from a cyclical or unsteady business.

Stocks trading at meaningful discounts to our fair value estimates will receive high star ratings. For high-quality businesses, we require a smaller discount than for mediocre ones, for a simple reason: We have more confidence in our cash-flow forecasts for strong companies, and thus in our value estimates. If a stock's market price is significantly above our fair value estimate, it will receive a low star rating, no matter how wonderful we think the business is. Even the best company is a bad deal if an investor overpays for its shares.

Our fair value estimates don't change very often, but market prices do. So, a stock may gain or lose stars based just on movement in the share price. If we think a stock's fair value is $50, and the shares decline to $40 without much change in the value of the business, the star rating will go up. Our estimate of what the business is worth hasn't changed, but the shares are more attractive as an investment at $40 than they were at $50.

Because we focus on the long-term value of businesses, rather than short-term movements in stock prices, at times we may appear out of step with the overall stock market. When stocks are high, relatively few will receive our highest rating of 5 stars. But when the market tumbles, many more will likely garner 5 stars. Although you might expect to see more 5-star stocks as the market rises, we find assets more attractive when they're cheap.

We calculate our star ratings nightly after the markets close, and issue them the following business day, which is why the rating date on our reports will always be the previous business day. We update the text of our reports as new information becomes available, usually about once or twice per quarter. That is why you'll see two dates on every Morningstar stock report. Of course, we monitor market events and all of our stocks every business day, so our ratings always reflect our analyst's current opinion.

Economic Moat™ Rating

The Economic Moat™ Rating is our assessment of a firm's ability to earn returns consistently above its cost of capital in the future, usually by virtue of some competitive advantage. Competition tends to drive down such

Morningstar Research Methodology for Valuing Companies

Competitive Analysis → **Economic Moat™ Rating** → Company Valuation → **Fair Value Estimate** → Uncertainty Assessment → ★★★★★

Competitive Analysis: Analyst conducts company and industry research:

- Management interviews
- Conference calls
- Trade-show visits
- Competitor, supplier, distributor, and customer interviews

Economic Moat™ Rating: The depth of the firm's competitive advantage is rated:

- None
- Narrow
- Wide

Company Valuation: Analyst considers company financial statements and competitive position to forecast future cash flows.

Assumptions are input into a discounted cash-flow model.

Fair Value Estimate: DCF model leads to the firm's Fair Value Estimate, which anchors the rating framework.

Uncertainty Assessment: An uncertainty assessment establishes the margin of safety required for the stock rating.

★★★★★: ★ / ★★ / ★★★ / ★★★★ / ★★★★★ — The current stock price relative to fair value, adjusted for uncertainty, determines the rating.

economic profits, but companies that can earn them for an extended time by creating a competitive advantage possess an Economic Moat. We see these companies as superior investments.

Discounted Cash Flow

This is a method for valuing companies that involves projecting the amount of cash a business will generate in the future, subtracting the amount of cash that the company will need to reinvest in its business, and using the result to calculate the worth of the firm. We use this technique to value nearly all of the companies we cover.

Discount Rate

We use this number to adjust the value of our forecasted cash flows for the risk that they may not materialize. For a profitable company in a steady line of business, we'll use a lower discount rate, also known as "cost of capital," than for a firm in a cyclical business with fierce competition, since there's less risk clouding the firm's future.

Fair Value

This is the output of our discounted cash-flow valuation models, and is our per-share estimate of a company's intrinsic worth. We adjust our fair values for off-balance sheet liabilities or assets that a firm might have--for example, we deduct from a company's fair value if it has issued a lot of stock options or has an under-funded pension plan. Our fair value estimate differs from a "target price" in two ways. First, it's an estimate of what the business is worth, whereas a price target typically reflects what other investors may pay for the stock. Second, it's a long-term estimate, whereas price targets generally focus on the next two to 12 months.

Uncertainty

To generate the Morningstar Uncertainty Rating, analysts consider factors such as sales predictability, operating leverage, and financial leverage. Analysts then classify their ability to bound the fair value estimate for the stock into one of several uncertainty levels: Low, Medium, High, Very High, or Extreme. The greater the level of uncertainty, the greater the discount to fair value required before a stock can earn 5 stars, and the greater the premium to fair value before a stock earns a 1-star rating.

Margin of Safety

This is the discount to fair value we would require before recommending a stock. We think it's always prudent to buy stocks for less than they're worth.The margin of safety is like an insurance policy that protects investors from bad news or overly optimistic fair value estimates. We require larger margins of safety for less predictable stocks, and smaller margins of safety for more predictable stocks.

Consider Buying/Consider Selling

The consider buying price is the price at which a stock would be rated 5 stars, and thus the point at which we would consider the stock an extremely attractive purchase. Conversely, consider selling is the price at which a stock would have a 1 star rating, at which point we'd consider the stock overvalued, with low expected returns relative to its risk.

Stewardship Grades

We evaluate the commitment to shareholders demonstrated by each firm's board and management team by assessing transparency, shareholder friendliness, incentives, and ownership. We aim to identify firms that provide investors with insufficient or potentially misleading financial information, seek to limit the power of minority shareholders, allow management to abuse its position, or which have management incentives that are not aligned with the interests of long-term shareholders. The grades are assigned on an absolute scale--not relative to peers--and can be interpreted as follows: A means "Excellent," B means "Good," C means "Fair," D means "Poor," and F means "Very Poor."