Macro Keys

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Economics & Macro Strategy

Global

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Divergence in asset prices and traditional macroeconomic indicators is a defining trait of the post-crisis world. Exhibit A is the decoupling between credit, interest rate and economic cycles. This phenomenon makes forecasting increasingly complex as binary, if not trinary, outcomes seem increasingly probable. And the exponential rise in data and research offerings can create attention deficit disorder for investors. To that end we continue to migrate away from the traditional year-end ritual of compiling dissertation-like research pieces spanning volumes of data, analytics and sub themes. Our approach this year is straightforward: to attempt to answer the key question that will influence future returns in US high yield and leveraged loan markets in the coming years. We certainly run the risk of being too focused and narrow-minded; however, we would contend this is precisely our intent. Cut down on the noise, focus in depth on what matters most. In our view, the key question is: will credit markets be able to absorb the refinancing needs of lower quality high yield and leveraged loan borrowers?

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US high yield outlook: What is the fate of $1tn in stressed credit?

Divergence in asset prices and traditional macroeconomic and fundamental indicators is a defining trait of the post-crisis world. Exhibit A is the decoupling between credit, interest rate and economic cycles. This phenomenon makes forecasting increasingly complex as binary, if not trinary, outcomes seem increasingly probable. And the exponential rise in data and research offerings can create attention deficit disorder for investors. In the current environment, we sometimes wonder if clients, particularly non-credit specialists, leave our meetings with greater clarity or simply more questions. To that end we continue to migrate away from the traditional year-end ritual of compiling dissertation-like research pieces spanning volumes of data, analytics and sub themes. Our approach this year is straightforward: to attempt to answer the key question that will influence future returns in US high yield/ leveraged loan markets in the coming years. We certainly run the risk of being too focused and narrow-minded; however, we would contend this is precisely our intent. Cut down on the noise, focus in depth on what matters most. Only time will tell whether we fail or succeed.

In our view, the key question is: will credit markets be able to absorb the refinancing needs of lower quality high yield and leveraged loan borrowers? To answer this question we need to establish how much of the existing universe is 'low quality'. What may appear to be a fairly conventional question is not so when one considers the rapid rate of credit market growth in the context of several structural impediments. First, the rapid growth in corporate credit markets has been arguably unprecedented (Figure 1), and it has far surpassed the addition of research resources, both in number and in quality[1]. The implication is that market participants are increasingly relying more on external appraisers of credit risk, namely credit rating agencies. Second, the post-crisis credit cycle is the first that utilizes the revised rules for credit quality classifications in benchmark HY bond indices. What this means is that since 2005 bond indices utilized the middle of the three rating agencies to assign credit quality. Prior to 2005, bond indices used the lower or more conservative of Moody's/S&P credit ratings.

The fallacies of this approach are that ratings competition actually favors issuers as it results in more aggressive credit ratings[2], and deterioration in credit ratings is glacial and lagged versus prior cycles. For example, the proportion of triple C issuers in the Citi US high yield cash bond index is currently 13%, appearing in-line with the average triple C proportions in the prior cycle. However, since index rating criteria now typically utilize the middle classification of the three agencies[3], this could be biased. If we instead utilize Moody's ratings – the more conservative rating for a majority of the ratings – the proportion of triple Cs increases to 20% (Figure 2). And this is not a function of changes in rating methodologies with respect to incorporating loss in default ratings. According to Moody's not only has the number of single B and triple C issuers surged post- crisis, but the proportion of issuers by count rated triple C is at all-time highs (27%, Figure 3). Note this figure would include high yield bonds as well as leveraged loans, the latter of

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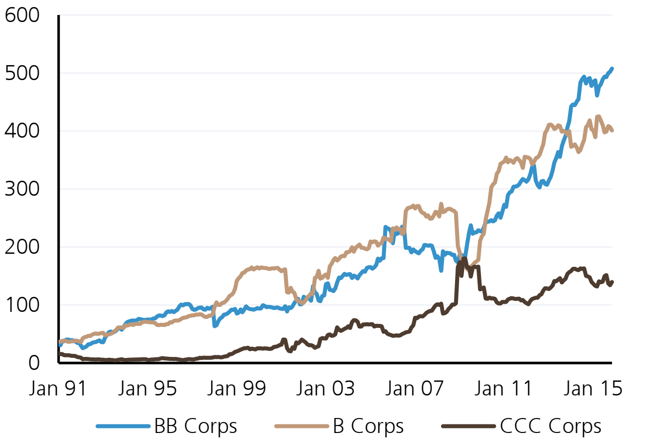
[1] High yield: The scary reality, M. Mish, S. Caprio, 27-Jul-2015
[2] Why Competition May Not Improve Credit Rating Agencies, B. Becker, August 2009
[3] S&P is the middle rating of the three agencies in a majority of cases, and S&P is the primary rating criteria used by the Citi HY Index.

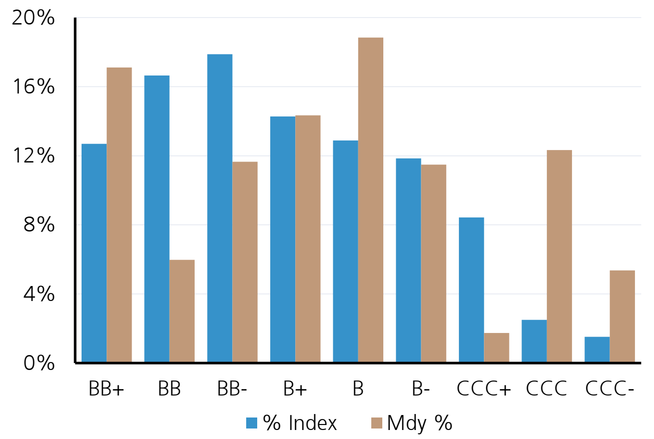
which has been under particular scrutiny from the Fed due to elevated credit risk and poor underwriting concerns[4].

Figure 1: US high yield market by ratings (par amounts, $ bn)



Source: UBS, Yieldbook

Figure 2: US high yield index – breakdown of index versus Moody's ratings (%)



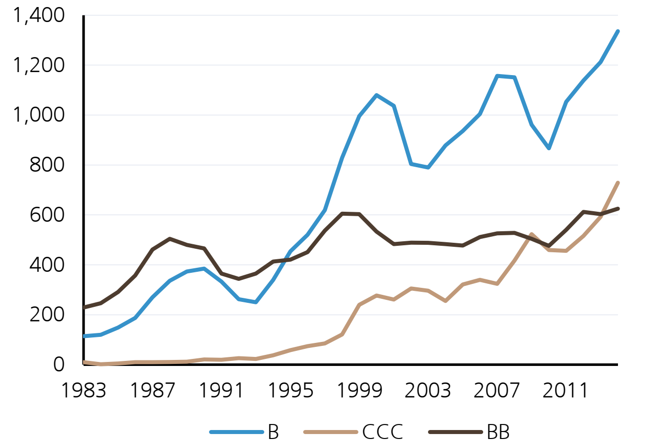
Source: UBS, Yieldbook, Moody's

Third, after reviewing dozens of credit rating agency issuer reports, it is abundantly clear to us that excessive corporate leverage has been covered up by perception of adequate liquidity due to unprecedented central bank policy accommodation. Moody's itself notes the most common differentiating factor between B3 and Caa1-rated issuers is liquidity or the perception thereof[5]. And during the post-crisis issuance boom, fuelled by the crowding-in effects from the Federal Reserve's $4tn in quantitative easing programs, it was hard to argue that almost any issuer had trouble accessing capital markets at inexpensive funding levels. However, the dark side of that tale is that liquidity is dynamic and increasingly fleeting – particularly for lower quality issuers. Zero interest rates matter little to issuers whose funding costs are dictated primarily by the level of credit spreads, not risk free yields.

Given that cash flow measures are also subject to significant variation, particularly when funding costs are rising and capital market access is declining, the reality that median net leverage for single B issuers is back at late 1990 levels should be troubling, given corporate earnings and margins are also above trend (Figure 4). Equally worrying, the post-crisis theme of HY companies issuing or refinancing debt at lower and lower interest rates has almost certainly ended (Figures 5 & 6). Lastly, many investors may forget, but a few may recall, that cumulative default rates were actually much worse in the late 1980s and 1990s than they were in the financial crisis (Figure 7) – and much of that is predicated on the origin of the credit growth and excesses. We would posit that non-financial corporate credit is at the nexus of the excesses in this cycle, unlike in 2007-2008 which was centred on the US housing sector and the banking system. This does not bode well for future long-term cumulative corporate default rates.

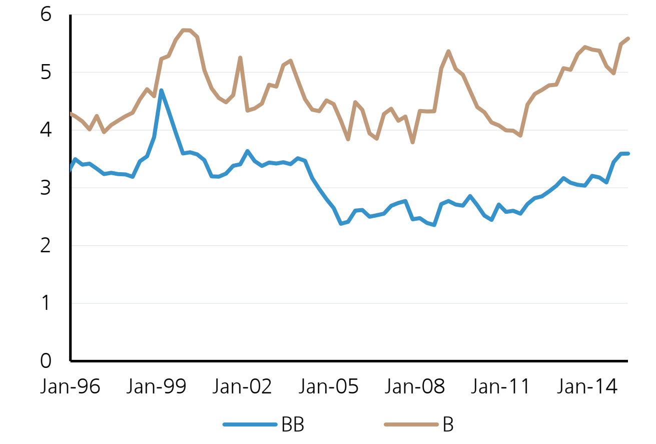
[4] Fed's lev lending review: sobering, M. Mish, S. Caprio, 10-Nov-2015
[5] Mind the Gap: Caa1 vs B3 – Recurring Differences Often Account for the Crucial Divide, January 2015

Figure 3: Evolution of Moody's issuer ratings by rating category (issuer count)



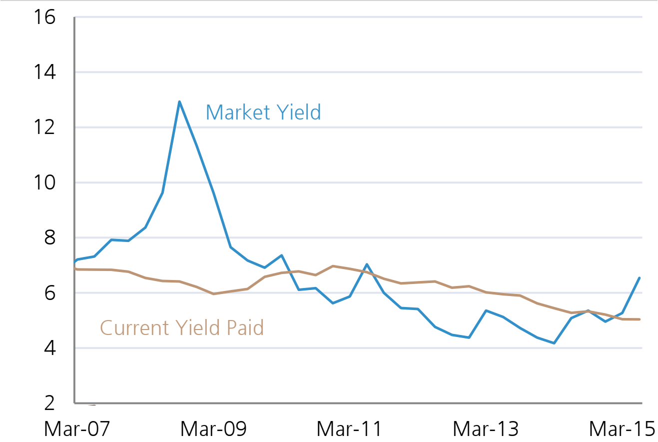
Source: UBS, Moody's

Figure 4: Net leverage for double and single Bs (net debt/ EBITDA)



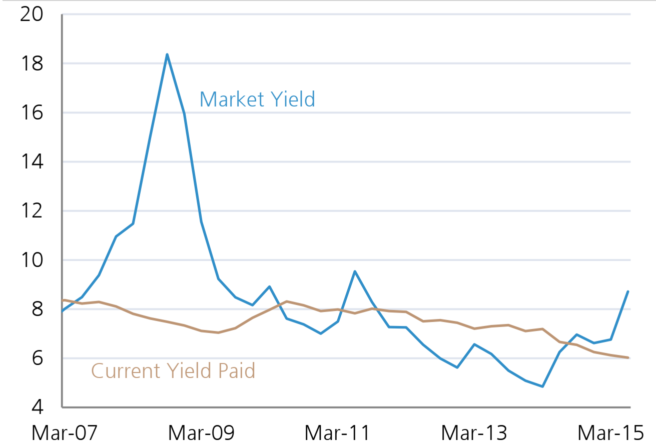
Source: UBS, Worldscope

Figure 5: Current Yield Paid vs. Market Yield for BB rated issuers



Source: UBS, Worldscope, Yieldbook

Figure 6: Current Yield Paid vs. Market Yield for B rated issuers



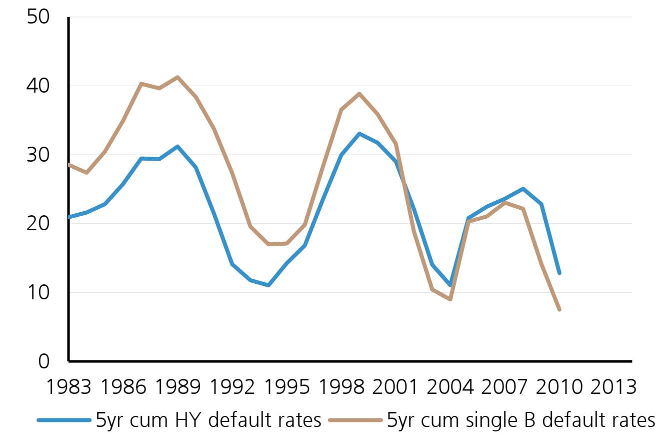
Source: UBS, Worldscope, Yieldbook

In total, we would posit that roughly 35 – 40% of the outstanding US high yield and leveraged loan universe is at risk (not including any emerging market exposure). Based on the size of the US high yield cash bond and leveraged loan indices, which total approximately $2tn in debt outstanding, that would imply $750 – 800bn in low quality speculative grade debt. However, exact figures of the size of US speculative grade debt vary[6]. According to a recent S&P study US speculative grade entities could have as much as $4tn in debt outstanding (if one includes bonds, loans, and revolving credit facilities assuming fully drawn[7]) – with about one-third maturing through 2020 (Figure 8). In short, indices understate and the rating agencies overstate the amount of debt coming due, so we'll take the middle ground which implies roughly $1.05 – 1.2tn in low quality speculative grade debt outstanding.

[6] This is partly due to the fact that indices have strict requirements for index inclusion and private securities are not included

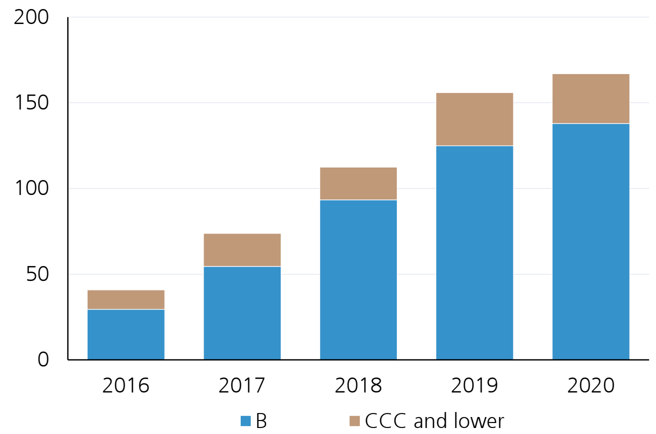
[7] Global Refinancing Study- Global Corporate Issuers Face Nearly $10 Trillion in Rated Debt Maturities Through YE 2020, D. Vazza, August 27, 2015

Figure 7: Cumulative five-year default rates for speculative grade and single B rated issuers (%)



Source: UBS, Moody's

Figure 8: US speculative grade lower quality debt maturity wall through 2020 (mid point estimate)



Source: UBS, S&P

The next question we need to address is will credit markets be able to absorb the refinancing needs of the low quality speculative grade segment? In our view, several observations are critical. First, we believe the Fed is no longer supporting corporate credit markets. We do not expect the Fed will embark on QE4 to 'crowd-in' investors into corporate credit markets, and we do not believe the Fed is capable of providing much additional accommodation in the form of forward guidance given current market pricing is implying about three rate hikes in 2016 and two hikes in 2017. Further, our economists expect uncertainty to remain elevated throughout the year, with the committee lacking clear consensus and being heavily data dependent. Importantly, we believe the Fed is now standing firmly against the interests of leveraged lenders – given their aggressive regulation of leveraged loan issuance.

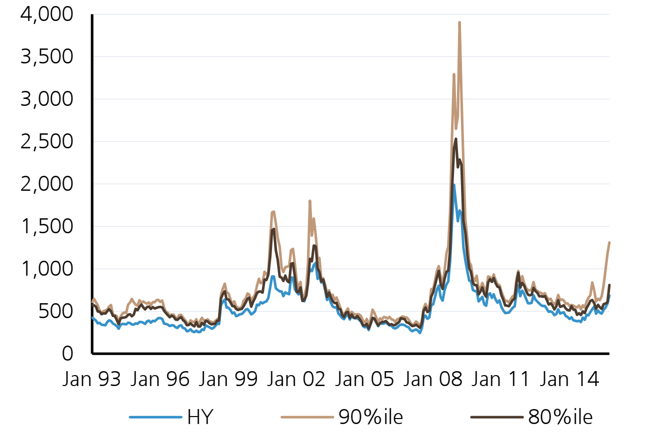
Some may argue the Fed is pursuing the right policy, in that the alternative is for leveraged loan markets to overheat further. While that may be accurate the lesser evil is still evil; low quality speculative grade issuers do not organically delever – they only do so through earnings growth, and given above trend earnings and elevated leverage the prospects for such an outcome are slim. They cannot pay down debt because cash flow generation is weak, and now interest costs are rising. So the Fed is explicitly condoning rising default rates. Finally, it is our humble belief that the consensus at the Fed does not fully understand the magnitude of the problems in corporate credit markets and the unintended consequences of their policy actions. The implication is that their actions will be reactive, not proactive – but only time will tell. What about stimulus from other central banks? Our prior analysis suggests it is beneficial at the margin, but much of the portfolio rebalancing is out of very high quality assets; e.g., investors rotating out of Europe and Japan are not buying lower quality speculative grade debt en masse. In fact, we have seen and heard that European investors are actually reducing exposure to US HY despite the relative yield differential[8].

Second, we assume commodity prices are simply lower for longer. We will defer to our house as well as market implied forecasts, which are not that far apart. That said, we would underscore that the extreme divergence between commodity and ex-commodity sectors in high yield is largely unprecedented (Figure 9). The

[8] Can the global bid for yield keep credit markets afloat?, M. Mish, S. Caprio, 18-Nov-2015

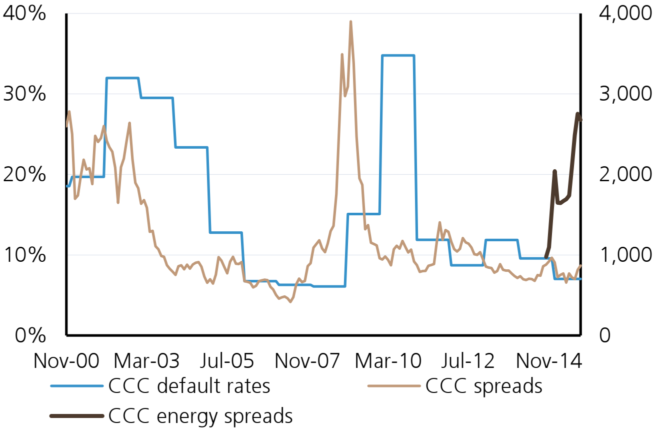
implication is that, if commodity prices remain roughly at current levels, we believe contagion to the broader high yield market is very likely[9]. Empirically we find spreads re-price wider largely in conjunction with rising losses and defaults, not necessarily prior to their realization[10]. Part of this may be a function of larger issuers defaulting later into an industry-specific downturn, which aligns with academic literature indicating credit spreads react more negatively upon defaults in large benchmark issuers. This thesis also seems appropriate in the current environment as some investors have been 'trapped' in commodity related positions – unable to exit given a lack of secondary market liquidity. The initial phase of the sell-off has been to shift exposure out of lower-quality commodity exposure into like risk in other industries. The next phase of the sell-off will likely negatively impact lower quality non-commodity issuers, whose valuations have recently come under pressure, but risks remain asymmetric to the downside (Figure 10).

Figure 9: US High Yield spreads and 80th and 90th percentile spreads across industries (bp)



Source: UBS, Yieldbook

Figure 10: Triple C default rates, spreads and triple C ex-energy* vs energy spreads (bp)



Source: UBS, Yieldbook; *CCC spreads starting Oct-14 represent CCC Ex-Energy

Third, we presume that investors will only reach for yield if future potential returns are appropriate. Our prior research finds that when investors initiate positions in US high yield bonds in the middle or later stages of the default cycle, future excess returns are typically low or negative over a multi-year horizon – if initial spreads are at or below 500bp[11]. And future excess returns are particularly poor for the lower quality segment. Given current spreads are in the mid-600bp context, we modified this analysis to consider potential excess returns assuming corporate credit markets re-price along a path similar to that witnessed in the late 1990s (Figure 11). Specifically we estimated annualized excess returns over the next two years assuming a) spreads linearly re-price to levels similar to those observed at the end of the 1990s credit cycle[12] and b) downgrades and defaults are in-line with historical averages. In our view, much of the lower quality speculative grade universe will face severe refinancing challenges by 2018 – if not before – given sizeable maturities come due through 2020 and maturity walls understate the refinancing risks given pull-forward effects derived from credit agreements[13].

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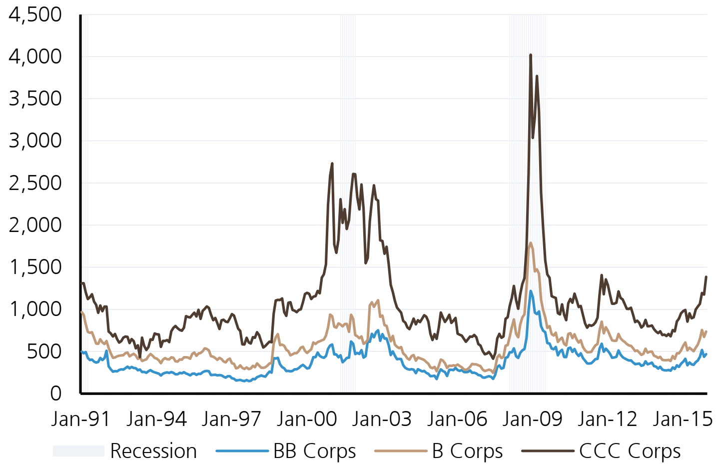
[9] Is US corporate credit about to catch the Flu, M. Mish, S. Caprio, 18-Nov-2015
[10] US: A Show Me Market? M. Mish, S. Caprio, 25-Feb-2015
[11] Is the US high yield bond theatre on fire, M. Mish, S. Caprio, 07-Aug-2014
[12] Our spread targets are calculated as the average spreads observed by rating over the period Dec 00 – May 01, Figure 13
[13] This occurs when a credit facility with different tenor loans, typically a shorter-dated revolver & longer-dated term loan are refinanced at the same time

Estimated annual excess returns in the above scenarios may appear harsh at about 2%, -1% and -8%, respectively, for BBs, Bs and CCCs (Figure 12), but the bottom line is that lower rated credit risk (*ex-commodities*) offers coupon-like upside returns and equity-like downside returns. The real risk posed by illiquid credit markets is the interaction between liquidity and default risks[14]; namely, as an issuer's fundamental prospects deteriorate, secondary market liquidity declines as dealers pull back, and default risk rises as equity holders face larger losses in refinancing maturing bonds. This can become a vicious cycle as plunging bond prices correlate with falling equity prices, sending further market signals of stress and further complicating refinancing prospects. It is this scenario which we have consistently feared for lower-quality credits; i.e., a liquidity 'crunch' exacerbates deterioration in fundamentals and creates a self-fulfilling prophecy – but on a broader scale.

Figure 11: US high yield credit spreads by rating (bp)



Source: UBS, Yieldbook

Figure 12: US high yield estimated excess returns by rating assuming a corporate credit recession in 2018 (annualized, bp)

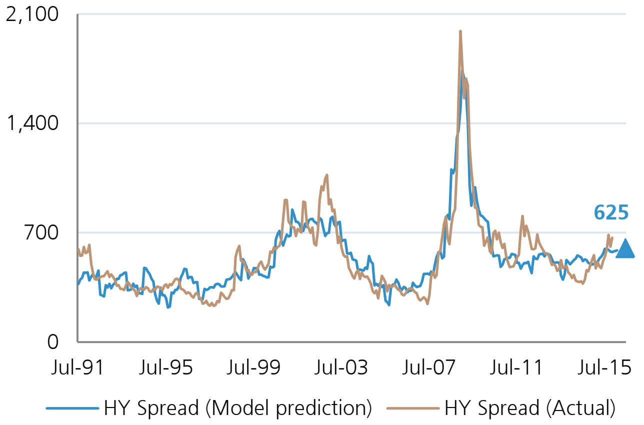
Month	BB Corps	B Corps	CCC Corps
Current Spreads (bp)	465	732	1,385
Average Spreads (Dec'00 – May'01) (bp)	495	847	2,149
Annual excess returns (bp)	195	-129	-881

Source: UBS

Last year we analyzed the principal drivers of high yield total returns historically; our findings were straightforward – spreads and ratings are key drivers, sectors are secondary, and tenor is of tertiary relevance. Near term, our 6-month forward-looking high yield spread model suggests current spreads look fairly valued at wider levels[15], and may even be slightly cheap on a very tactical basis (675bp market versus 625bp model spread, Figure 13). However, over the long term, we believe credit spreads move wider, not tighter. We anticipate US speculative grade default rates to breach 4 – 4.5% by the summer and, depending on the speed of re-pricing in the lower quality segment and duration of the dearth in low-quality issuance and tightening credit standards[16], they will likely finish the year higher, in the 5 – 6% range (Figure 14).

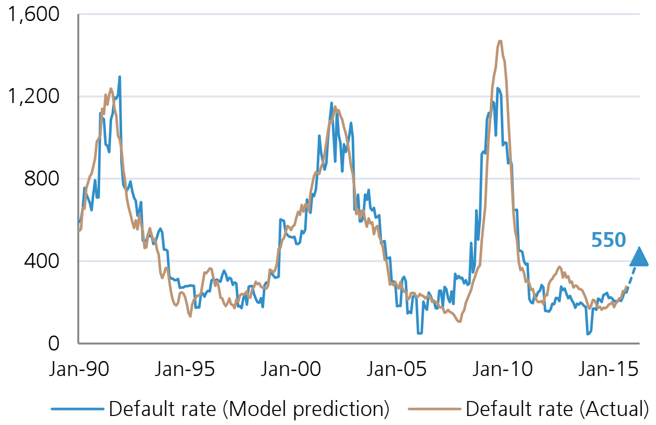
[14] A Primer on Corporate Bond Liquidity, M. Mish, S. Caprio, 23-Oct-2014
[15] Interactive Credit Models, M. Mish, S. Caprio, 03-Nov-2015
[16] Credit Cycle Turning? Non-Bank Liquidity Hits Multi-Year Lows, S. Caprio, 08-Oct-2015

Figure 13: US HY spreads: 6-month forecast vs. actual



Source: UBS, Yieldbook, Moody's, Bloomberg

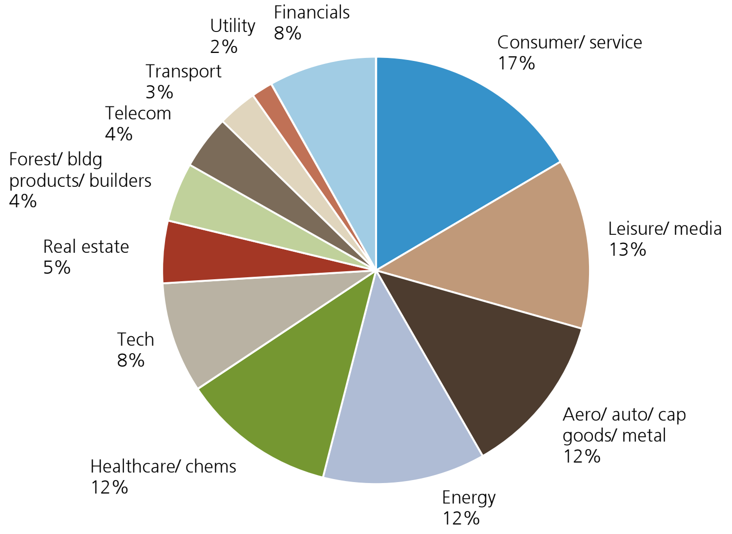
Figure 14: US HY defaults: 12-month forecast vs. actual



Source: UBS, Yieldbook, Moody's, Bloomberg

Investors should use the emergence of a new-year tactical rally to sell into strength, as we expect any outperformance to be fairly short-lived. Significant selling pressure should intensify in the lower quality segments of the market as we move through 2016. In our view, sector selection is particularly challenging – i.e., finding places to hide is not easy. The largest sectors of the speculative grade rated universe can hardly be characterized as defensive – namely consumer/service, leisure/media and industrials – the majority of which are highly leveraged and highly cyclical. And industries traditionally considered more defensive – namely energy and healthcare – face stiff secular headwinds. In total, they account for nearly two-thirds of outstanding speculative grade debt (Figure 15). Finally, we would not view US leveraged loans as a safe haven. We remain very concerned about the combination of elevated credit risk, further credit tightening from regulation and volatility in a concentrated buyer base (i.e. CLOs now own roughly two-thirds of the overall market as mutual fund ownership continues to wane). Where could we be wrong? There are many places, but more likely if a) commodity prices rally substantially, b) US equity market multiples overshoot significantly or c) the Fed aggressively eases policy.

Figure 15: S&P rated universe by industry (issuer count, %)



Source: UBS, S&P

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