

Last Price Fair Value **Consider Buy** Consider Sell Uncertainty Economic Moat™ Moat Trend™ Stewardship **Industry Group** 29.42 USD 32 00 USD 19 20 USD 49 60 usp High Wide Stable Standard **Brokers & Exchanges**

Increasing Our Fair Value Estimate and Moat Rating for Charles Schwab

Updated Forecasts and Estimates from 18 Mar 2015

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The primary analyst covering this company does not own its stock.

Research as of 09 Mar 2015 Estimates as of 18 Mar 2015 Pricing data through 19 Mar 2015 Rating updated as of 19 Mar 2015

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

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Investment Thesis 09 Mar 2015

Charles Schwab reported record operating profits of \$2.1 billion in 2014, and operating profits will rise significantly in the following years from the compound effect of revenue growth and operating margin expansion. We estimate that over the next five years, operating income will grow nearly 170%. There should be a sharp rise in revenue and profits around the beginning of 2016 from rising short-term interest rates. The first 50-basis-point rate increase will reverse the majority of the annualized nearly \$800 million of money market fund fee waivers, and about half of the company's interest-earning assets are floating rate. Net interest income is also highly profitable with management aiming for 75%-plus of interest rate-related revenue to fall to the bottom line. This mix shift to more net interest income will expand operating margins.

In the medium term, there are another two legs to the net interest income story. The first leg is the repricing of the other half of the company's fixed-rate bank portfolio that has a duration of around four years. The second leg is management's intention to continue shifting client cash balances from money market funds to its bank. Even with money market fund fee waivers reversed, the company has only around a 50-basis-point revenue yield from its money market funds, while it can earn more than 200 basis points at the bank. To support the bank growth, Schwab will have to retain earnings to bolster its regulatory capital, so we don't expect a significant increase in dividends or share repurchases in the next three years.

Schwab Intelligent Portfolios is an interesting opportunity and illustrative of the company's wide moat. Charles Schwab is one of the only companies that can make online advisory for the masses profitable, due to its scale-driven operational cost advantage, distribution platform, and proprietary products. Whatever developments occur in the retail brokerage and wealth management industry, Charles Schwab has the resources and capabilities to adapt to them.

Vital Statistics	
Market Cap (USD Mil)	38,571
52-Week High (USD)	31.73
52-Week Low (USD)	23.35
52-Week Total Return %	7.5
YTD Total Return %	-2.4
Last Fiscal Year End	31 Dec 2014
5-Yr Forward Revenue CAGR %	14.5
5-Yr Forward EPS CAGR %	22.3
Price/Fair Value	0.92

Valuation Summary and Forecasts								
Fis	cal Year:	2013	2014	2015(E)	2016(E)			
Price/Earnings	3	33.3	30.8	28.3	22.5			
EV/EBITDA	1	14.3	12.8	11.6	9.5			
EV/EBIT	1	15.9	14.0	12.6	10.1			
Free Cash Flow Yield %		4.2	4.9	2.7	5.0			
Dividend Yield %		1.1	0.9	0.8	0.8			

Financial Summary and Forecasts (USD Mil)							
	Fiscal Year:	2013	2014	2015(E)	2016(E)		
Revenue		5,543	6,161	6,509	7,479		
Revenue YoY %		11.4	11.2	5.7	14.9		
EBIT		1,813	2,218	2,379	2,956		
EBIT YoY %		17.6	22.3	7.3	24.2		
Net Income, Adjusted		1,010	1,261	1,372	1,729		
Net Income YoY %		14.4	24.9	8.8	26.0		
Diluted EPS		0.78	0.98	1.04	1.31		
Diluted EPS YoY %		12.8	24.9	6.6	26.0		
Free Cash Flow		1,361	1,886	1,132	2,036		
Free Cash Flow YoY %		36.8	38.6	-40.0	79.9		

Historical/forecast data sources are Morningstar Estimates and may reflect adjustments.

Profile

Based in San Francisco, Charles Schwab operates in the brokerage, banking, and asset management businesses. The company runs a large network of brick-and-mortar brokerage branch offices and a well-established online investing website. It also operates a bank and a proprietary mutual fund business. Additionally, Schwab offers services to independent investment advisors.



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Morningstar Analysis

Increasing Our Fair Value Estimate and Moat Rating for Charles Schwab 09 Mar 2015

We are increasing our fair value estimate for Charles Schwab to \$32 per share from \$26, changing our moat rating to wide from narrow, and changing our moat trend rating to stable from positive as we transfer coverage to a new analyst. Our valuation implies a price/forward earnings multiple of 31 times and a price/book multiple of about 3.3 times. Approximately half of the fair value estimate increase came from incorporating a higher over-a-cycle operating margin assumption and extending the duration in our model that the company earns excess economic returns after changing our moat rating to wide. The other half of the increase was from lowering the cost of equity that we use in our model to 9% from 10% to be more in alignment with our outlook for inflation and real rates of return on capital.

We are increasing our moat rating to wide from narrow. With its massive scale and industry-leading cost efficiency, we believe the company can sustain severe competitive pressures, such as trading revenue dropping to \$0, and still earn above its cost of capital. We also estimate that around 25% of client assets are either in a Charles Schwab proprietary or controlled product, which allows the company to extract more profits on client assets than other brokerages where clients use primarily third-party products.

We are changing our moat trend rating to stable from positive. The company is already one of the low-cost leaders in its industry. While the company will continue to increase in size and its costs will scale downward, we don't believe the gap between it and its peers will materially widen. A certain amount of switching costs may be developing at Charles Schwab from the increasing usage of proprietary products and advice solutions among its clients, but we don't view it as material enough to affect the overall level of the company's already strong competitive position.

Valuation, Growth and Profitability 09 Mar 2015

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Over the next five years, we project a net revenue compound annual growth rate of nearly 15%. Approximately 75% of the revenue growth over the five years is from net interest income growing at a nearly 25% CAGR. We're currently projecting short-term interest rates to start increasing near the end of 2015 and gradually rise to 2.5% in 2019. In the long run, we use an across-a-cycle normalized short-term interest rate of 2%, roughly in line with our long-term inflation forecast minus a little for periods of accommodative monetary policy. Our across-a-cycle net interest margin forecast for Schwab is close to 2.9%. We also incorporate about a 20% increase in deposits as a percentage of client assets that increases banking income, as the company shifts client money market fund balances into the bank.

We project asset management revenue increasing at a nearly 9.5% CAGR. About half of the increase in revenue comes from the reversal of money market fund fee waivers over the next two years. The remaining increase is due to 6.5% annual growth in non-money market fund fee-based assets.

We believe trading revenue will have low growth of less



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than 3% annually. Part of the low growth stems from competitive pricing pressures, but also from Schwab shifting the revenue from former revenue trades into other lines, such as its commission-free trading platforms where the revenue shows up in asset management.

Due to Charles Schwab's scalable business model and high operating margins on net interest income, we have the company's operating margins growing to nearly 50% over the next five years from about 35% last year. High revenue growth and operating margin expansion leads to our forecast of close to a 170% increase in operating income by 2020.

Scenario Analysis

We value Charles Schwab at \$57 per share in our upside scenario and \$21 in our downside scenario, which correspond to price/forward earnings ratios of 46 and 25 times, respectively. The main drivers of the difference in valuation between our scenarios are the normalized level of interest rates and operating margins.

In our upside scenario, we forecast a five-year net revenue

CAGR of nearly 21%. We have net interest income growing about 33% annually from a combination of Schwab moving an even greater amount of money market fund cash balances into the bank than in our base case and higher interest rates. The company recently said that there's the potential to move around \$75 billion of client cash into the bank, and our upside scenario models this by having deposits as a percentage of clients increasing to 6% from around 4% lately. We also incorporate a normalized short-term interest rate of 3%. This assumes that inflation going forward is higher than current market expectations or that the Federal Reserve is able to sustain a real interest rate above the rate of inflation without causing the economy to go into a recession. Asset and administration fees have a revenue CAGR of 13% from an assumed stronger adoption of the company's products and higher market returns. Due to the scalability of Schwab's cost structure and greater proportion of highly profitable net interest income, our year five operating margin is in the upper 50s.

In our downside scenario, our five-year net revenue CAGR is about 8%. This scenario incorporates a negative 5% client asset growth year from a market correction, which causes asset management fee growth to only be about a 5.5% CAGR. We still have net interest income growing a relatively healthy 14% annually. In this scenario, we don't have an interest rate increase until 2017, which implies the U.S. economy remains somewhat weak, and use a normalized short-term interest rate of 1.5%. Operating margins in our downside scenario top out at a little over 40%.

Economic Moat

We are increasing our moat rating for Charles Schwab to wide from narrow. Due to the company's massive scale and industry-leading cost efficiency, we believe that the company can sustain severe competitive pressures, such as trading revenue dropping to \$0, and still earn above its cost of capital. We also estimate that around 25% of client assets are either in a Charles Schwab proprietary or



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controlled product, which allows the company to extract more profits on client assets than other brokerages where their clients use primarily third-party products.

Retail brokerage moats are primarily built on cost advantages. Their scalable infrastructure allows them to process additional trades at low costs, which produces high incremental operating margins. Many retail brokerages also have banking subsidiaries that rank well compared to traditional banks in terms of having low funding costs, credit costs, and operating expenses. Their strong banking subsidiary profitability--recent operating margins have been in excess of 60%--comes from not having to support a physical branch presence, brokerage clients that are less interest rate sensitive than traditional banking customers, and catering to generally higher-net-worth clientele with lending products that are collateralized.

We think the company's massive scale gives it a cost advantage that few can match. Currently, Schwab supports approximately \$2.5 trillion of client assets, making it one of the largest companies in the United States that is focused on securities trading and wealth management. The company's cost advantage can easily be seen with its industry-leading, sub-20 basis points of expenses per dollar of client assets.

Charles Schwab's low costs and large client base also give it the flexibility to create products that offer a comparable or superior value proposition to peers and that can ramp quickly. While a relative latecomer to creating its own exchange-traded product line, it is now among the top 10 largest exchange traded fund companies. The company's new online advisory platform will also benefit from its low cost and client reach, which will give Schwab the ability to be more profitable than existing players and leap frog them in assets.

Charles Schwab Bank is one of the largest banks in the U.S. with more than \$100 billion in deposits. It has low operating costs because of its synergy with the company's brokerage business. Credit costs are also low, due to much of the bank's portfolio being in low-risk agency mortgage-backed securities and loans being primarily made to the company's relatively affluent clients.

The company has a strong intangible asset in its brand and arguably possesses some network effect between its large client base and investment product manufacturers, but we view the cost advantage from its scale as being the primary source of its moat. We estimate that a double-digit percentage of Charles Schwab's client assets are in a Schwab-branded proprietary product or advice solution. Proprietary products are more profitable than third-party products, but revenue from these sources isn't as material as other revenue lines like net interest income. Because Schwab's commission-free trading product platform is valuable to both clients and product manufacturers, the firm is able to extract value from operating it. Additionally, its large independent wealth management client base gives Schwab a unique ability to offer benchmarking and process improvement benefits to affiliated firms.

Moat Trend

We are changing our moat trend rating for Charles Schwab to stable from positive. The company is already one of the low-cost leaders in its industry. While the company will continue to increase in size and its costs will scale downward, we don't believe the gap between it and its peers will materially widen. For example, Charles Schwab has approximately \$2.5 trillion in client assets compared with TD Ameritrade at nearly \$700 billion, whereas full-service wealth managers, such as Bank of America Merrill Lynch, have more than \$2 trillion. A certain amount of switching costs may be developing at Charles Schwab from the increasing usage of proprietary products and advice



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Morningstar Analysis

solutions among its clients, but we don't view it as material enough to affect the overall level of the company's already strong competitive position.



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Bulls Say/Bears Say

Bulls Say

- We believe Schwab's profits are primed for a major boost once interest rates make a decisive move upward.
- ► We believe its investment advice offerings are helping Schwab sow sticky relationships among clients.
- Schwab's scalable model should enable it to pocket increasing revenue growth as earnings.

Bears Say

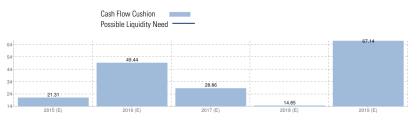
- Swings in trading volume, such as bouts of weakness and spurts of strength in investing activity, continue to inject a measure of instability into Schwab's revenue and profits.
- Pricing pressure always lurks as a danger to earnings in the online brokerage business.
- Changes to the Federal Reserve's thinking regarding the future of rates underscore how unsettled the outlook for improved interest income remains, which may delay Schwab's improved profitability.



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Five Year Adjusted Cash Flow Forecast (USD Mil)					
	2015(E)	2016(E)	2017(E)	2018(E)	2019(E,
Cash and Equivalents (beginning of period)	11,363	12,016	13,626	15,412	17,585
Adjusted Available Cash Flow	2,060	1,976	2,004	2,325	2,749
Total Cash Available before Debt Service	13,423	13,992	15,629	17,737	20,334
Principal Payments	-357	-7	-258	-908	-8
Interest Payments	-73	-76	-84	-87	-95
Other Cash Obligations and Commitments	-200	-200	-200	-200	-200
Total Cash Obligations and Commitments	-630	-283	-542	-1,195	-303

Cumulative Annual Cash Flow Cushion



Adjusted Cash Flow Summary

disclosures at the end of this report.

		/0 UI
	USD Millions	Commitments
Beginning Cash Balance	11,363	384.9
Sum of 5-Year Adjusted Free Cash Flow	11,113	376.5
Sum of Cash and 5-Year Cash Generation	22,476	761.4
Revolver Availability	_	_
Asset Adjusted Borrowings (Repayment)	_	_
Sum of Cash, 5-Year Cash Generation, Revolver and Adjustments	22,476	761.4
Sum of 5-Year Cash Commitments	-2,952	_

Financial Health

We have no significant concerns about Schwab's financial health. We are comfortable with Schwab's ability to shoulder its debt load, cover its interest obligations, and make its common and preferred dividend payments. Management's stated target is for a long-term debt/total financial capital ratio of no more than 30%. The ratio was at about 15% at the end of 2014. Schwab's regular common stock dividends have held steady at a quarterly \$0.06 per share since 2008. While the company targets a dividend payout ratio of 20%-30%, we don't expect significant dividend raises or repurchases for the next several years, as we believe management will retain earnings to capitalize its growing bank. As the bank grows, we believe the company will periodically issue preferred stock to supplement its regulatory bank capital ratios.

Enterprise Risk

Major risks to Schwab include the future of interest rates as well as factors that can influence market trading activity. We assume that rates will begin to head meaningfully higher in late 2015 or early 2016, but the economic recovery in the U.S. remains fragile in the meantime, and it is possible that rates will remain suppressed for an extended period. If so, investors will have to wait even longer for a strong and sustained recovery in Schwab's interest profitability. Regarding trading activity, the firm is exposed to variables that can influence investors' decisions on whether to trade stocks, options, and other products, such as market volatility and sentiment on future market performance. The company's brokerage business is vulnerable to price competition, which can drive fees for trading and other services downward. Scrutiny of payment-for-order-flow practices could crimp this revenue source, though we don't believe Schwab is as exposed as rival TD Ameritrade.



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Management & Ownership

Management Activity				
Name	Position	Shares Held	Report Date*	InsiderActivity
MR. WALTER W. BETTINGER,II	CEO/Director/President,Director	711,119	02 Mar 2015	_
CHARLES R. SCHWAB	Director	148,303	02 Mar 2015	1,400,000
ROBERT N. WILSON	Director	131,530	19 May 2014	_
JOSEPH R. MARTINETTO	CEO, Subsidiary/CFO/CFO, Subsidiary/Chief Accounting Officer/Executive VP/Executive VP, Subsidiary	119,826	02 Mar 2015	_
JAMES D. MCCOOL	Executive VP, Divisional/Executive VP, Subsidiary	110,838	06 Mar 2015	74,000
GEORGE A. GILL	Executive VP/Other Corporate Officer	58,995	03 Nov 2014	_

^{*}Represents the date on which the owner's name, position, and common shares held were reported by the holder or issuer.

Fund Ownership				
Top Owners	% of Shares Held	% of Fund Assets	Change (k)	Portfolio Date
Dodge & Cox Stock Fund	4.32	2.84	1,060	31 Dec 2014
Vanguard PrimeCap Fund	1.99	1.69	-520	31 Dec 2014
Vanguard Total Stock Mkt Idx	1.55	0.14	479	31 Jan 2015
SPDR® S&P 500 ETF	0.92	0.18	1	18 Mar 2015
Vanguard Five Hundred Index Fund	0.97	0.17	199	31 Jan 2015
Concentrated Holders				
Goldman Sachs Long Short Fund	0.01	12.49	76	31 Dec 2014
PowerShares KBW Capital Markets Port	_	7.73	_	18 Mar 2015
iShares US Broker-Dealers	0.05	7.31	_	18 Mar 2015
AB SICAV Concentrated US Eq Portfolio	0.03	6.70	23	31 Jan 2015
W.P. Stewart Holdings Fund	0.11	6.21	_	31 Jan 2015
Institutional Transactions				
Institutional Iransactions				
Top 5 Buyers	% of Shares Held	% of Fund Assets	Shares Bought/ Sold (k)	Portfolio Date
Top 5 Buyers State Street Global Advisors (Aus) Ltd	Held 0.81	Assets 0.18	Bought/ Sold (k) 12,009	17 Mar 2015
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc.	Held 0.81 1.22	Assets 0.18 0.21	Bought/ Sold (k) 12,009 5,713	17 Mar 2015 31 Dec 2014
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc. Vanguard Group, Inc.	Held 0.81 1.22 4.69	Assets 0.18 0.21 0.13	Bought/ Sold (k) 12,009 5,713 3,628	17 Mar 2015 31 Dec 2014 31 Dec 2014
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc. Vanguard Group, Inc. Standard Life Investments	Held 0.81 1.22 4.69 0.97	Assets 0.18 0.21 0.13 1.51	Bought/ Sold (k) 12,009 5,713 3,628 3,254	17 Mar 2015 31 Dec 2014 31 Dec 2014 31 Dec 2014
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc. Vanguard Group, Inc.	Held 0.81 1.22 4.69	Assets 0.18 0.21 0.13	Bought/ Sold (k) 12,009 5,713 3,628	17 Mar 2015 31 Dec 2014 31 Dec 2014
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc. Vanguard Group, Inc. Standard Life Investments	Held 0.81 1.22 4.69 0.97	Assets 0.18 0.21 0.13 1.51	Bought/ Sold (k) 12,009 5,713 3,628 3,254	17 Mar 2015 31 Dec 2014 31 Dec 2014 31 Dec 2014
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc. Vanguard Group, Inc. Standard Life Investments Franklin Advisers, Inc.	Held 0.81 1.22 4.69 0.97	Assets 0.18 0.21 0.13 1.51	Bought/ Sold (k) 12,009 5,713 3,628 3,254	17 Mar 2015 31 Dec 2014 31 Dec 2014 31 Dec 2014
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc. Vanguard Group, Inc. Standard Life Investments Franklin Advisers, Inc.	Held 0.81 1.22 4.69 0.97	Assets 0.18 0.21 0.13 1.51	Bought/ Sold (k) 12,009 5,713 3,628 3,254 3,208	17 Mar 2015 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc. Vanguard Group, Inc. Standard Life Investments Franklin Advisers, Inc. Top 5 Sellers Winslow Capital Management, LLC	Held 0.81 1.22 4.69 0.97 0.31	Assets 0.18 0.21 0.13 1.51 0.10	Bought/ Sold (k) 12,009 5,713 3,628 3,254 3,208	17 Mar 2015 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc. Vanguard Group, Inc. Standard Life Investments Franklin Advisers, Inc. Top 5 Sellers Winslow Capital Management, LLC Spo Advisory Corp	Held 0.81 1.22 4.69 0.97 0.31	Assets 0.18 0.21 0.13 1.51 0.10	Bought/ Sold (k) 12,009 5,713 3,628 3,254 3,208 -11,170 -9,450	17 Mar 2015 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014
Top 5 Buyers State Street Global Advisors (Aus) Ltd J.P. Morgan Investment Management Inc. Vanguard Group, Inc. Standard Life Investments Franklin Advisers, Inc. Top 5 Sellers Winslow Capital Management, LLC Spo Advisory Corp Capital World Investors	Held 0.81 1.22 4.69 0.97 0.31 2.53 0.34	Assets 0.18 0.21 0.13 1.51 0.10 13.36 0.04	Bought/ Sold (k) 12,009 5,713 3,628 3,254 3,208 -11,170 -9,450 -7,806	17 Mar 2015 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014 31 Dec 2014

Management 09 Mar 2015

In our view, Schwab's stewardship of shareholder capital is standard. The company is led by CEO Walter Bettinger and chairman Charles Schwab. We generally favor separating the CEO and chairman roles, as Schwab does, because it avoids the concentration of corporate power. Chairman Schwab is the company's founder, while Bettinger has been at the helm since 2008. Previously, he was chief operating officer. We think Bettinger possesses the skills and experience needed to run the company.

Schwab has had a mixed record in making acquisitions, including the unsuccessful acquisition of U.S. Trust, a wealth management operation that Schwab ultimately sold. The company's regular common stock dividend payouts haven't grown since 2008, though we think they will eventually improve with profits. Generally, we think management has done a decent job in managing the company through a rocky period, and we expect the firm's performance to improve.

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We Expect More Record Results in 2015 for Schwab 16 Jan 2015

Charles Schwab exceeded its initial financial expectations for 2014, and the inherent operating leverage in its business means that it may happen again in 2015. Schwab reported record fourth-quarter net income of \$350 million on \$1.5 billion of net revenue. More clients and the related growth in assets led to this result. We're encouraged by the trend of more client assets finding their way into Schwab-related fund offerings and advice solutions, which are steadier sources of revenue with generally better competitive pricing characteristics than trading. Net interest income was able to set a new annual record of \$2.3 billion, as growth in margin balances and deploying more deposits into higheryielding fixed-income securities at the bank more than offset the influence of continued low interest rates. With the company still waiving more than \$700 million of money market fund fees per year, net income and margins are poised for a jump in late 2015 or early 2016 when many expect short-term interest rates to rise. We are maintaining our fair value estimate and narrow moat rating.

Schwab's Plan to Move Into Robo-Advisor Market Taps Into Firm's Disruptive DNA 27 Oct 2014

We believe Charles Schwab's new "robo-advisor" platform offers an opportunity for the firm to make inroads into a growing market. Given Schwab's plans to not levy fees such as commissions on the service--one way for the firm to make money is through its own exchange-traded funds that make it into client portfolios--and the lack of more-detailed information on its long-term strategy, we don't now expect this effort to materially contribute to near-term earnings. Thus, we aren't making changes to our \$25 fair value estimate for this narrow-moat name.

In our view, Schwab Intelligent Portfolios, planned for the



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Analyst Notes

first quarter of 2015, will give the company a potentially powerful lure to court investors, many of them younger, who prefer a cheaper and more technology-driven approach to managing their money. The robo-advisor marketplace already has plenty of competition, but we believe Schwab's brand, reputation, scale, and investing know-how will make it into a strong player. For instance, we believe Schwab will be able to offer more-robust customer service than smaller rivals. We also think the Schwab name will help the Intelligent Portfolios offering stand out in the market.

There are risks. We see cannibalization is a potential danger, as the offering could siphon away current Schwab clients. Ultimately, we suspect that many of the robo-advisor clients are likely to be new to Schwab and that this will be an opportunity for the firm to attract assets that otherwise would go to rival firms.

Schwab's 30 Earnings Helped by Higher Interest, Asset Management Revenue as Trading Faltered 15 Oct 2014

Charles Schwab's third-quarter earnings were close to our views, and we don't plan big changes to our fair value estimate. Generally, the improvement in net interest margin, a key revenue driver, is a nice hint at stronger eventual earnings power. Further, Schwab's success with its advice-solutions products underscores its ability to sow sticky client relationships, which we think helps its narrow economic moat. Indeed, the combination of higher interest revenue and asset-management fees more than offsets lower trading revenue, lifting overall revenue by 13% year over year to \$1.55 billion.

Schwab's asset growth is stronger than we expected, with client assets just north of \$2.4 trillion in September, up from \$2.25 trillion in December. This helps Schwab drive higher revenue from its asset-management fees, even though it is still hobbled by fee waivers on money-market funds to the

tune of \$190 million in the quarter. We continue to expect that the eventual end of these waivers will boost Schwab's revenue. Overall, asset-management and administration fees rose 11% to \$649 million, lifted by a 17% increase in revenue from advice solutions.

While net interest margins are still far from the 3%-plus that we view as achievable over time, Schwab improved on this front. The firm's second-largest revenue source, net interest revenue, rose 13% to \$573 million as NIM widened by 13 basis points to 1.64% amid higher yields on securities held to maturity. In addition, trading revenue fell 7% to \$209 million amid lower activity, though we suspect that the recent market turmoil is inspiring more trading.

Costs rose more than we expected, but it was due to \$68 million in one-time severance items. Thus, we aren't too alarmed by a 23% increase in compensation costs that helped drive the pretax margin down to 33.4% from 33.8%. Overall, profits rose 11% to \$312 million.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
29.42 USD	32.00 USD	19.20 USD	49.60 USD	High	Wide	Stable	Standard	Brokers & Exchanges

Morningstar Analyst Forecasts

Financial Summary and Forecasts							
Fiscal Year Ends in December						Forecast	
	3-Year						5-Year
Growth (% YoY)	Hist. CAGR	2012	2013	2014	2015	2016	Proj. CAGR
Revenue	9.0	4.5	11.4	11.2	5.7	14.9	14.5
EBIT	14.9	5.4	17.6	22.3	7.3	24.2	21.7
EBITDA	14.3	7.4	15.9	20.0	6.7	22.4	20.6
Net Income	13.4	2.2	14.4	24.9	8.8	26.0	22.8
Diluted EPS	11.5	-1.5	12.8	24.9	6.6	26.0	22.3
Earnings Before Interest, after Tax	4.8	6.0	-4.1	13.2	0.3	24.2	20.1
Free Cash Flow	-6.3	-56.6	36.8	38.6	-40.0	79.9	12.0
	3-Year						5-Year
Profitability	Hist. Avg	2012	2013	2014	2015	2016	Proj. Avg
Operating Margin %	33.2	31.0	32.7	36.0	36.6	39.5	42.1
EBITDA Margin %	36.8	34.9	36.4	39.2	39.6	42.2	44.7
Net Margin %	18.8	17.8	18.2	20.5	21.1	23.1	24.8
Free Cash Flow Margin %	25.1	20.0	24.6	30.6	17.4	27.2	24.8
ROIC %	_	_	_	_	_	_	_
Adjusted ROIC %	10.4	10.0	10.1	11.0	11.0	12.6	15.0
Return on Assets %	0.8	0.7	0.7	0.9	0.8	1.0	1.1
Return on Equity %	11.4	10.7	11.1	12.3	12.0	13.7	15.2
	3-Year						5-Year
Leverage	Hist. Avg	2012	2013	2014	2015	2016	Proj. Avg
Debt/Capital	0.15	0.15	0.15	0.14	0.13	0.12	0.11
Total Debt/EBITDA	0.89	0.94	0.94	0.79	0.74	0.60	0.53
EBITDA/Interest Expense	20.34	18.89	18.66	23.47	35.32	41.49	48.25

Valuation Summary and F	orecasts			
	2013	2014	2015(E)	2016(E)
Price/Fair Value	1.13	1.21	_	_
Price/Earnings	33.3	30.8	28.3	22.5
EV/EBITDA	14.3	12.8	11.6	9.5
EV/EBIT	15.9	14.0	12.6	10.1
Free Cash Flow Yield %	4.2	4.9	2.7	5.0
Dividend Yield %	1.1	0.9	0.8	0.8
Key Valuation Drivers				
Cost of Equity %				9.0
Pre-Tax Cost of Debt %				5.8
Weighted Average Cost of Cap	ital %			8.8
Long-Run Tax Rate %				37.8
Stage II EBI Growth Rate %				4.3
Stage II Investment Rate %				14.5
Perpetuity Year				20
Additional estimates and scenarios av	ailahla for down	aload at http:	//calact more	ningetar.com

Additional estimates and scenarios available for download at http://select.morningstar.com.

Discounted Cash Flow Valuation			
	USD Mil	Firm Value (%)	Per Share Value
Present Value Stage I	17,244	38.4	13.06
Present Value Stage II	12,905	28.7	9.78
Present Value Stage III	14,772	32.9	11.19
Total Firm Value	44,920	100.0	34.03
Cash and Equivalents	543	_	0.41
Debt	-1,899	_	-1.44
Preferred Stock	-872	_	-0.66
Other Adjustments	-1,666	_	-1.26
Equity Value	41,026	_	31.08
Projected Diluted Shares	1,320		
Fair Value per Share (USD)	_		
The data in the table above represent base	-rase forecast	s in the compar	ıv's renortina

The data in the table above represent base-case forecasts in the company's reporting currency as of the beginning of the current year. Our fair value estimate may differ from the equity value per share shown above due to our time value of money adjustment and in cases where probability-weighted scenario analysis is performed.



Last Price Fair Value Moat Trend™ **Consider Buy Consider Sell** Uncertainty Economic Moat™ Stewardship **Industry Group** 32.00 USD 19.20 USD 29.42 USD 49.60 USD High Wide Stable Standard **Brokers & Exchanges**

Morningstar Analyst Forecasts

				Ford	cast
riscal feal citus III Decellibel	2012	2012	2014		2016
Non-Cash (Income) Charges Char		7,479			
Cost of Goods Sold					
Gross Profit	4,975	5,543	6,161	6,509	7,479
Selling, General & Administrative Expenses	3,237	3,528	3,744	3,931	4,324
Other Operating Expense (Income)	_	_	_	_	_
Other Operating Expense (Income)	_	_	_	_	_
Depreciation & Amortization (if reported separately)	196	202	199	199	199
Operating Income (ex charges)	1,542	1,813	2,218	2,379	2,956
Restructuring & Other Cash Charges	_	_	_	_	_
Impairment Charges (if reported separately)	_	_	_	_	_
Other Non-Cash (Income)/Charges				_	
Operating Income (incl charges)	1,542	1,813	2,218	2,379	2,956
Interest Expense	92	108	103	73	76
Interest Income					
Pre-Tax Income	1,450	1,705	2,115	2,306	2,880
Income Tax Expense	522	634	794	872	1,089
Other After-Tax Cash Gains (Losses)	_	_	_	_	_
Other After-Tax Non-Cash Gains (Losses)	_	_	_	_	_
(Minority Interest)	_	_	_	_	_
(Preferred Dividends)	-45	-61	-60	-62	-62
Net Income	883	1,010	1,261	1,372	1,729
Weighted Average Diluted Shares Outstanding	1,275	1,293	1,293	1,320	1,320
Diluted Earnings Per Share	0.69	0.78	0.98	1.04	1.31
Adjusted Net Income	883	1,010	1,261	1,372	1,729
Diluted Earnings Per Share (Adjusted)	0.69	0.78	0.98	1.04	1.31
Dividends Per Common Share	0.24	0.24	0.24	0.24	0.24
EBITDA	1,738	2,015	2,417	2,578	3,155
Adjusted EBITDA	1,738	2,015	2,417	2,578	3,155



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
29.42 USD	32.00 USD	19.20 USD	49.60 USD	High	Wide	Stable	Standard	Brokers & Exchanges

Morningstar Analyst Forecasts

Balance Sheet (USD Mil)				_	
Fiscal Year Ends in December	2012	2013	2014	<u>For</u> 2015	ecast 2016
Cash and Equivalents	12.663	7.728	11.363	12.016	13.626
Investments					
Accounts Receivable	_				
Inventory	_	_	_	_	_
Deferred Tax Assets (Current)	_	_	_	_	_
Other Short Term Assets	1,146	1,255	1,249	1,320	1,516
Current Assets	13,809	8,983	12,612	13,336	15,142
Net Property Plant, and Equipment	675	790	1,039	1,090	1,147
Goodwill	1,228	1,227	1,227	1,227	1,227
Other Intangibles	319	266	227	227	227
Deferred Tax Assets (Long-Term)	_	_	_	_	
Other Long-Term Operating Assets	117,606	132,376	139,537	155,525	173,553
Long-Term Non-Operating Assets	_	_	_	_	_
Total Assets	133,637	143,642	154,642	171,405	191,296
Accounts Payable	_	_	_	_	_
Short-Term Debt	_	_	_	_	_
Deferred Tax Liabilities (Current)	_	_	_	_	
Other Short-Term Liabilities	2,709	3,053	3,820	3,414	3,668
Current Liabilities	2,709	3,053	3,820	3,414	3,668
Long-Term Debt	1,632	1,903	1,899	1,902	1,902
Deferred Tax Liabilities (Long-Term)	_	_	_	_	_
Other Long-Term Operating Liabilities	119,707	128,305	137,120	153,288	171,512
Long-Term Non-Operating Liabilities		_	_		
Total Liabilities	124,048	133,261	142,839	158,603	177,082
Preferred Stock	865	869	872	872	872
Common Stock	15	15	15	15	15
Additional Paid-in Capital	3,881	3,951	4,050	4,050	4,050
Retained Earnings (Deficit)	8,554	9,253	10,198	11,254	12,666
(Treasury Stock)	-4,024	-3,716	-3,497	-3,497	-3,497
Other Equity	298	9	165	108	108
Shareholder's Equity	9,589	10,381	11,803	12,802	14,214
Minority Interest	_		_	_	_
Total Equity	9,589	10,381	11,803	12,802	14,214



Last Price Fair Value Moat Trend™ **Consider Buy Consider Sell** Uncertainty Economic Moat™ Stewardship **Industry Group** 32.00 USD 19.20 USD 29.42 USD 49.60 USD High Wide Stable Standard **Brokers & Exchanges**

Morningstar Analyst Forecasts

Cash Flow (USD Mil)					
Fiscal Year Ends in December	2040	2040	2044	Fore	
	2012	2013	2014	2015	2016
Net Income	928	1,071	1,321	1,434	1,791
Depreciation	196	202	199	199	199
Amortization	_	_	_	_	_
Stock-Based Compensation	105	116	115	121	133
Impairment of Goodwill	_	_	_	_	
Impairment of Other Intangibles	_	_	_	_	_
Deferred Taxes	5	-21	-25	_	_
Other Non-Cash Adjustments	368	186	115	_	_
(Increase) Decrease in Accounts Receivable	_	_	_	_	_
(Increase) Decrease in Inventory	_	_	_	_	_
Change in Other Short-Term Assets	-5,077	4,381	1,062	-71	-197
Increase (Decrease) in Accounts Payable	_	_	_	_	_
Change in Other Short-Term Liabilities	4,741	-4,279	-439	-406	254
Cash From Operations	1,266	1,656	2,348	1,277	2,181
(Capital Expenditures)	-148	-249	-400	-250	-256
Net (Acquisitions), Asset Sales, and Disposals	-80	_		_	
Net Sales (Purchases) of Investments	-16,035	-19,803	-7,984	_	
Other Investing Cash Flows	3	2	-11	180	197
Cash From Investing	-16,260	-20,050	-8,395	-70	-60
Common Stock Issuance (or Repurchase)	35	258	189	_	_
Common Stock (Dividends)	-337	-368	-373	-317	-317
Short-Term Debt Issuance (or Retirement)	300	-300		_	
Long-Term Debt Issuance (or Retirement)	-382	269	-6	3	_
Other Financing Cash Flows	19,362	13,600	9,872	-183	-195
Cash From Financing	18,978	13,459	9,682	-497	-512
Exchange Rates, Discontinued Ops, etc. (net)	_	_	_	-57	_
Net Change in Cash	3,984	-4,935	3,635	653	1,609



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
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Comparable Company Analysis

These companies are chosen by the analyst and the data are shown by nearest calendar year in descending market capitalization order.

Valuation Analysis																
		Price/Ea	rnings		EV/EBITD	Α		Price/Fre	ee Cash Flo	w	Price/Bo	ok		Price/Sa	les	
Company/Ticker	Price/Fair Value	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)
TD Ameritrade Holding Corp AMTD	0.85	23.5	23.9	20.9	12.2	12.2	10.8	20.6	22.4	19.4	3.8	3.8	3.4	5.8	6.0	5.4
Average		23.5	23.9	20.9	12.2	12.2	10.8	20.6	22.4	19.4	3.8	3.8	3.4	5.8	6.0	5.4
Charles Schwab Corp SCHW US	0.92	30.8	28.3	22.5	12.8	11.6	9.5	20.3	37.5	20.0	3.4	3.0	2.7	6.4	5.9	5.2

Returns Analysis		ROIC %			Adjusted	ROIC %		Return o	n Equity %		Return o	n Assets %		Dividend	l Yield %	
Company/Ticker TD Ameritrade Holding Corp AMTD	Last Historical Year Total Assets (Mil) 23,831 USD	2014 —	2015(E)	2016(E) —	2014 24.8	2015(E) 26.5	2016(E) 29.7	2014 16.7	2015(E) 16.8	2016(E) 17.2	2014 3.5	2015(E) 3.4	2016(E) 3.6	2014 3.0	2015(E) 1.7	2016(E) 1.7
Average		_	_	_	24.8	26.5	29.7	16.7	16.8	17.2	3.5	3.4	3.6	3.0	1.7	1.7
Charles Schwab Corp SCHW US	154,642 USD	-	_	-	11.0	11.0	12.6	12.3	12.0	13.7	0.9	0.8	1.0	0.9	0.8	0.8

Growth Analysis																
	Last Historical Year	Revenue	Growth %		EBIT Grov	wth %		EPS Grov	wth %		Free Cas	h Flow Gro	wth %	Dividend	I/Share Gro	wth %
Company/Ticker	Revenue (Mil)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)
TD Ameritrade Holding Corp AMTD	3,123 USD	13.0	5.6	11.4	21./	7.2	15.1	16.6	/./	14.5	57.0	-0.4	15.6	14.7	-38.4	
Average		13.0	5.6	11.4	21.7	7.2	15.1	16.6	7.7	14.5	57.0	-0.4	15.6	14.7	-38.4	
Charles Schwab Corp SCHW US	6,161 USD	11.2	5.7	14.9	22.3	7.3	24.2	24.9	6.6	<i>26.0</i>	38.6	-40.0	<i>79.9</i>	_	_	_



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
29.42 USD	32.00 USD	19.20 USD	49.60 USD	High	Wide	Stable	Standard	Brokers & Exchanges

Comparable Company Analysis

These companies are chosen by the analyst and the data are shown by nearest calendar year in descending market capitalization order.

Profitability Analysis																
	Last Historical Year Net Income	Gross M	argin %		EBITDA N	/largin %		Operatin	g Margin %	b	Net Mar	gin %		Free Cas	h Flow Ma	rgin %
Company/Ticker	(Mil)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)
TD Ameritrade Holding Corp AMTD	787 USD	100.0	100.0	100.0	47.1	47.7	48.4	41.2	41.8	43.2	25.2	25.4	26.1	28.2	27.0	28.0
Average		100.0	100.0	100.0	47.1	47.7	48.4	41.2	41.8	43.2	25.2	25.4	26.1	28.2	27.0	28.0
Charles Schwab Corp SCHW US	1,261 USD	100.0	100.0	100.0	39.2	39.6	42.2	36.0	36.6	39.5	20.5	21.1	23.1	31.6	15.8	25.7

Leverage Analysis		: Debt/Equ	iity %		Debt/Tota	al Cap %		EBITDA/	nterest Exp) .	Total De	bt/EBITDA		: Assets/E	quity	
Company/Ticker TD Ameritrade Holding Corp AMTD	Last Historical Year Total Debt (Mil) 1,251 USD	2014 26.4	2015(E) 20.9	2016(E) 18.7	2014 20.9	2015(E) 17.3	2016(E) 15.8	2014 58.8	2015(E) 62.1	2016(E) 70.2	2014 0.9	2015(E) 0.7	2016(E) 0.6	2014 5.0	2015(E) 4.8	2016(E) 4.7
Average		26.4	20.9	18.7	20.9	17.3	15.8	58.8	62.1	70.2	0.9	0.7	0.6	5.0	4.8	4.7
Charles Schwab Corp SCHW US	1,899 USD	16.1	14.9	13.4	13.9	12.9	11.8	23.5	35.3	41.5	0.8	0.7	0.6	13.1	13.4	13.5

Liquidity Analysis																
	Market Cap	Cash per	Share		Current R	atio		Quick Ra	tio		Cash/Sho	ort-Term De	ebt	Payout P	atio %	
Company/Ticker	(Mil)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)	2014	2015(E)	2016(E)
TD Ameritrade Holding Corp AMTD	19,893 USD	2.64	3.32	4.50	1.11	1.13	1.15	1.11	1.13	1.15	9.73	_	_	33.4	39.2	34.3
Average		2.64	3.32	4.50	1.11	1.13	1.15	1.11	1.13	1.15	9.73	_	_	33.4	39.2	34.3
Charles Schwab Corp SCHW US	38,571 USD	8.79	9.10	10.32	3.30	3.91	4.13	3.30	3.91	4.13	_	_	_	24.6	23.1	18.3



Research Methodology for Valuing Companies

Components of Our Methodology

- ► Economic MoatTM Rating
- ► Moat Trend™ Rating
- ► Moat Valuation
- ► Three-Stage Discounted Cash Flow
- Weighted Average Cost of Capital
- ► Fair Value Estimate
- ► Scenario Analysis
- ► Uncertainty Ratings
- ► Margin of Safety
- ► Consider Buying/Selling
- ► Stewardship Rating

The Morningstar Rating for stocks identifies companies trading at a discount or premium to our analysts' assessment of their fair value. A number of components drive this rating: (1) our assessment of the firm's economic moat, (2) our estimate of the stock's intrinsic value based on a discounted cash-flow model, (3) the margin of safety bands we apply to our Fair Value Estimate, and (4) the current stock price relative to our fair value estimate.

The concept of the Morningstar Economic Moat™ Rating plays a vital role not only in our qualitative assessment of a firm's investment potential, but also in our valuation process. We assign three moat ratings—none, narrow, or wide—as well as the Morningstar Moat Trend™ Rating—positive, stable, or negative—to each company we cover. There are two major requirements for firms to earn either a narrow or wide moat rating: (1) the prospect of earning above-average returns on capital; and (2) some competitive edge that prevents these returns from quickly eroding. The assumptions we make about a firm's moat determine the length of "economic outperformance" that we assume in the latter stages

of our valuation model. We also quantify the value of each firm's moat, which represents the difference between a firm's enterprise value and the value of the firm if no future net investment were to occur. Said differently, moat value identifies the value generated by the firm as a result of any future net new investment. Our Moat Trend Rating reflects our assessment of whether each firm's competitive advantage is either getting stronger or weaker, since we think of moats as dynamic, rather than static.

At the heart of our valuation system is a detailed projection of a company's future cash flows. The first stage of our three-stage discounted cash flow model can last from 5 to 10 years and contains numerous detailed assumptions about various financial and operating items. The second stage of our model—where a firm's return on new invested capital (RONIC) and earnings growth rate implicitly fade until the perpetuity year—can last anywhere from 0 years (for no-moat firms) to 20 years (for wide-moat companies). In our third stage, we assume the firm's RONIC equals its weighted average cost of capital, and we calculate a continuing value using a standard

Morningstar Research Methodology for Valuing Companies

Fundamental Analysis

Economic Moat™ Rating Company Valuation

Fair Value Estimate

Uncertainty Assessment **** *** ***

Analyst conducts company and industry research:

- Financial statement analysis
- ► Channel checks
- ► Trade-show visits
- Industry and company reports and journals
- ► Conference calls
- Management and site visits

Strength of competitive advantage is rated: None, Narrow, or Wide

Advantages that confer an economic moat:

High Switching Costs (Microsoft)

Cost advantage (Wal-Mart)

Intangible assets (Johnson & Johnson)

Network Effect (Mastercard)

Efficient Scale (Lockheed Martin)

Analyst considers past financial results and focuses on competitive position and future prospects to forecast future cash flows.

Assumptions are entered into Morningstar's proprietary discounted cash-flow model.

Analyst uses a discounted cash-flow model to develop a Fair Value Estimate, which serves as the foundation for the Morningstar Rating for stocks.

The analyst then evaluates the range of potential intrinsic values for the company and assigns an Uncertainty Rating: Low, Medium, High, Very High, or Extreme.

The Uncertainty Rating determines the margin of safety required before we would recommend the stock. The higher the uncertainty, the wider the margin of safety.

The current stock price relative to Morningstar's Fair Value Estimate, adjusted for uncertainty, determines the Morningstar Rating for stocks.

The Morningstar Rating for stocks is updated each evening after the market closes.



Research Methodology for Valuing Companies

Detailed Methodology Documents and Materials*

- ► Comprehensive Equity Research Methodology
- ► Uncertainty Methodology
- ► Cost of Equity Methodology
- ► Morningstar DCF Valuation Model
- ► Stewardship Rating Methodology
- Please contact a sales representative for more information.

perpetuity formula. In deciding on the rate at which to discount future cash flows, we ignore stock-price volatility. Instead, we rely on a system that measures the estimated volatility of a firm's underlying future free cash flows, taking into account fundamental factors such as the diversity of revenue sources and the firm's fixed cost structure.

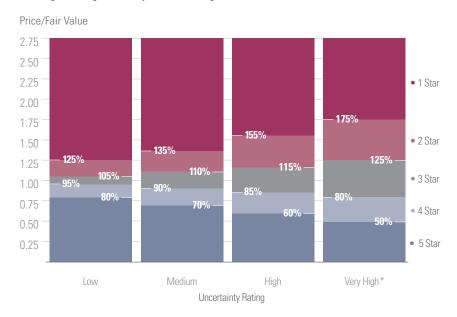
We also employ a number of other tools to augment our valuation process, including scenario analysis, where we assess the likelihood and performance of a business under different economic and firm-specific conditions. Our analysts typically model three to five scenarios for each company we cover, stress-testing the model and examining the distribution of resulting fair values.

The Morningstar Uncertainty Rating captures the range of these potential fair values, based on an assessment of a company's future sales range, the firm's operating and financial leverage, and any other contingent events that may impact the business. Our analysts use this range to assign an appropriate margin of safety—or the discount/premium

to a fair value we apply in setting our consider buying/consider selling prices. Firms trading below our consider-buying prices receive our highest rating of five stars, whereas firms trading above our consider-selling prices receive our lowest rating of one star.

Our corporate Stewardship Rating represents our assessment of management's stewardship of shareholder capital, with particular emphasis on capital allocation decisions. Analysts consider companies' investment strategy and valuation, financial leverage, dividend and share buyback policies, execution, compensation, related party transactions, and accounting practices. Corporate governance practices are only considered if they've had a demonstrated impact on shareholder value. Analysts assign one of three ratings: "Exemplary," "Standard," and "Poor." Analysts judge stewardship from an equity holder's perspective. Ratings are determined on an absolute basis. Most companies will receive a Standard rating, and this is the default rating in the absence of evidence that managers have made exceptionally strong or poor capital allocation decisions.

Morningstar Margin of Safety and Star Rating Bands



^{*} Occasionally a stock's uncertainty will be too high for us to estimate, in which case we label it Extreme



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
29.42 USD	32.00 USD	19.20 USD	49.60 USD	High	Wide	Stable	Standard	Brokers & Exchanges



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