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Contacts

Harold Steiner, CFA +1.212.553.2152
*Analyst*
harold.steiner@moodys.com

Joaquin Sanchez +1.212.553.9593
*Associate Analyst*
joaquin.sanchez@moodys.com

Inna Bodeck +1.212.553.7288
*Analyst*
inna.bodeck@moodys.com

Margaret Taylor +1.212.553.0424
*Senior Vice President*
margaret.taylor@moodys.com

Russell Solomon +1.212.553.4301
*Associate Managing Director*
russell.solomon@moodys.com

Non-financial companies - Americas

# Concentration risk is something to watch in still-accommodative financing environment

» **Credit erosion can be both abrupt and significant when a company loses a key customer or supplier.** Since late 2017, more than half a dozen low-rated companies have experienced multi-notch rating downgrades following the loss of an important customer or supplier relationship. The downgrades point to the criticality of concentration risk among companies rated single-B or lower that rely heavily on a small number of customers or suppliers. Even so, while an assessment of concentrated business exposures is a core tenet of our credit analysis, other factors such as liquidity, size and market importance often serve as mitigating considerations.

» **High financial risk exacerbates the adverse impact of business concentration.** Companies positioned at the lower end of the rating scale are typically smaller, less diverse and less competitive than higher-rated companies, while also shouldering high debt burdens. These dynamics can complicate efforts to adjust to the departure of a top customer or supplier. The most important consequence of a major customer or supplier loss is the resulting heightened mismatch of a company's reduced earnings and cash flows relative to its unchanged debt service requirements.

» **Leverage has weakened to pre-crisis highs.** Narrow spreads coupled with low interest rates have allowed more levered companies a better ability to service their growing debt stacks, as broadly improving interest coverage metrics can attest. Nonetheless, higher leverage and associated underlying financial risk leave companies with less flexibility to adjust to operational challenges, particularly the significant disruption that can occur following the loss of a key partner.

» **Median metrics for B2- and B3-rated companies are broadly similar, regardless of concentration.** This finding is unsurprising in consideration of many other factors unrelated to concentration that drive our analysis of credit. Nevertheless, higher leverage and reduced cash flows of concentrated B2- and B3-rated companies supports our view that key partner losses will continue to result in significant debt to earnings mismatches, a trend that will likely worsen as the economic cycle slows further.

» **We reviewed over 1,000 single-B rated non-financial corporates and found that 14% have noteworthy concentration risk.** Many of these companies are also highly levered. All else being equal, companies with debt-laden balance sheets have greater financial risk and less flexibility to absorb abrupt operational disruptions. An adverse change in business relationships would leave them exposed to potentially meaningful credit erosion.

## Credit erosion can be abrupt and significant after loss of key customer or supplier

Since late 2017, more than half a dozen low-rated companies have experienced significant erosion of their credit profiles following the loss of an important customer or supplier relationship. Most of these adverse developments have been accompanied by multi-notch rating downgrades, followed by defaults in two cases. The downgrades point to the criticality of concentration risk among companies rated single-B or lower that rely heavily on a small number of customers or suppliers. Given their significant debt service requirements, companies at the low end of the rating scale are particularly vulnerable to concentration risk because they are ill-equipped to weather the sudden loss of earnings and cash flows that results from the departure of a key customer or supplier.

Even so, concentration is often a function of supply chain and industry structure, and is common in sectors such as automotive, aerospace & defense, and consumer products, for example. Certain such industries are more narrowly defined and have been consolidated over many years, rendering concentrated exposures almost inevitable. And so even more creditworthy, higher rated companies often remain exposed to the adverse impact of concentration risk. But other factors such as liquidity, size and market importance can and often do serve as mitigating considerations. An assessment of concentrated business exposures is a core tenet of our credit analysis. Among other qualitative and quantitative factors, our ratings reflect an assessment of what we believe to be the likelihood of a key customer or supplier loss, and the resulting impact on a company's earnings and cash flows. In assessing concentration risk, we broadly evaluate the length and strength of business relationships and conduct sensitivity analyses to gauge operational resilience.

The two companies that defaulted last year illustrate how detrimental the combination of concentration risk and high leverage can be. American Tire Distributors Inc. is a leading tire wholesaler that suffered the loss of two (out of four) key suppliers of premium tires in 2018 – Goodyear Tire & Rubber Company (Ba2 negative) and Bridgestone Corporation (A2 stable). Products from these two large global manufacturers accounted for about 25% of American Tire's revenue base. Despite the company's important role in the US tire distribution market, its significant debt burden and high fixed cost structure were not amenable to materially reduced volumes and related sales levels. As such, a restructuring of the company's significant debt obligations became necessary, with a bankruptcy filing occurring roughly six months after the loss of Goodyear and Bridgestone. On December 21, 2018, American Tire completed its recapitalization process, equitizing $1.05 billion of its senior subordinated notes and extending the maturity of its term loan.

Tweddle Group, a developer of service manuals for automobiles, is another example of how quickly creditworthiness can erode after the disruption of important business relationships. The company opted to restructure its obligations after learning that it was losing Fiat Chrysler Automobiles N.V. (Ba2 positive), which as its largest customer comprised roughly 40% of total revenue. Facing the prospect of such a meaningful decline in associated earnings and cash flow, the company preemptively restructured its debt in order to have a better chance at completing a turnaround that would allow it to continue as a going concern.

Exhibit 1

**Major customer or supplier losses can quickly and significantly weaken corporate credit profiles**

**Ratings impact on companies hurt by the loss of a large customer or supplier**

| Issuer | Date of downgrade/review | Event | Pre-event rating | Post-event rating | Number of notches | Defaulted? |
|---|---|---|---|---|---|---|
| Affinion Group, Inc. | 12/12/2018 | Customer Loss | Caa1 | Caa3 | 2 | No |
| Lannett Company, Inc. | 8/20/2018 | Supplier Loss | B2 | B3 | 1 | No |
| ASP MCS Acquisition Corp. | 6/18/2018 | Customer Loss | B2 | Caa1 | 2 | No |
| PFS Holding Corporation | 4/20/2018 | Customer Loss | Caa1 | Ca | 3 | No |
| American Tire Distributors, Inc. | 4/17/2018 | Supplier Loss | B3 | Caa2 | 2 | Yes |
| Tweddle Group, Inc. | 4/9/2018 | Customer Loss | B2 | Caa1 | 2 | Yes |
| APTIM Corp. | 12/20/2017 | Customer Loss | B3 | Caa2 | 2 | No |
| Mattel, Inc. | 12/11/2017 | Customer Loss | Baa3 | B1 | 4 | No |

*Source: Moody's Investors Service*

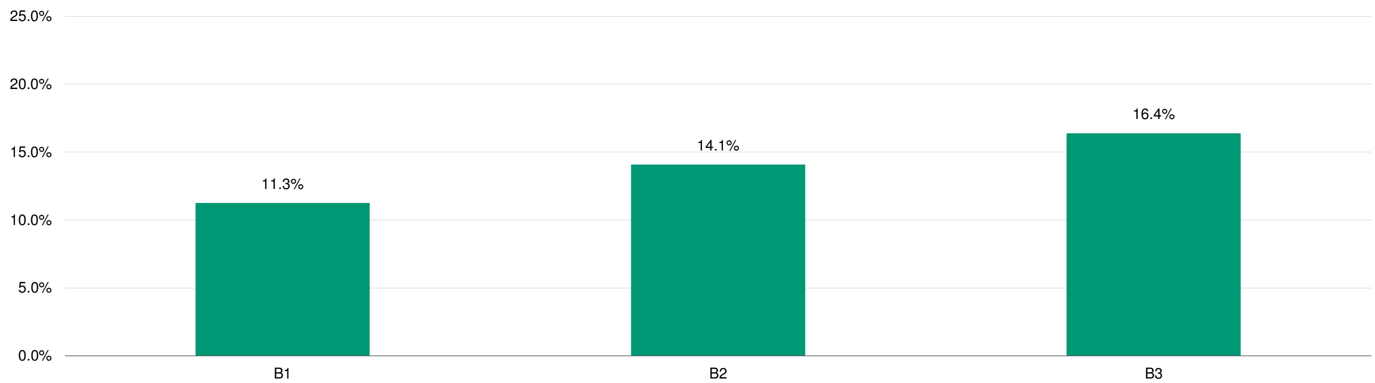
## High financial risk exacerbates the adverse impact of concentration risk

Companies positioned at the lower end of the rating scale are typically smaller, less diverse and less competitive than higher-rated companies, while also shouldering high debt burdens. In addition to limiting a company's financial strength, these dynamics can also complicate efforts to adjust to the departure of a top customer or supplier. The most important consequence of a major customer or supplier loss for these companies – and ultimately the leading driver of our ensuing rating actions – is the resulting heightened mismatch of their reduced earnings and cash flows relative to their unchanged debt service requirements. Hence, comparatively small companies with both high concentration and high leverage tend to be rated lower, as seen in Exhibit 2.

Exhibit 2

**Customer concentration can be more pronounced (and impactful) for less creditworthy companies**

**Percentage of issuers in a given rating category that have noteworthy customer concentration[1]**




[1] As cited in Moody's published research

*Source: Moody's Investors Service*

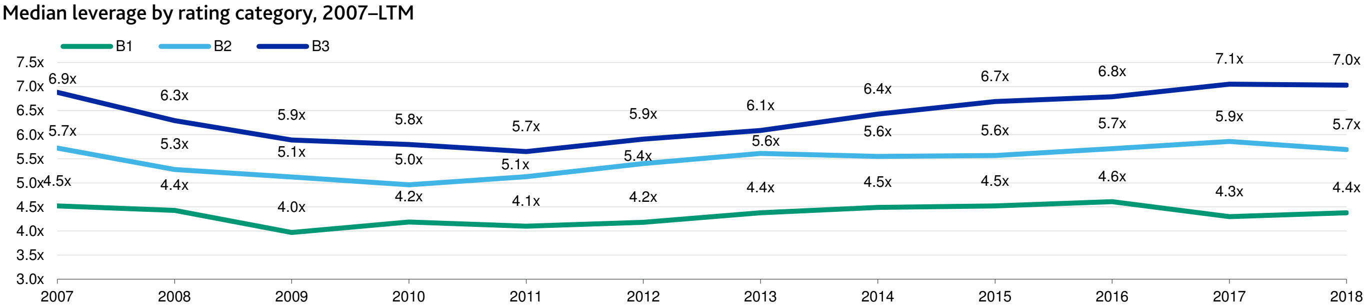
## Leverage metrics have weakened to pre-crisis highs

Borrower friendly market conditions, growth in private equity, and low rates and spreads have allowed companies to take on increasingly significant amounts of debt, resulting in a weaker ratings distribution (see Leveraged finance - US: Convergence of bonds and loans sets stage for worse recoveries in the next downturn). In the North American speculative-grade rated universe, more companies than ever (64% as of 2018, versus 47% in 2006) are rated B2 or lower, and 44% of first-time issuers were rated B3 in 2018. Median leverage and cash flow metrics for companies rated B2 and B3 – the proverbial “sweet spot” for these mostly financial sponsor-backed companies – have deteriorated to pre-crisis levels not seen since 2007. This oftentimes leaves little room for earnings deterioration, be it from customer/supplier losses, operational missteps or an economic downturn. While median debt/EBITDA has also risen among Baa-rated companies during the same period, improvements in scale, profitability and interest coverage have mitigated the impact of higher leverage (see Nonfinancial Corporates - US: Credit strengths of Baa-rated companies mitigate risks of higher leverage). As seen in Exhibit 3, median leverage for B2- and B3-rated companies has returned to pre-crisis highs of 5.7x and 7.0x, respectively.

Exhibit 3

**Median leverage for B3-rated companies is now higher than it was in the 2007 prior peak**

**Median leverage by rating category, 2007–LTM**



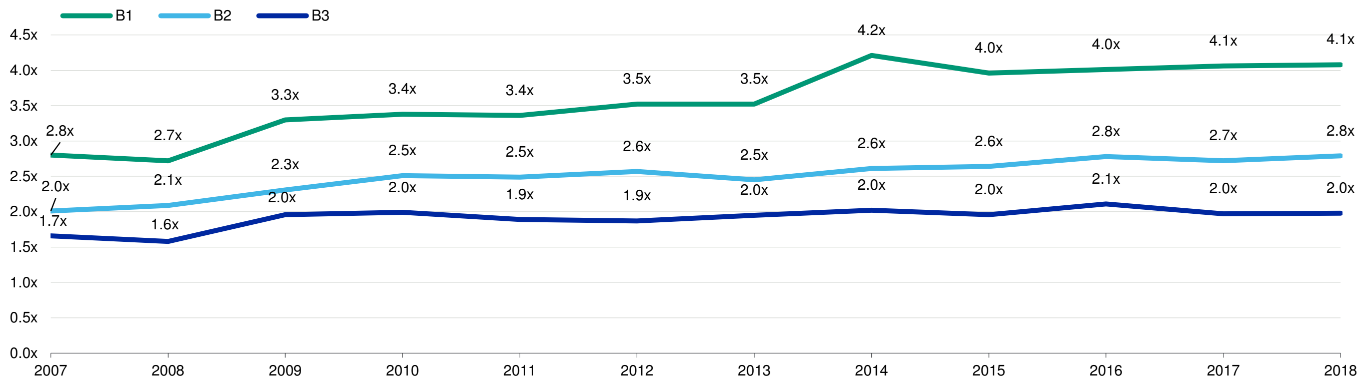

*Source: Moody's Financial Metrics*

While leverage metrics have weakened, interest coverage has improved amid historically low rates and spreads. This has made borrowing cheaper than long-term historical norms, both in absolute and relative terms, and serves as a mitigating consideration.

Exhibit 4

**Interest coverage has improved since 2007, owing to persistently low borrowing costs**

**Median EBITDA/Interest by rating category, 2007–LTM**



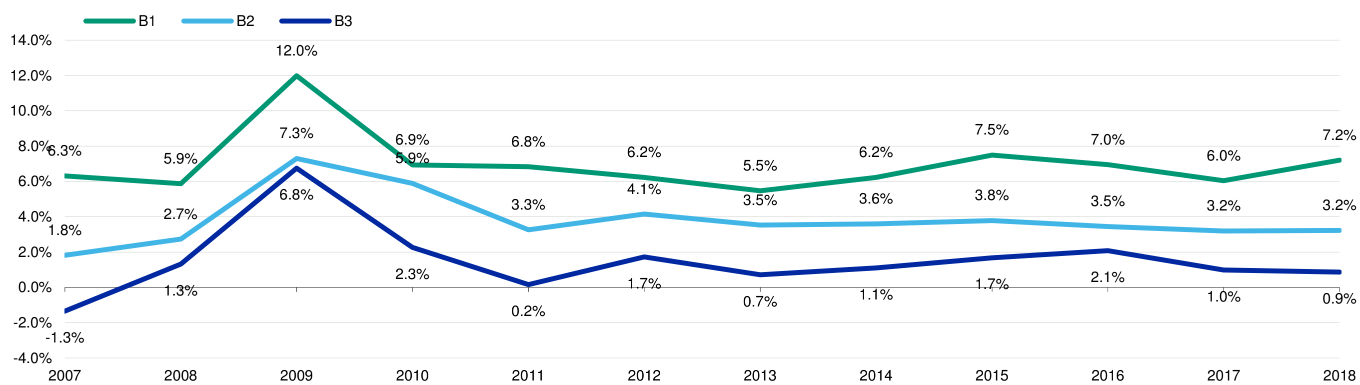

*Source: Moody's Financial Metrics*

Pre-dividend free cash flow (cash flow from operations minus capital expenditures) has been steadily weakening on a dollar basis, and as a proportion of debt, for both B2- and B3-rated companies. Once again, the issue is most pronounced for B3-rated companies, as median B3 free cash flow for this cohort has become fairly nominal at about $6 million, or less than 1% as a proportion of debt, on a per annum basis.

Exhibit 5

**FCF/debt is approaching its 2007 low, particularly for B3- and B2-rated companies**

**Median FCF/debt by rating category, 2007–LTM**




Note that the 2009 spike in FCF/debt among single-B rated issuers was likely driven by the effective removal of weak credits that defaulted, a lack of new issuance (and associated transaction costs), a lack of dividends, lower interest rates, and a winding down of working capital.

*Source: Moody's Financial Metrics*

All else being equal, higher leverage and weaker cash flow leave B3-rated companies with less flexibility to respond to headwinds from rising interest rates, slowing economic growth, and/or a major customer or supplier loss. Despite this erosion in quantitative credit quality, companies have been able thus far to support B3 (or in some cases B2) ratings because rates and spreads have been so low and liquidity has generally been consistent with highly accommodative capital market conditions, making it easier to support such substantial and growing debt burdens. Additionally, favorable economic conditions have supported our expectations for deleveraging through earnings growth. However, these supportive conditions have been showing some modest signs of receding as interest rates steadily rise and GDP growth slows, portending a potentially more challenging environment to come and rendering appropriate ever more vigilant monitoring of such exposed companies.

If borrowing costs continue to rise and economic growth slows, already-weakened free cash flows will likely deteriorate further, stressing the ratings of these highly leveraged companies. This trend would be exacerbated if a sudden and protracted economic downturn were to trigger a pronounced decline in earnings, and potentially more so in the event of a key customer or supplier loss.

## Median metrics for B2- and B3-rated companies broadly similar, regardless of concentration

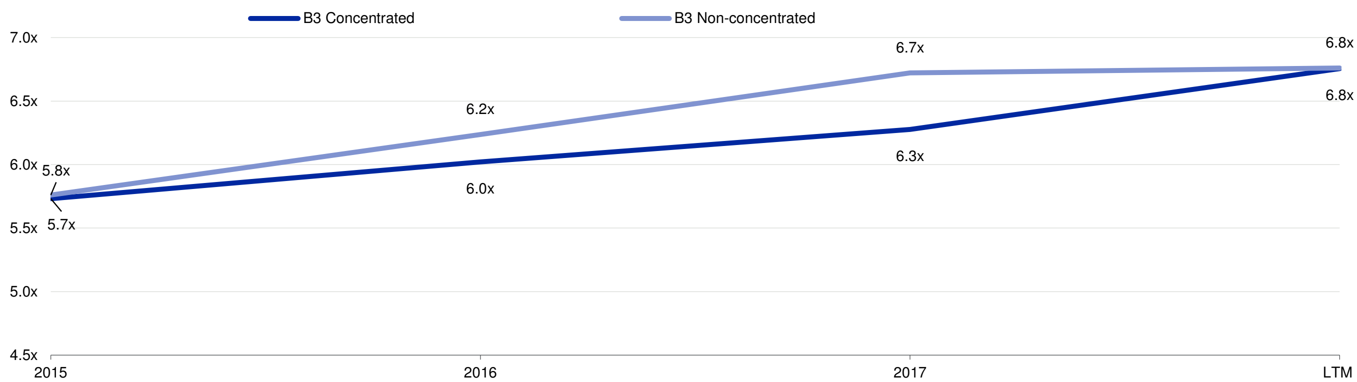
Our analysis of Moody's Credit Opinions for 1,153 single-B-rated companies in the US, Canada and Latin America identified 163 issuers (14%) that were referenced to have noteworthy customer concentration as cited by a Moody's analyst in our research during the 12 months ended 30 November 2018. After categorizing each company as either concentrated or non-concentrated, we calculated medians for each group's key credit metrics, including debt/EBITDA, EBITDA/interest, pre-dividend free cash flow (FCF, defined as cash flow from operations minus capital expenditures, or CFO – capex) and pre-dividend FCF/debt.

There are only modest differences in the median metrics of concentrated and non-concentrated companies. This finding is unsurprising in consideration of many other factors unrelated to concentration that drive our analysis of credit. Nevertheless, higher leverage and reduced cash flows of concentrated B2- and B3-rated companies supports our view that key partner losses will continue to result in significant debt to earnings mismatches, a trend that will likely worsen as the economic cycle slows further. As shown in Exhibit 6, leverage levels have broadly risen, but the pace of increase has been similar for both concentrated and non-concentrated B3-rated companies.

Exhibit 6

**Concentrated and non-concentrated B3-rated companies are operating with similar debt levels**

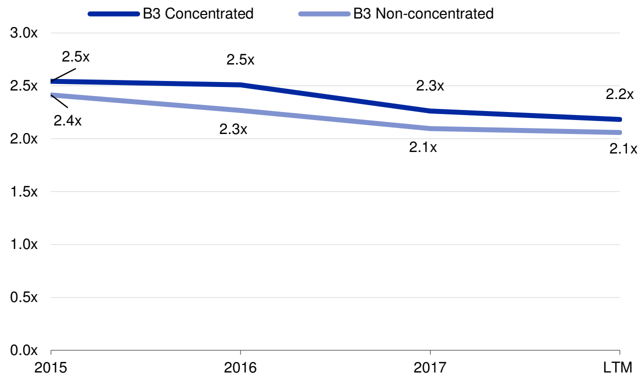
**Median debt-to-EBITDA, concentrated and non-concentrated B3-rated companies, 2015–LTM**




Note that the data above will not foot to Exhibit 3 given differences in the sample cohorts and some degree of survivorship bias (see appendix).
*Source: Moody's Financial Metrics*

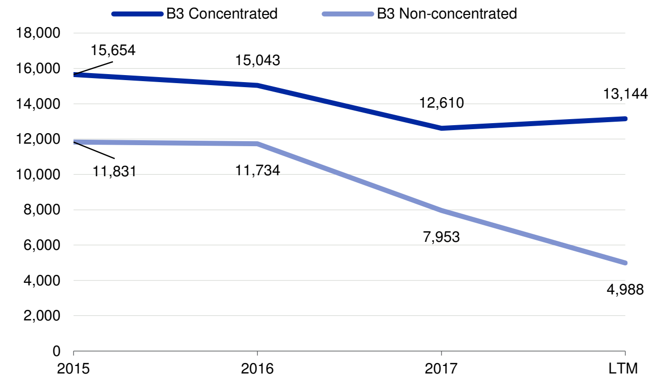
Similarly, EBITDA/interest coverage has tracked fairly consistently for concentrated and non-concentrated B3-rated companies, but importantly this notably remains at a still relatively healthy level just above 2.0x. Median free cash flow for concentrated B3-rated companies is about $13.1 million, only about $8 million higher than the non-concentrated median – likely not enough to offset the loss of a major business partner.

Exhibit 7
**Interest coverage very similar for concentrated and non-concentrated B3-rated companies**
**Median EBITDA-to-interest, concentrated and non-concentrated B3-rated companies, 2015–LTM**




Note that the data above will not foot to Exhibit 5 given differences in the sample cohorts and some degree of survivorship bias (see appendix). For this chart in particular, historical measures of interest coverage noted above are biased upwards.
*Source: Moody's Financial Metrics*

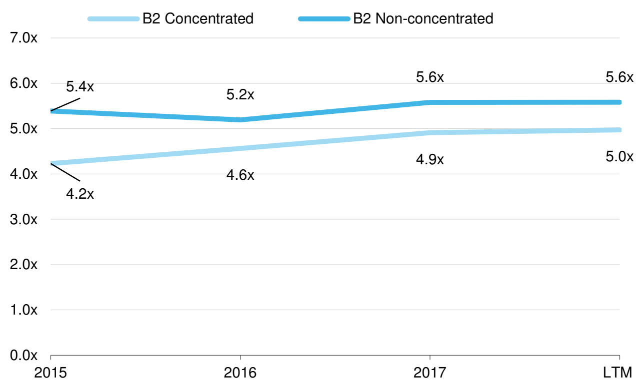
Exhibit 8
**Free cash flow for concentrated B3-rated companies has been modestly more resilient**
**Median free cash flow, concentrated and non-concentrated B3-rated companies, 2015–LTM**




Interpretation: Depression in B3 non-concentrated FCF may be due to higher deal activity
*Source: Moody's Financial Metrics*

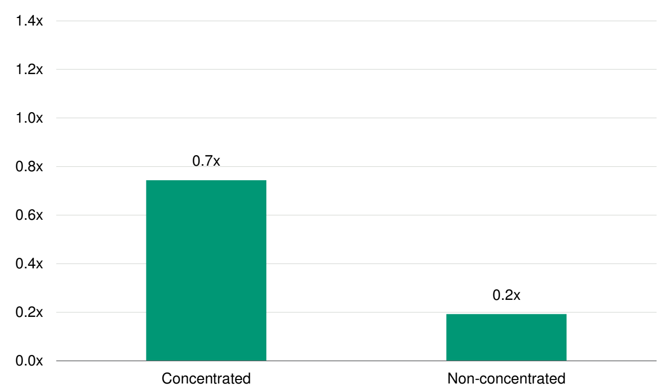
Among B2-rated companies, there is some differentiation in the median metrics of those with and without a concentration. But some favor the former, rather than the latter. For instance, median debt/EBITDA is lower among concentrated B2-rated companies than their non-concentrated peers, although there has been a modestly sharper increase in median leverage among the former since 2015 (see Exhibits 9 and 10).

Exhibit 9
**Concentrated B2-rated companies still operate with less leverage, but the spread is narrowing**
**Median debt-to-EBITDA, concentrated and non-concentrated B2-rated companies, 2015–LTM**




*Source: Moody's Financial Metrics*

Exhibit 10
**Concentrated B2-rated companies have seen a steeper rise in leverage**
**Change in median debt-to-EBITDA, concentrated and non-concentrated B2-rated companies, 2015–LTM**




*Source: Moody's Financial Metrics*

Once again, these findings are not surprising given that our ratings are not solely based on the few credit metrics presented – or credit metrics alone, for that matter; rather, they reflect our analysis of numerous qualitative and quantitative factors that affect expected loss, including size, competitive position, revenue stability, and cyclicality, among many others.

Moreover, only five of 163 single-B-rated concentrated companies that we identified experienced a noteworthy operational disruption after losing a major customer or supplier. This equates to an incidence rate of just 3% over the past 18 months. The low likelihood of a significant customer/supplier loss, coupled with other offsetting considerations (most prominently including adequate backstop liquidity provisions) likely contributes to the similarities in median credit metrics for the concentrated and non-concentrated companies in our analysis of single-B rated companies.

Even so, higher leverage and weaker measures of debt serviceability across concentrated B2- and B3-rated companies continues to drive our expectation that major customer or supplier losses would likely result in abrupt and meaningful mismatches between their earnings generating ability and debt service capacity. This broad risk is likely to be exacerbated as the economic cycle changes, particularly if concentrated companies remain highly levered.

With leverage for B2- and B3-rated companies at pre-crisis highs and free cash flow generation weakening, such companies that are also characterized by high concentration risk remain increasingly vulnerable to potential operational disruptions – particularly those typically accompanying the loss of a major business relationship, which are often abrupt and significant. This dynamic is likely to worsen during the next recession. As companies experience slowing earnings growth, or even a contraction, they will lean on their partners for better pricing terms, even on smaller order volumes. Concentrated companies will have more difficulty adjusting to such declines, particularly if they persist.

## Appendix 1: Affected company list

We have broken down our list of concentrated companies by rating and leverage, highlighting those that we deem to have sizable concentration and published leverage metrics that rank in the bottom quartile among concentrated issuers in their respective rating categories. As the rating implies, B3-rated companies are perceived to be more at risk given their typically higher leverage and more modest free cash flows.

Our lists were created using companies that met the following criteria:

» Most recently published debt/EBITDA leverage ranked in the bottom quartile of concentrated issuers in that rating category. This equates to leverage higher than 5.4x for B1-rated companies, 6.1x for B2-rated companies, and 7.5x for B3-rated companies.

» A company's average concentration (i.e., the stated concentration divided by the number of customers that make up that concentration) is at least 10%; or, the top customer accounts for more than 10% of total revenue.

Links to our published research for these companies can be found within the following exhibits.

Exhibit 11
**B3-rated companies with sizable concentration and high leverage**

| Industry | Issuer | Outlook | Concentration | Average Concentration | Top Customer | Published Leverage | Reported Debt ($M) |
|---|---|---|---|---|---|---|---|
| Auto | GC EOS Buyer, Inc. | Stable | Top 2 account for 47% of revenue; Auto retailers | 24% | 24% | 7.7x | $778 |
| Consumer Products: Durables | Hillman Group Inc. (The) | Negative | Top 3 (big-box retailers) account for 54% of revenue; disintermediation risk as it is a distributor | 18% | - | 8.0x | $1,560 |
| Consumer Products: Household & Personal Care | pH Beauty Holdings III, Inc. | Stable | Top 3 retailers account for more than 50% of revenue | 17% | - | 7.9x | $198 |
| | Alphabet Holding Company, Inc. | Negative | Top 2 account for 30% of revenue; top 10 account for 50% | 5% | 15% | 7.5x | $1,866 |
| | Parfums Holding Company, Inc. | Stable | Top 5 account for 50% of revenue | 10% | - | 7.5x | $752 |
| Consumer Products: Pckd Food | Shearer's Foods, LLC | Stable | Top 2 account for 33% of revenue; one is contracted through 2020 | 17% | - | 7.9x | $1,017 |
| Manufacturing | LTI Holdings, Inc. (Boyd) (New) | Stable | Top customer accounts for 20% of revenue | 20% | 20% | 7.5x | $1,615 |
| Services | Packaging Coordinators Midco, Inc. | Stable | Top 2 account for 16% of revenue; Top customer accounts for 11% | 8% | 11% | 8.0x | $700 |

Note: Leverage and reported debt is as of the last published credit opinion, or is interpolated based on PF leverage at close and 2018E
*Source: Moody's Investors Service*

Exhibit 12

**B2-rated companies with sizable concentration and high leverage**

| Industry | Issuer | Outlook | Concentration | Average Concentration | Top Customer | Published Leverage | Reported Debt ($M) |
|---|---|---|---|---|---|---|---|
| Auto | Dealer Tire, LLC | Stable | Top 3 account for 56% of revenue | 19% | - | 6.2x | $724 |
| Healthcare | Viant Medical Holdings Inc. | Stable | Top 3 account for 40% of revenue | 13% | - | 6.8x | $725 |
| Manufacturing | Energy Acquisition Company, Inc. | Stable | Top 2 account for 30% of revenue | 15% | - | 6.2x | $695 |
| Packaging | Anchor Glass Container Corporation | Negative | Top 3 account for 49% of revenue | 16% | - | 7.1x | $768 |
| Services | R1 RCM Inc. | Stable | Top customer, Ascension, accounts for a significant majority of revenue | >50% | >50% | 8.7x | $360 |
| | GoodRx, Inc. | Stable | Top 3 account for a significant majority of revenue | >17% | - | 6.7x | $745 |
| | PAREXEL International Corporation | Negative | Top 5 account for 37% of revenue; we estimate Pfizer accounts for 12% of revenue | 7% | 12% | 6.9x | $2,800 |

Note: Leverage and reported debt is as of the last published credit opinion, or is interpolated based on PF leverage at close and 2018E
*Source: Moody's Investors Service*

Exhibit 13

**B1-rated companies with sizable concentration and high leverage**

| Industry | Issuer | Outlook | Concentration | Average Concentration | Top Customer | Published Leverage | Reported Debt ($M) |
|---|---|---|---|---|---|---|---|
| Aerospace | TransDigm Inc. | Negative | Top 2 account for 25% of revenue | 13% | - | 7.9x | $17,000 |
| Consumer Products: Durables | Griffon Corporation | Negative | Top 2 account for 30% of revenue; Home Depot 20%, Government programs 10% | 15% | 20% | 6.2x | $1,121 |
| Consumer Products: Pckd Food | B&G Foods, Inc. | Stable | Top ten account for 55% of revenue; Walmart accounts for 24% | 6% | 24% | 5.6x | $1,650 |
| Oil Services | Archrock Partners, L.P. | Stable | Top 2 account for 23% of revenue; Williams Partners and Anadarko account for 14% and 9%, respectively. | 12% | 16% | 5.4x | $1,516 |
| Services | Ironman Merger Sub, LLC | Stable | Top 10 customers account for 45% of revenue; top customer accounts for 10% | 5% | 10% | 6.2x | $760 |

Note: Leverage and reported debt is as of the last published credit opinion, or is interpolated based on PF leverage at close and 2018E
*Source: Moody's Investors Service*

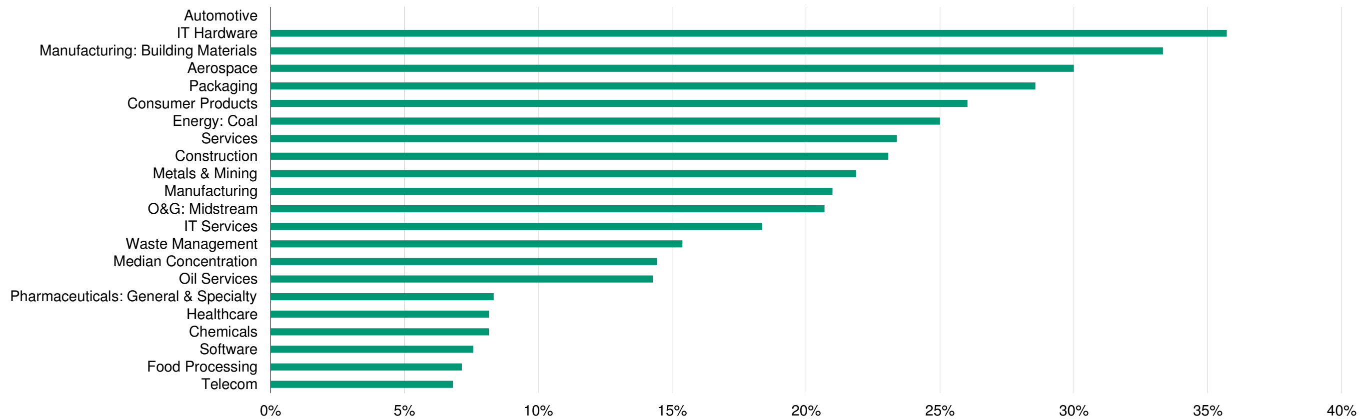
## Appendix 2: Industry Data

The prevalence and degree of customer concentration varies by industry. Suppliers in the automotive, aerospace & defense, and consumer products industries often generate a high percentage of their revenues from a small number of large manufacturers.

Exhibit 14

**Automotive is most concentrated industry**

**Percentage of issuers rated B1 to B3 in a given industry that have a customer concentration**

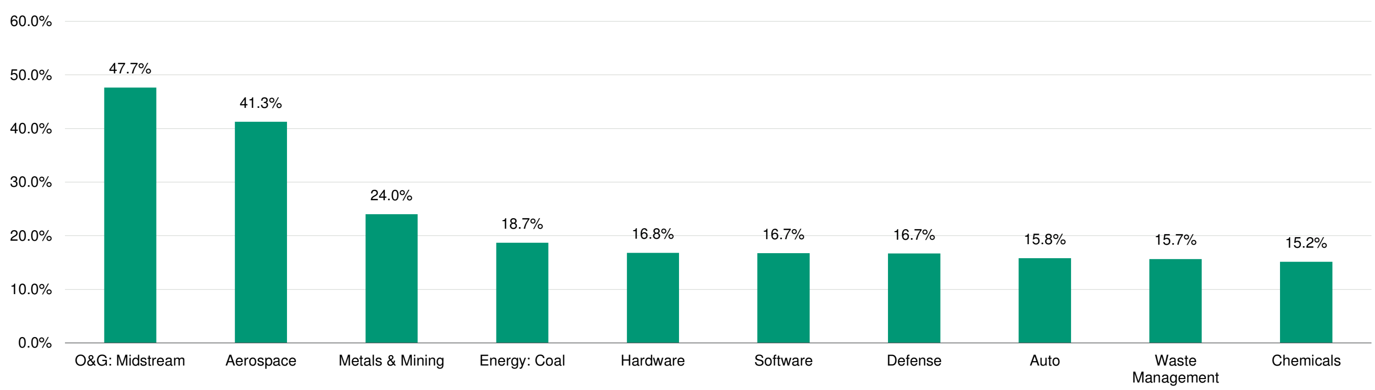



*Source: Moody's Investors Service*

Exhibit 15

**Largest customers found in basic industries**

**Average size of individual customer concentration by industry, for our group of 163 B1- to B3-rated concentrated issuers**

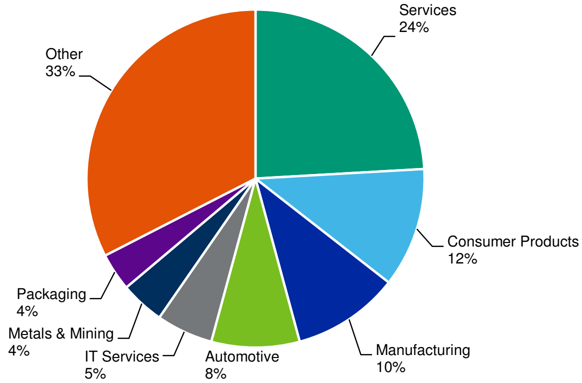



*Source: Moody's Investors Service*

Exhibit 16

**Concentrated single-B issuers more common in services, consumer products, manufacturing and automotive industries**

**Industry breakdown of our 163 single-B rated companies with high customer concentration**

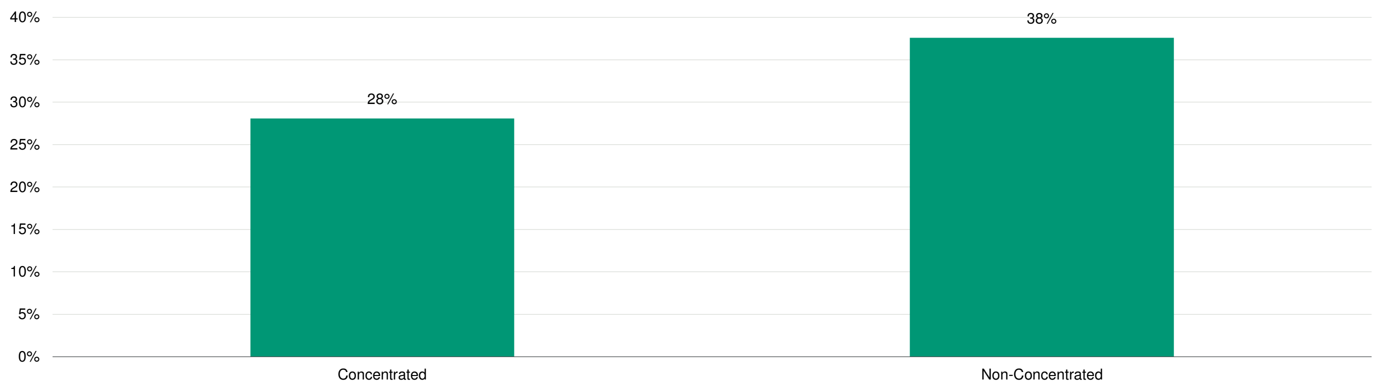



*Source: Moody's Investors Service*

Exhibit 17

**Customer concentration typically reduces bargaining power, resulting in a sizeable margin differential between concentrated and non-concentrated issuers**

**LTM single-B median gross margins**




[1] Gross margins from latest available LTM period

*Source: Moody's Investors Service*

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- Leveraged Finance - US: Tracking the largest private equity sponsors - LBO credit quality is weak, bodes ill for next downturn
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