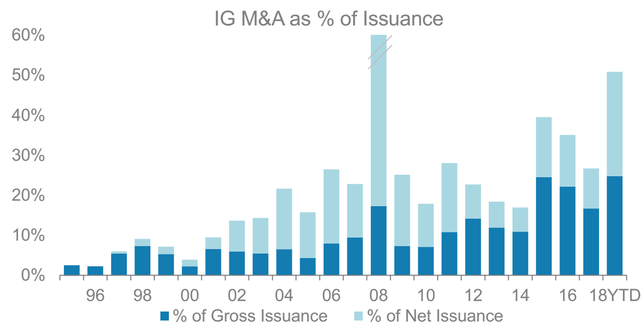
through the end of the year (more in the last section below) shows that M&A issuance in 2018 will likely exceed 2017's pace by over 25% and could reach an outright record (Exhibit 6). Even when normalized for the overall level of issuance, M&A-related financings are still significant, currently representing about 25% of gross and 51% of net supply so far this year (Exhibit 7).

Exhibit 6: Total IG M&A-related supply could reach record levels in 2018

Source: Morgan Stanley Research, S&P LCD, Bloomberg

Exhibit 7: As a % of total gross or net supply, M&A issuance looks even more substantial

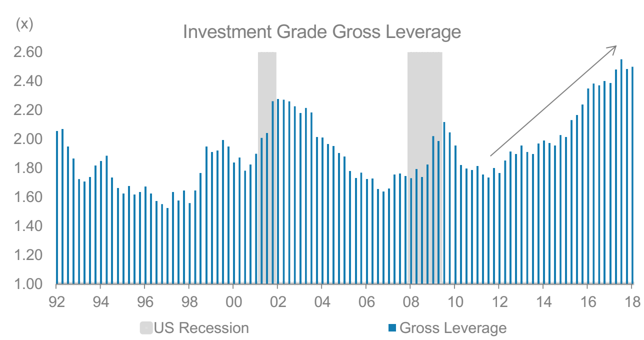


Source: Morgan Stanley Research, S&P LCD, Dealogic, Bloomberg

Impact on Fundamentals

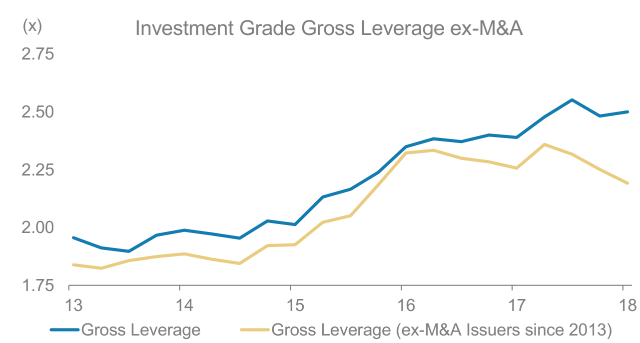
Leverage for our investment grade universe has been at or near record highs for the past few quarters and has increased dramatically over the course of this cycle. As we have discussed many times in the past, current leverage levels are particularly concerning, given leverage generally peaks in or after a recession, which means when the economy does turn, it is likely going even higher (Exhibit 8). The buildup in IG leverage over the course of this cycle has coincided with slow growth and extremely accommodative central bank policy, encouraging substantial debt capital structures. These same factors also made it highly attractive for corporates to fund M&A with debt, which has clearly contributed to the buildup in IG leverage. For example, simply excluding any issuers in our database that have funded M&A with debt (since 2013) shows median gross leverage at lower levels, especially in recent quarters (Exhibit 9).

Exhibit 8: IG leverage is near all-time highs, despite the fact that the economy is still healthy; leverage typically rises most in recessions



Source: Morgan Stanley Research, Bloomberg

Exhibit 9: Excluding issuers who have financed M&A with debt, leverage has still risen but looks better

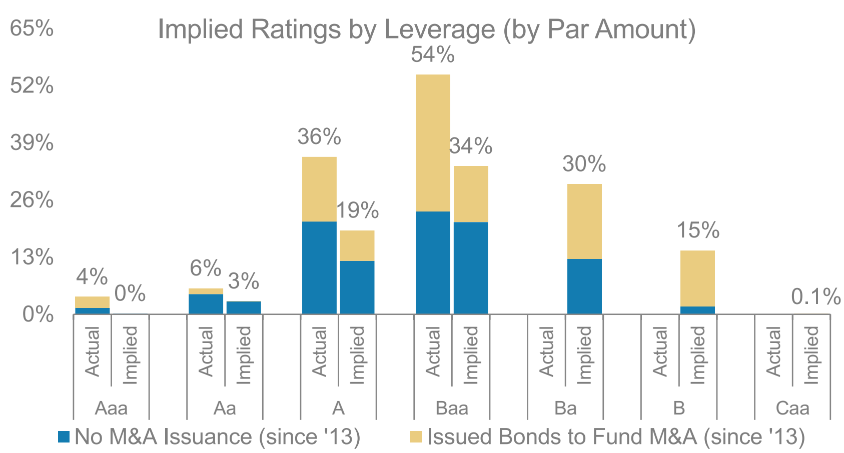


Source: Morgan Stanley Research, Bloomberg, S&P LCD

To examine these dynamics a bit further, we repeated and refined our leverage-implied ratings analysis first detailed in Corporate Credit Research: Living the HY-Life (2017.07.28). Here, we calculate the "implied" rating for each non-financial US-based IG issuer assuming leverage as the sole criteria for a rating. In other words, we compare each IG issuer's current leverage level against the thresholds that define Moody's rating categories for leverage (unique to each sector). Compared to the last time we ran this analysis in 1Q17 – which showed ~30% of IG par value at HY-like leverage levels – now ~45% of this universe, by par, has leverage consistent with a high yield rating (Exhibit 10). This meaningful increase has been driven mainly by large issuers whose leverage (as defined and adjusted by Moody's) is now consistent with a HY rating (again, ignoring other factors that go into a rating), such as AT&T, CVS Health, Pepsi, Qualcomm, Northrop Grumman, Lockheed Martin, and Kroger (representing over $220 billion in index debt), to name a few. For comparison, a simplified version of this analysis shows that just 8% of the universe had an implied HY rating much earlier in this cycle in 2011.

If we break out the issuers who have funded M&A with new debt over the last five years, we see that they account for around two-thirds of issuers that fall in the "implied HY" bucket, showing the propensity for M&A transactions to add significant credit risk.

Exhibit 10: ~45% of US IG non-fins have leverage consistent with a HY rating, up from ~30% in 1Q17 and 8% in 2011, skewed by M&A deals

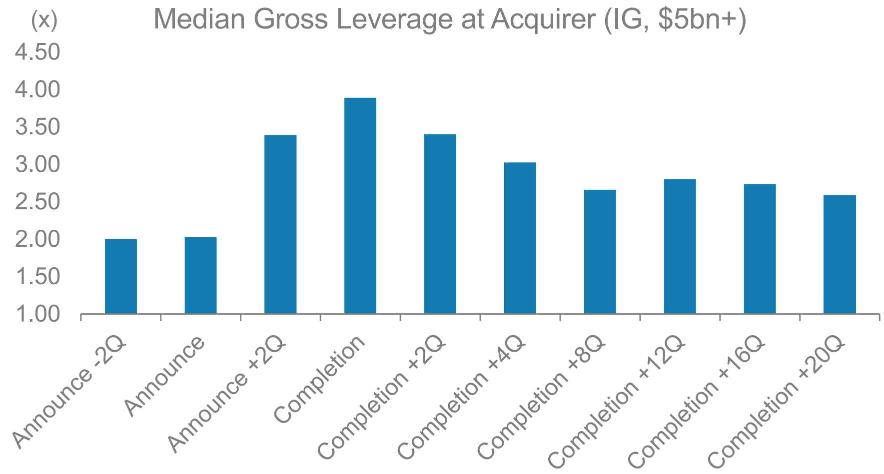


Source: Morgan Stanley Research, Moody's, S&P LCD
Note As of most recent financials available since YE2017

Issuers have been able to justify this incremental leverage for various reasons, such as scale of business, low rates, and most importantly, because acquirers have pledged to delever quickly or at least maintain an IG rating. Of course, the key questions: Have issuers actually delevered over time, and how realistic are these pledges to cut leverage going forward?

On the first point, we have observed that leverage increases at the completion of an acquisition and does generally decline over time. However, more importantly, most companies that undergo M&A ultimately do not get back to "pre-deal" leverage levels (Exhibit 11). For example, in a cross-section of over 100 M&A transactions of announced value $5bn+, where the acquirer was initially IG-rated, we observed a median leverage increase of ~2x from announcement to completion (from ~2x to ~4x). Additionally, even after 5 years, the median leverage level for this cohort was still over ~2.50x – a full half turn of incremental leverage (which is notable for a large universe of IG companies).

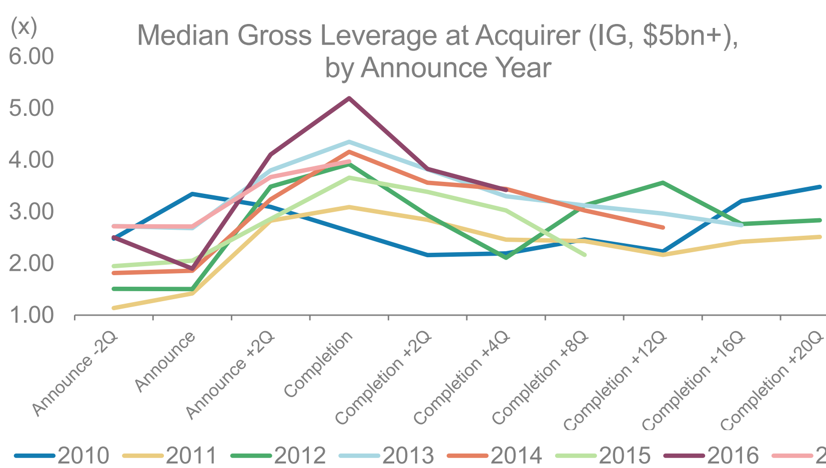
Exhibit 11: Even after 5 years, median leverage of IG acquirers is higher than pre-acquisition



Source: Morgan Stanley Research, Bloomberg
Note: Shows completed deals >=$5bn with IG rating at acquirer pre-acquisition

Now, leverage for our broader universe has generally trended higher over time, which does impact the aggregate numbers. For example, median leverage pre-announcement for deals in 2017 was 2.72x, compared to 1.13x in 2011. However, even controlling for transaction year, Exhibit 12 shows that M&A is still translating to higher leverage. The only difference is that leverage is jumping to even higher levels on completion currently vs. earlier in this cycle, in part given higher starting leverage for companies today.

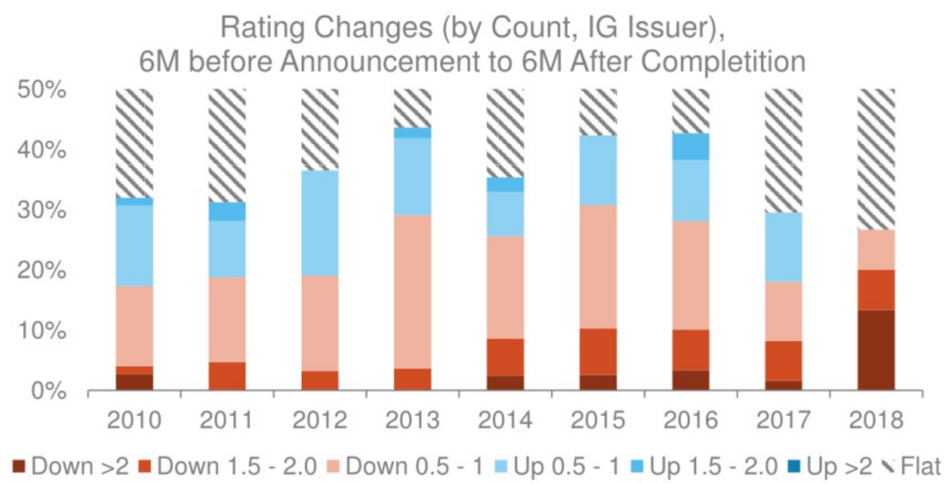
Exhibit 12: Leverage keeps creeping higher both pre- and post-M&A



Source: Morgan Stanley Research, Bloomberg
Note: Shows completed deals >=$5bn with IG rating at acquirer pre-acquisition

Clearly, in some cases, the increase in leverage of these transactions has already flown through to ratings. Looking at over 700 deals (with announced value of at least $1 billion) since 2010, which started as IG, 24% of acquirers on average were downgraded by at least one notch at one agency over the 6 months prior to the deal to the 6 months after completion (Exhibit 13). And showing the increased aggressiveness of transactions in 2018 YTD, 27% of deals this year have been downgraded, 73% of deals have maintained a steady rating, and no transactions have been upgraded, vs. at least some upgrades in all prior years.

Exhibit 13: Not surprisingly, M&A tends to lead to more downgrades than upgrades, clearly the case YTD



Source: Morgan Stanley Research, Bloomberg
Note: Shows completed deals with announced value >=$1bn with IG rating at acquirer pre-acquisition

Hence, while leverage does trend lower in the years after an M&A deal, on average it does not get back to pre-transaction levels, and that is after rising substantially on deal completion. Ultimately, expectations for quick deleveraging are often disappointed. For example, we focused on just 10 of the largest debt-financed M&A transactions in the last 5 years (based on the largest bond deals for completed transactions, with publicly available company statements on leverage targets post-acquisition) and looked at the leverage metrics these companies achieved vs. their prior commentary in earnings, calls, and press releases. We found that nearly all of the acquirers failed to reach their stated leverage target or took longer to do so than the timeline posited at announcement of the transaction. Indeed, deleveraging goals often assumed too-robust earnings trends going forward. These issuers ended up facing a mix of unexpected headwinds, both on a sector and macro level.

The key point to remember is that Exhibit 11, Exhibit 12, and Exhibit 13 all show the leverage trends of M&A transactions over the course of this cycle – a time when the economy has been growing continuously and when monetary policy has been for the most part very accommodative. Even with this macro backdrop, companies have fallen short of deleveraging goals on average.

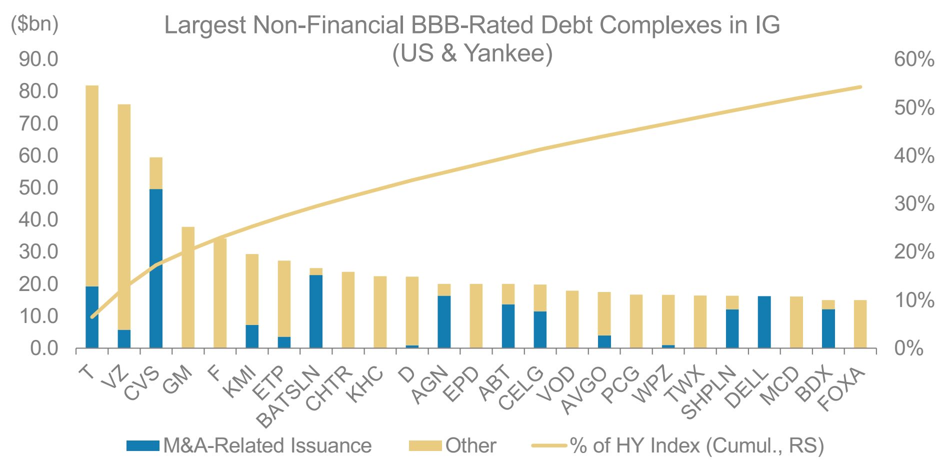
The ability to meet deleveraging targets will only get harder, in our view: Monetary policy is getting tighter, and the likelihood of a recession at some point in the next few years grows as we get later and later in this cycle. Combined with the fact that starting leverage for M&A transactions is even higher today, we see current late-cycle M&A as particularly risky with negative long-term implications for credit markets broadly.

Technical Impact of M&A

Index Composition

The IG credit market has grown significantly over the last 10 years and is now quite low-rated, with nearly 50% of the index BBB rated, a theme that we have discussed in detail (see Corporate Credit Research: Living the HY-Life, 2017.07.28). The non-financial portion of this debt totals $3.5 trillion, of which $1.8 trillion (51%) is BBB. Looking at the 25 biggest BBB-rated capital structures alone, we note that their cumulative debt load ($685 billion) is about as large as 50% of the High Yield index. Of these, 17 have issued at least $1 billion to fund M&A with debt over the last several years and, in several cases, the M&A financing represents a majority of the issuer's debt capital stack.

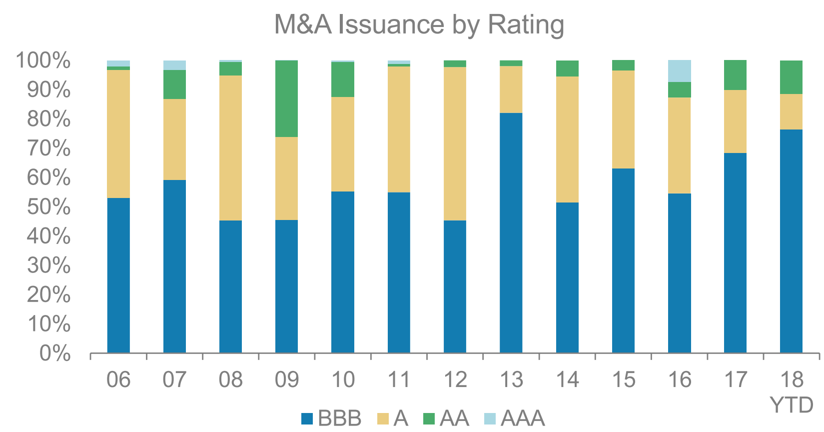
Exhibit 14: The largest 25 BBB issuers are over half as big as the full HY index, and in many cases have issued debt to fund M&A



Source: Morgan Stanley Research, FTSE Fixed Income LLC, Bloomberg, ICE Indices

We see the rise of BBB-rated debt reflected in new issuance as well, with the proportion of BBB-rated M&A issuance increasing over the last several years (Exhibit 15). For example, year to date, 76% of M&A issuance has been BBB rated, meaning that not only has M&A depressed ratings post-completion, but an increasing portion of M&A and accompanying financing is also coming from already lower-rated companies.

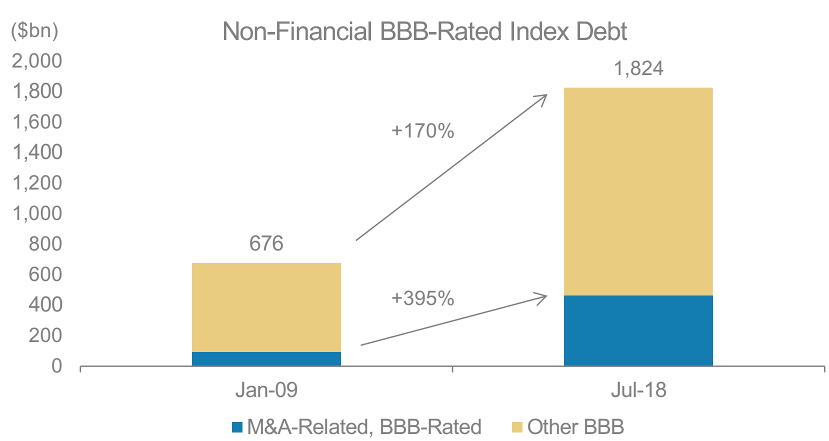
Exhibit 15: A greater percentage of M&A is coming from BBB rated companies



Source: Morgan Stanley Research, S&P LCD, Bloomberg
Note: Uses only Moody's rating at issue prior to 2012 and average rating of Moody's and S&P thereafter

Looking at the impact of M&A on the index over the course of this cycle, in Exhibit 16 we compare today's IG universe to that at the beginning of 2009. For non-financials overall, the index today includes $707 billion of bonds with stated use-of-proceeds as acquisition-financing, representing 20% of non-fin bonds in the index. At the beginning of 2009, such bonds totaled only $150 billion and represented just 11% of non-fins. Hence, bonds outstanding in this index that were originally issued to fund M&A have increased by 369% in this cycle while the total IG index has grown by "just" 140% over the same time period. Looking at BBB-rated bonds specifically, M&A-related issues grew from $93 billion in 2009 to $462 billion today, a change of 395% compared to overall non-financial BBB growth of 170%.

Exhibit 16: An increasing proportion of BBB-rated debt can be linked to M&A



Source: Morgan Stanley Research, FTSE Fixed Income LLC, Bloomberg
Note: M&A-related category only reflects bonds that have publically disclosed use of proceeds

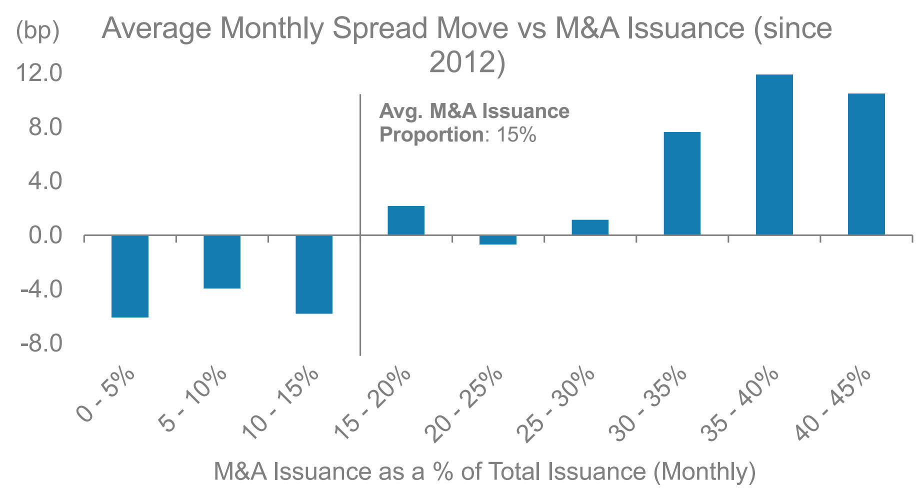
Putting this all together, we see that not only has M&A contributed meaningfully to the growth in the IG index, but it has also shifted more of that debt to lower ratings and is doing so at an increasing pace. Again, we see this as one of the drivers that could contribute to elevated fallen angel activity when the broader credit cycle turns, a theme we have discussed in detail in past research (see Corporate Credit Research: Living the HY-Life, 2017.07.28).

Pricing

Jumbo M&A issuance has also impacted supply/demand dynamics in credit markets. To be clear, we are in the camp that investors often put too much weight on supply expectations in driving views on where credit spreads are headed. Clearly, supply is just one factor that drives spreads and, in many cases, the relationship between issuance and excess returns is quite weak. For example, 2017 was a record supply year and IG spreads steadily tightened nearly all year. In 2018, IG supply is down ~11% YTD, and spreads have widened most of the year.

That said, supply does matter, and we find that M&A-related issuance can have an impact, especially at the extremes. For example, as we show in Exhibit 17, in months where the proportion of issuance attributable to M&A is high, spreads tend to widen. Specifically, when M&A-related issuance represents over 30% of overall supply (more than double the average proportion), spreads on the month widened by 7-11bp on average.

Exhibit 17: Spreads widen in months with high M&A-related supply



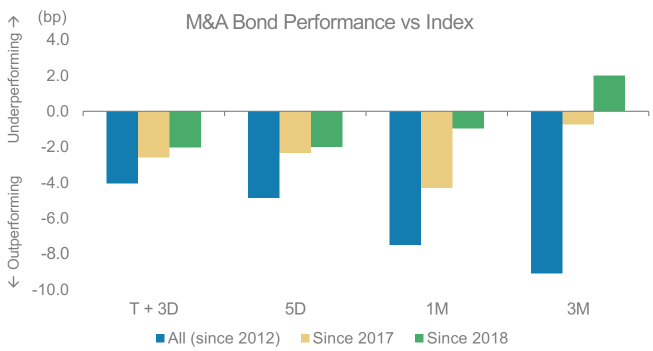
Source: Morgan Stanley Research, FTSE Fixed Income LLC, S&P LCD, Dealogic

This spread performance is in part due to the sheer size of M&A-related transactions in this cycle. For example, since 2012, there have been 30 M&A deals over $10 billion in size, and 73 over $5 billion. These deals are generally well-telegraphed and spreads for the issuers tend to widen in expectation of the new issuance, both on account of transactions fundamentals (lower credit quality), but also in anticipation of the elevated new issue concessions that issuers have to pay to entice demand. As a result, these M&A deals have subsequently tended to perform well in the secondary markets.

Focusing on deals since 2012, bonds issued in M&A financings generally outperformed the index by 7bp in the first month after issuance (Exhibit 18). However, we note that more recently, these deals have tended to outperform by a smaller margin and in 2018 to date, M&A-related deals have actually underperformed the market in the three months after issuance. Granted, overall performance is still not poor, but the market's reward for digesting these financings seems to be declining. This dynamic could be due in part to the more aggressive nature of recent deals, and in part due simply to a much weaker flow environment in credit markets so far this year.

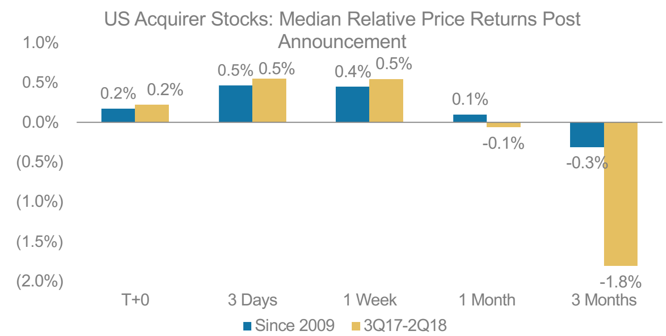
We see a similar dynamic in the equity performance of acquirers as well. As our colleagues in equity research show in a recent note (see Quantitative Equity Research: US M&A Activity: Mixed Signals in the Second Quarter, 2018.07.26), acquirer stocks initially outperform the market, but underperform in the three months after announcement (Exhibit 19), particularly for deals in the past year.

Exhibit 18: Performance of M&A bond deals has deteriorated in recent years...



Source: Morgan Stanley Research, FTSE Fixed Income LLC, S&P LCD
Note: Shows median of bond spread change less index spread change over the same time period

Exhibit 19: ...mirroring equity performance for acquirer stocks

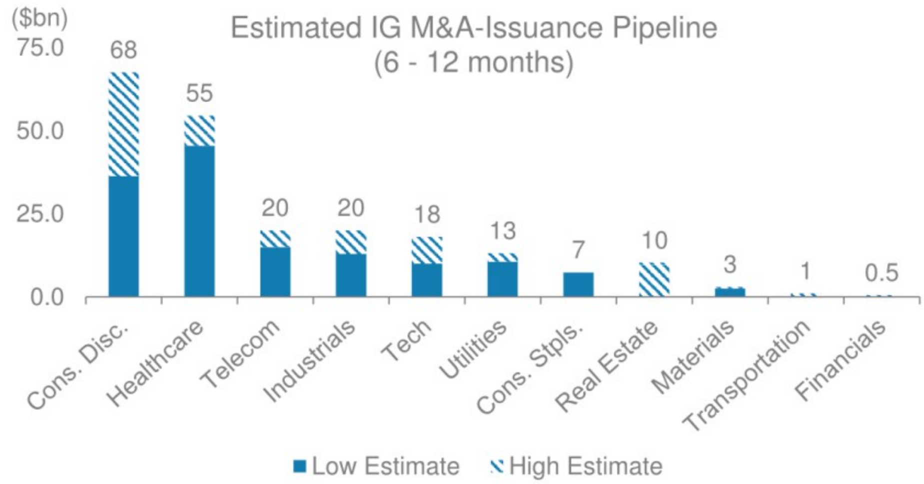


Source: ClariFi, Factset, Morgan Stanley Research

Looking Ahead

Assuming financial conditions do not tighten too aggressively, the economic backdrop and current bullish readings across a wide array of business sentiment indicators point to further late-cycle M&A activity. However, just based on already-announced transactions and company statements, we estimate $100-150 billion of M&A-related issuance still to come in the second half of 2018 and into the first part of 2019, with upside risk of potentially over $200 billion still to come, dependent on the outcome of key transactions. This issuance is difficult to time, as issuers generally have bridge loans in place that they can opportunistically refinance into permanent capital before or after an acquisition closes. However, even the low end of our estimate would put the total for M&A-related issuance close to its record high of $284 billion reached in 2015, while M&A-related volume would likely account for the highest proportion of overall supply post-crisis. Exhibit 20 shows our estimate for the pipeline of IG bond deals based on publicly available statements and bridge loans currently outstanding.

Exhibit 20: M&A issuance pipeline over the next 6-12 months



Source: Company filings, Morgan Stanley Research
Note: Shows low and high estimates of new bonds to be issued to finance M&A over the next 6 - 12 months, assuming transactions close

Ultimately, whether or not the pace of deal-making continues, M&A already completed in this cycle has contributed to the decline in ratings and fundamental credit quality in the IG market and will likely impact the magnitude of the next credit cycle. Even in a very supportive environment, made possible by healthy economic growth and unprecedented easing by global central banks for nearly a decade, corporates have struggled to hit deleveraging targets post-M&A transactions. Assuming added risks from tightening Fed policy, the reasonable likelihood of a downturn at some point in the next few years, and with even higher starting leverage levels, the fundamental and macro headwinds going forward will only grow.

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	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
STOCK RATING CATEGORY	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
Overweight/Buy	**1164**	**37%**	**306**	**41%**	**26%**	**544**	**38%**
Equal-weight/Hold	**1347**	**43%**	**359**	**48%**	**27%**	**648**	**46%**
Not-Rated/Hold	**49**	**2%**	**4**	**1%**	**8%**	**7**	**0%**
Underweight/Sell	**546**	**18%**	**75**	**10%**	**14%**	**215**	**15%**
TOTAL	**3,106**		**744**			**1414**	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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