

Counter-Cyclical Sector Allocation

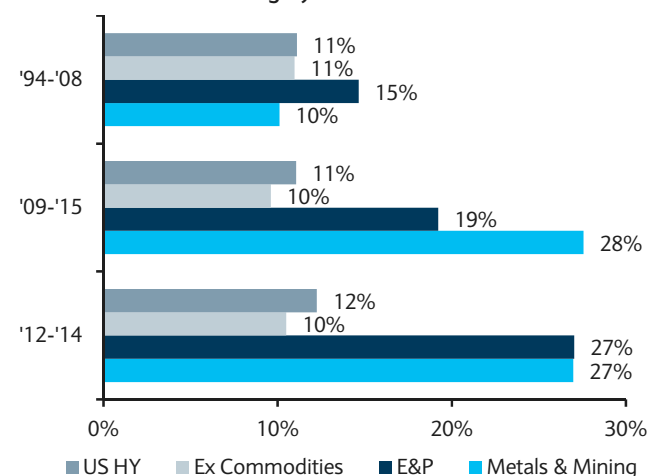
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Extraordinary growth in issuance from the commodities sectors during the post-crisis period should serve as a broader cautionary tale for sector allocation. As Figure 1 illustrates, in 2009-15, the E&P and metals & mining sectors grew at nearly double (19%) and triple (28%) the annual rate of the index excluding those sectors (10%). Although the assumptions underpinning this flood of debt-led investment seemed sound at the time, a subsequent freefall in commodity prices and related slowdown in global macroeconomic growth turned a credit boom into a bust in those sectors.

Spotting full-blown credit cycles in advance is challenging, but using net issuance as a signal for sector allocation is highly useful. In *Issuance Dynamics and Performance of Corporate Bonds* (September 15, 2014), our Quantitative Portfolio Strategy group showed the effects of net issuance on corporate bonds (including investment grade) in great detail. We replicated some of the basic elements of that analysis for high yield bonds and found similar results.

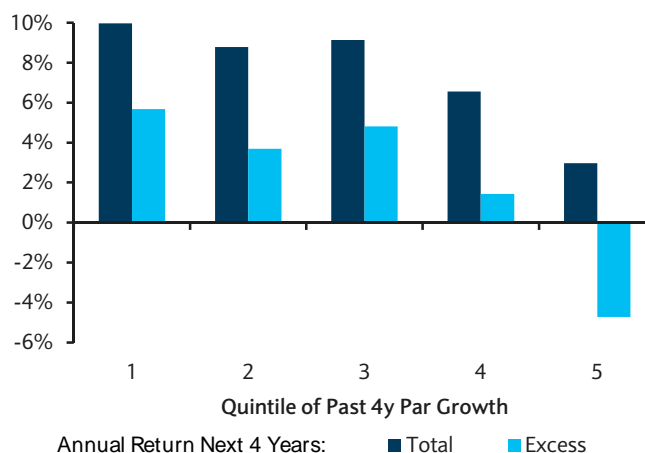
At the aggregate index level, a higher par growth rate is a signal of weaker forward returns, suggesting that par growth can be used as a signal for asset allocation models that include US high yield. Going back 20 years, we calculated the index growth rate net of turnover driven by fallen angels, rising stars, and defaults. Sorting based on that growth rate, a clear pattern emerges for forward returns (Figure 2). Indeed, when looking back four years for par growth and forward four years for returns, the difference in annual excess returns between the highest growth and lowest growth periods is a striking 10.4%. A similar relationship exists for different look-back and look-forward combinations, although we find it to be less distinct at the 6m/6m combination used in the paper referenced above. This is not entirely surprising given the difference in bond universes between the two studies. Furthermore, we did not find that the correlation of par growth and forward returns was much related to issuer size (Figure 3). Although larger issuers appear to drive a substantial portion of the results in the broader universe, which includes investment grade, in high yield the effect is more diffuse. Larger high yield issuers may be better positioned to take advantage of favorable primary market conditions, but they tend to be higher quality and, thus, have the conflicting incentive to be prudent with their financing policy in order to be upgraded to investment grade.

FIGURE 1
CAGR of Par Outstanding by Sector



Source: Barclays Research

FIGURE 2
Average Annual Forward Returns versus Past Growth in Par

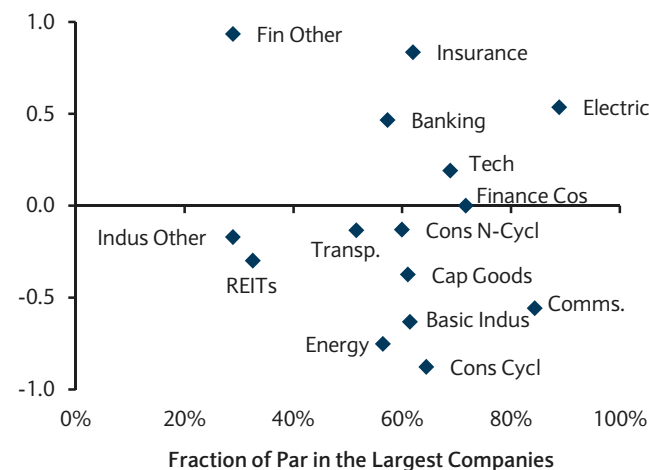


Note: Par growth adjusted for fallen angels, rising stars, and defaults. Four-year look-back on growth and four-year forward window for returns.

Source: Barclays Research

FIGURE 3

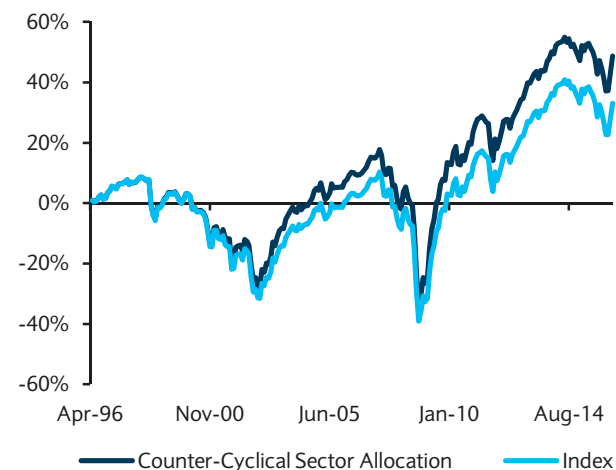
Correlation of Forward Returns and Net Issuance versus Issuer Size Concentration



Note: Largest companies defined as those in the top quartile of the index by par amount. Source: Barclays Research

FIGURE 4

Cumulative Excess Returns of a Counter-Cyclical Sector Weighting Strategy versus the Barclays US High Yield Index

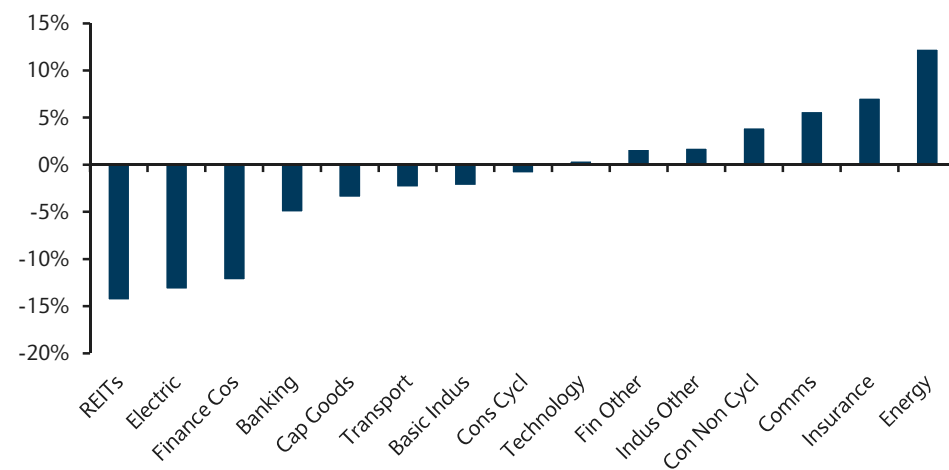


Source: Barclays Research

Within high yield, systematically underweighting (overweighting) sectors with high (low) net growth in par produces significant outperformance relative to the Barclays US High Yield Index. For illustrative purposes, we devised a simple rule whereby we adjust the sector's market-value weight based on its four-year net par growth rate relative to the index. For instance, if a sector's index weight is 10%, but its par growth has exceeded that of the index by 20% over the past four years, its new weight becomes 8%.¹ A monthly rebalancing strategy employing this rule, which linearly adjusts weights based on excess par growth, would have outperformed the index by 73bp per annum in excess returns over the past 20 years (Figure 4) and by 172bp per annum in total returns (please see Figure 5 for current excess par growth rates by sector).

FIGURE 5

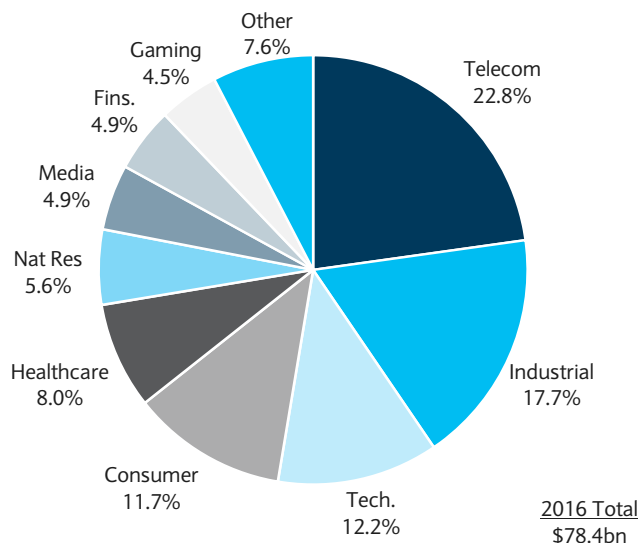
Four-year Par Growth Relative to the Barclays US High Yield Index



Source: Barclays Research

¹ New weight = index weight x (1 - excess growth rate); 8% = 10% x (1-20%). The minimum weight is set to 0% to avoid shorting. Weights are further adjusted pro-rata such that all sector weights add up to 100%.

2016 High Yield Supply By Sector



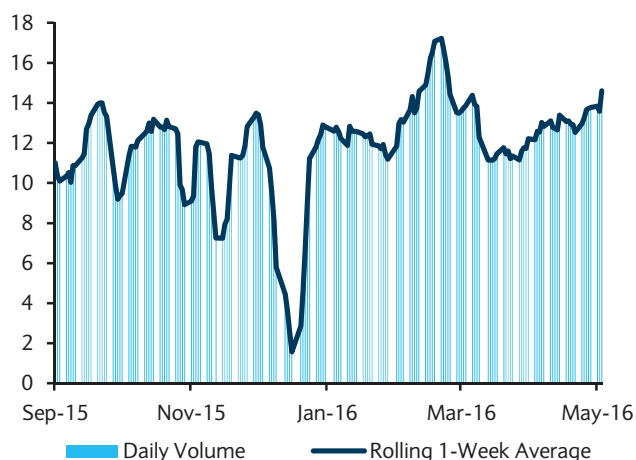
Source: Barclays Research

Top On-the-Run CDX index Names by Weekly CDS Volume

| | Notional Outstanding (\$bn) | | Volume – Week Ending 5/13/16 (\$mn) |
|-----------------|-----------------------------|-----|-------------------------------------|
| | Gross | Net | Gross |
| US Steel | 6.9 | 0.7 | 227.1 |
| Chesapeake | 8.3 | 0.7 | 213.4 |
| Dell Inc. | 8.6 | 0.7 | 210.5 |
| MBIA Insurance | 20.4 | 1.0 | 182.6 |
| J. C. Penney | 12.0 | 0.6 | 170.7 |
| Sprint Comms. | 13.4 | 0.9 | 123.7 |
| Frontier Comms. | 8.7 | 0.7 | 102.4 |
| AK Steel | 4.1 | 0.3 | 101.3 |
| CenturyLink | 9.7 | 0.8 | 91.9 |
| Dish DBS | 4.1 | 0.5 | 78.2 |

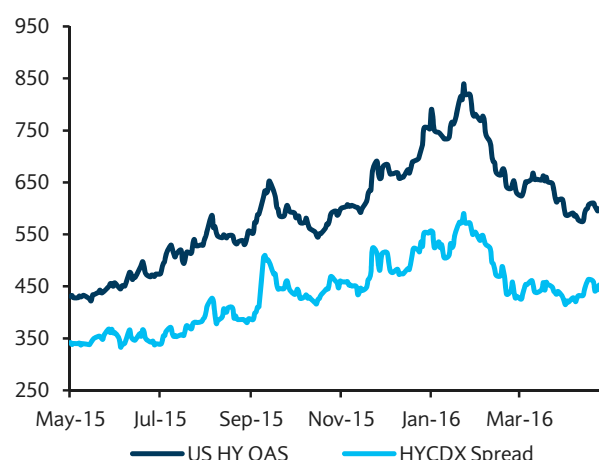
Source: DTCC

High Yield Average Institutional Trade Volume (\$bn)



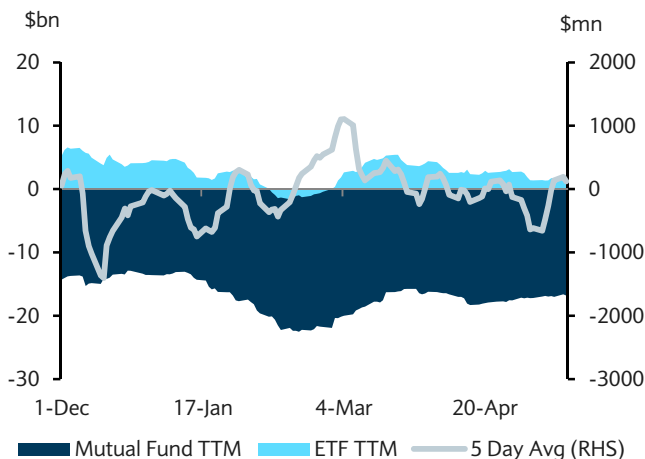
Note: Includes both registered and 144A volumes. Source: FINRA TRACE

On-the-Run HYCDX versus US High Yield Index (bp)



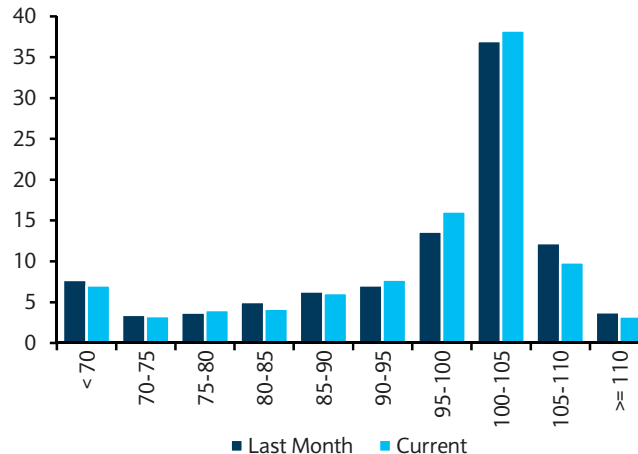
Note: CDX increase partly reflects roll to CDX.HY.25. Source: Barclays Research

Flows to High Yield Mutual Funds and ETFs



Note: Daily reporters only. Source: EPFR

High Yield Index Price Distribution by Par (%)



Source: Barclays Research

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