

Credit Summary: The Charles Schwab Corporation

Schwab's A+ rating reflects diversified business, strong balance sheet, and healthy credit metrics

Morningstar Credit Ratings, LLC

20 August 2018

Contents

- 2 Credit Rating History
- 2 Credit Rating Rationale
- 4 Pillar Analysis
- 7 Financial Projections
- 7 Company Overview
- 12 Peer Comparison
- 14 Capital Structure
- 15 Capital Allocation Policy
- 16 Financial Summary
- 17 Appendix

Erin Davis
Associate Vice President
+1 312 384-4810
erin.davis@morningstar.com

Executive Summary

Morningstar Credit Ratings, LLC, has assigned an A+ consolidated corporate credit rating to The Charles Schwab Corporation. Most recently, on April 26 we affirmed Schwab's A+ credit rating and maintained our stable outlook. Our A+ rating for Charles Schwab reflects the firm's substantial size and solid market position, including its wide economic moat, as assessed by Morningstar's Equity Research Group. Schwab has \$3.4 trillion in client assets under management, making it the market leader among retail brokerages with full-service offerings and a competitive cost structure. Our stable outlook reflects our view that Schwab's credit metrics are unlikely to change substantially over the next 12-24 months. However, Schwab's exposure to broader macroeconomic conditions is a key risk factor to the rating, with potential downturns in markets viewed as credit negatives.

Key Takeaways

- ▶ While brokers traditionally rely on trading activity to drive revenue, Schwab has successfully transformed itself into a modern investment services firm, leaving it a with more diversified revenue stream and less exposed to market cycles.
- ➤ Schwab maintains a prudent debt allocation policy, with relatively low levels of debt and a highly liquid balance sheet. At the end of second-quarter 2018, Schwab reported a trailing 12-month debt/EBITDA and an interest coverage ratio of 1.2 times and 8.8 times, respectively. We forecast debt/EBITDA to average 1.2 times over our five-year forecast period.
- ► Mid-2018 was a milestone for Schwab's growing bank, with the company completing \$45 billion of transfers of client funds to bank deposits from sweep money market accounts in the first half of the year. As a result, the company's consolidated balance sheet crossed the \$250 billion mark, a key threshold for banks in the United States that implies heightened regulatory requirements.
 Management's intention to continue shifting cash balances to its bank from money market funds will be a key driver of growth in net interest income.
- ▶ We compare Schwab to TD Ameritrade (A, Stable), an online stock trading and brokerage company. TD Ameritrade's size and narrow economic moat trail that of the larger, wide-moat Charles Schwab. Schwab also leads its competitor in total client assets under management (AUM), with \$3.4 trillion in client's assets against \$1.2 trillion at Ameritrade.

Exhibit 1 Peer Bond Pricing

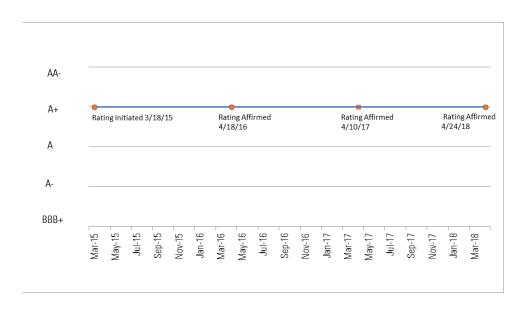
| Company | Rating | Outlook | Coupon | Maturity | IDC Pricing | YTW | Gspread |
|---------|--------|----------|--------|-----------|--------------------|-------|---------|
| CME | A+ | Stable | 3.75% | 6/15/2028 | 101.33 | 3.58% | 72 |
| SCHW | A+ | Stable | 3.20% | 3/2/2027 | 96.61 | 3.67% | 82 |
| AMTD | Α | Stable | 3.30% | 4/1/2027 | 96.71 | 3.75% | 90 |
| NDAQ | BBB+ | Negative | 3.85% | 6/30/2026 | 97.88 | 4.17% | 133 |

Source: Morningstar Credit Ratings, LLC and Interactive Data, as of Aug. 15, 2018.

Credit Rating History

We initiated our credit rating for The Charles Schwab Corporation at A+ on March 18, 2015. Since then we have reviewed and affirmed the rating three times and maintained our stable outlook for the company. Each of our reviews considered Schwab's substantial size and market-leading position in the broker space as well as its significant banking operations and expanding asset-management division. Schwab's wide economic moat, as assigned by Morningstar's Equity Research Group, has also been a key factor in our rating analysis, along with the company's low-cost, scalable expense structure, which leads to significant excess returns.

Exhibit 2 Charles Schwab Credit Rating History



Source: Morningstar Credit Ratings, LLC

Credit Rating Rationale

In our credit risk assessment, Schwab's large size and sustainable competitive advantages contribute positively to the company's low Business Risk pillar score. Our strong Cash Flow Cushion score considers Schwab's moderate leverage and good earnings over our five-year forecast horizon. Our forecasts

include continued client asset growth as well as a lower effective tax rate. Schwab's Solvency Score is strong, reflecting the company's solid returns on invested capital and excellent interest coverage. Rounding out our assessment is a very strong score on our Distance to Default pillar, which utilizes market data to estimate the likelihood that a company will fall into financial distress.

Schwab has \$3.4 trillion in client assets under management — making it the market leader among retail brokerages with full-service offerings — and also maintains a competitive cost structure. Pricing cuts caused trading revenue to fall in the first half of 2017, but this has been more than offset by revenue gains from asset management and administration fees as well as net interest revenue from Schwab's banking operations. As a result, Schwab reported 14.8% trailing 12-month net revenue growth as of June 30. Interest rate increases have benefited net interest margins, with Schwab reporting a second-quarter margin of 230 basis points compared with 197 basis points for full-year 2017. Debt to trailing 12-month EBITDA was reported at 1.2 times at second-quarter close, and we expect it to remain near to this level going forward.

As Schwab has transformed to a full-service asset and wealth manager from its origin as a discount broker, it has established one of the strongest reputations in the business, which we believe drives a solid retention rate among its customers. The company's sustainable competitive advantages are derived from its valuable brand and associated intangible assets, the network effect between its sizable client base and manufacturers of investment products, and the cost advantage it enjoys from its vast scale.

Key factors that could lead to a positive rating action include materially higher operating income as demonstrated by operating margin expansion and/or significant expansion in size and scale, which could lead to improved Solvency or Cash Flow Cushion scores. Continued diversification could reduce product and customer concentration, or lower the cyclicality of operations, and could positively influence our Business Risk assessment. Key factors that could lead negative rating action include a deterioration in Schwab's Business Risk pillar stemming from damage to its brand and loss of clients, and/or changes in macroeconomic conditions that have a material negative impact on the company's revenue from asset-based earning or interest-based earnings. We could also consider a negative rating action if Schwab's banking operation shows marked deterioration in funding, asset quality, and/or capital strength.

Credit Strengths

- ► Schwab's diversification within the financial-services sector provides stability to its revenue stream, as the company is not overly reliant on any one source for revenue. In 2017, Schwab generated 72% of its \$8,618 million in revenue from Investor Services and 28% from Advisor Services. Within the Investor Services segment, 52% of revenue was net interest income, 38% was asset management and administration fees, and 10% was trading and other revenue.
- ► With \$3.4 trillion in client assets under management as compared with an estimated total market of \$45 trillion in U.S. retail financial assets, Schwab is both one of the largest U.S.-based firms providing securities trading and wealth management and a firm that has significant room to continue to expand.

Between 2013 and 2017, Schwab's client assets grew at a CAGR of 11%, and we forecast 6% annual growth over the next five years.

- ➤ Strong and consistent profitability is another key credit strength for the firm. Schwab logged a strong second quarter, with the net revenue growing 16.7%, driven by net interest income that contributed \$354 million of the \$356 million increase. The net interest margin expanded 18 basis points from the first quarter to 2.30%, its highest since 2009. We expect revenue to grow at a CAGR of 8.4% over the next five years, compared with a CAGR of 10.5% in 2015-17. Moreover, we expect operating margin to expand to nearly 50% compared with 42.4% in 2017, as we calculate it, as net interest income grows.
- ► Financial leverage is consistently low and interest coverage is solid. As of June 30, 2018, the trailing 12-month Debt/EBITDA and interest coverage ratio stood at 1.2 times and 8.8 times, respectively. Additionally, the firm maintains a large balance of cash and cash equivalents, which has kept the company in a net cash position for over 10 years. We forecast run-rate leverage averaging 1.2 times over our five-year forecast period.
- Schwab has built its strong reputation and client relationships organically, rather than acquiring them, which has helped it to maintain its high-quality capital. Schwab's goodwill and intangible asset balances are minuscule, consisting of less than 1% of total assets and 8% of shareholder equity.

Credit Weaknesses and Risks

- ▶ In our view, the chief threat to Schwab's credit is a larger-than-expected market downturn, perhaps due to a prolonged recession, which could lead to material negative impacts on the company's asset-based revenue, interest-based earnings, and trading fees.
- ► The increasing importance of Schwab's banking operations further tie the company's profitability to the path of interest rates. While rising interest rates are expected to bolster net interest income, continued low long-term interest rates could make it difficult for Schwab's bank to meet profitability expectations without taking on additional risk.
- ➤ Schwab has been pushing further into the territory of asset management and investment advisory services. As of 2017, these services constituted for \$3.4 billion of the company's \$8.6 billion net revenue, with net interest income accounting for another \$4.3 billion. Its trading services constituted only \$654 million for the year. This expansion means it will be facing increasing competition from established giants like Goldman Sachs and Morgan Stanley as well as asset managers pushing into wealth management like Fidelity Investments and The Vanguard Group.

Pillar Analysis

Schwab's credit rating reflects its low Business Risk, strong Solvency Score, strong Cash Flow Cushion, and a very strong Distance to Default score. Please refer to the Appendix for a full description of the rating pillars.

Exhibit 3 Charles Schwab Credit Pillar Summary

Current Rating: A+

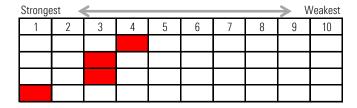
Rating Pillars

Business Risk

Cash Flow Cushion

Solvency Score

Distance to Default



Source: Morningstar Credit Ratings, LLC

- ▶ Business Risk (4): Schwab's low Business Risk is supported by Morningstar Equity Research Group's wide economic moat assessment and a low dependence on capital markets.
 - Size (Large): With 2017 revenue of \$8.6 billion and an operating margin of nearly 40% over the last five years, Schwab ranks as one of the low-cost leaders in the asset and wealth management industry. Schwab is substantially larger than its peer, TD Ameritrade, which reported \$3.6 billion revenue in 2017.
 - ▶ Economic Moat (wide): Morningstar's Equity Research Group awards Schwab a wide economic moat because of the cost advantages it has built through its massive scale and industry-leading cost efficiency. Schwab's scale minimizes the incremental costs of additional trades and therefore produces high incremental operating margins. In addition, about one quarter of client assets are in either a Charles Schwab proprietary or controlled product, such as Schwab funds, OneSource funds, or Schwab bank accounts, which allows the company to extract more profits on client assets than other brokerages where their clients use primarily third-party products.
 - Uncertainty (High): We view Schwab's range of possible operating results as fairly wide because of the uncertain path of interest rates and fee pressures, both of which could materially affect the company's revenue growth and the ability to expand operating margins. Schwab's uncertainty rating also reflects the inherent cyclicality in financial services industry.
 - Product/Customer Concentration (Diversified): Schwab has transformed itself into to a full-service retail financial services firm from its origin as a discount broker. Schwab, through its Advisor Services and Investor Services segment, operates in the brokerage, banking, and asset-management businesses. It also operates a bank, a proprietary mutual fund business, and offers banking, custodial, and retirement business services to independent investment advisors.
 - ▶ Management (Neutral): Schwab's capital allocation strategy is consistent with preserving its credit profile. Schwab has historically maintained its debt/EBITDA below 2 times and prioritizes using capital to support organic growth in the business, which primarily includes growing the bank and growing the balance sheet. Management explicitly targets a long-term debt/financial capital ratio of no more than 30% and a dividend payout ratio of 20%-30%. The Morningstar Equity Research Group recently increased its stewardship rating for Schwab to Exemplary from Standard to reflect the company's position as a consistent industry

- trendsetter and innovator. Walter Bettinger, CEO since 2008, and Chairman Charles Schwab successfully led Schwab's transformation into a modern investment services firm from a discount brokerage during a period of substantial industry structural changes.
- ▶ Dependence on Capital Markets (Low): Schwab ended the second quarter 2018 with a cash and cash equivalents balance of \$13.3 billion compared with total long-term debt of \$5.8 billion. Long-term debt included \$1.95 billion of senior notes issued in May, a portion of which was used to refinance \$275 million of senior notes scheduled to mature later in 2018. Of the total debt, \$2.1 billion matures within in our five-year forecast horizon. We believe that Schwab's level of debt and its maturity schedule is manageable given the company's strong cash flow generation.
- Cyclicality (Average Cyclicality): Retail brokerage and asset management services leave Schwab exposed to market cycles and activity, but the firm's scale and scope serve as insulation against drastic swings in revenue.
- Cash Flow Cushion (3): Schwab's strong earnings profile, excellent cash flow generation and minimal near-term debt maturities enhance its ability to shoulder its debt load and cover its interest obligations. The current maturities include \$700 million due in 2020, \$1.2 billion due in 2021, and \$256 million due in 2022. The current and the forecast five-year adjusted free cash flow cover up to 6 times the five-year obligations. Financial flexibility is enhanced by a \$31 billion Federal Home Loan Bank secured credit facility. During 2017, Schwab Bank used borrowings under this agreement to purchase investment securities prior to bulk transfers. This credit facility is also available as a backup financing in the event of the outflow of client cash from Schwab Bank's balance sheet. Exhibit 4 illustrates our projections that Schwab's cash flow cushion will exceed its potential liquidity needs throughout our five-year forecast.

60.0 50.0 40.0 30.0 20.0 10.0 2018 2019 2020 2021 2022 Cash Flow Cushion (LFP) 54.05 13.06 3.33 3.55 9.96 Possible Liquidity Need 1 1 1 1

Exhibit 4 Cash Flow Cushion

Source: Morningstar Credit Ratings, LLC

➤ Solvency Score (3): Schwab's score is built on four key financial metrics derived from our five-year forecast. Schwab's ratio of total liabilities/total assets starts out at 86% in 2018 and is projected to increase as bank deposits and payables to brokerage clients grow. The company's forecast quick ratio starts at near 4.1 times in 2018 because of large cash holdings following debt issuance and then drops near the 2.0 area though 2022. Schwab's return on invested capital (ROIC) is forecast to be 10.5% in 2018 and is expected to increase to 15.1% in 2022. The company's ROICs are well above its estimated

WACC of 8.1%. Similarly, debt service coverage as measured by adjusted EBITDAR/(interest expense + 1/3 rents) remains in the 24-27 times area throughout our forecast horizon.

▶ Distance to Default (1): Schwab's very strong score in our Distance to Default pillar reflects the company's high enterprise value/EBITDA multiple of 19.9 times at year-end, which provides creditors a substantial equity cushion. An increase in market capitalization to \$69.1 billion in July 2018 from \$57.1 billion in July 2017 and continued low equity volatility also contribute to the very strong score.

Financial Projections

We project that Schwab will double its bank deposits over the next five years, to over \$300 billion, as the company grows organically and as it completes the transfer of client funds into bank deposits from money market funds. We expect that this growth, along with further increases in the Fed Funds rate over the next two years, will be the primary drivers of earnings.

Schwab reported strong operating performance for the second quarter, which, when combined with first quarter performance and external catalysts for higher net interest income, suggests to us that Schwab will report full-year 2018 revenue growth toward the midpoint of its guidance range (13%-15%). We expect net interest margins at Schwab's bank to grow as deposit expenses increase at a slower-rate than yields on Schwab's asset portfolio. Because of this and Schwab's operating leverage, we expect operating margins to increase to 50% by 2021.

| Exhibit 3 Summary Financial Fit | эјесного | | | | |
|---------------------------------|----------|--------|--------|--------|--------|
| Figures | 2018E | 2019E | 2020E | 2021E | 2022E |
| Revenue | 9,820 | 10,871 | 12,717 | 13,912 | 14,722 |
| Revenue growth | 13.95% | 10.70% | 16.99% | 9.39% | 5.83% |
| EBITDA | 4,698 | 5,339 | 6,688 | 7,340 | 7,756 |
| Operating Income | 3,102 | 3,564 | 4,556 | 4,898 | 5,169 |
| Operating Cash Flow | 3,113 | 4,103 | 5,034 | 5,605 | 5,957 |
| Capital Expenditures | (638) | (489) | (572) | (626) | (663) |
| Free Cash Flow | 2,475 | 3,614 | 4,462 | 4,979 | 5,295 |

Source: Morningstar Credit Ratings, LLC

Charles Schwab Company Overview

Fyhihit 5 Summary Financial Projections

Company Description

Headquartered in San Francisco, The Charles Schwab Corporation (SCHW) has transformed itself into a diversified wealth and asset management firm from its origin as a discount broker. Significant business subsidiaries of SCHW include Charles Schwab & Co., Inc., a securities broker-dealer, Charles Schwab Bank, a federal savings bank, and Charles Schwab Investment Management, Inc., the investment advisor for Schwab's proprietary mutual funds (Schwab Funds®) and Schwab's exchange-traded funds (Schwab ETFs™). Through its operating subsidiaries, the company provides a full range of wealth management, securities brokerage, banking, money management, custody, and financial advisory

services to individual investors and independent investment advisors. At June 30, 2018, Schwab had \$3.4 trillion in total client assets, 11.2 million active brokerage accounts, 1.6 million corporate retirement plan participants, and 1.3 million banking accounts.

Schwab reports its operations across two core segments: Investor Services and Advisor Services, with the former providing services including retail brokerage, banking, retirement plan and other corporate brokerage services, and the latter providing custodial, trading, banking and support, and retirement business services. The company runs a large network of brick-and-mortar brokerage branch offices and a well-established online investing website. It currently has footprint in 46 states in the United States across 345 branches, and branches in Puerto Rico, London, Australia, Hong Kong, and Singapore. Schwab's website includes an electronic trading platform for the purchase and sale of financial securities including but not limited to common stocks, exchange-traded funds, options, mutual funds, and fixed income investments as well as educational materials and investment calculators. The website also provides access to investment advice ranging from automated investing to personalized advice from Schwab Financial Consultants.

Exhibit 6 Segment Income Statement and Growth

| | Inves | tor Services | Advisor Services | | Total | |
|--|-------|--------------|------------------|-------------|-------|-------------|
| | | Growth Rate | | Growth Rate | | Growth Rate |
| | 2017 | 2016-17 | 2017 | 2016-17 | 2017 | 2016-17 |
| Net Revenue | | | | | | |
| Net Interest Revenue | 3,231 | 25% | 1,051 | 44% | 4,282 | 29% |
| Asset Management and Administration Fees | 2,344 | 12% | 1,048 | 9% | 3,392 | 11% |
| Trading Revenue | 408 | -22% | 246 | -18% | 654 | -21% |
| Other | 217 | 9% | 73 | 1% | 290 | 7% |
| Provision for Loan Losses | - | nm | - | nm | - | nm |
| Total Net Revenue | 6,200 | 15% | 2,418 | 17% | 8,618 | 15% |
| Non-Interest Expense | 3,725 | 10% | 1,243 | 12% | 4,968 | 11% |
| Income Before Taxes | 2,475 | 22% | 1,175 | 22% | 3,650 | 22% |

Source: Morningstar Credit Ratings, LLC, Charles Schwab Corp. 2017 10K

Investor Services Segment

Investor Services is Schwab's largest segment and produced 72% of company net revenue in 2017. Within this segment, Schwab provides a wide variety of services and service-levels to investors through Financial Consultants as well as through branch, online, mobile, and telephone services. For do-it-yourself investors, Schwab offers a competitively priced trading platform, robo-managed portfolios, and educational tools like workshops and online courses. For clients seeking advice, Schwab offers a variety of service levels from occasional consultations with Schwab Financial Consultants to ongoing, personalized relationships through Schwab Private Client. Within this segment, Schwab also offers Retirement Plan Services to retirement plan sponsors (like corporate employers) that can include custodial services and record-keeping, access to Schwab, and third-party funds.

Advisor Services Segment

Schwab's advisor segment supports Registered Investment Advisors (RIAs) with custodial services, trading, banking, and other services. Schwab is the largest provider of these services to RIAs, and its scale and technology-driven platforms allows it to cost-effectively serve both established RIAs and new independent practices. The Advisor Services segment also supports independent retirement plan advisors and independent recordkeepers, who, in turn, serve plan sponsors. For these clients, Schwab provides trust and custody services, and retirement plan assets are held in trust at Schwab Bank.

Schwab Bank

Background

Schwab Bank's strategy centers around increasing the profitability of the group's clients' cash holdings. Schwab's clients hold significant amounts of cash, historically around 12% of total client portfolios. Until 2015, most clients had their cash swept automatically into Schwab money market accounts, where it could earn a higher yield. However, in the years following the financial crisis, interest rates were so low that Schwab, like most money market providers, was forced to waive billions of dollars in money market fees in order to prevent the funds from having effective negative yields and risk net asset values falling

below \$1. For 2014, Schwab earned \$206 million net in money market fees for the \$166 billion of client cash held in money market accounts. However, Schwab said that it would have earned \$970 million if fees had been at a normalized level of 58 basis points. It also estimated that this client cash could have generated as much as \$3.3 billion in revenue if \$91 billion of client cash remained in money market funds and \$75 billion moved into bank deposits and generated a spread of 367 basis points.

Strategy

In 2008, Schwab began to gradually transfer client cash into deposits at Schwab Bank from money market funds. As bank deposits, these funds would be on Schwab's balance sheet and could be used to fund purchases of yield-earning assets, such as mortgage-backed securities or loans, and could therefore generate a spread. Regulators require banks to hold a certain level of equity capital against their assets (Schwab targets a 7% equity/assets level), and Schwab said that it preferred to support these cash transfers with organically generated capital rather than by issuing shares. This meant that transfers could take place only gradually, as client notification procedures and Schwab's capital levels allowed.

As of June 30, 2017, Schwab's bank deposits had increased to \$164 billion from \$103 billion at the end of 2014. Client sweep money market funds had decreased to \$58 billion from \$150 billion over the same time period. Some yield-sensitive clients purchased money market funds through the brokerage platform, causing purchased money market funds to increase to \$76 billion from \$16 billion. The transfers included \$45 billion of transfers in first-half 2018, and management said that it expects most of the remaining \$58 billion to come onto the balance sheet.

Exhibit 7 Sweep Money Market Fund Activity

Source: Charles Schwab Corp. Summer Business Update, July 20, 2018.

This strategy, along with organic growth and an improved invest rate environment, has been a key driver of Schwab's increasing revenue. As a percentage, net interest revenue was 50% of total revenue in 2017, compared with a low of 29% in 2009 as shown in Exhibit 8.

10,000 9,000 8,000 7,000 Revenue (\$ Mil) 6,000 5,000 4,000 3,000 2,000 1,000 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 ■ Net Interest Revenue ■ Asset Management and Administration Fees Other ■ Trading Revenue

Exhibit 8 Net Interest Income Has Been an Important Driver of Earnings Growth

Source: SNL Financial, Morningstar Credit Ratings, LLC

Cost Advantages

Schwab's scale and management's close attention to cost controls have long made it an industry leader in cost efficiency. The impact of cost controls over the last decade can be seen in Exhibit 9, which shows that operating revenue has doubled since 2007 while expenses have grown only 75%.

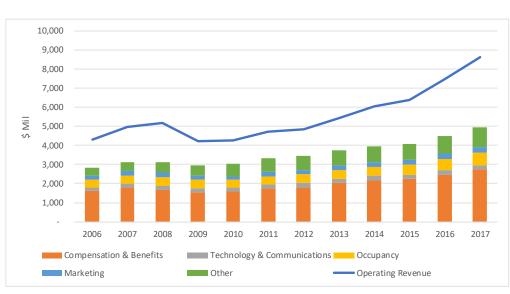


Exhibit 9 Revenues Have Grown Faster Than Expenses

Source: SNL Financial, Morningstar Credit Ratings, LLC

As Schwab continues to expand and diversify, it will face increasing competition from established larger players, including investment banking firms such as Goldman Sachs. However, we see Schwab as well positioned to compete against these larger players because it is an industry leader in terms of AUM and expense/AUM even compared with this expanded peer group, as is shown in Exhibit 10.

Exhibit 10 Peer AUM and Expense to Average Client Assets Data

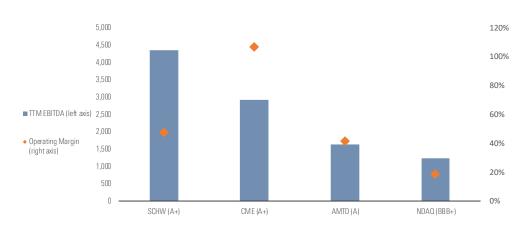


Source: Charles Schwab Corp. Summer Business Update, July 20, 2018.

Peer Comparison

We compare Schwab to the discount brokerage TD Ameritrade as well as to exchange companies CME Group and Nasdaq. Brokerage and exchange activity is closely linked as increases in market volatility and trading benefit both sectors, and performance of similarly rated nonbank financial companies is fairly comparable.

Exhibit 11 Trailing 12-Month EBITDA & Operating Margins as of First-Quarter 2018 (TTM EBITDA in \$Mil)



Source: Morningstar Credit Ratings, LLC, Company filings

As shown in Exhibit 11, Schwab's performance against peers supports our assigned ratings. A+ rated exchange operator CME Group, while posting superior operating margins relative to Schwab, reports

lower EBITDA and similar financial leverage, with debt/EBITDA at 0.9 times and net debt/EBITDA ratio at 0.1 times. Lower-rated peers report both lower operating margins and lower EBITDA. A closer comparison of credit metrics against peers provided in Exhibit 12.

Exhibit 12 Peer Comparison

| Ticker MCR Credit Rating MCR Rating Outlook Economic Moat Moat Trend Uncertainty Equity Stewardship | SCHW A+ Stable Wide Stable High Exemplary | CME A+ Stable Narrow Stable Medium Exemplary | AMTD A Stable Narrow Stable High Standard | NDAQ BBB+ Negative Narrow Negative High Standard |
|--|--|--|---|--|
| Pillars: Business Risk Cash Flow Cushion Solvency Score Distance to Default | 4 3 3 1 | 4 5 3 2 | 5 4 4 1 | 6 6 6 2 |
| Business Risk Detail: Size Moat Uncertainty Concentration Management Score Depend on Cap Mkt Cyclicality | 8 10 5.0 4 3 4 | 6 10 7.5 3 3 4 3 | 6 5 5.0 3 3 5 3 | 6 5 5.0 3 3 3 3 |
| OPERATING METRICS: LTM (\$ in mm) Revenue Interest Expense EBITDA Operating margin Net Interest Margin | 1018 TTM 8,744 381 4,353 47.5% 2.1% | 2017 3,645 117 2,521 63.4% | 1018 TTM 3,951 68 1,630 41.3% 1.7% | 2017 2,428 143 1,231 41.1% |
| Balance Sheet Cash and Equivalents Total Assets Total Debt Common Equity Total Shareholder's Equity | 14,145 248,320 4,100 16,480 19,330 | 1,952 75,791 2,233 20,341 20,341 | 1,644 39,412 2,581 7,433 7,433 | 612 15,786 4,207 5,887 5,887 |
| Cash Flow Statement Cash Flow from Operations Free Cash Flow | 1,845 1,403 | 1,840 1,759 | 393 162 | 909 765 |
| Credit Metrics Debt/Total Capital Debt/EBITDA Net Debt/EBITDA EBITDA/Interest Expense ROIC (2017 year-end) | 17.5% 0.94 -2.31 11.4 9.8% | 9% 0.9 0.1 21.5 -5.2% | 26% 1.58 0.57 24 14.5% | 42% 3.4 3.1 8.6 8.4% |

Source: Morningstar Credit Ratings, LLC. Moat, Moat Trend Uncertainty, and Equity Stewardship are products of Morningstar Equity Research.

Capital Structure

Charles Schwab reported \$25.9 billion of total capital at second-quarter 2018. Common equity constituted 67% of capital, with preferred equity accounting for 11% and debt 22%. Schwab utilizes a higher percentage of preferred equity than peers, with five series of noncumulative shares outstanding. Series F shares were issued in October 2017, while Series B shares were redeemed in December. The company's Series D and Series E shares were issued to support balance sheet growth and aid in the migration of client balances to Schwab Bank from sweep money market funds.

The majority of Schwab's debt is composed of senior notes, with debt maturities ranging from 2020 to 2028 and coupon rates varying between 2.65% and 4.45%. The company's strong earnings profile, excellent cash flow generation, and low leverage provide ample room to fund the company's obligations over our five-year forecast horizon, resulting in a very strong Cash Flow Cushion pillar. Capital metrics are strong but have deteriorated modestly since year-end 2017 due to increased debt, with debt-to-trailing 12-month EBITDA reported at 1.19 times and interest coverage (EBITDA-to-interest expense) at 8.79 times at the close of second-quarter 2018 versus 0.8 times and 19.9 times, respectively, at year-end 2016.

Exhibit 13 Capital Structure

| Senior Notes | Dec 31,2017 | June 30,2018 |
|---|-------------|--------------|
| 1.50% due March 10, 2018 | 625 | - |
| 2.20% due July 25, 2018 | 275 | - |
| 4.45% due July 22, 2020 | 700 | 700 |
| 3.25% due May 21, 2021 | - | 600 |
| Floating Rate Senior Notes due May 21, 2021 | - | 600 |
| 3.225% due September 1, 2022 | 256 | 256 |
| 2.65% due January 25, 2023 | 800 | 800 |
| 3% due March 10, 2025 | 375 | 375 |
| 3.85% due May 21, 2025 | | 750 |
| 3.45% due February 13, 2026 | 350 | 350 |
| 3.20% due March 2, 2027 | 650 | 650 |
| 3.20% due January 25, 2028 | 700 | 700 |
| Total Senior Notes due | 4,731 | 5,781 |
| 5.45% Finance lease obligation | 61 | 57 |
| Unamortized discount — net | (14) | (14) |
| Debt issuance costs | (25) | (35) |
| Total long-term debt | 4,753 | 5,789 |
| EBITDA (TTM) | 4,261 | 4,871 |
| Debt/EBITDA | 1.12 | 1.19 |

Source: Morningstar Credit Ratings, LLC, Company filings.

Schwab also has access to a Federal Home Loan Bank secured credit facility that it uses to purchase investment securities prior to funding them with bulk transfers of client funds into bank deposits. As of March 31, the company had paid off the \$15.0 billion balance it incurred in the fourth quarter of 2017. Board authorization allows Schwab to issue up to \$1.5 billion of commercial paper, although management has set a current limit not to exceed the \$750 million available on its committed unsecured bank credit facility. No amounts were outstanding under the commercial paper program or Schwab's bank credit lines as of June 30, 2018.

Capital-Allocation Policy

Currently, Schwab's top priority for capital use is to support the bulk transfers of client money-market funds into deposits at Schwab Bank. Longer term, management plans to support continued dividend growth, targeting a 20%-30% payout ratio, and may announce other capital return measures such as special dividends and opportunistic buybacks. We expect the payout ratio will stay closer to 20% for the next several years as management retains earnings to capitalize its growing bank. Management has said that it will continue to consider acquisitions but will follow a highly selective and disciplined approach.

Exhibit 14 Capital Allocation Priorities



to drive long-term growth for the next decade and beyond

Post bulk transfers, we will evaluate options for any

Source: Charles Schwab Investor Presentation, April 2018

Exhibit 15 Financial Summary

Morningstar Credit Ratings, LLC | 1 August 2018

| Charles Schwab Corp. (SCHW) | | | | Corporate Credit Rating | | | | A+ | |
|------------------------------------|---------------------------------------|--|------------|-------------------------|--|--------------------|-----------------|-------------------|--------|
| Economic Moat (1) Wide | Moat Trend (1) Stable | | | | | | | Outlook | Stable |
| Sector Industry | Financial Services Capital Markets | Business Risk Rank Cash Flow Cushion Solvency Score Rai Distance to Default | Rank nk | 4 3 3 1 | Charles Schwab is a brokerage, banking, investors directly and | asset and wealth i | management, and | d related service | - |
| | | | | | Forecast | | | | |
| All values (except per sh | are amounts) in: USD Mill | lion: 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Income Statement | | | | | | | | | |
| Revenue | | 6,380 | 7,478 | 8,618 | 9,820 | 10,871 | 12,717 | 13,912 | 14,722 |
| Gross Profit | | 6,380 | 7,478 | 8,618 | 9,820 | 10,871 | 12,717 | 13,912 | 14,722 |
| Operating Income | | 2,279 | 2,993 | 3,650 | 4,416 | 5,043 | 6,376 | 6,952 | 7,359 |
| Adjusted EBITDA | | 2,503 | 3,227 | 3,919 | 4,698 | 5,339 | 6,688 | 7,340 | 7,756 |
| Net Income | | 1,364 | 1,746 | 2,180 | 3,102 | 3,564 | 4,556 | 4,898 | 5,169 |
| Balance Sheet | | | | | | | | | |
| Cash + Investments | | 11,978 | 10,828 | 14,217 | 3,829 | 4,146 | 3,049 | 4,105 | 4,391 |
| Total Debt | | 4,349 | 5,659 | 7,546 | 8,593 | 8,892 | 9,417 | 9,057 | 8,093 |
| Total Adjusted Debt | | 6,013 | 7,323 | 9,210 | 10,193 | 10,492 | 11,017 | 10,657 | 9,693 |
| Cash Flow Statement | | | | | | | | | |
| Cash Flow From Operati | ions | 1,246 | 2,662 | 1,263 | 3,113 | 4,103 | 5,034 | 5,605 | 5,957 |
| Capital Expenditures | | (266) | (346) | (400) | (638) | (489) | (572) | (626) | (663) |
| Free Cash Flow (CFO-C | apex) | 980 | 2,316 | 863 | 2,475 | 3,614 | 4,462 | 4,979 | 5,295 |
| Free Cash Flow / Sales | | 15.4% | 31.0% | 10.0% | 25.2% | 33.2% | 35.1% | 35.8% | 36.0% |
| Growth (% YoY) | | - 00/ | 4= 00/ | 4= 00/ | 40.004 | 40 =0/ | 4= 00/ | | |
| Revenue | | 5.3% | 17.2% | 15.2% | 13.9% | 10.7% | 17.0% | 9.4% | 5.8% |
| Gross Profit | | 5.3% | 17.2% | 15.2% | 13.9% | 10.7% | 17.0% | 9.4% | 5.8% |
| Operating Income | | 7.8% | 31.3% | 22.0% | 21.0% | 14.2% | 26.5% | 9.0% | 5.8% |
| Adjusted EBITDA | | 8.2% | 28.9% | 21.4% | 19.9% | 13.6% | 25.3% | 9.7% | 5.7% |
| Profitability (%) Operating Margin | | 35.7% | 40.0% | 42.4% | 45.0% | 46.4% | 50.1% | 50.0% | 50.0% |
| Adjusted EBITDA Margir | n | 39.2% | 43.2% | 45.5% | 47.8% | 49.1% | 52.6% | 52.8% | 52.7% |
| Net Margin | • | 21.4% | 23.3% | 25.3% | 31.6% | 32.8% | 35.8% | 35.2% | 35.1% |
| Adjusted ROIC | | 11.3% | 12.7% | 9.8% | 10.2% | 13.2% | 14.9% | 15.4% | 16.8% |
| Coverage / Cash Flow | | | | | | | | | |
| Adjusted EBITDA / Interes | est Expense | | | | 34.5 | 33.6 | 36.2 | 34.4 | 31.6 |
| (Adj. EBITDA-CapEx) / Ir | nt. Exp. | | | | 29.9 | 30.5 | 33.1 | 31.5 | 28.9 |
| Adj. EBITDAR / (Int. Exp | . + 1/3 Rents) | 39.1 | 49.6 | 59.6 | 24.2 | 24.6 | 27.4 | 26.9 | 25.5 |
| Dividends / FCF | | 39% | 21% | 69% | 22% | 20% | 20% | 20% | 24% |
| Share repurchase (issua | ince) / FCF | -9% | -6% | -20% | 0% | 0% | 0% | 0% | 0% |
| Leverage | | | | | | | | | |
| Total Debt / Adj. EBITDA | 1 | 1.7 | 1.8 | 1.9 | 1.8 | 1.7 | 1.4 | 1.2 | 1.0 |
| Net Debt / Adj. EBITDA | | (3.0) | (1.6) | (1.7) | 1.0 | 0.9 | 1.0 | 0.7 | 0.5 |
| Total Adj. Debt / Adj. EB | ITDAR | 2.2 | 2.1 | 2.2 | 2.1 | 1.9 | 1.6 | 1.4 | 1.2 |
| EV /Adj. EBITDA | | 14.4 | 14.7 | 16.0 | 15.6 | - | - | - | |
| Debt / Capital | | 18% | 15% | 20% | 21% | 19% | 17% | 13% | 10% |
| FCF / Total Debt | | 34% | 81% | 18% | 43% | 62% | 77% | 98% | 136% |

[©] Morningstar 2016 All Rights Reserved. Report produced by Morningstar Credit Ratings, LLC, an NRSRO. You may use this report only in the country where original distributor is based. Information not warranted as accurate, complete or timely. Redistribution prohibited. Please see the Disclosure tab for important information. (1) Source: Morningstar, Inc. Please Disclosure page at the back of this Report for additional important information.

Appendix

Charles Schwab Moat and Trend

The following description comes directly from Morningstar's Equity Research Group.

Moat

"Our moat rating for Charles Schwab is wide. Given 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 in either a Charles Schwab proprietary or 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 with 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 sensitive to interest rates than traditional banking customers, and catering to generally higher-net-worth clientele with collateralized lending products.

We think the company's massive scale gives it a cost advantage that few can match. Currently, Schwab supports over \$3 trillion of client assets, making it one of the largest U.S.-based companies focused on securities trading and wealth management. Its 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 offering a value proposition that is comparable or superior to that of 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 enable Schwab to be more profitable than existing players and leapfrog 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, as much of the bank's portfolio is in low-risk agency mortgage-backed securities and loans are 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, such as 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 singular ability to offer benchmarking and process improvement benefits to affiliated firms."

"Our moat trend rating for Charles Schwab is stable. The company is already one of the low-cost leaders in its industry. While it will continue to increase in size and its costs will scale downward, we don't believe the gap between the firm and its peers will materially widen. For example, Charles Schwab has over \$3 trillion in client assets compared with TD Ameritrade at around \$1 trillion, whereas full-service wealth managers, such as Morgan Stanley, 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 solutions among its clients, but we don't view it as sufficiently material to affect the overall level of the company's already strong competitive position."

Exhibit 16 Descriptors for Pillar Analysis

| | | Rating Pillars | | | | | | |
|--------------|---------------------------------|-----------------------|---|---------------------|--------------------|--|--|--|
| | Score Range | Business Risk | Cash Flow Cushion | Solvency Score | Distance to Defaul | | | |
| Strongest | 1-2 | Minimal | Very Strong | Very Strong | Very Strong | | | |
| | 3-4 | Low | Strong | Strong | Strong | | | |
| | 5-6 | Moderate | Moderate | Moderate | Moderate | | | |
| | 7-8 | High | Weak | Weak | Weak | | | |
| Neakest | 9-10 | Very High | Very Weak | Very Weak | Very Weak | | | |
| Business R | isk Pillar Componen | ıts | | | | | | |
| Country Risk | (10% of Business Risk S | core) | | | | | | |
| | | | _ | | | | | |
| Weakest | Very High Risk | | | | | | | |
| | High Risk | | | | | | | |
| | Moderate Risk | | | | | | | |
| Strongest | Low Risk | | | | | | | |
| Company Ris | k (90% of Business Risk Size | Score) Economic Moat | or Sustainable Competitive Advantage | Uncertainty | | | | |
| Weakest | Very Small | None | None | Extreme | | | | |
| rroundot | Small | 140110 | 140110 | Very High | | | | |
| | Moderate | Narrow | Moderate | High | | | | |
| | Large | TVATTO V | Wodorato | Medium | | | | |
| Strongest | Very Large | Wide | Substantial | Low | | | | |
| | Product/Customer | | Dependence on Capital | | | | | |
| | Concentration | Management | Markets | Cyclicality | | | | |
| Weakest | Highly Concentrated | Aggressive | Extremely Dependent | Highly Cyclical | | | | |
| | Concentrated | Fairly Aggressive | Highly Dependent | Cyclical | | | | |
| | Neutral | Neutral | Dependent | Average Cyclicality | | | | |
| | Diversified | Fairly Conservative | Low Dependence | Mild Cyclicality | | | | |
| Strongest | Highly Diversified | Conservative | Very Low Dependence | Non-Cyclical | | | | |

Source: Morningstar Credit Ratings, LLC

Morningstar® Credit Research

For More Information

Todd Serpico +1 312 384-5488 todd.serpico@morningstar.com



22 West Washington Street Chicago, IL 60602 USA

©2018 Morningstar. All Rights Reserved. Unless otherwise provided in a separate agreement, you may use this report only in the country in which its original distributor is based. The information, data, analyses, and opinions presented herein do not constitute investment advice; are provided solely for informational purposes and therefore are not an offer to buy or sell a security; and are not warranted to be correct, complete, or accurate. The opinions expressed are as of the date written and are subject to change without notice. Except as otherwise required by law, Morningstar shall not be responsible for any trading decisions, damages, or other losses resulting from, or related to, the information, data, analyses, or opinions or their use. References to "Morningstar Credit Ratings" refer to ratings issued by Morningstar Credit Ratings, LLC, a credit rating agency registered with the Securities and Exchange Commission as a nationally recognized statistical rating organization ("NRSRO"). Under its NRSRO registration, Morningstar Credit Ratings issues credit ratings on financial institutions (e.g., banks), corporate issuers, and asset-backed securities. While Morningstar Credit Ratings issues credit ratings on insurance companies, those ratings are not issued under its NRSRO registration. All Morningstar credit ratings and related analysis are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Morningstar credit ratings and related analysis should not be considered without an understanding and review of our methodologies, disclaimers, disclosures, and other important information found at http://morningstarcreditratings.com. Investment research is produced and issued by subsidiaries of Morningstar, Inc. including, but not limited to, Morningstar Research Services LLC, registered with and governed by the U.S. Securities and Exchange Commission. The information contained herein is the proprietary property of Morningstar and may not be reproduced, in whole or in part, or used in any manner, without the prior written consent of Morningstar. To license the research, contact Vanessa Sussman (+1 646 560-4541) or by email to: vanessa.sussman@morningstar.com.