BARCLAYS

Credit Research
17 January 2019

#bbbubble

US Credit Strategy

Big BBBs Won't Break Bad

- Much ink has been spilled about the growth of the BBB market, especially given the shrinking size of the US High Yield Index in recent years. Because of this growth, fueled in part by large debt-funded M&A deals, BBBs now represent more than half of the investment grade corporate market, which has caught the attention of investors.
- While we expect fallen angel volumes to remain subdued in 2019, the extent to which downgrades increase over the full credit cycle will depend on the macroeconomic environment. Despite market concerns, we do not think that other factors – including leverage, concentration of issuers, and sector weights – will result in a BBB downgrade rate worse than that implied by the economic cycle.
- There has been an increase in large-cap BBBs relative to the size of the high yield market. Even if issuer-weighted downgrades remain below long-term averages, there is increased risk to the high yield market if one or more of these issuers is downgraded. One notable threshold for potential fallen angel issuers is 2% of the par value of the US High Yield Index, as the 2% issuer-capped high yield index is a benchmark for many high yield mutual funds.
- We profile thirteen BBB companies that, if downgraded, would make up more than 2% of the high yield market and provide detailed comments on potential cash flow levers (dividend reduction, decreased capital spending, and asset sales) that could be used to avoid downgrades. While our fundamental analysts view downgrade risk as low for all of these issuers, we also outline the ability of each company to operate within the high yield market.
  - Companies profiled are AT&T (T), Verizon (VZ), Anheuser-Busch InBev (ABIBB), CVS Health Corp (CVS), Charter (CHTR) General Electric (GE), General Motors (GM), Ford (F), AbbVie (ABBV), Cigna (CI), United Technologies (UTX), Kinder Morgan (KMI), and Energy Transfer Operating (ETP).

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BROAD IMPLICATIONS

BBBs in the Spotlight

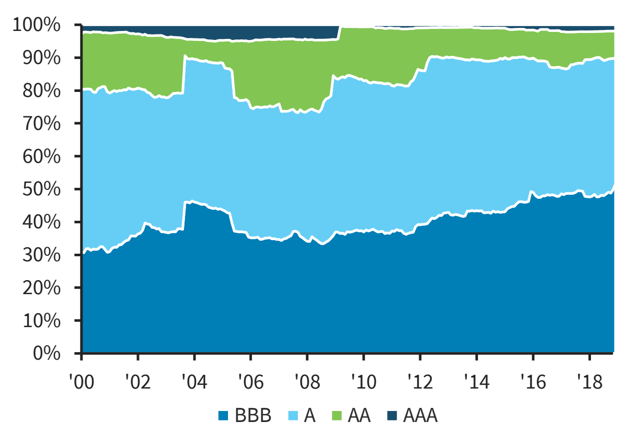
The increase in BBB debt outstanding has garnered significant investor attention, especially amid concerns about a worsening US economic backdrop. Fueled in part by several large debt-funded M&A deals over the past few years, the total par amount of BBB debt within the US Credit Corporate Index has increased by 62% since the end of 2014, significantly outpacing the 14% growth of AAA to single-A paper over the same period. As a result, at the end of 2018, BBB debt represented 52% of the broader index, up from sub-40% levels as recently as 2011 (Figure 1).

This drastic increase has raised concerns about potential downgrades of large BBB capital structures to high yield, which would not only result in significant losses for investment grade investors, but could also overwhelm the high yield market. Indeed, the growth of the BBB segment has been coincident with a decline in the size of the High Yield Index – the BBB universe (including 144A issuance), as seen in Figure 2, is now larger than the combined leveraged finance market (high yield and loans).

Given these concerns, select large capital structure issuers, many of which have taken on leverage to fund large transactions, have been at the forefront of investor uneasiness. One threshold of note for potential fallen angel issuers is 2% of the par value of the US High Yield Index, as the 2% issuer-capped high yield index is a benchmark used by many high yield mutual funds. As outlined in *Mapping Demand to a Shrinking Market*, mutual funds and ETFs represent a combined 19-22% of the high yield market buyer base. We work in conjunction with our fundamental analysts to evaluate the BBB issuers that would exceed the 2% threshold of the High Yield Index. We find that many of these companies operate in fairly defensive industries and have sufficient cash flow levers to pull to maintain their investment grade ratings.

FIGURE 1

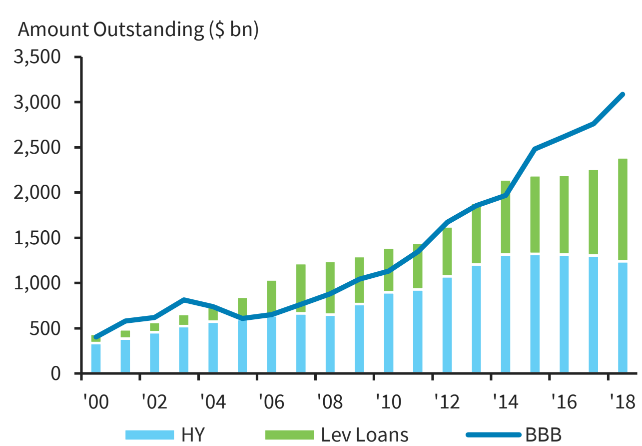
BBBs Continue to Represent a Larger Portion of the Investment Grade Index…



Source: Factset, Bloomberg, CapIQ, Barclays Research

FIGURE 2

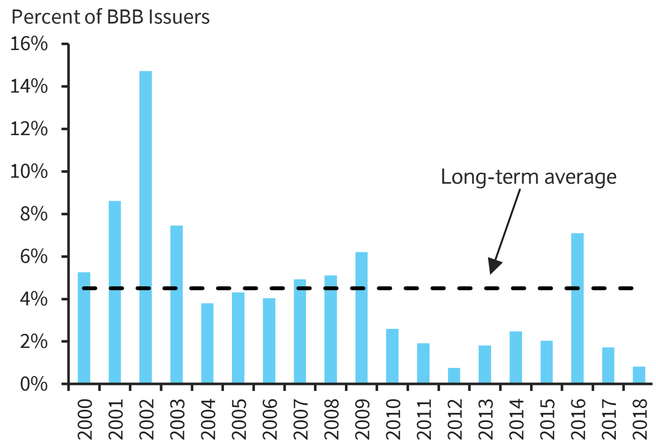
…And Are Now Larger in Size Than the Combined High Yield and Leveraged Loan Indices



Note: BBB data are for combined US Credit Corp and US 144A Index.
Source: Bloomberg Barclays Live, S&P LCD

FIGURE 3

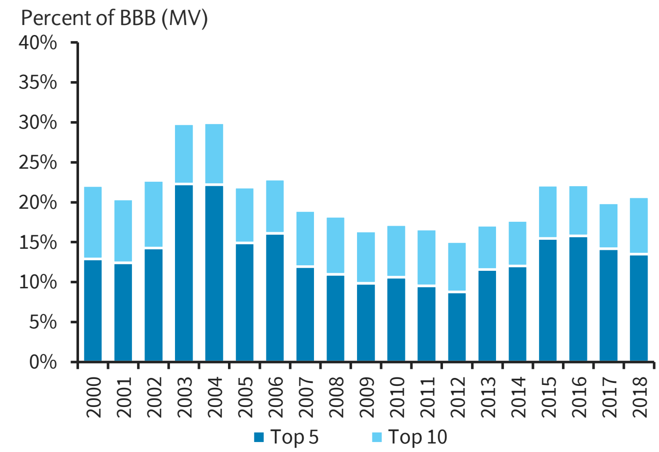
BBB Downgrade Rates Have Been below the Long-Term Average for Most Years since the Recession



Note: Dashed line is the average rate over 2000-18.
Source: Moody's, Barclays Research

FIGURE 4

The Concentration among the Largest BBB Issuers Is in Line with Long-Term Averages



Source: Barclays Research

Potential Influences on BBB Downgrades over the Next Cycle

BBBs have enjoyed an extended period of low downgrade rates over the past few years, reflecting the supportive macro backdrop. The rate at which BBB issuers have been downgraded to high yield has been below the long-term average (~4.5%) in eight of the past nine years, with stress in the energy sector making 2016 the outlier. While fallen angel volumes should remain low in 2019 (see *Angels Flirt but Won't Fall*), supported in part by our house view for another year of stable economic growth, downgrade rates should pick up subsequently if and when we approach the end of this growth cycle. Not surprisingly, in the last cycle, the downgrade rate of BBB issuers to high yield peaked in 2008-09.

While the extent to which downgrade rates pick up will be driven in large part by the depth of the next recession, we believe that overall better investment grade corporate fundamentals should make for a less severe downgrade cycle. In addition to the economic backdrop, there is concern that other factors, including elevated leverage and concentration, could result in a higher percentage of BBBs moving into high yield. We assess four factors that could affect BBB downgrade risk in the next cycle. As discussed in detail later in this report, we do not believe these factors will result in a BBB downgrade rate that is worse than that implied by the economic cycle.

1. Distribution of BBB issuers between BBB+, BBB flat, and BBB-
2. Sector concentration of BBB issuers
3. Leverage profile of BBB companies
4. Concentration of the largest BBB issuers

In regard to the rating distribution within the BBB segment, the current ratio does not suggest a trend of increased downgrade risk. Specifically, 25% of the amount outstanding of BBB debt is rated BBB-, broadly in line with both the post-recession average of 25% and last-twenty-year average of 27%.

In addition, as highlighted below (and in greater detail in *Deleveraging Post-M&A: Implications in the Case of a Credit Downturn*), BBB issuers that have taken on substantial debt to fund acquisitions in recent years have been skewed more toward defensive sectors than in the past. We think that this should partially insulate many of these companies from broader economic stress.

BBB leverage does appear elevated relative to BBs. We believe this is driven in large part by debt-funded M&A deals, as companies have utilized relatively cheap debt funding to support large-scale M&A while also relying on earnings growth to support subsequent deleveraging. A shift in the macroeconomic background could pressure BBB issuers with elevated leverage, although the sector distribution of M&A deals has generally been more defensive (see Figure 8) which should mitigate the increased leverage levels.

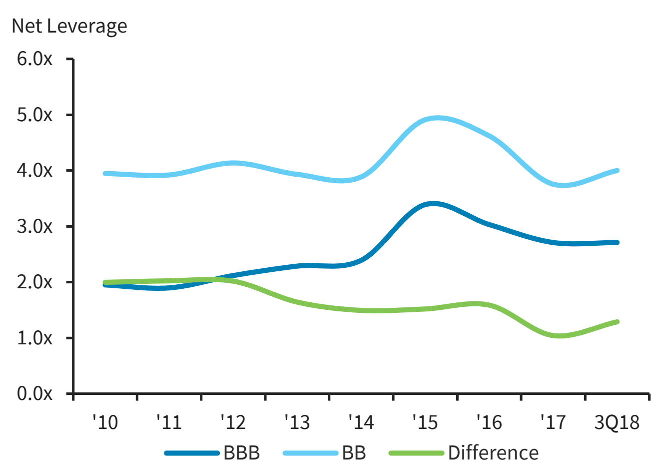
We also find the concentration of the largest BBB issuers to be in line with long-term averages. As seen in Figure 4, the par value of the five largest BBB issuers represent 14% of the BBB cohort as a whole, while the ten largest represent 21%. Both of these levels are in line with the 20-year average rates and are down relative to just two years ago. However, the quantum of debt of these issuers has obviously ballooned compared with the high yield market, which has increased the focus on these names. As a result, we discuss these companies in detail later in this report.

Highly Leveraged BBBs Have Grown

The increase in BBB debt has coincided unsurprisingly with an increase in leverage since 2014, while the gap between median BBB and BB leverage has declined over the same period (Figure 5). This increase in BBB leverage is most noticeable for select large investment grade capital structures. Figure 6 shows the market value of investment grade and BBB issuers with net leverage above the average BB leverage at the time as a percentage the market value of the BB index.

FIGURE 5

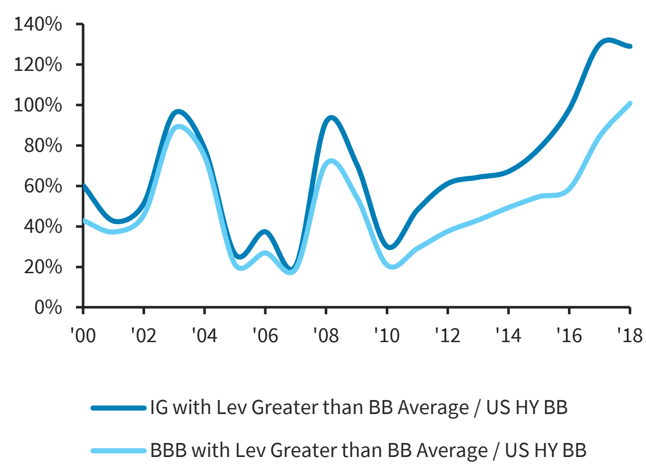
The Spread between BBB and BB Net Leverage Has Compressed



Source: Factset, Bloomberg, CapIQ, Barclays Research

FIGURE 6

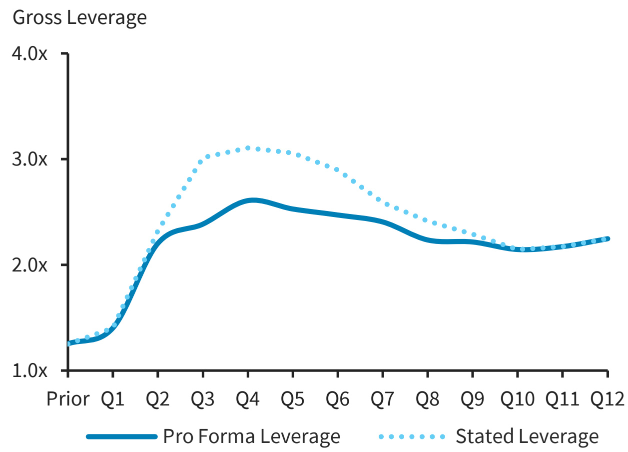
Highly Leveraged Investment Grade and BBB Names Have Grown in Size Relative to the High Yield Market



Note: company-level financial data for 2018 is as of 3Q18.
Source: Bloomberg Barclays Indices

FIGURE 7

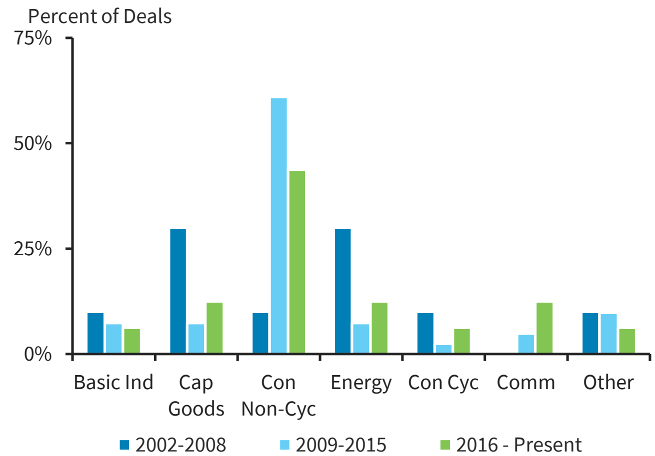
Gross Leverage Following an Acquisition



Source: Factset, Barclays Research

FIGURE 8

Historical Large M&A Transactions by Sector



Source: Factset, Barclays Research

As of the end of 2018, the market value of BBB names with leverage greater than median BB leverage was $540bn, slightly larger than the size of the BB index. In fact, this is the only period in recent memory in which BBB issuers with leverage greater than average BB leverage were greater in size than the entire BB sub-index. For investment grade names that broadly fit these criteria, their market value was nearly $700bn, representing 129% of the size of the BB index.

Furthermore, companies that have increased leverage for M&A transactions have historically deleveraged relatively slowly, if at all. In fact, there are instances of "serial acquirers" that follow a pattern of increasing leverage for an acquisition immediately after deleveraging following a prior M&A transaction. As we found in *M&A Deleveraging Stuck in the Slow Lane*, companies that engage in large debt-funded acquisitions generally do not return to pre-acquisition leverage levels within three years of the deal.

Figure 7 shows the median gross leverage from pre-announcement levels across these transactions. It is also worth noting that when we break down the deals into pre-crisis (2002-08) and post-crisis (2009-present), we find that although the leverage increase has been roughly the same for deals done in both periods, starting leverage for the post-crisis acquirers we evaluated was nearly twice that of pre-crisis acquirers.

Despite this shift, both investors and rating agencies had generally adopted a fairly lenient stance toward the leverage added as part of these transactions, which was driven in part by the more defensive sector skew of the deals, implying a more reliable ability to deleverage, especially in times of financial stress. However, rating agencies have recently become more stringent with companies that have lagged their initially communicated paths of deleveraging.

One of the most notable examples is Moody's downgrade of ABIBB debt to Baa1 this past December, three years after the deal was announced and two years after it closed. While the decision to downgrade ABIBB was in part due to idiosyncratic factors, such as the company's EM exposure and FX considerations, we think it also reflects a trend of rating agencies' becoming increasingly uncomfortable with companies that are running behind on their deleveraging targets. Particularly when combined with potential fundamental weakness – whether due to idiosyncratic factors or a broader economic slowdown – we think the risk that rating agencies will adopt a more aggressive attitude toward leveraged M&A deals remains elevated. We highlight companies that have fallen behind their target deleveraging paths and may face continued rating agency pressure in *M&A Names on Notice*.

Intra-Investment Grade Downgrades Likely; Fallen Angel Risks Seem Overstated

The combination of elevated leverage and a more stringent rating agency approach means that ratings are likely to come under pressure. This may result in one- or two-notch intra-IG downgrades, although we believe the risk of large capital structures moving to high yield is still relatively muted. Acquirers in this cycle have been heavily weighted toward defensive sectors, which, in theory, should help insulate them in an economic downturn (Figure 8). When we specifically stress-test many of the largest current deleveraging stories, we find that even in macro environments similar to prior recessions, many of the largest deleveraging companies have the financial flexibility to reach leverage targets if prioritized at greater levels.

Furthermore, most large caps usually have access to several levers that can be used to defend their ratings. This includes reducing dividends and buybacks, cutting capital expenditures, and potential asset divestures. All of these options come at a cost and are potentially disruptive to a company's operations and, therefore, are likely to be utilized only if the alternate is much worse. While we do not believe that intra-IG downgrades quite meet that threshold – for instance, a downgrade from A to BBB still maintains access to investment grade funding markets, albeit at wider spreads – a downgrade to high yield for some of the large capital structures could have more drastically negative implications. Not only would funding costs increase significantly, but funding a large capital structure – each of the top 10 BBB would be more than 2% of the High Yield Index if downgrade – in the high yield market might be downright impossible. In addition to funding issues, some companies could face operation challenges as high yield credits.

For example, General Electric has taken multiple steps in recent months in order to free up cash for debt paydown. The company reduced its quarterly dividend from 12 cents/share to 1 cent/share, cut share buybacks, and lowered capex meaningfully. Furthermore, the company raised $4bn through the sale of its stake in oilfield services unit Baker Hughes. Management continues to place urgency on asset sales in order to generate cash, with recent headlines suggesting that GE is accelerating a potential partial monetization of its healthcare business.

As another example of the reaction of a large cap, capital-intensive issuer to ratings risk, on December 1, 2015, Moody's revised its outlook on Kinder Morgan's (KMI) Baa3 rating to negative from stable. Within one week, KMI had cut its dividend by 75% and Moody's had returned the outlook to stable. In our view, the swift response to just one agency's move to a negative outlook (not even a negative review, which typically signals more acute ratings risk) is indicative of how serious potential fallen angel risk is treated by management teams of companies with large debt structures and active capital spending programs. That week in early 2015 paved the way for several years of credit improvement at KMI, culminating in recent upgrades to mid-BBB at both Moody's and S&P.

Given that the downgrade of a large cap to high yield would cause the most disruption to markets, we focus on non-financial BBB credits that, if downgraded, would form more than 2% of the index (ie, have more than $25bn of debt outstanding). In the following section, our fundamental analysts discuss the tools that these companies have at their disposal to bring down leverage. They also discuss the potential implications of a downgrade to high yield – the more severe the consequences, the more aggressive a company is likely to be to defend its investment grade rating.

Although we do not expect fallen angel volumes to pick up, spread volatility is still likely to be elevated. Any ratings pressure could result in meaningful spread widening for these issuers. The response to intra-IG downgrades – particular from A to BBB – would also likely be severe given the preponderance of BBB debt. In *Falling 'A's Are the New Fallen Angels*, we evaluated the median spread performance versus the index in the six-week periods on either side of a downgrade for each notch from A+ to BBB-. We found that performance is fairly ordinal: the lower the starting rating, the worse the spread widening. For instance, a move from BBB to BBB- is worse than a move from A to A-. There is one glaring exception, however, with a downgrade from A- to BBB+ resulting in roughly 9bp of spread widening – nearly twice the underperformance seen for any other one-notch downgrade. This is partly driven by selling from investors with A-or-better mandates, but more important, in our view, it is due to the significant increase in the BBB part of the market. With already-elevated exposure to BBBs, incremental investor demand for BBB rated debt is likely to be limited, especially amid concerns about the end of the credit cycle. Furthermore, unlike fallen angels, which tend to rally post-downgrade as a new buyer base (high yield) develops, most credits that suffer intra-IG downgrades continue to widen even after the rating move.

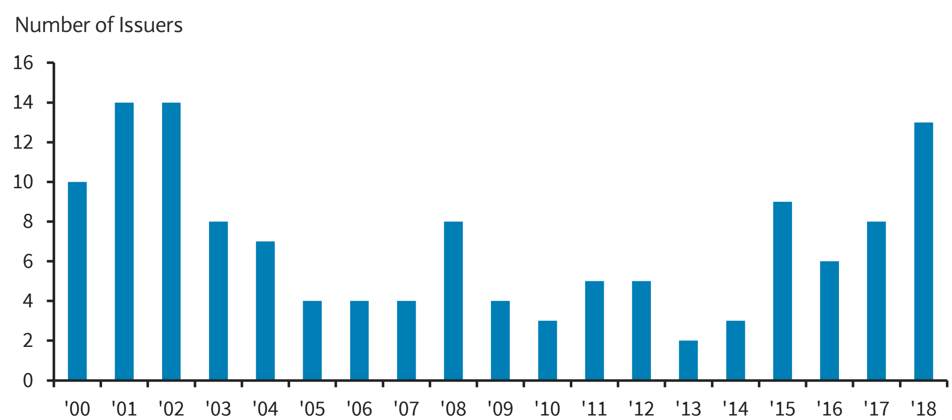
Fundamental Analysis of Current Large Cap Structure BBBs

Given these findings, we believe it is worth evaluating select, large cap structures that investors are concerned could fall to high yield. There are currently thirteen non-bank BBB issuers that, if downgraded to BB, would represent more than 2% of the High Yield Index.[1] As seen in Figure 9, this is the most since 2002.

Below, our fundamental analysts provide commentary on select companies, specifically highlighting why they believe they should remain BBB rated over the medium term. The names are listed in descending order based on the market value of combined debt in the Investment Grade and High Yield Indices.

FIGURE 9

Number of BBB Industrial Issuers with Market Value Greater than 2% of US High Yield



Source: Bloomberg Barclays Indices

[1] AT&T (T), Verizon (VZ), Anheuser-Busch InBev (ABIBB), CVS Health Corp (CVS), Charter (CHTR) General Electric (GE), General Motors (GM), Ford (F), Abbvie (ABBV), Cigna (CI), United Technologies (UTX), Kinder Morgan (KMI), and Energy Transfer Operating (ETP). Note: CHTR number includes existing high yield debt.

SUMMARY FUNDAMENTAL TABLE

FIGURE 10

Large Capital Structure BBB Issuers and Potential Cash Flow Levers

Company	MV of US Credit Corp Eligible Debt Outstanding ($ bn)	Ticker	Moody's Rating	S&P Rating	Fitch Rating	Recent Ratings Trend	Management Target Leverage	Management Ratings Policy	Most Recent net debt/EBITDA	2019E Share Buyback & Dividend/EBITDA	2019E CapEx/EBITDA	Potential deleveraging through asset sales*
AT&T Inc.		T	Baa2	BBB	A-	Negative	2.50x net lev.	Investment Grade	2.96x	0.24x	0.39x	0.13x
Verizon Communications		VZ	Baa1	BBB+	A-	Neutral	1.80x net lev.	Pre-Vodafone Credit Rating Profile	2.29x	0.21x	0.36x	n/a
Anheuser-Busch InBev		ABIBB	Baa1	A-	BBB	Negative	2x net lev.	N/A	4.9x	0.2x	0.2x	
CVS Health Corp		CVS	Baa2	BBB	N/A	Negative	3.5x in two years post Aetna Acquisition close, then low 3x	Mid-BBB	4.6x	0.1x	0.1x	N/A
Charter Communications		CHTR	Ba1	BBB-	BBB-	Neutral	3.50x secured debt/EBITDA	Investment Grade (at secured level)	3.47x	0.24x	0.48x	n/a
General Electric		GE	Baa1	BBB+	BBB+	Negative	< 2.5x net lev.	Single-A	4.2x	0.0x	0.4x	3.1x
Ford		F	Baa3	BBB	BBB	Negative	N/A	Investment Grade	-0.9x	0.3x	0.9x	0.0x
AbbVie Inc		ABBV	Baa2	A-	N/A	Flat	N/A	Comfortable with current balance	2.7x	0.3x	0.0x	N/A
Cigna Corp		CI	Baa2	A-	BBB-	Negative	Debt-to-cap ratio returning to the 30s within 18-24 months following closing.	Investment Grade	51.0%	0.0x	0.1x	N/A
United Technologies		UTX	Baa1	BBB+	N/A	Negative	N/A	Single-A (prior to split announcement)	3.7x PF for COL acquisition; 6.3x PF for UTX Breakup	0.2x	0.2x	0.7x from the PF today basis; 3.3x from the PF UTX breakup basis
Kinder Morgan		KMI	Baa2	BBB	BBB-	Positive	4.5x net lev.	Investment Grade	4.5x	0.3x	0.5x	0.0x
Energy Transfer Operating		ETP	Baa3	BBB-	BBB-	Positive	4.5x debt/adj. EBITDA	Investment Grade	4.9x	0.4x	0.6x	0.0x
General Motors		GM	Baa3	BBB	BBB	Stable	NA	Investment Grade	-0.3x	0.2x	0.7x	0.0x

*Adjusted for lost EBITDA: defined as current debt/EBITDA - pro forma debt/pro forma EBITDA.

Note: Charter ratings in table are for secured debt only. The company has roughly $19bn in market value of sub-investment grade unsecured debt.

Source: Source: Barclays Research, Moody's, S&P, Fitch

FUNDAMENTAL ANALYSIS

Covered by Sandeep Gupta with a Market Weight rating.

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AT&T (T)

After acquiring TWX in a deal valued at $110bn (EV) and undergoing a lengthy approval process that included winning an antitrust suit in court brought by the DOJ, AT&T was left with more than $190bn in debt and one-notch downgrades to mid-BBB at both Moody's and S&P (Fitch left its A- rating unchanged). While AT&T's current ratings outlooks are stable at all three agencies and the company has paid down some debt since closing the merger in June (including through bond make-wholes and commercial paper/term loan paydowns), at 2.96x, net leverage remains elevated compared with historical levels, even as the company has promised to reduce net leverage to 2.5x by the end of 2019. While we think that further ratings downgrades are unlikely, as the company will continue to deleverage, should fundamentals remain under pressure (specifically in the pay TV segment,) it could face risk of ratings downgrades, in which case it would need to look for alternatives for reducing debt. As a note, Moody's has AT&T's leverage at 3.6x for 2018, with a downgrade threshold of 3.5x, and S&P has AT&T's leverage at approximately 3.5x, with a downgrade threshold of 3.75x.

Pro forma for the TWX acquisition, AT&T's fundamentals are improving, with mid- to high single-digit growth being driven primarily by strength in subscription revenues at Turner and HBO. While the media business is more cyclical, the wireless business is growing in the low single digits and is more defensive. We also expect the wireless business to benefit from a more benign competitive environment should the T-Mobile and Sprint transaction be approved. The entertainment segment, consisting of DirecTV and U-Verse, is declining in low single digits. While this segment makes up about 26% of total revenues and only 15% of EBITDA, it would be concerning if the segment deteriorates further.

Potential Levers

Asset Sales

AT&T has stated that it plans to sell $6-8bn in assets to reach its leverage target (2.5x net by year-end). The company has said that the asset sales, which we expect to occur this year, will include real estate in New York's Hudson Square, the stake in Sky Mexico, and Time Warner's 10% stake in Hulu. $8bn in potential asset sale would imply 0.13x in deleveraging for the company. We expect asset sales to be a significant piece of the company's deleveraging strategy, as it will need to reduce debt by at least $25bn in 2019 and will likely have only around $12bn in post-dividend free cash flow.

Furthermore, AT&T could consider strategic alternatives for some of its larger, more recently acquired assets, such as HBO. Were AT&T's financials to come under further pressure for fundamental reasons, the company has the ability to monetize its HBO asset (even if only partially) and use any proceeds to reduce debt.

Reduced Capital Spending and/or Operating Expenses

Wireless is a capital-intensive business, as capex is crucial for a wireless operator to maintain and improve its network operations. From 2015 to 2017, AT&T spent an average of around $21bn on capex annually, and we expect the pro forma company to have around $24bn of capex this year. Having said that, we believe about a third of this will be growth capex, as opposed to maintenance, which would mean that in a stressed situation, it could reasonably reduce capex by $7-8bn and use the savings for debt reduction. Such a reduction could help reduce leverage by as much as 0.1x.

Dividend Cut

We do not expect AT&T to consider reducing its dividend unless it is on the verge of being downgraded to high yield, given the dividend's historical importance to the company's equity investors and the long history of its dividend policy. However, cutting the dividend is a big lever that the company could eventually utilize to avoid downgrades out of investment grade. AT&T has a large, growing (~2.12% annually) dividend that we expect to burn through around $15bn, or over 50%, of the company's free cash flow in 2019. AT&T has not been repurchasing stock, and we do not expect it to do so in the immediate term.

Ability to Operate as a High Yield Business

With one of the largest capital structures in the index and $95.8bn in debt maturing in the next ten years, we think that AT&T would have an extremely tough time operating as a non-investment grade company and would therefore be willing to take measures such as cutting the dividend or selling larger assets if a potential downgrade to high yield became a real possibility. We think that AT&T would have difficulty refinancing its maturities as a high yield company, and any deals that it could get done would be at a higher rate that would, in turn, pressure its earnings and cash flow. In addition, AT&T has routinely relied on the commercial paper market for liquidity, and it would lose access if downgraded to high yield.

Verizon Communications (VZ)

Covered by Sandeep Gupta with a Market Weight rating.

Verizon is rated Baa1/BBB+/A- (Moody's/S&P/Fitch) and has a long-term net leverage target of 1.8x, which is consistent with its credit rating profile pre-Vodafone transaction (a period in which Verizon was rated single-A). Given that the company has three notches of cushion at Moody's and S&P (and four at Fitch), a conservative management team, strong cash flow, and defensive business model, we view the risk of Verizon being downgraded to high yield as extremely low.

Verizon is currently well below rating agency downgrade thresholds for the BBB+ rating band. Both Moody's and S&P have Verizon's adjusted leverage at around 2.8x for 2018, with the Moody's downgrade threshold at 3.0x and S&P's threshold at 3.25x. As a reminder, the agencies typically would not downgrade Verizon if it were to go above these leverage levels for an acquisition while committing to deleverage shortly thereafter.

If Verizon's ratings were to come under pressure as a result of fundamental issues or a large leveraging event such as M&A, the company would have a number of steps to take in order to avoid downgrades. Namely, it could reduce capex (likely by ~$6bn), cut the dividend (costs VZ ~$9.5bn), or even sell assets, all of which we think would provide significant flexibility to reduce debt and keep investment grade ratings.

Verizon's fundamentals are relatively stable, with flat to low-single-digit consolidated revenue growth. The core wireless business (~70% of revenues) is growing in the low single digits and is also defensive, which means it is unlikely to be affected as significantly in a downturn. The wireline business, however, is declining at a rate of 3-4% annually, as the video market is under pressure and cord-cutting continues.

Potential Levers

Reduced Capital Spending and/or Operating Expenses

Both wireless and wireline telecommunications are capital intensive businesses, as capex is crucial for operators to maintain and improve its network operations. From 2015 to 2017, Verizon spent an average of around $17bn on capex annually, and we expect the company to have $17.5bn in capex this year. Having said that, we estimate that about a third of its capex can be attributed to growth and the rest to maintenance, which means that in a stressed situation, it could reasonably reduce capex by $5-6bn and use savings for debt reduction. Such an action could reduce leverage by about 0.1x.

Dividend Cut

We do not expect Verizon to be forced to consider reducing its dividend; however, in a potential future period of stress, it would be a way for the company to save cash, as it spends a substantial portion (about 59%) of its free cash flow on its dividend every year. In 2019, we expect Verizon's dividend outlay to be about $9.95bn, compared with a $9.69bn LTM outlay and $9.47bn in 2017. Not paying a dividend would allow Verizon to deleverage about 0.21x in a year.

Asset Sales

Verizon has a few assets that it would likely evaluate in order to shore up its balance sheet. Namely, it could sell the rest of its wireline business, of which it sold a piece to Frontier in a deal announced in 2015. That transaction included 2.2mn internet subscribers, as well as voice connections and DSL connections, and was valued at $10.54bn. Verizon currently has 6.96mn broadband subscribers, which, using the EV/sub from the FTR deal, would value the business at about $33bn. That said, given the subsequent decline in Frontier's business and limited demand for wireline assets, the value of Verizon's wireline assets is likely to be much lower than $33bn. Furthermore, Verizon's wireline business has state-regulated unfunded pension obligations that might make a sale somewhat more difficult. Verizon could also sell its media business, Oath (which consists of a combination of Yahoo and AOL assets), for which it recently wrote down $4.6bn of value – about half of Verizon's combined purchases of Yahoo and AOL.

Ability to Operate as a High Yield Business

If, in the future, Verizon's ratings come under pressure, because of either to weakening fundamentals or a leveraging event, and a potential downgrade to high yield becomes a concern, we think the company would have incentive to take the necessary steps to keep investment grade ratings. With such a large capital structure, Verizon relies on the capital markets for liquidity and refinancing, which could be extremely difficult in the high yield market. Verizon also frequently uses commercial paper for short-term liquidity. which is another market it could have a hard time tapping as a high yield borrower.

Anheuser-Busch InBev

Covered by Priya Ohri-Gupta with a Market Weight rating.

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Absent a meaningful erosion in business trends related to global macro weakness or adverse foreign exchange, we do not foresee risk to Anheuser-Busch InBev's investment grade rating in the near term. ABIBB migrated from the A ratings category to BBB in December following a downgrade by Moody's that brought ratings/outlooks to Baa1 (Stable)/A- (Negative)/BBB (Stable). While we could see a potential downgrade by S&P over the next 12 months (and as early as March, following full-year results) if the company cannot deliver against the agency's expectation for leverage to approach 4.0x by YE19 (from a forecast 4.5x at the end of FY18), we view the risk of the credit moving out of investment grade as fairly low. We would also anticipate limited reaction from an S&P downgrade, if one were to occur, because it would not really change the company's overall ratings profile from an index perspective.

Moody's December write-up noted that the threshold for further downgrade would be an inability to get leverage below 4.5x (by its calculation) by the end of FY20. The bulk of this is weighted toward 2020, as Moody's published estimate shows that it expects leverage to end FY18 at 5.2x (from 5.4x at midyear 2018) and FY19 at 4.9x. While this appears somewhat modest, the agency expects cash to build in only modest liability management actions (and maturities in 2019 total only $2.1bn). In other words, if one assumes that all of the free cash flow after dividends is used for debt repayment, leverage could improve closer to 4.7x (Moody's anticipates that ABIBB will generate $10.8bn in free cash flow after capex in 2019, which should leave $6.7bn of cash after expected dividend payments).

Given the language used by Moody's and S&P, less than half a turn of deleveraging is implied per annum over 2019/20. In contrast, we note that on the 2Q18 earnings call, CFO Dutra indicated that the company expected "approximately half a turn of net debt reduction per year through the combination of EBITDA growth…as well as debt paydown."

The company recently announced a liability management transaction in which it offered to tender up to $16.5bn worth of bonds across 12 series of USD notes maturing in 2021-26. In conjunction with this announcement, ABIBB also issued $15.5bn of USD bonds with maturities ranging from six to 40 years. If the tender goes through as outlined, the company would have debt maturities of less than $6bn annually from 2020 to 2023 and then $6.3-6.8bn from 2024 to 2026.

Potential Levers

Reduce Share Buybacks and Dividends

In conjunction with its 3Q18 earnings results, ABIBB announced a 50% reduction in its dividend to EUR1.80/share for FY18 (this is composed of a EUR0.80/share payment in fall 2018 and a EUR1.00/share payment in spring 2019). On an annual basis, this is projected to release $4.0-4.2bn (depending on FX), with the fall dividend cut estimated to have freed up about $1.8bn of cash. We note that while this level of dividend reduction is notable, there is precedent for an even higher cut, as the company reduced its dividend by 80% following the Anheuser Busch acquisition. If ABIBB were to suspend its dividend entirely, we estimate that it could support about 0.2x of leverage improvement annually.

The company stemmed share repurchase activity in 2H15, with the SABMiller deal announced in late 2015. Prior to that, ABIBB's repurchase activity had been modest following the Anheuser Busch acquisition, with a $1bn program announced and executed in 1H15.

Reduced Capital Spending and/or Operating Expenses

While "bare bones capex" was a hallmark of the deleveraging plan following the Anheuser Busch transaction and less so after the SABMiller transaction, the company has nevertheless pushed a meaningful reduction in the metric from an estimated $6bn on a pro forma basis in 2015. For 2018, capital expenditures are forecast by the company at $4.0-4.5bn (a 5-15% reduction y/y), and we think that this figure could continue to decline at a similar pace in coming years. If ABIBB continues to reduce capex by 5% in the next three years, it could free up about $600mn of cash, which could support 0.01x of additional deleveraging per year. However, given that ABIBB's first priority for capital allocation remains the ability to invest in its brands and support organic opportunities in the business, we would not assume a meaningful step-down from the current level of capital spending at the company.

Asset Sales

In contrast to the significant divestitures pursued as part of deleveraging actions after the Anheuser Busch acquisition, after the SABMiller deal, the company has largely pursued asset sales necessitated for regulatory reasons. As such, we view this as a lever that the company has yet to utilize, but could, in the event that it is needed to protect its rating. More recently, *Bloomberg* reported that ABIBB was considering an IPO of its Asian business, which could raise over $5bn, and valued the overall business at $70bn ("Anheuser-Busch InBev soars on possible IPO of Asian business," January 11, 2019). However, the more muted recent IPO backdrop, coupled with data pointing to a slowdown in the Chinese economy, suggests that this could be challenging to accomplish in the short term. Furthermore, we note that LTM EBITDA for the Asia business is around $3bn, and ABIBB is currently trading around 11.9x on an EV/EBITDA basis, while Constellation Brands is valued around 15.2x and China Resources Beer Holdings is around 17.2x, which points to a potential valuation of roughly $35-52bn.

Ability to Operate as a High Yield Business

Given the limited depth of the high yield market, refinancing risk is often viewed as the primary concern for credits that migrate down the spectrum. However, even in a theoretical high yield scenario, this should be manageable for ABIBB. If the company's recent liability management actions occur as outlined, the maturity profile should be manageable within free cash flow – even just the cash unlocked from a dividend rebase should cover upward of roughly 60% of annual maturities through 2026.

The company's use of the commercial paper market following the SABMIller acquisition has been $1.8-2.1bn, and it maintains a $3bn US program and a EUR1bn program. We see limited risk to this level of access at the company's current ratings and would expect no effect as long as the company retains at least mid-BBB ratings at Moody's and S&P. At low-BBB ratings, or even in the case of high yield ratings, companies often increase their reliance on term loan and revolver borrowings to transition away from the CP market as access becomes more limited. We surmise that ABIBB would be able to do this if needed.

CVS Health Corp (CVS)

Commentary from Brittany Chen. CVS is Not Covered.

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Notwithstanding US District Judge Richard Leon's continuing review of the company's settlement with the Department of Justice, CVS has confirmed that the court's ongoing examination of its terms does not impair the streamlining processes already under way save for certain activities pertaining to Aetna's handling of insurance products and medical records. As such, CVS is now in the early innings of the deal's integration phase, and investors will be limited to evaluating the deal's progression based on the timeliness of its promised deleveraging, as the strategic rationale behind a retail pharmacy's combination with a health insurer will likely take longer to play out.

At 4.6x, CVS's pro forma adjusted leverage is materially above the company's previously held 2.7x long-term average target. Accordingly, CVS incurred a one-notch downgrade at both Moody's and S&P, to Baa2 and BBB, respectively. Management has indicated that discretionary cash generated and available for corporate purposes will be swept toward the enlarged debt stack until the company deleverages to the low-3x area (nearer term, to ~3.5x within two years of the deal's close, which occurred on November 28, 2018). To facilitate that progression, CVS will refrain from repurchasing any shares, hold its dividend steady, and forgo any other major transactions until this is achieved.

In 2017, CVS and Aetna jointly generated approximately $18.3bn of EBITDA. Management's latest pro forma guidance calls for $2.6bn of capex annually and $3.1bn of interest expense in 2019. Using these assumptions and without adjusting for any synergy capture or Aetna's sale of its standalone PDP business to WellCare, CVS should exit its first year as a newly merged entity with stronger credit metrics than its peers, including interest coverage after capex of 5.1x (versus 4.8x for Walgreens and 1.1x for Rite Aid) and free cash flow as a percentage of total debt of 12% (versus 11% for WBA and 4% for RAD). For context, Walgreens is rated Baa2/BBB/BBB and Rite Aid (senior unsecured) is rated Caa1/CCC+/BB.

CVS's credit rating is on stable outlook at Moody's and S&P, but both agencies have stated that adjusted leverage sustained above 4.00x and 3.75x 12- and 18-24 months post-close, respectively, could place downward pressure on ratings. Moody's has identified weaker-than-expected synergy capture and management's reneging on its commitment to hold the company's common dividend steady and/or refrain from repurchasing stock as key risks to this downside scenario. S&P is seemingly more focused on unforeseen or more severe than currently expected competitive challenges.

Potential Levers

Dividend Cut

Since CVS has already agreed to pause its share repurchase program and refrain from increasing its common dividend until it is able to bring adjusted leverage back into the low-3x area, the only capital deployment lever the company could pull if unforeseen earnings pressure were to impair its debt repayment capabilities is to reduce or entirely eliminate its current dividend. After issuing approximately 274mn common shares to Aetna shareholders pursuant to the deal's terms, common dividends of $0.50/share will amount to $2.6bn annually.

Ability to Operate as a High Yield Business

Although it could prove challenging to refinance certain maturity walls (eg, more than $10bn of debt comes due in 2021 and 2023, $9bn in 2028, and approximately $8bn in 2025 and 2048), depending on market dynamics, we do not see any business reason that CVS could not operate with high yield ratings, so long as its insurance subsidiaries retain the same or comparable levels of capitalization that they enjoy today – that is, Aetna's operating entities have a business case for not following suit. Specifically, Aetna's health plan customers are unlikely to ignore a meaningful deterioration in financial strength when selecting a managed care provider that they will rely on to adjudicate benefit claims in a timely manner. However, we believe there is sufficient precedent for the retail pharmacy and PBM businesses to operate as high yield companies (eg, Alliance Boots, Rite Aid, Medco). Although the company's historical dependence on commercial paper would need to be addressed with alternative measures, we view this as a relatively lower hurdle to overcome when cast against the aforementioned refinancing needs.

General Electric (GE)

Covered by Brian Monteleone with a Market Weight rating.

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GE's net debt/EBITDA of 4.2x at 3Q18 remains elevated after a couple years of increasing debt outstanding and a more recent deterioration in its Power segment earnings and free cash flow. Along with a long-term care (LTC) charge that de-capitalized its financial service subsidiary and a goodwill charge that signaled greater challenges in its Power segment, Moody's, S&P, and Fitch each downgraded GE by two notches, to Baa1/BBB+/BBB+, in late 2018. While each outlook is currently stable, an inability to improve profitability in the Power segment or reduce leverage below 4x could lead to further downgrades.

While GE's Power business is facing secular, cyclical, and company-specific pressures, we expect the segment performance to bottom in 2019 as revenue begins to stabilize and the company makes progress in reducing costs. Aviation results should remain strong, with EBITDA growth and improved free cash flow conversion. Finally, we do not think that GE will need to take another large LTC reserve charge over the next couple of years (annual review each 4Q). We expect the company to reduce net leverage to 3.6x at year-end 2018 and 2.6x at year-end 2019, or 3.1x pro forma for RemainCo EBITDA (*The Short and the Long of It*). Management recently stated that it may look to monetize more than the 20% of Healthcare contemplated in the June 2018 strategic update. Moody's and S&P highlighted this as a credit-positive development that was not contemplated in their recent downgrades. Any cash received from a partial sale of its Healthcare operations would also be beneficial relative to our 2019 leverage estimates.

Potential Levers

Dividend and Share Buyback Cut

GE has largely exhausted this lever. It has historically been a generous payer of dividends, which amounted to $9.3bn, $8.5bn, and $8.4bn in 2015, 2016, and 2017, respectively. Former CEO John Flannery halved the dividend to $4.2bn in 2018, and new CEO Larry Culp cut it to just $0.3bn for 2019. GE's share repurchases were elevated in 2015, 2016, and

2017 at $23.7bn, $22.0bn, and $3.8bn, respectively, driven by proceeds from asset sales at GE Capital and the split off of Synchrony. GE has not net repurchased stock in 2018, and we do not expect it to while leverage and rating questions remain.

Reduced Capital Spending and/or Operating Expenses

GE's industrial capital expenditures averaged $3.9bn from 2015 to 2017. At its November 2017 Investor Update, GE emphasized a more disciplined, returns-based approach for evaluating capital expenditures and guided to lower capex in 2018. Through the first nine months of the year, capex was down 21%. We expect GE to remain vigilant with capex and see modest room for further cash savings.

Asset Sales

Asset sales are GE's most important remaining tool for deleveraging. We estimate that $33bn of potential gross proceeds could be raised from the monetization of 50% of Healthcare ($20bn), the sale of its remaining 50.1% stake in Baker Hughes GE ($11bn), and the sale of the 9.9% of Wabtec it expects to maintain after the sale of its Transportation business in 1Q19 ($2bn). Of these, only $4bn is included in our 2019 leverage walk (partial BHGE stake sale).

Potential asset sale proceeds are meaningful relative to our $38bn of estimated gross industrial debt at year-end 2019. However, GE faces a number of contingent liabilities, including potential further LTC reserve charges over time (which we believe would be funded with GE Capital earnings), pension deficit volatility, working capital needs, a potentially more prolonged trough in Power than we expect, and various accounting investigations. It must also reduce leverage at GE Capital, which we expect it to do with cash freed up from the runoff and sale of its lending portfolio.

CEO Culp's decision to monetize the first piece of its BHGE stake at a price more than 30% lower than its trading level at the time of the June strategy update indicates to us an emphasis on pace of deleveraging over maximizing shareholder value, and the termination of the share sale lockup with BHGE indicates to us that more sales are likely in 2019. Recent press reports have highlighted that GE could seek a monetization of its Healthcare business as early as 2Q18, marginally earlier than the 12- to 18-month timeline announced last June.

While contingent liabilities will likely linger, GE is likely to take powerful steps toward deleveraging its balance sheet in 1H19. We expect these actions to limit further ratings downside, particularly at Moody's and S&P. We believe there is greater risk of a one-notch downgrade at Fitch in 2019, driven by the size of a capital contribution from GE to GE Capital during the year. We think that a downgrade to high yield is remote at any of the three rating agencies.

Ability to Operate as a High Yield Business

GE targets sustainable credit ratings in the single-A range. Historically, mid-single-A ratings were important for GE because it was a large issuer of commercial paper (average outstanding consistently over $30bn in 2014 and 2015) and because strong ratings were important to its clients. As GE plans to reduce its average CP borrowing to less than $5bn by 2020, this has become a less pressing reason to return to single-A ratings. We question how meaningful it is for customers for GE to be rated low-single-A as opposed to high-BBB, but we believe that remaining investment grade and getting out of the news regarding its financial health is important. GE sells expensive equipment that is core to its customers (jet engines in Aviation and turbines in Power), takes time to build, and is typically purchased with long-term servicing contracts. If customers question GE's ability to perform on its contracts, then we believe business could be put at risk.

Charter Communications (CHTR)

Covered by Sandeep Gupta with an Overweight rating.

Charter's secured debt is rated Ba1/BBB-/BBB- (Moody's/S&P/Fitch), so would only need a downgrade at either S&P or Fitch to fall out of the investment grade index (Charter has $26bn of secured debt in the Investment Grade Index and $19bn of unsecured bonds in the High Yield Index). Having said that, both the S&P and Fitch ratings are on a stable outlook, and we do not view the risk of a downgrade as likely in the near term, absent incremental debt-funded M&A and a deterioration in the business (potentially due to 5G competition from Verizon).

When the TWC/Bright House transaction was announced in 2015, Charter outlined its target for total net leverage of 4.0-4.5x and secured leverage of 3.5x, with a commitment to maintain the investment grade ratings for the secured part of the structure (secured TWC and CHTR bonds). Currently, LTM secured leverage is 3.47x, which is in line with the company's target that the agencies were comfortable with at the time of the transaction. To the extent the secured rating is tied to the parentco rating, Fitch has total leverage at 4.6x with a downgrade threshold of 5.0x, and even if the parentco rating is downgraded to BB from BB+, the agency has the flexibility to have a two-notch gap between the secured and unsecured rating, which means that the secured rating could potentially still stay at BBB-. S&P considers the unsecured rating and notches up based on recovery, which is currently estimated to be over 100%, and even if the corporate level rating were to be downgraded to BB, the secured rating could stay at BBB- if recovery is estimated to be above 90%.

Charter has solid fundamentals, with revenue and EBITDA growth in the mid-single digits, driven by growth in the broadband business. Despite the secular decline in the video market driven by cord-cutting and changing consumer preferences, we think the internet business should be able to support future growth, especially as cable operators continue to upgrade broadband offerings and raise prices. We also think that Charter should be fairly defensive in the event of a downturn; while video subscriber declines may accelerate somewhat, we would not expect broadband subscribers to decline materially.

Potential Levers

Share Buyback Cut

Charter has been repurchasing shares rather aggressively, which would be one easy way for the company to save cash if it were facing ratings pressure. In the last twelve months, Charter has spent $4.8bn repurchasing its shares, and we expect it to repurchase around $4bn this year as well. If the company were to cease buybacks in order to shore up its balance sheet, this could allow it to deleverage by about 0.2x.

Reduced Capital Spending and/or Operating Expenses

As a facilities-based cable operator, capex is important for Charter to keep its network operating smoothly. In 2019, we expect $8.04bn in capex, which compares with $9.3bn LTM and $8.7bn in 2017. However, we assume that about a third of Charter's capital spending is unrelated to maintenance (similar for the telcos), which means it could hypothetically reduce capex by $2-3bn while still sustaining its network. This could help reduce leverage by as much as 0.2x.

Asset Sales

Selling assets would likely be an action of last resort for Charter, as the company does not have any obvious non-core businesses; however, it could potentially look to sell some regional operations, such as Bright House Networks, which was acquired for $10.7bn EV with the deal announced in 2015. Bright House Networks has operations in California, Indiana, Alabama, and Florida. We also think that Charter could fetch a similar amount or more if it were to dispose of operations in other markets; for example, if Verizon's fixed broadband services were to take share in markets such as Los Angeles, Charter could potentially consider partially or fully exiting that market.

Ability to Operate as a High Yield Business

We think that Charter could operate as a high yield company, although this clearly would not be the ideal operating profile given the higher cost of capital. Charter is already well known in the high yield market, given that part of the structure is sub-investment grade rated and John Malone has a history of being comfortable running companies with high yield ratings. As a note, although Malone retired from the Charter board last year, he is still chairman of the board at Liberty Broadband, which owns about 24% of Charter's equity; Malone directly owns about 3.7% of Liberty Broadband equity and has a voting position of around 47%. Having said that, the TWC/Bright House deal was specifically structured as investment grade in order to keep access to long-dated, low-cost financing, and the company committed to maintaining an investment grade rating at the secured level at the time, so would likely be willing to take action in order to avoid downgrades. We think this could include slowing share repurchases, as well as cost-cutting, but are less certain that the company would sell assets in order to keep its investment grade secured rating.

General Motors (GM)

Covered by Peter Troisi with a Market Weight rating.

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GM's Baa3/BBB/BBB ratings are stable at all three agencies, and we see very low risk that the company will transition to high yield in the next 12 months. The company has delivered strong operating results in recent years, maintains low leverage (1.1x gross debt to EBITDA), and has strong liquidity ($18.0bn of automotive cash at 3Q18). In addition, GM has strong positions in the two largest auto markets – US and China – and has largely exited markets that are facing difficult industry conditions, such as Europe, in contrast to Ford.

That said, a sharp contraction in the North American auto market has the greatest potential to pressure GM's ratings, with further contraction in the Chinese market also posing risks. We also think that poor performance in the finance captive business has the potential to create pressure on GM's ratings. In addition, if management chooses to unlock the value of its autonomous vehicle business through a spin-off or sale, we think this could cloud GM's long-term strategic outlook and place ratings in jeopardy.

Potential Risk

Contraction in North America and/or China

GM does not foresee a material contraction in the US or China automotive markets in 2019 (see *2019 Guidance Exceeds Street Estimates*), which underpins its upbeat near-term outlook for earnings and free cash flow. GM's North American business is already top-quartile (10.2% EBIT margin in 3Q18), and the restructuring program announced in November aims to further enhance those results, boost efficiency, and increase free cash flow with a relatively quick payback period (see *Cost Save Program Should Increase Leverage Near-Term in Exchange for Better FCF Generation*). North America is GM's main profit center, and we think it would take a material downturn there to pressure consolidated results enough to call its high grade ratings into question.

To put this in context, GM estimates that a 25% downturn in the US (SAAR contracting to around 13mn from YE18 levels) would result in a 60% decline in EBIT there. We would expect Moody's to downgrade to high yield in such a scenario given its Baa3 rating on GM. S&P and Fitch are rated a notch higher at BBB (Stable/Stable), and their criteria for auto ratings seem more aligned with rating through a cycle. That said, a 25% contraction in North America (GM's stress case) would be large enough to make high grade ratings vulnerable, in our view, particularly if it is not clear how quick the recovery would be.

China is GM's other primary geographic segment, with JV income accounting for about 20% of its pre-tax income. The company estimates that a 25% contraction there would correspond to roughly a 60% decline in that segment's profitability, similar to the US. It is hard to envision a scenario in which a downturn contained to China (not affecting North America) would result in high yield ratings.

Poor Performance in Finance Captive

GM Financial has exposure to $10.2bn of subprime retail auto receivables, which account for 27% of total retail receivables. The company is gradually reducing the mix of subprime receivables by focusing its originations on the prime segment, but quick shifts in consumer credit quality could cause GMF's results to suffer. In addition, GMF's concentration in leases (48% of total receivables and leases) exposes the business to residual value risk.

GMF has been highly profitable in recent quarters, but a downturn in consumer credit quality or used car values could cause GMF's earning assets leverage ratio to breach the 11.5x threshold (3Q18: 8.56x), at which point GM parent would be required to contribute capital to the finance captive. We think this would detract from the strength of GM's automotive balance sheet and create ratings pressure. In our view, the most plausible mitigant to such pressure would be to suspend or reduce common dividends to replenish the automotive cash balance.

Potential Levers

Asset Sales

We view GM's majority ownership stake in Cruise, its autonomous vehicle (AV) unit, as a crucial strategic asset that will help the company contend with the challenges of AV adoption over the next few decades. In our view, AVs will pose a threat to the traditional OEM model, since they will likely result in lower rates of individual vehicle ownership. Accordingly, we think it is essential that automakers incorporate AV technology and ridesharing into their business models to ensure long-term viability, particularly in the face of competition from tech companies in this arena.

Given the rapid appreciation in the value of Cruise since its acquisition by GM in 2016 and the low multiples being applied to the traditional OEM business, we think there is a risk that shareholder pressure could mount for a spin-off or sale of Cruise. If that occurs, we think the long-term viability of GM will be called into question by bondholders and rating agencies. We think rating downgrades could occur as a result, although we think GM could mitigate the magnitude of such downgrades by reducing the leverage on its legacy business.

Ability to Operate as a High Yield Business

GM operated as a high yield business from 2005 until it filed for bankruptcy in 2009. We believe that it would be able to operate with a high yield rating profile so long is it maintained access to the capital markets. Sourcing funding for GM Financial would become more expensive as a high yield credit, which would impede its ability to offer preferred terms to GM customers. However, GM and Ford have demonstrated that it is possible to operate a captive finco even with high yield ratings. A more damaging outcome would be if the asset quality of the finco deteriorated, reducing the cash flow available to repay debt. Such a scenario does not necessarily have to coincide with a downgrade to high yield.

Ford (F)

Covered by Peter Troisi with an Underweight rating.

Ford's main credit challenge is improving the performance of its businesses outside North America. The company has announced a restructuring program primarily intended to repair its operations in China, Europe, and South America, which collectively lost $1.4bn over the first nine months of 2018 on an adjusted EBIT basis. The lagging performance of these geographies has weakened Ford's credit metrics, notability its measures of profitability (eg, margins and coverage), which has resulted in ratings pressure. Although the company's leverage (debt/EBITDA) has also increased because of lower earnings, the rating agencies are less focused on Ford's balance sheet and more focused on its ability to execute on the initiatives in place to address its profitability challenges.

The key restructuring program that Ford has announced will cost the company $11bn, of which $7bn will be cash related, over the next three to five years. The company has said that the majority of this will be spent outside of North America, but other details on the program have been limited. Moody's and S&P are focused on Ford's ability to demonstrate that the program will be effective in addressing the underperformance of its international businesses. Evidence of progress against this plan has not been apparent yet, but remains critical to Ford maintaining its ratings at Moody's and S&P, in our view (Baa3/Negative and BBB/Negative, respectively).

We see elevated risk of a one-notch downgrade to Ford's Moody's and S&P ratings in 2019, to Ba1 and BBB-, respectively, but view its Fitch rating (BBB/Stable) as less vulnerable over the near term. Based on this opinion, even if Moody's downgrades to high yield, we see low risk that Ford bonds will move to the High Yield Index over the near term because a second high yield rating is unlikely over that horizon, in our view. In general, Ford is much closer to its downgrade triggers at Moody's than it is at S&P (Figure 11), largely because of differences in the adjustments each agency makes to the ratios used in the ratings process. We do not expect Ford's S&P metrics to deteriorate enough to result in a multi-notch downgrade to high yield absent a significant shift in auto market conditions, particularly in the US.

FIGURE 11
Rating Agency Triggers

	----- S&P -----			----- Moody's -----		
	Actual (LTM 3Q18)	2019E	Trigger	Actual (LTM 3Q18)	2018E	Trigger
FOCF/debt	5.8%	10-20%	<25%	-8.8%	-13.0%	NA
EBITDA margin	5.7%	6-7%	8% by 2020	1.7%	1.2%	>8%
Debt/EBITDA	1.0x	0.5-1.0x	>3.0x	3.25x	3.4x	>2.75x
Interest coverage	4.6x	NA	NA	1.5x	1.1x	<5.0x
EBITDA ($bn)	8.5	NA	NA	8.7	NA	NA
Debt ($bn)	8.7	NA	NA	28.3	NA	NA

Note: Moody's EBITDA and debt figures are LTM as of 2Q18. The Moody's margin target of 8% is on an EBIT basis. Interest coverage is defined as EBITA/interest expense for Moody's and EBITDA for S&P. Source:

In our view, the concerns that Moody's has about Ford's profitability outweigh the benefit it assigns to the company's strong liquidity profile. As a result, we believe that Moody's could downgrade Ford to high yield even with more cash on its balance sheet ($23.7bn ex-finco) than debt ($15.3bn ex-finco). S&P, on the other hand, appears to give more quantitative and qualitative credit to Ford's financial flexibility, which offsets some of the ratings pressure from the company's profitability challenges.

Ford has said that it is committed to investment grade ratings, but there are few levers it can pull to protect them. In our view, Ford's ratings will remain under pressure unless it improves its profitability. With regard to Moody's specifically, actions commonly taken to mitigate ratings pressure, such as reduced shareholder distributions, capex cuts, and asset sales, may have limited benefit to the rating and are therefore less likely to occur, in our view.

Potential Levers

Margin Improvement

The biggest risk to Ford's ratings is inability to improve its profitability. The EBIT margin in its automotive segment is low at 3.9% through 3Q18, with the biggest drag stemming from its loss-making segments outside of North America. The path to improving margins involves repositioning (and potentially contracting) in these markets. Ford's $11bn restructuring program is designed to help it achieve this goal, but we believe it faces execution risks given industry challenges in the European and Chinese auto sectors. In our view, Ford's ability to improve its automotive margins is partially out of its control because it is dependent on market conditions outside of the US.

Alternatives such as asset sales to exit problematic markets more quickly are unlikely, in our view, because Ford is unlikely to transfer control of its brand or nameplates to a third party. Other than Lincoln and certain other brands sold in China, all of the company's vehicles sold internationally carry the Ford name.

Dividend and Share Buyback Cut

Ford consistently returns capital to shareholders, primarily through common stock dividends, which amounted to $2.4bn, $3.4bn, and $2.6bn in 2015, 2016, and 2017, respectively. We believe that Ford remains committed to its dividend based on management's comments. One factor that we think has influenced management's perspective on the dividend is feedback from Moody's that cutting it would have limited benefit for its rating. This is consistent with Moody's view that the company's weak operating performance – not leverage, capitalization, or overall balance sheet health – is its primary ratings concern.

Reduced Capital Spending and/or Operating Expenses

Auto manufacturers generally have heavy capex burdens, which reflects the capital needed to support the regular refresh of the fleet and investment in technology and capacity. For Ford, capex has been $7.0-7.5bn over the past few years, or 5-6% of automotive revenues. The company is planning 2020 capex of roughly $7.0, at which point it will not spend beyond depreciation. That said, this capex reduction is unlikely to change Ford's credit profile materially given the minimum needed to position the company competitively. Furthermore – similar to the merits of cutting the dividend – cash conservation and balance sheet improvement are not the primary rating sensitivities for Ford.

Ability to Operate as a High Yield Business

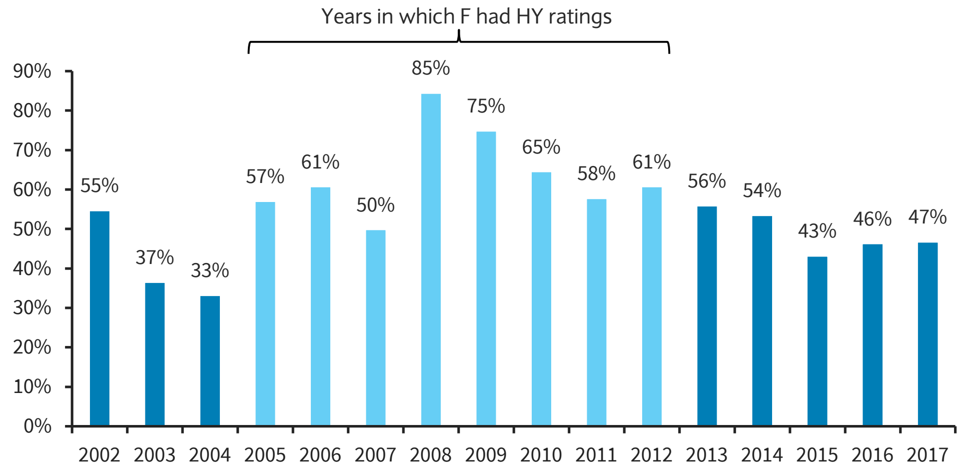
High yield ratings are not optimal for OEMs, but they do not introduce existential risk. Ford operated as a deeply high yield business from 2005 to 2012, and we believe it would be able to operate similarly with BB ratings today. The constraints from ratings relate to the cost of funding at the company's finco subsidiary, where the majority of Ford's consolidated unsecured debt resides (~85%). Clearly, funding costs are higher in the high yield market than the high grade market, which is the primary reason Ford (and the other OEMs) targets high grade ratings.

To mitigate this, Ford shifted its funding mix away from unsecured debt toward secured financing in the ABS market at tighter levels when it was rated high yield (Figure 12). We would expect it to take a similar approach if it were to be downgraded to high yield again. Although this would encumber more of its balance sheet, it would largely preserve the finco's ability to offer preferred financing terms to Ford customers, which is critical to the company's ability to manage volumes.

The unsecured debt outstanding of Ford Motor and Ford Motor Credit has no material covenants or ratings-based triggers.

FIGURE 12

Ford Motor Credit's Funding Mix Shifted to More Secured When it Was High Yield Rated



Source: Company filings, Barclays Research

AbbVie (ABBV)

Covered by Brittany Chen with an Overweight rating.

AbbVie's gross and net leverage as of September 30, 2018, were 3.4x and 2.7x, respectively, including Moody's standard adjustments. These ratios, although very comparable with standalone Celgene at 3.2x and 2.8x, respectively, have historically justified a higher rating at S&P due in large part to AbbVie's dominant scale (eg, revenues, EBITDA, market capitalization) and the biologic nature of its core franchise, Humira (ie, compared with the small molecule characteristics of Celgene's Revlimid). That said, Moody's has considered the two credit profiles to be very comparable, assigning Baa2 ratings to both, with AbbVie the latter of the two lowered to mid-BBB in 2016 following its $5.8bn acquisition of Stemcentrx.

AbbVie is currently rated Baa2/A- with stable outlooks at both agencies. Given the two-notch differential, investors have generally put greater emphasis on the credit's performance relative to parameters outlined by Moody's. Quantitatively, Moody's believes that debt-to-EBITDA sustained above 3.5x could lead to a downgrade; in addition, disappointing pipeline launches and/or earlier-than-anticipated biosimilar launches of Humira in the US could exert significant downward pressure on rating.

In our view, abrupt competition against Humira in the US will remain the most significant tail risk to this credit's investment thesis, as the product accounted for 61% of net revenues through the first nine months of 2018. Although AbbVie has now settled with seven highly sophisticated biosimilar manufacturers to date (Amgen, Samsung Bioepis, Mylan, Fresenius Kabi, Sandoz, Momenta, and, most recently, Pfizer), more challengers are likely to press forward with renewed attempts at launching their own version of the highest grossing pharmaceutical product globally – Boehringer Ingelheim is currently the most defiant company from a litigation standpoint and, despite a growing list of settlements, has resisted following suit.

Among its many arguments, Boehringer alleges that AbbVie re-patented certain manufacturing processes that were already being used in practice but had previously circumvented disclosure to the US Patent and Trademark Office, effectively being granted patents for methods that were not new inventions at the time of issuance. Market participants from all walks (eg, patent attorneys, biologic manufacturers, biosimilar manufacturers, investors) are closely monitoring the progress of this case, as it could have far-reaching implications for a nascent segment of the US pharmaceutical landscape that, so far, has underwhelmed legislative expectations set when a biosimilar pathway was first created. At the most basic level, BI contends that AbbVie used “unclean hands” to create a patent thicket and thwart emerging competitors. For its part, AbbVie has refuted the idea that an extensive patent estate, if composed of lawfully acquired patents, is not grounds for invalidating commercial protection of the covered product.

Biosimilar copies of the blockbuster launched across the EU in October 2018, but 67% of year-to-date sales were generated in the US, which is why it is critical that AbbVie retain market exclusivity in its main market through 2022. But defending Humira’s US dominance is only half of the challenge; AbbVie will also need to deliver on its pipeline in order to reduce the company’s reliance on its marquee drug.

Potential Levers

Repay Matuirties Rather than Refinance

Two key drivers of the pharmaceutical sector’s historical valuation premium relative to US credit are its robust margin and cash flow profiles, which allow even the smallest companies (eg, BIIB) to generate several billion in annual free cash flow. Prior to tax reform, most excess cash was trapped in foreign subsidiaries; now, issuers are generally able to access the majority of this balance. Accordingly, while pharma companies used to rely on the capital markets to help address debt maturities (by rolling current liabilities into out years), many now have the discretion to choose whether they want to keep extra dry powder on hand and continue to refinance their debts or whether they want to utilize that cash instead to reduce balance sheet debt, even though this would require them to access the capital markets on-demand for future funding needs. For AbbVie, repayment of current debt would lower its leverage significantly, as the company has a $3bn term loan due May 2019, EUR1.4bn in senior notes due November 2019, and $3.75bn in senior notes due May 2020.

Dividend and Share Buyback Cut

One significant use of pharma’s strong free cash flow is its shareholder-friendly capital deployment priorities. For AbbVie, that amounts to a quarterly cash dividend of $1.07/share, or $6.4bn annually. This payout represents nearly 16% of total debt as of September 30, 2018. As such, the company could free up considerable liquidity by reducing or eliminating its common dividend.

In line with the sector’s generally high targeted dividend payout ratio, pharmaceutical companies can also be aggressive with respect to share buybacks. In the past, many issuers have debt-funded their accelerated share repurchase programs. For AbbVie, in the latest twelve-month period, this activity has cost nearly $10.5bn. Should the company encounter operational challenges, pipeline setbacks, and/or unfavorable court rulings related to Humira, reducing this level of expenditure would free up a large amount of capital for management to deploy instead toward debt reduction.

Ability to Operate as a High Yield Business

In our view, access to the investment grade debt market is and will remain highly strategic for growth-oriented drugmakers, including AbbVie. This, in large part, is attributable to the industry’s inherently riskier R&D efforts, the significant lag between when an investigative drug enters the clinic and when it is ready for commercial launch, and the magnitude of earnings erosion that persistent patent challenges (through the US District Court system and the newer IPAB system) threaten to cause. These dynamics are particularly true for biotechnology companies, which differ from their large-cap pharmaceutical peers in that biotechs are generally faster growing but heavily concentrated in a smaller number of products. Accordingly, biotech companies need to pursue large, portfolio-augmenting M&A to ensure that pipelines remain robust as key franchises move through their respective product lifecycles, which necessitates a large amount of debt financing. Limited access to this funding could severely stifle the ability of large biotech companies to offset the inevitable deterioration that ensues from losses of exclusivity. Separately, a material shift in the shareholder-oriented nature of these cash-generative companies, activities that have generally been debt financed, could significantly weaken their relative attractiveness in the equity market.

Commentary from Brittany Chen. Cigna is Not Covered.

Cigna (CI)

With debt-to-EBITDA of just 3.4x, Cigna's pro forma leverage screens as modest relative to other large leveraged healthcare credits. However, because New Cigna, now the holding company for Express Scripts and Cigna Holding Company (Old Cigna), is a health insurer, leverage is assessed on a debt-to-total capitalization basis, or approximately 51% on a pro forma basis. This level of leverage screens as high relative to comparably rated credits such as Anthem (40%, Baa2/A/BBB) and even lower-rated peers such as Humana (33%, Baa3/BBB+/BBB). As a result, following the company's $20bn senior notes issuance, Cigna's senior unsecured debt ratings were lowered to Baa2/A-/BBB- from Baa1/A/BBB+ (one/one/two notches, respectively, although S&P left the combined entity on Negative outlook to reflect the potential for a one-notch downgrade over the next two years if the company underperforms its expectations).

Of the above, Fitch's credit watch resolution was the most punitive (ie, two notches), which the agency attributed to Cigna's pro forma financial leverage not only being well in excess of sensitivities for its prior rating category (35% and 1.8x) but also being in line with Fitch's speculative grade ratio guidelines for senior holding company debt under its insurance criteria. At this juncture and, in our view, because of Cigna's increased concentration in the pharmacy benefit management business within a rapidly evolving drug channel, all three agencies have explicitly identified earnings and cash flow shortfalls relative to forecasts as a key risk to further ratings downside.

To us, this shared concern indicates that a major determinant in assessing the health of Cigna's credit profile over the medium term will be PBM profit pools – specifically, whether proposed rules under review by the current administration may threaten to marginalize the traditional PBM business. Both S&P and Fitch indicate that sustained underperformance beyond year-end 2020 may lead them to lower their rating; on the other hand, Moody's has established a more generous timeline – through 2021 – for the company to demonstrate the strategic importance of this acquisition. Quantitatively, the agencies have set leverage durably above 45% and 3.0x on a debt-to-cap and debt-to-EBITDA basis, respectively, as the trigger.

Potential Levers

Dividend and Share Buyback Cut

Cigna currently pays an annual dividend of $0.04/share per share. Express Scripts, at the time of its acquisition, did not pay a cash dividend to shareholders. The combined company's dividend policy will be determined by New Cigna's board of directors. Based on the number of ESRX shares outstanding as of July 13, 2018, approximately 137mn shares of New Cigna were issued to Express Scripts stockholders; in aggregate, roughly 380mn shares of New Cigna are now outstanding. Accordingly, unless the board is planning to announce a substantial increase to its common dividend (ie, from the previous $0.04/share annually), dividends will not represent a material lever for the company (~$15mn annually).

On the other hand, capital spent on stock buybacks has, on average, been much more substantial for Cigna. For example, in full-year 2017, the company deployed $2.725bn toward repurchases. Through the first ten months of 2018, Cigna spent only $310mn on buybacks, all of which occurred in 1Q18; thereafter, the company paused its program while management worked to complete its combination with Express Scripts. On December 20, 2018, the deal was successfully closed, remitting the merged enterprise to revisit opportunistic stock repurchases under the remaining program, which totaled $2.7bn as of November 1, 2018. In recent remarks to investors, management confirmed that returning excess capital to shareholders would remain among its capital deployment priorities even throughout the first 18-24 months, during which the company would be focused on deleveraging toward a more normalized debt-to-cap ratio in the high-30% area. Accordingly, to the extent that Cigna encounters setbacks during its integration period, any expected share buybacks may be tempered to accumulate more cash for debt reduction.

Ability to Operate as a High Yield Business

We see significant challenges with Cigna's ability to operate as a high yield issuer. With more than 85% of total risk lives coming from the commercial segment, the company could face a competitive disadvantage if customers perceive it to be of worse financial strength than other managed care companies. If, because of limited access to the capital markets, it were to encounter difficulties paying customer claims, severe reputational risk could be incurred and membership loss could ensue.

United Technologies (UTX)

Covered by Andrew Keches with a Market Weight rating.

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United Technologies completed its acquisition of Rockwell Collins in November 2018, increasing its debt/EBITDA to 3.7x on a pro forma basis from 2.5x. UTX issued $11bn of debt to fund the transaction and assumed $7bn of COL borrowings, which resulted in one-notch downgrades to Baa1/BBB+ (S&P maintained a Negative outlook, Moody's is stable). After the closing of the Collins transaction, United Technologies announced that it intends to separate the company into three public entities: Otis, Carrier, and United Technologies (the remaining aerospace business).

Potential Lever

Deleveraging through Spin Proceeds

Details of the separation are scarce, but the company intends to complete the process by the end of 2020 and is targeting investment grade ratings at all three entities. Our assumption, which has not been confirmed by the agencies, is that the UTX debt, including COL and Goodrich bonds, will remain at the aerospace business, as it accounts for more than 50% of total earnings. Based on our model, this would imply debt/EBITDA of over 6x for the aerospace business in 2020, suggesting that UTX will need to pay down a significant amount of debt to maintain investment grade ratings. We see BBB as a realistic floor for ratings and think that BBB+ is achievable at the time of separation based on comments from management and the rating agencies. To achieve this, we expect UTX to repay 2018-20 bonds with cash flow at maturity and then use proceeds from the capitalization of Otis and Carrier, as well as existing cash, to redeem a substantial amount additional maturities. Considering rating agency thresholds, we think that UTX can redeem approximately $16bn of debt and maintain BBB+ ratings (~3x debt/EBITDA). The company has already committed to suspending share repurchases ahead of the separation.

Ability to Operate as a High Yield Business

As one of the largest aerospace companies in the world, we think that investment grade ratings hold strategic value for United Technologies. Aerospace supply chains are highly sensitive to small disruptions, which can lead to significant swings in working capital, making it difficult to access capital as a high yield entity. In addition, the development of new engines within the Pratt and Whitney business requires substantial capital investment and often results in short-term drags on earnings (eg, the GTF engine is estimated to have a $1.2bn "negative margin" in the early years). UTX has historically targeted investment grade ratings, specifically targeting single-A ratings as part of the Rockwell Collins transaction. Although a single-A target was not reiterated when the business split was announced, the company said that its long-term objective of strengthening the aerospace business credit rating remains unchanged.

Kinder Morgan (KMI)

Covered by Harry Mateer with an Overweight rating.

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KMI's 4.5x net debt/EBITDA target appears elevated relative to many other investment grade industrial credits, but seems more reasonable in the context of a company that is currently valued at nearly 10x forward EBITDA (through the equity) and a sector with an average EV/EBITDA multiple of 10-11x. Although lower commodity prices are, all else equal, negative for any energy-related credit, we consider KMI's pipeline-oriented business mix to have relatively low direct commodity price risk (most of the company's assets have either fee-based and/or take-or-pay revenues). Ultimately, we think that KMI's EBITDA is driven by volume trends over time, with little quarter-to-quarter cash flow volatility. The company's CO2 segment has direct oil price sensitivity, but management hedges a majority of the production, and the business now generates only slightly more than 10% of consolidated EBITDA.

Management faced fairly acute downgrade risk at Moody's several years ago, which prompted the company to cut its dividend and embark on a multi-year deleveraging initiative. As a result, we think that management has already accomplished a significant amount of balance sheet de-risking, with Kinder Morgan recently upgraded to mid-BBB at Moody's and S&P (Fitch has a positive outlook in place on KMI's BBB- rating). This reflects KMI's new leverage target of around 4.5x, down from 5.0x. Given that the rating agencies have either upgraded or are in the process of upgrading KMI's ratings, we think that there is low risk of KMI falling to high yield in the next 12 months.

Potential Levers

Dividend Cut

If KMI again faced ratings pressure, the company's current dividend policy ($1/share in 2019 and $1.25/share in 2020) would provide some flexibility if required, with 2019 dividends of approximately $2.2bn equating to 25-30% of estimated EBITDA.

Reduced Capital Spending and/or Operating Expenses

KMI's 2019 budget includes $3.1bn of growth capital spending (40% of budgeted EBITDA). In our opinion, it is difficult for Kinder Morgan to flex capital spending down materially within a calendar year given the lead time required for infrastructure projects, but over a multi-year period, there is substantial cushion available if management were to choose to pull capital spending down toward its maintenance capital requirements ($664mn in 2018).

Ability to Operate as a High Yield Business

From a business standpoint, we think that Kinder Morgan could operate as a high yield credit, given the stable nature of its cash flow and the company's ability to generate positive free cash flow if dividends and/or growth capex needs are moderated. In terms of competitive positioning, we think that an investment grade rating is helpful for securing long-term contracts with pipeline customers, but there are examples of high yield-rated pipeline issuers. That said, given that cost of capital has become a differentiating factor for midstream companies as returns (and multiples) have compressed in the past few years, we think that higher borrowing costs would impede KMI's ability to compete for growth opportunities (both organic and M&A).

In our view, the greater difficulty from high yield status would be financial. Collateral requirements would be modest (as of December 31, 2017, $31mn would need to be posted if ratings declined to high yield), but annual debt maturities are large, with at least $2bn (and as much as $3.2bn) coming due each year from 2019 to 2023. In our opinion, it would be challenging to rely on high yield market access to roll that much debt on an annual basis. KMI has a $5bn revolving credit facility ($675mn borrowed as of 3Q18) and a $4bn commercial paper program ($207mn borrowed September 30, 2018).

Energy Transfer Operating (ETP)

Covered by Harry Mateer with an Overweight rating.

In our view, ET undertook a significant transformation of its structure and financial policy in the past couple of years, with a leverage target of 4.5x (we estimate leverage of 4.8x at the end of 2019), the elimination of incentive distribution rights (IDRs) by way of merging its general and limited partner entities, and a distribution reduction that is facilitating greater cash flow retention. The partnership recently issued $4bn of debt in order to pay down bank debt at its legacy general partner entity (Energy Transfer Equity, ETE), refinance 2019 maturities, and fund roughly half of its negative free cash flow this year. Based on management's previous guidance, we expect that ET will offer to exchange legacy senior secured noteholders at ETE into new unsecured notes issued by Energy Transfer Operating, which will further simplify the structure and make all ET/ETP bonds rated equally at low-BBB.

A significant majority of ET's asset base is characterized as fee-based, although the partnership does face volumetric risk to the extent that weak commodity prices translate into reduced production activity. In the 2014-16 energy credit cycle, ET faced rising leverage as commodity prices fell, volumes weakened, and the partnership navigated the middle of a multi-year capex cycle (annual capital spending peaked at $8.6bn in 2017). With new projects ramping up that benefit from longer-term contracts and/or fee-based EBITDA, we think that ET's cash flow sensitivity to commodity prices is now lower than in the previous downcycle.

ET management has guided for 2019 growth capital spending of $5bn, with retained cash flow of $2.8-3.0bn leaving roughly $2bn to be externally financed. Consistent with the midstream sector's overall trend toward less equity issuance, our expectation is that most or all of the partnership's negative free cash flow will be debt funded; as noted above, we think that ET has already pre-funded roughly half of its need for 2019. Energy Transfer has $6bn of revolving credit facilities ($5bn expires in 2023 and $1bn is a 364-day facility that next comes up for renewal in November 2019).

Moody's maintained a negative outlook on Energy Transfer's Baa3 rating from mid-2016 until October 2018, but the agency raised its outlook to stable after the partnership revised its financial policies (higher distribution coverage), announced structural simplifications, and began new projects that had been in the works for several years. As a result, ET now has stable outlooks in place at all three agencies, and we view the prospects of a downgrade to high yield in 2019 as limited given the recent upward ratings momentum.

Potential Levers

Distributions

We estimate that ET's total distributions to third parties in 2019 will equate to 37% of EBITDA, which provides a substantial level for the partnership if required because of a change in the energy market backdrop.

Reduced Capital Spending and/or Operating Expenses

As with Kinder Morgan, we think that the ability to toggle growth capital spending lower is limited in a given year, but ET's growth capital budget of $5bn in 2019 is significantly higher than the approximately $700mn that we estimate for the year. Therefore, over a couple of years, we think that Energy Transfer could pull back on a substantial amount of growth capital spending if required, which would enable the partnership to generate positive free cash flow.

Ability to Operate as a High Yield Business

Given ET's largely fee-based EBITDA and ability to generate positive free cash flow (if capital spending and/or distributions are curtailed), from a business standpoint, we think that the partnership could operate as a high yield credit. However, we think that high yield ratings would impede management's ability to compete for large growth projects (required for growth in a company of ET's size) and acquisition opportunities against other large midstream credits, which are rated investment grade and would have a cost of capital advantage over a high yield ET.

In terms of the financial implications of a downgrade to high yield, we think that the partnership's $14bn of consolidated debt maturities from 2020 to 2024, including more than $3bn of maturing debt in four of those five years, would be difficult to roll in the high yield market. If required, we think that ET could cut its distributions and capital spending in order to use retained cash flow for a substantial portion of the maturity burden, but this would come at the expense of future EBITDA growth given the reduction in growth capex.

Analyst Certification

We, Brittany Chen, Bradford Elliott, CFA, Sandeep Gupta, Shobhit Gupta, Andrew Keches, CFA, James K Martin, Harry Mateer, Brian Monteleone, Priya Ohri-Gupta, CFA, Scott Schachter and Peter Troisi, hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

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Materially Mentioned Issuers/Bonds

ABBVIE INC, Overweight, A/CD/CE/D/J/K/L/M
Representative Bond: ABBV 3.2 05/14/26 (USD 93.04, 15-Jan-2019)

ANHEUSER-BUSCH INBEV SA/NV, Market Weight, A/CD/CE/D/E/J/K/L/M/N
Other Material Conflicts: Barclays Bank Plc and/or an affiliate is providing Investment Banking services to Efes Breweries International N.V., a 100% subsidiary of Anadolu Efes Biracilik Ve Malt Sanayii AS in relation to the business combination between Efes Russia / Ukraine businesses and AB InBev's Russian and Ukrainian entities.The ratings, price target and estimates on Anheuser-Busch Inbev SA do not incorporate this potential transaction.
Representative Bond: ABIBB 2.7 03/31/26 (EUR 108.91, 15-Jan-2019)

AT&T INC, Market Weight, A/CD/CE/D/E/J/K/L/M/N
Representative Bond: T 4 3/4 05/15/46 (USD 91.31, 15-Jan-2019)

CHARTER COMMUNICATIONS OPERATING LLC / CHARTER COMMUNICATIONS OPERATING CAPITAL, Overweight, CD/J/K/M/N
Representative Bond: CHTR 3 3/4 02/15/28 (USD 91.45, 15-Jan-2019)

CIGNA CORP, CD/CE/J/K/M/N

CVS HEALTH CORP, Rating Suspended, A/CD/CE/D/E/J/K/L/M
Representative Bond: CVS 2 7/8 06/01/26 (USD 90.91, 15-Jan-2019)

ENERGY TRANSFER OPERATING LP, Overweight, A/CD/D/J/K/L/M
Representative Bond: ETP 4 3/4 01/15/26 (USD 97.80, 15-Jan-2019)

FORD MOTOR CO, Underweight, A/CD/CE/D/E/J/K/L/M/N
Representative Bond: F 4.346 12/08/26 (USD 89.09, 15-Jan-2019)

GE CAPITAL INTERNATIONAL FUNDING CO UNLIMITED CO, Market Weight, CD/D/J/K/L/M/N
Representative Bond: GE 2.342 11/15/20 (USD 96.98, 15-Jan-2019)
Representative Bond: GE 3.373 11/15/25 (USD 91.92, 15-Jan-2019)
Representative Bond: GE 4.418 11/15/35 (USD 86.05, 15-Jan-2019)
Representative Bond: GE 5 PERP (USD 82.75, 15-Jan-2019)

GENERAL MOTORS CO, Market Weight, A/CD/CE/D/E/J/K/L/M/N
Representative Bond: GM 5 10/01/28 (USD 95.42, 15-Jan-2019)

KINDER MORGAN INC/DE, Overweight, A/CD/CE/D/J/K/L/M
Representative Bond: KMI 5 5/8 11/15/23 (USD 105.99, 15-Jan-2019)

UNITED TECHNOLOGIES CORP, Market Weight, A/CD/CE/D/J/K/L/M/N
Representative Bond: UTX 4 5/8 11/16/48 (USD 97.50, 15-Jan-2019)

VERIZON COMMUNICATIONS INC, Market Weight, A/CD/CE/D/E/J/K/L/M/N
Representative Bond: VZ 4.862 08/21/46 (USD 99.29, 15-Jan-2019)

All pricing information is indicative only. Prices are sourced from Refinitiv as of the last available closing price at the time of production of the research report, unless another time and source is indicated.

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GD: One of the analysts on the fundamental credit coverage team (or a member of his or her household) has a financial interest in the debt or equity securities of this issuer.
GE: One of the analysts on the fundamental equity coverage team (or a member of his or her household) has a financial interest in the debt or equity securities of this issuer.
H: This issuer beneficially owns more than 5% of any class of common equity securities of Barclays PLC.
I: Barclays Bank PLC and/or an affiliate is party to an agreement with this issuer for the provision of financial services to Barclays Bank PLC and/or an affiliate.
J: Barclays Bank PLC and/or an affiliate is a liquidity provider and/or trades regularly in the securities of this issuer and/or in any related derivatives.
K: Barclays Bank PLC and/or an affiliate has received non-investment banking related compensation (including compensation for brokerage services, if applicable) from this issuer within the past 12 months.
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P: A partner, director or officer of Barclays Capital Canada Inc. has, during the preceding 12 months, provided services to the subject company for remuneration, other than normal course investment advisory or trade execution services.
Q: Barclays Bank PLC and/or an affiliate is a Corporate Broker to this issuer.
R: Barclays Capital Canada Inc. and/or an affiliate has received compensation for investment banking services from this issuer in the past 12 months.
S: This issuer is a Corporate Broker to Barclays PLC.
T: Barclays Bank PLC and/or an affiliate is providing equity advisory services to this issuer.
U: The equity securities of this Canadian issuer include subordinate voting restricted shares.
V: The equity securities of this Canadian issuer include non-voting restricted shares.

Explanation of the Barclays Research Corporate Credit Sector Rating System

Overweight (OW):
For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to exceed the six-month excess return of the relevant index.
For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to exceed the six-month total return of the relevant index.

Market Weight (MW):
For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be in line with the six-month excess return of the relevant index.
For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be in line with the six-month total return of the relevant index.

Underweight (UW):
For sectors rated against the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or the Bloomberg Barclays EM USD Corporate and Quasi-Sovereign Index, the analyst expects the six-month excess return of the sector to be less than the six-month excess return of the relevant index.
For sectors rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index, the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials, the Bloomberg Barclays Pan-European High Yield Finance Index or the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index, the analyst expects the six-month total return of the sector to be less than the six-month total return of the relevant index.

Sector definitions:
Sectors in U.S. High Grade Research are defined using the sector definitions of the Bloomberg Barclays U.S. Credit Index and are rated against the Bloomberg Barclays U.S. Credit Index.
Sectors in U.S. High Yield Research are defined using the sector definitions of the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index and are rated against the Bloomberg Barclays U.S. High Yield 2% Issuer Capped Credit Index.

Sectors in European High Grade Research are defined using the sector definitions of the Bloomberg Barclays Pan-European Credit Index and are rated against the Bloomberg Barclays Pan-European Credit Index.
Sectors in Industrials and Utilities in European High Yield Research are defined using the sector definitions of the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials and are rated against the Bloomberg Barclays Pan-European High Yield 3% Issuer Capped Credit Index excluding Financials.
Sectors in Financials in European High Yield Research are defined using the sector definitions of the Bloomberg Barclays Pan-European High Yield Finance Index and are rated against the Bloomberg Barclays Pan-European High Yield Finance Index.

Sectors in Asia High Grade Research are defined on Barclays Live and are rated against the Bloomberg Barclays EM Asia USD High Grade Credit Index.
Sectors in Asia High Yield Research are defined on Barclays Live and are rated against the Bloomberg Barclays EM Asia USD High Yield Corporate Credit Index.

Sectors in EEMEA and Latin America Research are defined on Barclays Live and are rated against the Bloomberg Barclays EM USD Corporate and Quasi Sovereign Index. These sectors may contain both High Grade and High Yield issuers.

To view sector definitions and monthly sector returns for Asia, EEMEA and Latin America Research, go to https://live.barcap.com/go/research/EMSectorReturns on Barclays Live.

Explanation of the Barclays Research Corporate Credit Rating System

For all High Grade issuers covered in the US, Europe or Asia, and for all issuers in Latin America and EEMEA, the credit rating system is based on the analyst's view of the expected excess return over a six-month period of the issuer's index-eligible corporate debt securities* relative to the expected excess return of the relevant sector, as specified on the report.

Overweight (OW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to exceed the six-month expected excess return of the relevant sector.
Market Weight (MW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be in line with the six-month expected excess return of the relevant sector.
Underweight (UW): The analyst expects the six-month excess return of the issuer's index-eligible corporate debt securities to be less than the six-month expected excess return of the relevant sector.
Rating Suspended (RS): The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.
Coverage Suspended (CS): Coverage of this issuer has been temporarily suspended.
Not Covered (NC): Barclays' fundamental credit research team does not provide formal, continuous coverage of this issuer and has not assigned a rating to the issuer or its debt securities. Any analysis, opinion or trade recommendation provided on a Not Covered issuer or its debt securities is valid only as of the publication date of this report and there should be no expectation that additional reports relating to the Not Covered issuer or its debt securities will be published thereafter.

For all High Yield issuers (excluding those covered in EEMEA or Latin America), the credit rating system is based on the analyst's view of the expected total returns over a six-month period of the rated debt security relative to the expected total return of the relevant sector, as specified on the report.

Overweight (OW): The analyst expects the six-month total return of the debt security subject to this rating to exceed the six-month expected total return of the relevant sector.
Market Weight (MW): The analyst expects the six-month total return of the debt security subject to this rating to be in line with the six-month expected total return of the relevant sector.
Underweight (UW): The analyst expects the six-month total return of the rated debt security subject to this rating to be less than the six-month expected total return of the relevant sector.
Rating Suspended (RS): The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.
Coverage Suspended (CS): Coverage of this issuer has been temporarily suspended.
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Where a recommendation is made at the issuer level, it does not apply to any sanctioned securities, where trading in such securities would be prohibited under applicable law, including sanctions laws and regulations.

*In EEMEA and Latin America (and in certain other limited instances in other regions), analysts may occasionally rate issuers that are not part of the Bloomberg Barclays U.S. Credit Index, the Bloomberg Barclays Pan-European Credit Index, the Bloomberg Barclays EM Asia USD High Grade Credit Index or Bloomberg Barclays EM USD Corporate and Quasi Sovereign Index. In such cases the rating will reflect the analyst's view of the expected excess return over a six-month period of the issuer's corporate debt securities relative to the expected excess return of the relevant sector, as specified on the report.

Distribution of ratings assigned by Barclays Corporate Credit Research at the issuer level:
24% have been assigned an Overweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Buy rating; 62% of issuers with this rating category are investment banking clients of the Firm; 77% of the issuers with this rating have received financial services from the Firm.
52% have been assigned Market Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 70% of issuers with this rating category are investment banking clients of the Firm; 82% of the issuers with this rating have received financial services from the Firm.
24% have been assigned an Underweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Sell rating; 67% of issuers with this rating category are investment banking clients of the Firm; 82% of the issuers with this rating have received financial services from the Firm.

Explanation of the Barclays EM Sovereign Credit Issuer Rating System
Overweight (OW):
The analyst expects the six-month excess return of the country's index eligible bonds to exceed the six-month excess return of the Bloomberg Barclays EM USD Sovereign Index.
Market Weight (MW):
The analyst expects the six-month excess return of the country's index eligible bonds to be in line with the six-month excess return of the Bloomberg Barclays EM USD Sovereign Index.
Underweight (UW):
The analyst expects the six-month excess return of the country's index eligible bonds to be less than the six-month excess return of the Bloomberg Barclays EM USD Sovereign Index.
Rating Suspended (RS):
The rating has been suspended temporarily due to market events that make coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity.

Distribution of ratings assigned by Barclays Emerging Markets Sovereign Research at the issuer level:
27% have been assigned an Overweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Buy rating; 30% of issuers with this rating category are investment banking clients of the Firm; 80% of the issuers with this rating have received financial services from the Firm.
35% have been assigned Market Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 15% of issuers with this rating category are investment banking clients of the Firm; 62% of the issuers with this rating have received financial services from the Firm.
38% have been assigned an Underweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Sell rating; 50% of issuers with this rating category are investment banking clients of the Firm; 100% of the issuers with this rating have received financial services from the Firm.

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