

Corporate Credit Spread Chartbook

Financial Institutions

Morningstar Credit Research

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Executive Summary

Trends remained broadly constructive for banks in the first quarter, although some banks have grown increasingly cautious about lending growth as we progress further into a long economic expansion. At the U.S. banks we cover, total assets increased an average of 3.4% over the past year, led by over 7.0% growth at both trust banks and credit-card-focused banks. In contrast, asset growth at the U.S. regional banks we cover averaged less just 0.6% over the last year and turned slightly negative (0.2%) in the first quarter. Nearly across the board, banks' profitability benefited from the implementation of the Tax Cuts and Jobs Act of 2017, which reduced the corporate tax rate to 21%. Return on average equity increased an average of 3.5 percentage points year over year across our coverage to 13.7%.

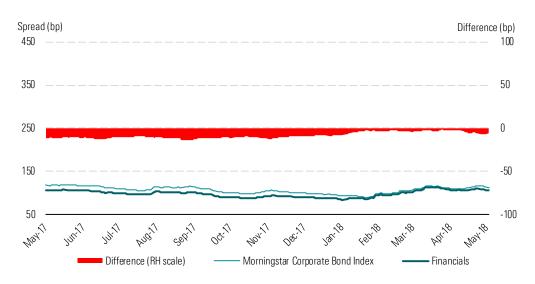
Since our last financials chartbook was published Dec. 22, 2017, we reviewed the ratings of two U.S. global banks, affirming both. We also reviewed the three U.S. trust banks, upgrading two by one notch and affirming one. Four card-services banks were also reviewed, and we affirmed three and downgraded one by one notch. Among regional banks, six were reviewed during this period and three were upgraded by one notch and three were affirmed.

For nonbank financial institutions, we reviewed four property-casualty insurers and two life insurers, affirming the ratings on all six companies. Amid significant merger-related activity in the health insurance space, we affirmed three managed-care organizations and subsequently withdrew the rating on one issuer. In the broker and exchange space, we reviewed and affirmed four ratings.

Historical Sector Spreads

Credit spreads across the financial sector have generally moved in line with the Morningstar Corporate Bond Index since our previous chartbook in late December. Financial sector spreads and the Morningstar Corporate Bond Index widened approximately 17 and 15 basis points, respectively, during the period. Spreads were essentially flat over the one-year period, with the financial sector spread widening 1 basis point while the Morningstar Corporate Bond Index spread tightened by 4 basis points.

Exhibit 1 Morningstar Corporate Bond Index vs. Financial Sector (Trailing 12 Months)

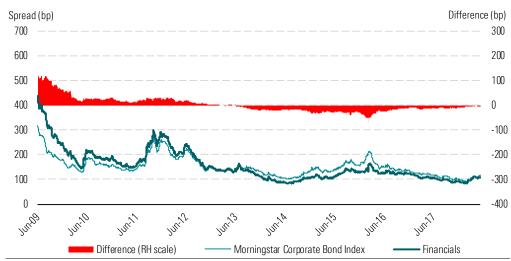


Source: Morningstar Credit Ratings, LLC as of 05/14/2018.

This relationship remains in sharp contrast to the activity during the financial crisis of 2008-09 and the European debt scare of 2011-12. During those periods, the financial sector materially underperformed the broader corporate bond index as bank solvency and sovereign concerns pushed financial spreads to historic levels. Relative to the broader credit index, financial sector spreads are modestly tight to the average level that has persisted since the financial crisis of 2008-09.

Events that could negatively affect credit risk in the financial institutions sector include weaker consumer credit profiles or a material weakening of regulatory capital standards for banks.

Exhibit 2 Morningstar Corporate Bond Index vs. Financial Sector (2009-Present)

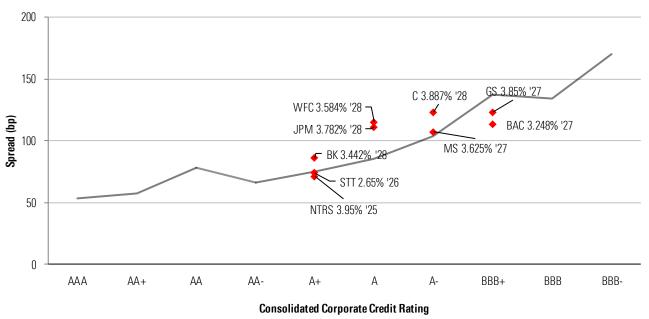


Source: Morningstar Credit Ratings, LLC as of 05/14/2018.

Spread Charts by Financial Sector

U.S. Global Banks

Exhibit 3 U.S. Global Banks Versus Morningstar Corporate Bond Index



Source: Morningstar Credit Ratings, LLC , Morningstar, Inc., and Interactive Data Corp. as of 015/14/2018

Sector Trends

On average, bonds in the U.S. global bank sector widened 12 basis points since our last chartbook in late December, which was consistent with the 15-basis-point change in the Morningstar Corporate Bond Index. Spreads widened the most at Wells Fargo (A, stable), which saw a 20-basis-point increase in its spread, to 115 basis points, as the costs associated with the bank's past misconduct continued to accumulate. In contrast, Northern Trust's (A+, stable) spreads tightened by 2 basis points, to 71 basis points. During the first quarter, all of the U.S. global banks we cover except Wells Fargo reported profits above year-ago levels. Lower effective tax rates were the most significant contributor to higher earnings, although higher interest rates and moderate asset growth also contributed positively. Credit quality remained high during the quarter, with global banks reporting an average 3-basis-point decrease in net charge-offs/average loans.

Issuer Highlights

► In January, we upgraded both Bank of New York Mellon and State Street to A+ from A, bringing their ratings in line with Northern Trust (A+, stable). All three banks score highly under our bank credit rating methodology because of their solid profitability, sufficient capital levels, and low-risk balance sheets.

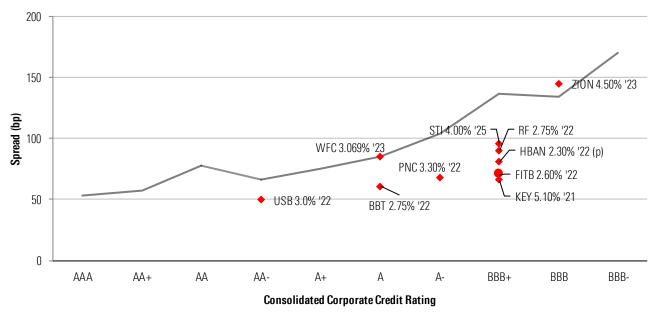
Our outlook for all three U.S. trust banks remains stable.

▶ In March, we affirmed the ratings of Citigroup (A-, stable) and Goldman Sachs (BBB+, stable). Although Citigroup reported a \$19 billion loss for the fourth quarter related to the Tax Cuts and Jobs Act of 2017, we do not expect this one-off charge to have a long-term negative impact on the company.

Spread Charts by Financial Sector

U.S. Regional Banks

Exhibit 4 U.S. Regional Banks Versus Morningstar Corporate Bond Index



Source: Morningstar Credit Ratings, LLC , Morningstar, Inc., and Interactive Data Corp. as of 015/14/2018 (UR) = rating under review / (p) = positive outlook / (n) = negative outlook

Sector Trends

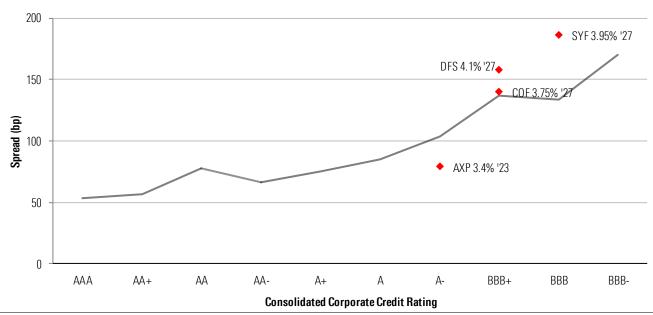
Because regional banks tend to focus their bond issuance on shorter maturities, we show five-year issues versus the Morningstar Corporate Bond Index, which tends to have average maturities closer to 10 years. Since our previous chartbook in late December, regional bank spreads in our coverage list have widened an average of 17 basis points in the five-year area, in line with the 15-basis-point expansion seen in the index. Positive credit trends in the sector include average loan growth of 1.9% year over year, in line with economic growth, and an average 17-basis point year-over-year increase in average net interest margin to 3.28%. Already strong credit quality improved modestly, with net charge-offs averaging 0.27% of average loans across our regional bank coverage in the first quarter compared with 0.34% in the year-ago quarter. As a result of these trends and a reduction in the effective tax rate following the implementation of the Tax Cuts and Jobs Act of 2017, profitability for regional banks increased materially. On our regional bank coverage list, return on average equity averaged 12.0% in the first quarter compared with 9.7% in the year-ago quarter. Capital levels held steady, with the regional banks we cover reporting an average common equity Tier 1 ratio of 10.53% at the end of the first quarter compared with 10.55% at the end of the year-ago quarter, as capital returns to shareholders balanced good earnings.

Issuer Highlights

- ▶ In January, we affirmed both KeyCorp and Huntington Bancshares Inc. at BBB+. While KeyCorp's outlook remained stable, we revised Huntington's outlook to positive from stable on what we see as management's successful integration of its 2016 acquisition of FirstMerit. We expect revenue synergies and scale benefits from the acquisition to be accretive to results in 2018.
- ▶ In February, we upgraded Comerica Inc. to A from A-, Regions Financial Corp. to BBB+ from BBB, and Zions Bancorp to BBB from BBB-. All three upgrades reflect the banks' improved profitability and asset quality, as well as stronger scores in our market-driven Distance to Default pillar. The outlooks for Comerica and Regions Financial remain stable, while the outlook for Zions was revised to stable from positive.
- ► Also in February, we affirmed both SunTrust Banks Inc. and Fifth Third Bancorp's BBB+ credit ratings. The outlook for both banks remains stable.

Credit Services

Exhibit 5 Credit Services Versus Morningstar Corporate Bond Index



Source: Morningstar Credit Ratings, LLC, Morningstar, Inc., and Interactive Data Corp. as of 05/14/2018

Sector Trends

Since our last chartbook in late December, spreads in the credit-services sector have widened an average of 21 basis points, directionally similar to the index, which widened by 15 basis points. Lending grew an average of 8.0% compared with the year-ago quarter but contracted 2.5% sequentially, reflecting the companies' increasingly cautious stance. This sector tends to be characterized by high profitability. Earnings have strengthened over the past year as average net interest margins increased 15 basis points to 9.46% and as the Tax Cuts and Jobs Act of 2017 took effect and lowered effective tax rates. However, a narrower business focus compared with traditional commercial banks tends to limit credit ratings in the sector. Moreover, credit quality appears to be deteriorating, with average net charge-offs/average loans increasing 36 basis points year over year to 3.35%. Synchrony Financial (BBB, stable), which focuses on white-label credit card lending, saw the biggest increase in charge-offs. There, net charge-offs increased 81 basis points to 6.06% of loans.

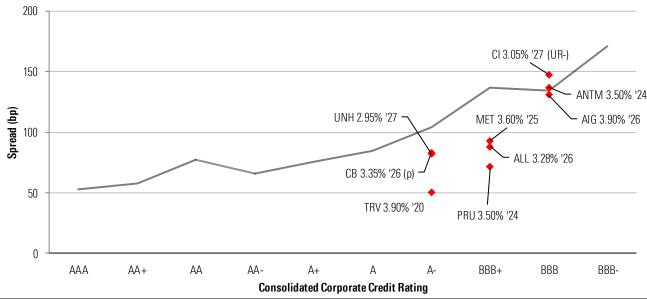
Issuer Highlights

▶ We downgraded Capital One Financial to BBB+ from A- in February. Historically, the company's higher-risk lending portfolio had been balanced by higher capital levels, but capital has steadily deteriorated in recent periods. Common equity Tier 1 was 10.3% at year-end 2017 compared with 12.5% at year-end 2014. The outlook remains stable.

► Also in February, we affirmed American Express Co. at A-, Discover Financial Services at BBB+, and Synchrony Financial at BBB. The outlooks for all three companies remain stable.

Insurers

Exhibit 6 Insurers Versus Morningstar Corporate Bond Index



Source: Morningstar Credit Ratings and Interactive Data Corp. as of May 15, 2018. UR = rating under review / (p) = positive outlook / (n) = negative outlook

Sector Trends

Bond spreads in the insurance sector widened 17 basis points since our previous publication, while the Morningstar CBI widened by roughly 15 basis points. Spreads widened for every company, but two managed-care organizations stand out, with Cigna's (BBB/UR-) spread widening +51 basis points and Anthem's (BBB, stable) spread increasing 42 basis points. These spread changes also place both companies above their corresponding BBB index level, whereas the other seven insurers are below.

Property-casualty insurers' full-year 2017 results were marred by natural catastrophe losses from Gulf Coast hurricanes and Mexican earthquakes in the third quarter and California wildfire damages incurred in the fourth quarter. As a result, the property-casualty industry aggregate combined ratio increased to 103.3% in 2017 from 100.2% in 2016. We expected an underwriting loss for the year heading into 2017 based on upward-trending loss costs from increasing frequency and severity of occurrences, but the magnitude of underwriting deterioration, exacerbated by catastrophe losses, came as somewhat of a surprise. According to a Munich Re press release, total insured losses from natural catastrophes in 2017 are estimated at \$135 billion, which would be a record for losses in any given year from catastrophes. Additionally, 83% of total losses were attributable to North America, and 50% to the U.S., well above the long-term average U.S. share of 32%. While the market underwriting cycle is ripe for hardening due to these outsized losses, we are projecting a modest underwriting loss for the industry in 2018 as we believe pricing increases will need to continue through 2019 to lead to a return to industry underwriting gains.

Following failed consolidations within the health insurance sector in early 2017, certain managed-care organizations have shifted their sights to branching out and combining with other sectors of the healthcare market, particularly pharmacy benefit managers. On the heels of the announced merger between Aetna (unrated) and CVS (BBB+/UR-) in December 2017, Cigna (BBB/UR-) announced in March that it would be acquiring Express Scripts (A-/UR-). While we feel the mid- to long-term benefits of these combinations will be positive for all companies involved, both deals are expected to result in material increases in financial leverage, leading to all rated companies being placed under review with negative implications. We also feel that regulators will more closely scrutinize both deals now that Cigna has thrown its hat in the ring, as anti-competitive concerns are sure to arise from the proposed mergers. As a result, we think it likely that either both deals will be approved or neither deal will be approved, Should CVS and Cigna gain necessary regulatory approvals as acquirers, the health insurance landscape is sure to be altered, with competitive advantages shifting to those insurers with in-house PBM operations. This would leave Anthem at a disadvantage, in our point of view, while the insurer works toward developing its in-house PBM IngenioRX by 2020.

Commentary from Federal Reserve officials leads us to believe that the federal-funds interest rate will be increased an additional two or three times in 2018 after being increased to the 1.5%-1.75% range in March. Rising rates should benefit the entire insurance industry but will have the largest positive impact on life insurers, whose earnings rely much more heavily on net investment income. Positive effects should start to appear in 2019 or 2020, when insurers have had a chance to roll over a portion of their fixed-income portfolios into higher-yielding securities.

Issuer Highlights

- ▶ In March, we affirmed the ratings of property-casualty insurers Allstate (BBB+, stable), Travelers (A-, stable), AIG (BBB, stable), and Chubb (A-, positive). We revised the outlook on AIG to stable from negative despite poor bottom-line performance in 2017, as both underlying operating and underwriting results and the company's reserve position show signs of material improvement, and AIG discontinued its \$25 billion capital return plan.
- ► Following the announced acquisition of Express Scripts (A-/UR-) by Cigna (BBB/UR-), we placed Cigna under review with negative implications as the merger is expected to drastically increase financial leverage to roughly 49% from 28% reported at year-end 2017.
- ► Also in March, we affirmed the rating of UnitedHealth Group (A-, stable) and revised the outlook to stable from negative given the insurer's deleveraging efforts in the wake of its 2015 acquisition of Catamaran (now part of its Optum segment).
- ▶ We affirmed and subsequently withdrew Humana's BBB rating in March.

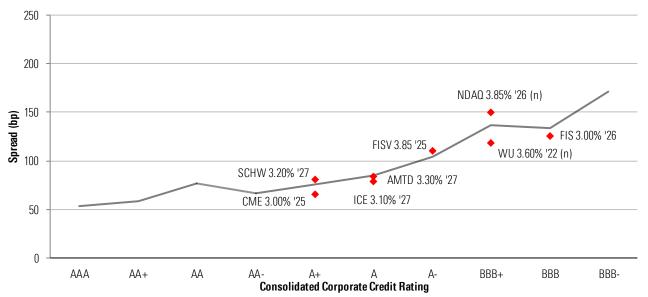
Recent Headlines

► Anthem announced in May that the CEO of its PBM startup IngenioRX, Brian Griffin, has left the position to take over leadership of Diplomat Pharmacy. This news, combined with the future threat of multiple competitors with established PBM operations (UnitedHealth, Cigna, Aetna), has likely been a factor in the company's widening spread.

- ► Cigna announced in March that it would acquire Express Scripts for \$67 billion in cash and stock, with the deal slated to close by Dec. 31, 2018. The proposed merger will face scrutiny by the U.S. Justice Department over antitrust concerns.
- ▶ MetLife (BBB+, stable) is facing investigations by the SEC and state regulators over material weaknesses in internal controls for financial reporting in its retirement and income solutions segment and for certain assumed variable annuity guarantee reserves. While we do not believe these accounting issues are endemic to other segments of MetLife's organization, further adverse findings or potential fines may have a negative impact on MetLife's credit profile. Additionally, at the beginning of May, the company announced that CFO John Hele will retire and be succeeded by executive vice president and treasurer John McCallion, raising further questions as to the soundness of accounting practices.

Brokers, Exchanges, Credit, Business Services

Exhibit 7 Brokers, Exchanges, Business and Credit Services Versus Morningstar Corporate Bond Index



Source: Morningstar Credit Ratings and Interactive Data Corp. as of May 15, 2018. UR = rating under review / (p) = positive outlook / (n) = negative outlook

Sector Trends

Since our previous financial sector chartbook, bond spreads in the financial-services sector have widened by 11 basis points, in line with the Morningstar CBI widening 15 basis points. Nasdaq (BBB+, negative) stands out, with the company's 10-year bond spread widening +38 basis points since our last chartbook publication, and along with Charles Schwab (A+, stable) and Fiserv (A-, stable) these companies report wider spreads than their corresponding index levels.

Both brokers and exchanges benefited from increased equity market volatility in the first quarter of 2018, posting improvements in results following a tepid 2017 in which volatility was historically low and pricing cuts led to decreased trading fee revenue at Charles Schwab (A+, stable) and TD Ameritrade (A, stable). We have also noticed that exchange operators are beginning to take cryptocurrencies more seriously, with both Intercontinental Exchange (A, stable) and Nasdaq exploring potential opportunities surrounding these currencies, such as setting up trading platforms for digital coins. While we believe there is a market for these operations, we feel more regulation is needed in this space before the broader investing community feels comfortable trading these assets.

Issuer Highlights

- ▶ In April we affirmed the ratings of brokers Charles Schwab (A+, stable) and TD Ameritrade (A, stable).
- We also affirmed the ratings of exchange operators CME Group (A+, stable) and Nasdaq (BBB+, negative) in April. Nasdaq's outlook was revised to negative from stable following the leverage-

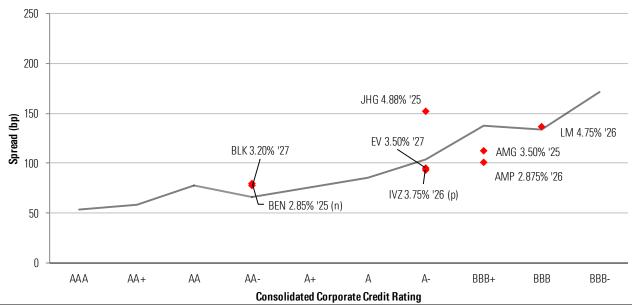
increasing purchase of eVestment. We believe Nasdaq is capable of reducing financial leverage from the 3.3 times debt/trailing 12-month EBITDA reported through the first quarter of 2018 to the mid-2 times debt/EBITDA area by mid-2019, in line with management targets. However, the risk of further acquisitions, which would lengthen the deleveraging time frame, is a factor behind our negative outlook.

Recent Headlines

- ► CME Group announced the acquisition of NEX Group (unrated), a U.K.-based exchange operator, for \$5.4 billion in April 2018. While the deal is expected to increase financial leverage to around 1.8 times debt/EBITDA in the short term, we believe CME Group will be able to deleverage to its targeted 1.0 times area over the next two to three years. As a result, we maintained our stable outlook on the company following our review of the credit in April.
- ▶ Nasdaq sold its public relations solutions and digital media services business in April 2018. The company netted roughly \$335 million from the sale to West Corp.

Asset Managers

Exhibit 8 Asset Managers Versus Morningstar Corporate Bond Index



Source: Morningstar Credit Ratings and Interactive Data Corp. as of May 15, 2018. UR = rating under review / (p) = positive outlook / (n) = negative outlook

Sector Trends

Since our previous financial institutions chartbook in December, bond spreads in the asset management sector have widened by 8 basis points, less than but still directionally consistent with the Morningstar Corporate Bond Index, which widened by 15 basis points. Ameriprise's (BBB+, stable) spread widened the most at +17 basis points, followed by Janus Henderson Group (A-, stable) at +15 basis points and Franklin Resources (AA-, negative) at +14 basis points.

As opposed to brokers and exchanges, most asset managers in our coverage took a hit to growth in assets under management due to increased market volatility in the first quarter of 2018. Five of the seven managers reported decreases in AUM over the prior quarter, and Eaton Vance (A-, stable) reported a decrease in AUM at March 31, 2018, from Jan. 31, 2018. Of the two that reported increases, which include industry leader BlackRock (AA-, stable) and Janus Henderson Group (A-, stable), growth was sluggish at 0.5% and 0.3%, respectively. Continued spikes in market volatility throughout 2018 would likely lead to static or slight decreases in AUM for the majority of asset managers, which would dampen revenue growth and profitability.

We continue to believe that firms with a passive-investing focus will have a sales advantage over active-management firms until an inflection point is reached, driven by further decreases in performance fees to more closely match the cost of mutual and exchange-traded funds. While some asset managers are cutting performance fees and migrating toward flat-rate agreements on active products, others are

devoting resources to promote new products, such as quasi-actively managed ETFs (also known as smart-beta funds), or attempting to create algorithms that computer-driven programs can monitor with little or no human capital decision-making required. While the fiduciary rule was effectively quashed in first-quarter 2018, most companies have already made investments to transform their operations to conform to the rule, leading us to believe the intended effect was largely satisfied either way. Furthermore, the SEC may propose its own version of a fiduciary rule, serving as reinforcement for companies to continue offering more fee-based versus performance-driven products.

Appendix Financial Institutions Sector Coverage

lacue	Tieker	Corporate Rating	Rating Outlook	Analyst
Issuer Asset Managers	Hicker	nauliy	Outlook	Analyst
Affiliated Managers Group, Inc.	AMG	BBB+	Stable	Graczyk
Ameriprise Financial, Inc.	AMP	BBB+	Stable	Graczyk
Franklin Resources, Inc.	BEN	AA-	Negative	Graczyk
BlackRock, Inc.	BLK	AA-	Stable	Graczyk
Eaton Vance Corp.	EV	A	Stable	•
Invesco Ltd.	IVZ	A- A-	Positive	Graczyk
	JHG	A- A-	Stable	Graczyk
Janus Henderson Group Plc		BBB	O LUBIO	Graczyk
Legg Mason, Inc.	LM	BBB	Stable	Graczyk
Credit Services	AVD	^	Orable	D '-
American Express Company	AXP	A-	Stable	Davis
Capital One Financial Corporation	COF	BBB+	Stable	Davis
Discover Financial Services	DFS	BBB+	Stable	Davis
Synchrony Financial	SYF	BBB	Stable	Davis
U.S. Global Banks	DAO	DDD :	0.11	ъ.
Bank of America Corporation	BAC	BBB+	Stable	Davis
Bank of New York Mellon Corporation	BK	A+	Stable	Davis
Citigroup Inc.	С	A-	Stable	Davis
Goldman Sachs Group, Inc.	GS	BBB+	Stable	Davis
JPMorgan Chase & Co.	JPM	A	Stable	Davis
Morgan Stanley	MS	BBB+	Stable	Davis
Northern Trust Corporation	NTRS		Stable	Davis
State Street Corporation	STT	A+	Stable	Davis
Wells Fargo & Company	WFC	A	Stable	Davis
Insurance	410	DDD	0.11	0 1
American International Group, Inc.	AIG	BBB	Stable	Graczyk
Allstate Corporation	ALL	BBB+	Stable	Graczyk
Anthem, Inc.	ANTM		Stable	Graczyk
Chubb Limited	CB CI	A- BBB	Positive Stable	Graczyk
Cigna Corporation MetLife, Inc.	MFT	BBB+	Stable	Graczyk
Prudential Financial, Inc.	PRU	BBB+	Stable	Graczyk Graczyk
Travelers Companies, Inc.	TRV	A-	Stable	Graczyk
UnitedHealth Group Incorporated	UNH	A-	Stable	Graczyk
Other Financial Services	0.4	,,	o table	G.GGE J.K
TD Ameritrade Holding Corporation	AMTD	A	Stable	Graczyk
CME Group Inc.	CME	A+	Stable	Graczyk
Fidelity National Information Services, Inc.	FIS	BBB	Stable	Graczyk
Fisery, Inc.	FISV	A-	Stable	Graczyk
Intercontinental Exchange, Inc.	ICE	Α	Stable	Graczyk
Nasdag, Inc.	NDAQ	BBB+	Negative	Graczyk
Charles Schwab Corporation	SCHW	A+	Stable	Graczyk
Western Union Company	WU	BBB+	Negative	Graczyk
U.S. Regional Banks				,
BB&T Corporation	BBT	A	Stable	Davis
Comerica Incorporated	CMA	A	Stable	Davis
Fifth Third Bancorp	FITB	BBB+	Stable	Davis
Huntington Bancshares Incorporated	HBAN		Positive	Davis
KeyCorp	KEY	BBB+	Stable	Davis
M&T Bank Corporation	MTB	A-	Stable	Davis
PNC Financial Services Group, Inc.	PNC	A-	Stable	Davis
Regions Financial Corporation	RF	BBB+	Stable	Davis
SunTrust Banks, Inc.	STI	BBB+	Stable	Davis
U.S. Bancorp	USB	AA-	Stable	Davis
Zions Bancorporation	ZION	BBB	Stable	Davis
·	ZIUN	סטט	งเสมโซ	Davis
U.K. Banks	DADC	DDD	Ctable Ctable	Davis
Barclays PLC	BARC	BBB	Stable	Davis
HSBC Holdings PLC	HSBA	A-	Stable	Davis
Lloyds Banking Group PLC	LLOY	BBB+	Stable	Davis
Royal Bank of Scotland plc	RBS	BBB-	Stable	Davis

About Morningstar® Credit Research

Morningstar Credit Research provides independent, fundamental equity research differentiated by a consistent focus on sustainable competitive advantages.

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