Macro Keys

The Sensitivity of Corporate Credit to Higher Rates

Global Macro Strategy

Global

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The critical questions

Many clients are concerned about the impact of higher rates sensitivity on corporate credit, particularly after today's Fed rate hike. But other investors believe debt burdens are sustainable given low rates, fixed rate exposure, and a rebound in 2017 earnings. We set out to address these market views in a macro and micro fashion.

Floating-rate exposure still matters, particularly for smaller, low-quality firms

We gauge the fixed vs. floating-rate nature of the credit market by analysing traded credit markets and bank C&I loans. The current breakdown of corporate credit is roughly 2/3 fixed and 1/3 floating. This split is not materially different than during past cycles. Much of the floating exposure is centered on speculative-grade markets. We find that 65% of below investment-grade firms have floating rate exposure, when we add in lower-quality bank C&I loans. In addition, while high grade issuers have extended average bond maturities significantly post-crisis, the average life for high yield and leveraged loans has seen little to no shift.

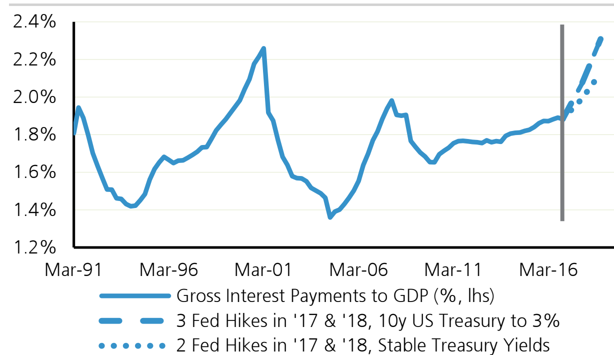
Interest coverage ratios at a macro level are poor and set to worsen

We calculate that gross corporate interest payments to GDP are near cyclical peaks. Material corporate issuance alongside weak growth has started to overwhelm the impact of low rates. We run future scenarios out to 2018 for interest coverage and conclude that coverage metrics are set to see moderate to substantial weakening. This will remain a structural problem for markets. Interest payments to GDP cannot be normalized absent a reduction in debt growth with rates still low. The best scenario would involve changes in capital structures to favour equity over debt.

Stronger revenue growth and stable margins are essential to supress this risk

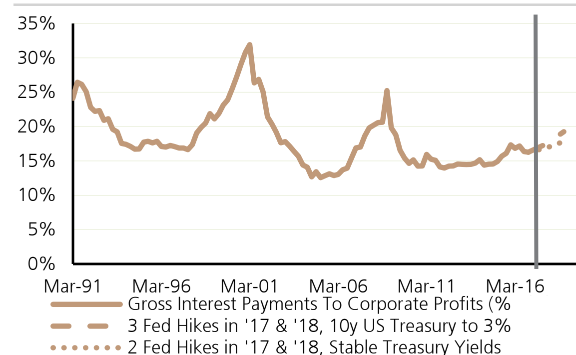
A strong positive is that interest payments relative to profits are less alarming due to resilient profit margins. And expected 2017 earnings growth coupled with stable margins should help interest coverage. But it is critical that this playbook come to fruition. In the context of a Fed rate hike cycle, future earning misses will no longer just expose high leverage, but also weakening interest coverage. We believe the canaries in the coal-mine will come from lower-quality spec-grade firms exposed to floating-rate risks and near-term maturities. We express a clear preference for **high-quality** floating-rate leveraged loans over US HY, given a lower beta to volatility and duration than US high yield and higher recovery rates due to their senior position in the capital structure.

Figure 1: Corporate Interest Payments to GDP highlight an elevated and growing risk…



Source: UBS, Bloomberg, Yieldbook, S&P LCD, Federal Reserve

Figure 2: … stronger revenues/stable margins are essential to suppress this near-term



Source: UBS, Bloomberg, Yieldbook, S&P LCD, Federal Reserve

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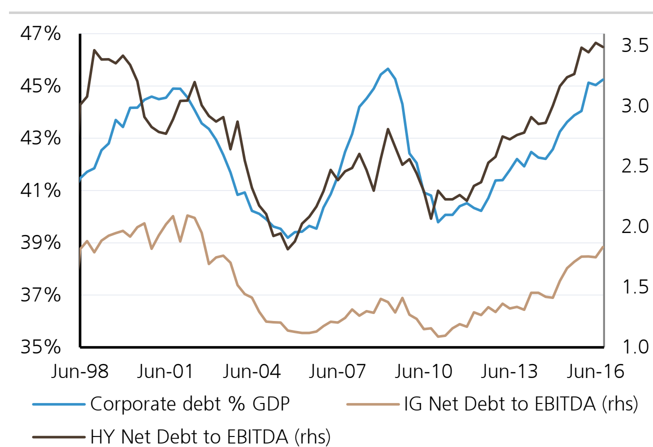
The Sensitivity of Corporate Credit to Higher Rates

The FOMC decision to raise interest rates 25bps and signal for 3 further hikes in 2017 and 2018 respectively highlights a dilemma for investors amidst otherwise unbridled optimism about fiscal stimulus and stronger earnings. Many clients are concerned about the sensitivity of corporate credit to higher rates, with today's elevated levels of corporate leverage. Indeed, US corporate debt to GDP is already at prior cyclical peaks, with high-yield leverage (net debt to EBITDA) in particular at records despite some modest Q3 improvement (Figure 3). These debt burdens are having an impact on business spending decisions; 64% of CFOs in the December Duke CFO survey [1] answered that high debt burdens would restrict future investment, *despite post-election optimism about the US economic outlook*.

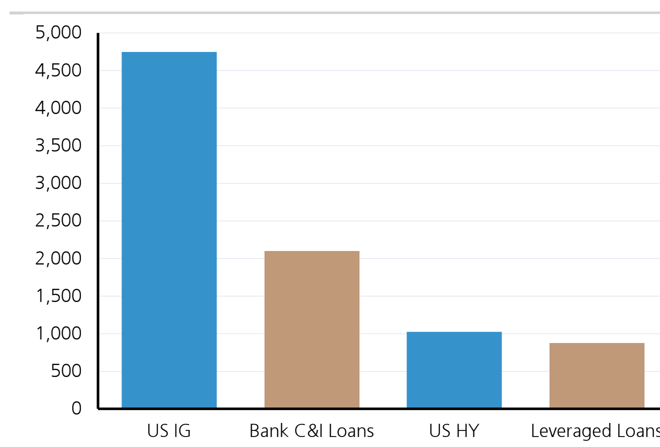
However, many clients believe debt heavy capital structures are sustainable in a world where interest rates are low, interest rate exposure is fixed, and earnings growth is expected to rebound. In this piece, we peel apart the onion and respond to these comments in a granular fashion. First, interest coverage ratios are far from ironclad; significant debt growth has left **interest payments relative to GDP at historically high levels**, creating a structural problem for markets. And our scenario analysis out to 2018 demonstrates that this measure will weaken moderately to materially with future Fed hikes and rising Treasury yields. Second, we estimate that **1/3 of US corporate credit (including bank C&I loans) is floating-rate in nature**. This is similar to that seen during the last few cycles, highlighting little reduction in beta to Fed rate hikes. And much of the floating-rate exposure is borne by smaller, below investment-grade firms. Hence, **the outlook for earnings will be critical**. Fiscal levers such as corporate tax reform, repatriation of overseas cash, and deregulation should buttress confidence and corporate earnings, effectively managing the impact of higher rates. But it is critical that this playbook come to fruition. In the context of an emerging Fed hike cycle, future earnings misses will no longer just expose high leverage, but also weak interest coverage.

Figure 3: Corporate Leverage is still climbing



Source: UBS, Bloomberg, Worldscope

Figure 4: US Corporate Credit Market (Floating Rate Exposure in Brown, $bn)



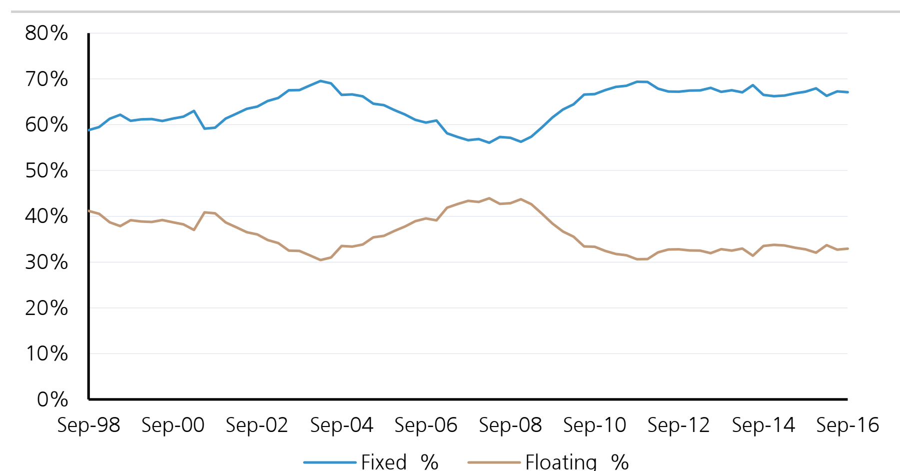
Source: UBS, Bloomberg, S&P LCD, Yieldbook

[1] December Duke CFO Survey

We gauge the fixed vs. floating-rate nature of the credit market by analyzing the major sources of corporate debt (Figure 4). This includes not just traded credit markets, but also C&I loans (term loans, revolvers, and lines of credit) held directly on bank balance sheets, many of which are owed by smaller firms without capital market access. We utilize the Fed Survey Terms of Business Lending[2] to gauge the composition of bank C&I loan portfolios. This survey is a snapshot of bank loans made each quarter by US banks and US branches of foreign banks that provides a window into the quality and rate-sensitivity of bank C&I loan portfolios. From this survey, we can combine segments of bank C&I loans with traded debt markets to calculate the split of fixed vs. floating- rate corporate debt, both at the aggregate level and by quality.

From this survey, we gauge that 90-95% of bank C&I loans (~$2tn) are floating-rate in nature, tied to either Fed Funds, Libor, prime rates, or other base rates. For purposes of our piece, floating-rate debt is that which resets in 365 days or less. When combined with the leveraged loan market ($873bn), we estimate that total US corporate floating rate exposure is $2.8tn. Total fixed-rate exposure from US investment-grade debt, US high-yield debt, and the remaining 5-10% of fixed-rate bank C&I loans is $5.8tn. Hence, the current breakdown of corporate credit is roughly 2/3 fixed and 1/3 floating.

Figure 5: US Corporate Credit Fixed vs. Floating-Rate Exposure



Source: UBS, Federal Reserve, Yieldbook, S&P LCD

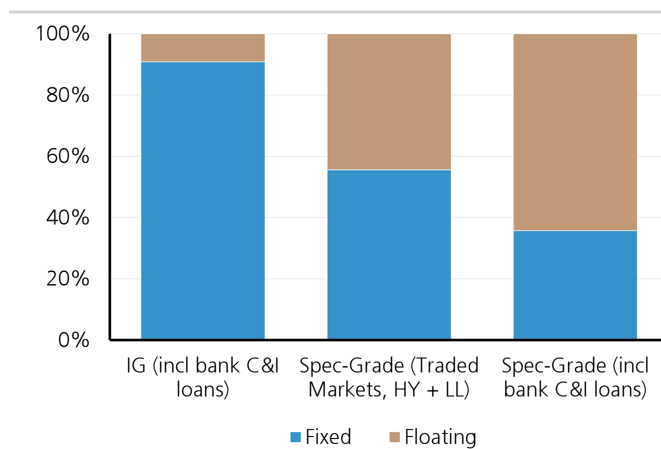
Surprisingly, this apportionment of US credit is not materially different than during past cycles. Put another way, sensitivity to the Fed remains pertinent (Figure 5). Does the impact of corporate hedging alter these numbers? While some floating-rate payers will enter into interest rate swaps to pay fixed and vice versa, the difference is rather small at the macro level. A recent academic piece on firm hedging activities finds that only a net 1.7% of total debt was swapped from fixed to floating over time[3].

The next step is to isolate credit markets by quality to distill where the floating rate concentrations reside. We estimate that 90% of US investment-grade corporate debt is fixed. This is not surprising, as most investment-grade firms are large enough to access capital markets. However, the story is quite different for below

[2] Fed Survey Terms of Business Lending
[3] Interest Rate Uncertainty, Hedging, and Real Activity, L.Bretscher, L.Schmid, A.Vedolin, May 2016

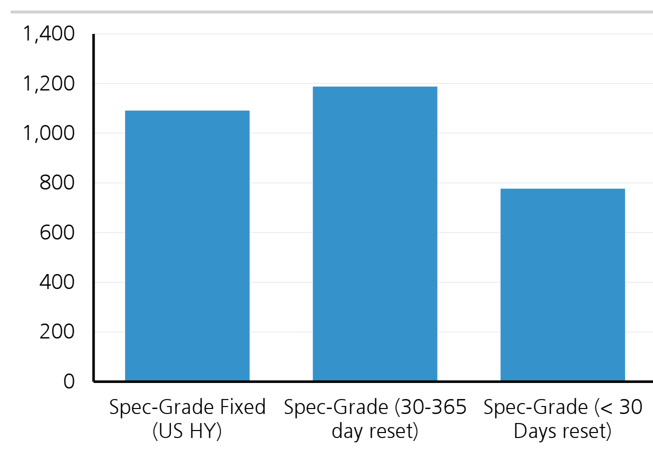
IG firms. For the tradable HY bond and leveraged loan markets, the fixed vs. floating weights are 54% vs. 46%. When adding spec-grade exposure from bank C&I loans[4], the ratio switches to 35% fixed vs. 65% floating (Figure 6). To be clear, this segment is typically comprised of smaller firms with limited access to capital markets which may not have credit metrics similar to deep speculative grade public issuers, but nonetheless are very sensitive to shifts in funding markets and market access. But it does pinpoint that lower-quality, more capital constrained firms have a substantially higher beta to Fed hikes than larger firms. And any rate reset risk could appear quickly. We estimate that rates on nearly 28% of total US spec-grade debt ($780bn) will reset within 30 days or less (though the vast majority of this is held on bank balance sheets) (Figure 7).

Figure 6: Fixed vs. Floating-Rate Exposure by Quality



Source: UBS, Federal Reserve, Yieldbook, S&P LCD

Figure 7: Spec-Grade Debt by Re-pricing interval ($bn)

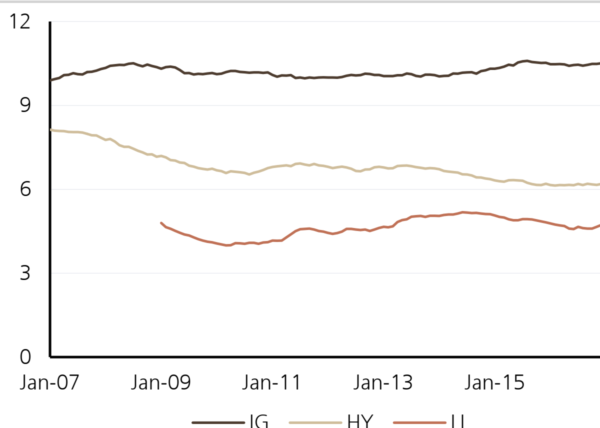


Source: UBS, Federal Reserve, Yieldbook, S&P LCD

Reset risk is not the only determinant of future interest coverage; we also need to assess refinancing risk – changes in market rates vs. current rates on maturing debt. First, the notion that the US corporate debt maturity wall has been termed out is both fact and fiction; high grade issuers have extended average bond maturities significantly, while the average life for high yield and leveraged loans has seen little to no material shift post-crisis (Figure 8). Put differently, the maturity wall is more back-ended for IG firms while the debt maturity profile is more front-loaded for HY/LL companies (Figure 9). For context, US high grade issuance totaled $1.3bn year-to-date versus maturities in the $410 – 460bn due in 2019, 2020 and 2021. In comparison, US high yield and leveraged loan supply reached $240bn and $330bn, respectively, in 2016 compared to $105 – 195bn and $115 – 235bn maturing annually in 2019 – 2021.

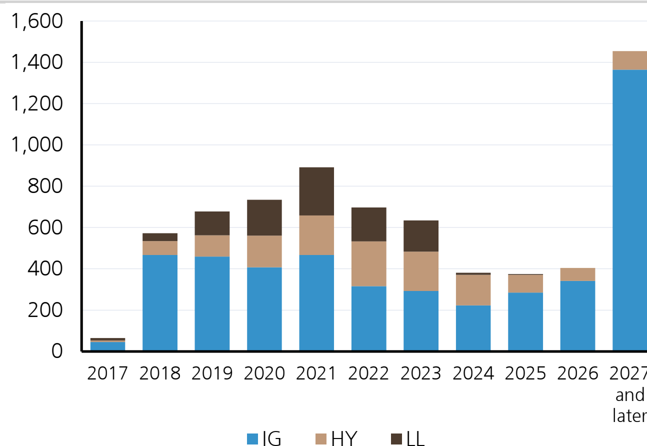
[4] Using moderate + acceptable + special mention risk ratings from the Survey of Terms on Business Lending

Figure 8: Weighted average life of US high yield, leveraged loan and high grade bond indices (yrs)



Source: UBS, Yieldbook, S&P LCD

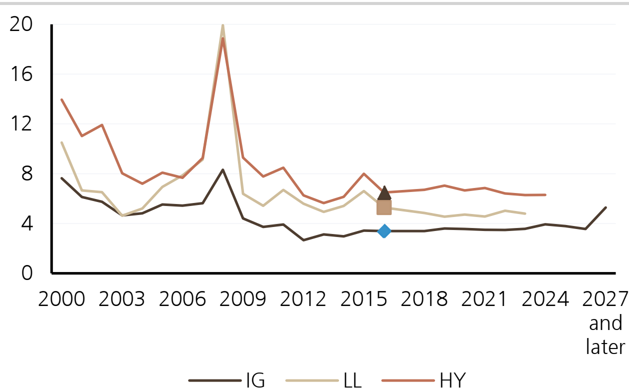
Figure 9: US corporate debt maturity wall broken down by rating category ($bn)



Source: UBS, Bloomberg, S&P LCD

Second, average yields are approximately 3.4%, 6.5% and 5.3%, respectively, for IG and HY bonds and leveraged loans. By comparison, average coupons on future maturities average 3.6%, 6.8%, and 4.6%, respectively – suggesting at current market prices refinancing will be incrementally more expensive in the LL markets and modestly less expensive in the IG & HY market. To reiterate, this is *ceteris paribus – i.e., explicitly not pricing in additional increases in Fed funds, higher Treasury yields, or wider credit spreads*. Third, any re-pricing in interest expense will disproportionately crowd out cash flow for higher leveraged firms. Median interest coverage relative to EBITDA less capital expenditures for the Top 125 HY/LL firms is approximately 1.5x. This metric demonstrates that the growth in interest expense will need to largely be contained to the growth in profits for the weakest HY/LL issuers (Fig 11). And here is where structurally low absolute yields perversely exacerbate the risks as relative (or percentage) rather than absolute changes in interest expenses will need to meet or exceed that observed in profits.

Figure 10: Historical US corporate bond yields versus average annual coupons on future maturing debt



Source: UBS, Bloomberg, S&P LCD

Figure 11: Median interest coverage metrics for IG vs. HY/LL firms

	EBITDA/ Int Expense	EBITDA - Capex/ Int expense
IG Median firm	8.1	3.5
HY/LL Median firm	3.5	1.5

Source: UBS, Bloomberg

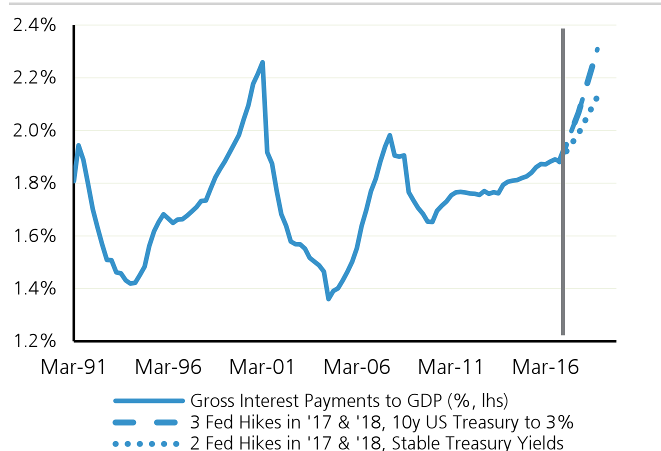
The next question brings us to the macro level: How strong is economy-wide interest coverage? The answer is less than one might expect. We construct a measure of gross interest payments to GDP by taking index par values of our major credit markets in Figure 4 and multiplying by index coupons over time. (For bank C&I loans, we use a trailing 4 quarter average of bank C&I loan rates to allow for

variation in reset rates). We estimate that total interest payments across corporate credit are $354bn, or 1.9% of US GDP. Historically, this is very elevated (Figure 12). Put simply, material debt issuance alongside persistently weak growth has started to overwhelm the impact of low rates and has led to deteriorating interest burdens. The one positive is that interest payments to corporate profits (from the BEA US GDP reports) appear less alarming due to the presence of elevated profit margins (Figure 13).

Given our construct above for estimating gross interest payments (Index Debt * Coupons), we can roughly project how macro interest coverage ratios will evolve through 2018 with the following assumptions.

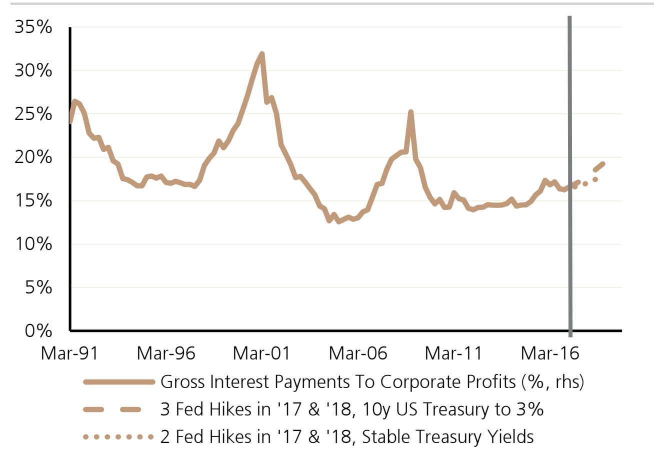
- We assume that US nominal GDP and US corporate earnings grow in line with our Economics team's (2017: 4.5%, 2018: 4.3%), and our Equity Strategy team's (2017: 5.9%, 2018: 4.8%) forecasts.
- We assume net credit issuance is in line with the average of the prior three years.
- We assume that floating-rate credit yields increase with Fed Funds.
- And we then present two rate scenarios.
    - In the first, we experience two Fed rate hikes in 2017 & 2018 with Treasury yields and credit spreads at current levels.
    - In the second scenario, we receive three Fed rate hikes in 2017 and 2018 with IG yields rising to 4% (from 3.4% currently). This latter assumption would be consistent with 3% yields on 10 year Treasury yields (assuming IG credit spreads are unchanged).

Figure 12: Corporate Interest Payments to GDP highlight an elevated and growing risk…



Source: UBS, Bloomberg, Yieldbook, S&P LCD, Federal Reserve

Figure 13: … stronger revenues/stable margins are essential to suppress this near-term



Source: UBS, Bloomberg, Yieldbook, S&P LCD, Federal Reserve

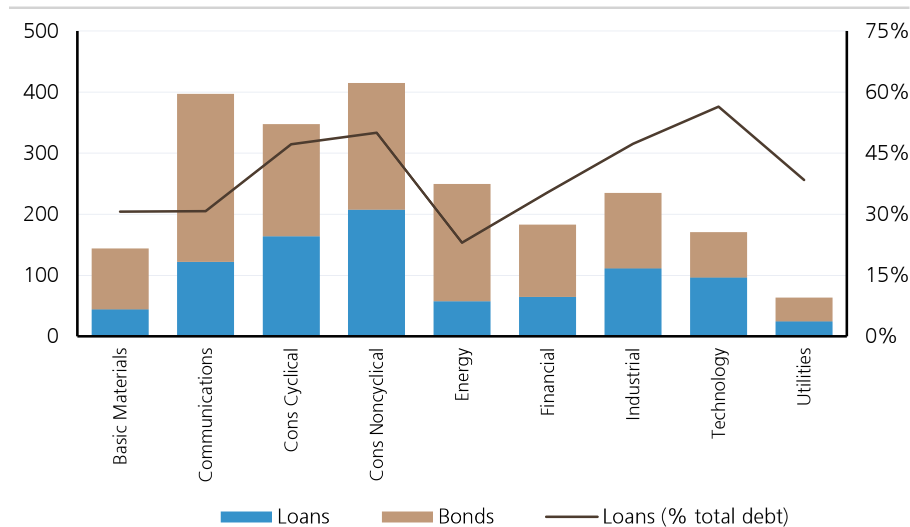
Our analysis highlights several key conclusions. First, poor interest coverage ratios in the context of low borrowing costs are a structural problem, even if latent near term. There are clear downside risks in the event of an exogenous shock to growth or worsening profit margins. Credit cycles heal from over-exuberance due to declining interest rates, defaults, and slower debt-financed investment. However, interest payments to GDP cannot be easily normalized with the Fed constrained in its ability to cut rates for floating-rate borrowers. If rates cannot fall, corporate deleveraging will be needed in greater doses to bring total interest payments back

to normal. The best case outcome here would entail a shift in the corporate capital structure to finance marginal growth through internal cash or equity rather than debt. But any such change in capital financing decisions is largely speculative at this stage.

Second, the near-term outlook for markets will remain heavily dependent on a rebound in earnings. Expected 2017 earnings growth and stable margins (potentially even rising if the more bullish aspects of fiscal stimulus plans are approved) should be enough to keep interest coverage ratios from worsening too much, leaving them well under cycle peaks. Improving near-term cash flows and earnings will likely be enough to satiate investors. But it is critical that said rebound in earnings comes to fruition. In the context of an emerging Fed hike cycle, future earnings misses will no longer just expose high leverage, but also weak interest coverage.

And third, canaries in the coal mine will likely stem from the non – investment grade sectors. We are specifically watching those sectors and issuers with greater concentrations of floating rate debt **and low credit quality**; for tradable credit markets, the exposure is greatest in the consumer noncyclical, consumer cyclical, and communication sectors in absolute terms (Figure 14). For non-tradable credit, we utilize the Fed's Shared National Credit Review as our proxy which highlights the largest concentrations lie in healthcare, media/telecom and finance/insurance[5]. And, in terms of refinancing risk, lower rated firms will face more challenging prospects given higher maturities ahead (e.g., 27% of triple C debt matures by 2019 versus 14% for higher grades) and relatively subdued issuance trends this year. And, in terms of micro credit names, there is even more heterogeneity across the larger HY/LL issuers with respect to sensitivity to floating rate debt and weighted average debt maturities (Figure 15).

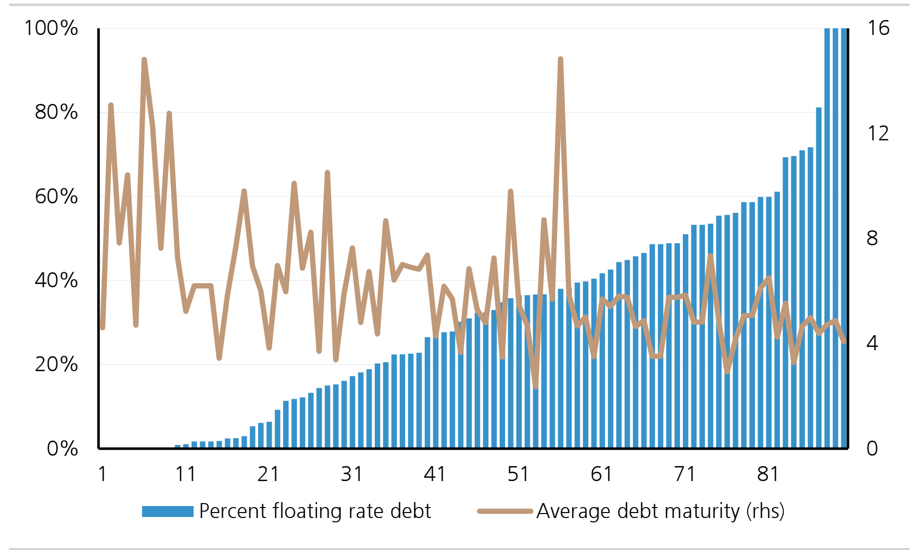
Figure 14: US high yield and leveraged loan debt by sector (bonds vs loans and share)



Source: UBS, Bloomberg, S&P LCD

[5] Shared National Credits Program 2015 Review, Fed, December 2015

Figure 15: Top Benchmark HY/LL firms: percent floating rate exposure & average debt maturity (x-axis = individual company names)



Source: UBS, Bloomberg, S&P LCD

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