

Guide to Our HY Issuer Fundamentals Dataset

Extended HY issuer fundamentals dataset: US/EU/sectors

This publication serves as a guide to our HY issuer fundamentals dataset. We provide a full description of sample behind our fundamental aggregates, describe the types and calculations of those aggregates, and introduce new subsets, such as European HY, sector and credit quality breakdowns. We are also describing valuation methodologies we have developed using issuer balance sheet and income statement data, and highlight some of the most interesting findings at current levels.

Defining the sample of issuers in our dataset

The universe behind our aggregate fundamentals comes from all issuers in our global HY index (HW00) with country of risk limited to US and EU, and where financials are being distributed publicly on a consistent quarterly basis. Having established this broad eligibility rule, we are also looking for data consistency for the purposes of year-over-year calculations by controlling for presence of Net Debt, LTM EBITDA and LTM Interest Expense figures in each of the last four quarters. This measure primarily helps us avoid situations where changes in sample composition drive changes in YOY metrics with no relationship to actual underlying trends. In addition, it helps us maintain consistency and between quarter-end levels of various indicators (e.g. leverage or coverage ratios for any given quarter) and YOY changes in EBITDA or Debt levels. The issuers and figures behind both of these metrics would be the same in our sample.

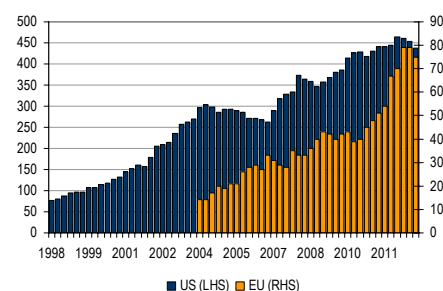
Adding EU HY to the roster of our fundamental stats

Starting with this publication we also extend our fundamental dataset to EU HY issuers. Here, we are tracking financials in EUR-equivalents for EUR- and GBP-reporting entities, i.e. some FX translation effects would be present in our aggregate calculations in case of the latter. We are also relaxing some of the restrictive conditions for data consistency described above for the US; European issuer sample is too small, at about 70-80 issuers, to be subject to those conditions at this point. For example level statistics, such as leverage ratio in a given quarter would only be subject to presence of both EBITDA and Debt metrics for each issuer in the sample; we would not include the trailing four-quarter presence requirement however. In YOY calculations we would only enforce the condition of data being present in two quarters (e.g. Q4 2012 and Q4 2011) that are subject to a particular YOY measurement; we would not be controlling EU issuers for presence in all four quarters within that YOY period, the way we do in the US. Again, these relaxed conditions are introduced with a goal of maintaining reasonable sample size, a more pivotal goal to maintaining a coherent aggregate dataset in the EU HY, in our opinion.



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Evolution of our issuer dataset over time



Source: BofA Merrill Lynch Global Research

Current characteristics of our dataset

	US HY	EU HY
Issuer Count	450	75
Net Debt	\$951	€ 157
LTM Revenues	\$1,664	€ 435
LTM EBITDA	\$247	€ 56
LTM Interest Expense	\$72	€ 9
LTM CapEx	\$199	€ 24

Source: BofA Merrill Lynch Global Research

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Refer to important disclosures on page 9 to 10. Link to Definitions on page 8.

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All charts in this report are available in Excel format under option 24 on HYDL page in Bloomberg

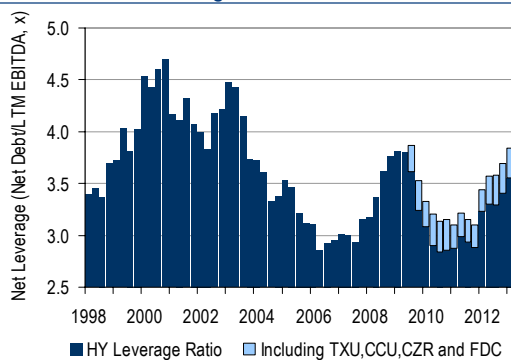
Diving into the details

Below, we discuss some of our fundamental metrics and their trends in detail.

Leverage and interest coverage

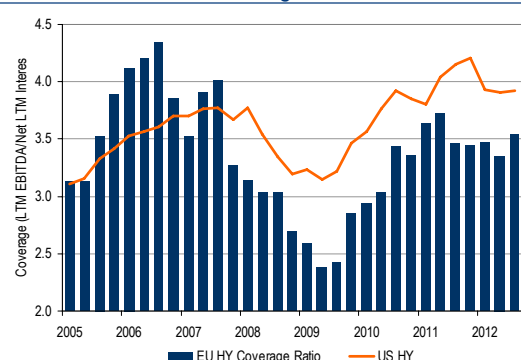
- Calculated as Net Debt divided by aggregate EBITDA over the last twelve months.
- Data is shown including and excluding legacy LBO issuers (TXU, CCU, CZR and FDC) from 2009 onwards, due to their outsized impact on the metrics.
- The US market has just crossed the historical average level (3.5x) on the upside (ex said LBOs). All factors are in place for it to continue to trend higher, as we show later in this report.
- European issuer leverage, though much higher through the 2009 credit cycle, has recently been coming in lower than its US counterpart (currently at 3.2x, see Figure 2) mostly as a function of issuers remaining on the defensive there and focusing on balance sheet strength as opposed to business expansion.

Figure 1: US HY issuer leverage ratios



Source: BofA Merrill Lynch Global Research

Figure 2: EU vs US HY issuer leverage ratios



Source: BofA Merrill Lynch Global Research

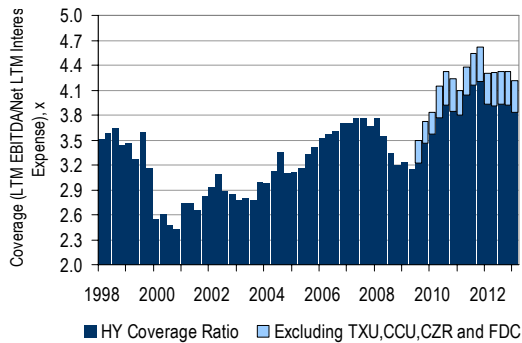
- Coverage across our issuer samples has been steadily increasing since bottoming out in mid-2009. In terms of absolute levels, US issuers fare better than European (3.9x vs 3.5x).

Spread per turn of leverage

- Calculated as spread of the sample divided by its leverage, indicates the incremental risk an investor is taking with each turn of leverage in the market (Figure 4).
- Aside from 2008 episode, the US metric has oscillated in the 75-250bp range most of the time, with an average running around 150bp.
- At the moment, this metric is at 120bp in the US, 140bp in Europe.
- Interestingly enough, the spread/turn measure has been running relatively close in both US and EU HY in recent years, despite meaningful divergences in nominal spreads and fundamental macro backdrop.

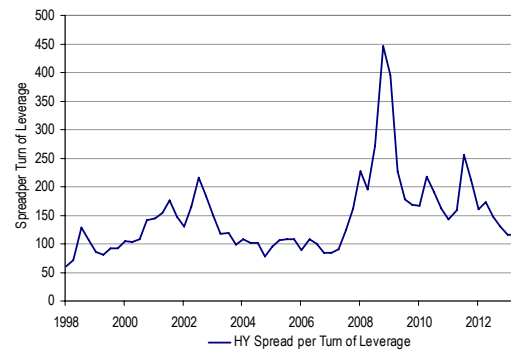
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Figure 3: US HY issuer interest coverage ratios



Source: BofA Merrill Lynch Global Research

Figure 4: US HY issuer spread per turn of leverage

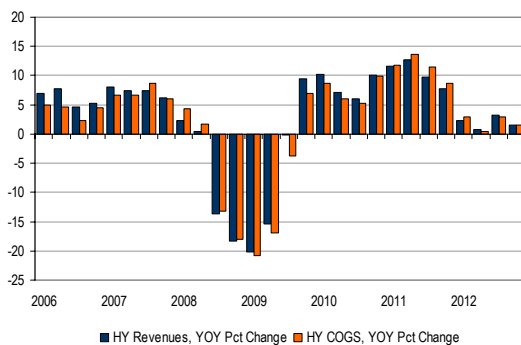


Source: BofA Merrill Lynch Global Research

Issuer profitability

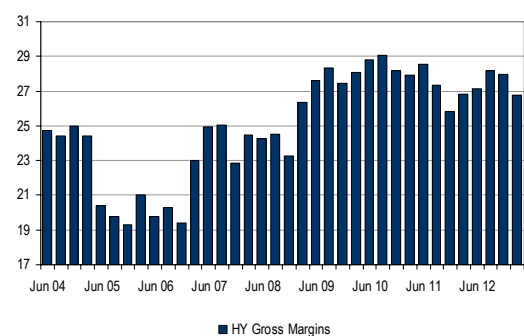
- US issuer revenues and COGS have reached their peak growth rate of ~12% around late 2010 and remained on a declining trend ever since. We have seen these measures bottoming out in the last few quarters at low single digit positive rates, barely avoiding a negative print.
- The disciplined efforts of US HY companies in reducing their costs comes also across through their margins, which have held up rather well, currently at 27%.
- EU HY issuer revenue and COGS growth has also stayed barely positive in the last couple of years, a surprise in our opinion, given the very difficult macro backdrop on the continent.
- EU revenue growth turned negative in Q1 2013, the first contraction since 2009. Margins are also meaningfully lower vs the US issuers (currently at 20%).

Figure 5: US HY issuer revenues and COGS, YOY pct change



Source: BofA Merrill Lynch Global Research

Figure 6: US HY issuer gross profit margins

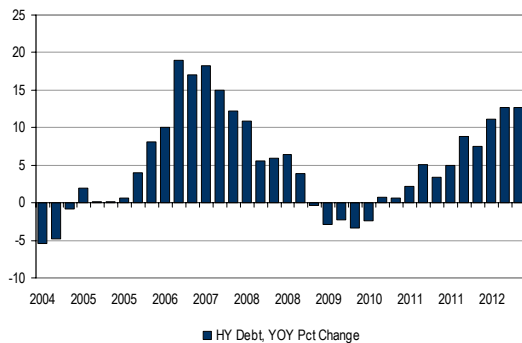


Source: BofA Merrill Lynch Global Research

Debt growth and releveraging of HY balance sheets

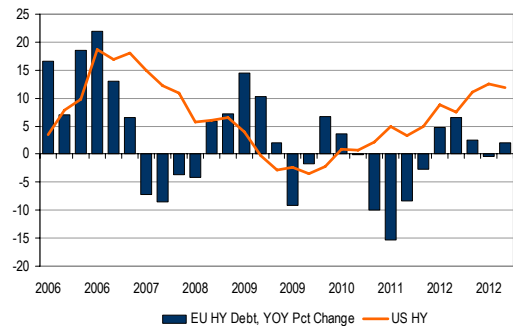
- Debt continues to grow in the US issuers, where issuers are now showing net issuance rate of around 12%.
- This rate has been on a consistent increasing trend since it bottomed out in late 2009.
- Between debt growing at 12% and EBITDAs staying barely above a negative print, there is only one way the leverage could go, and that way is up. This is consistent with the picture we demonstrated earlier.
- In Europe, not surprisingly, debt growth is not present, and in fact has shown significant contracting in 2011.

Figure 7: US HY issuer total debt (bonds & loans), YOY pct growth



Source: BofA Merrill Lynch Global Research

Figure 8: EU vs HY issuer debt growth YOY pct



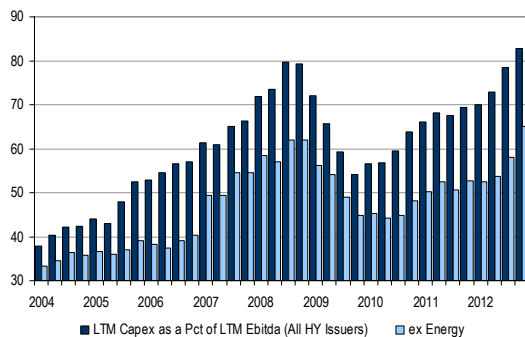
Source: BofA Merrill Lynch Global Research

Investment renaissance in the US

- US HY issuers have been experiencing a capex boom in recent years. Both LTM capex as a percentage of LTM revenues, and YoY pct change in capex are at cyclical highs, countering the theory that corporate spending is subdued and drags economic activity lower.
- The single largest contributing sector is Energy, which experiences nothing short of investment renaissance in the US. However, even removing this sector from overall picture, does not invalidate the conclusion: US issuers are borrowing and investing actively, even if at lower rates ex Energy.

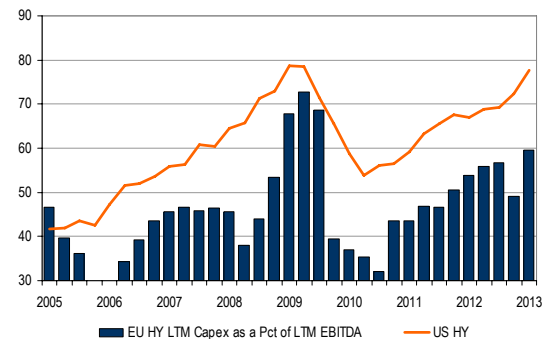
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Figure 9: US HY issuer LTM CapEx as a pct of EBITDAs



Source: BofA Merrill Lynch Global Research

Figure 10: EU vs US HY issuer CapEx as a pct of EBITDAs



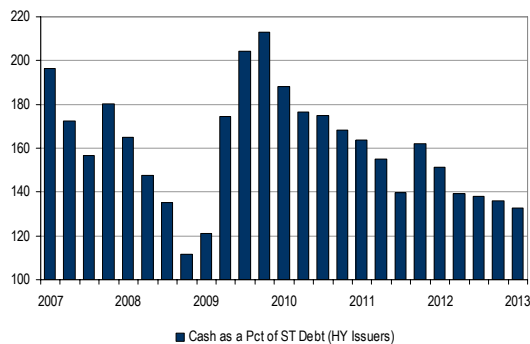
Source: BofA Merrill Lynch Global Research

- We continue to strongly believe that the Energy story in the US is as important, if not more so, than the housing market improvement to overall path of this economy. In fact, Energy being much less dependent on the level of interest rates than housing suggests that this sector could emerge as an unquestionable locomotive, and housing inevitably slows down following the recent spike in rates.
- European capex is running at significantly lower rates, understandably so, but it is also far from being in a complete shutdown, representing a ray of hope for the struggling economy seeking its way from the prolonged recession.

Balance sheet liquidity characteristics

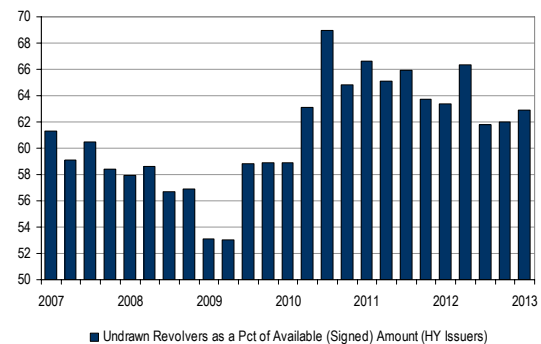
- Another measure showing increasing aggressiveness of US HY issuers in using their balance sheets is represented by the two ratios: cash as a pct of short-term debt and undrawn revolvers as a pct of total revolver capacity.
- In both cases the historical dataset shows how liquidity was built up in the aftermath of the 2008 credit crisis, but then subsequently issuers became more and more comfortable in bringing their cash and unused revolver balances further and further down.
- The pictures also demonstrate how issuers prefer the latter source of liquidity – undrawn revolvers – to the primary one (actual cash), undoubtedly a function of availability of cheap revolver facilities.

Figure 11: US HY issuer cash as a pct of short-term debt



Source: BofA Merrill Lynch Global Research

Figure 12: US HY issuer undrawn revolver capacity, pct of total

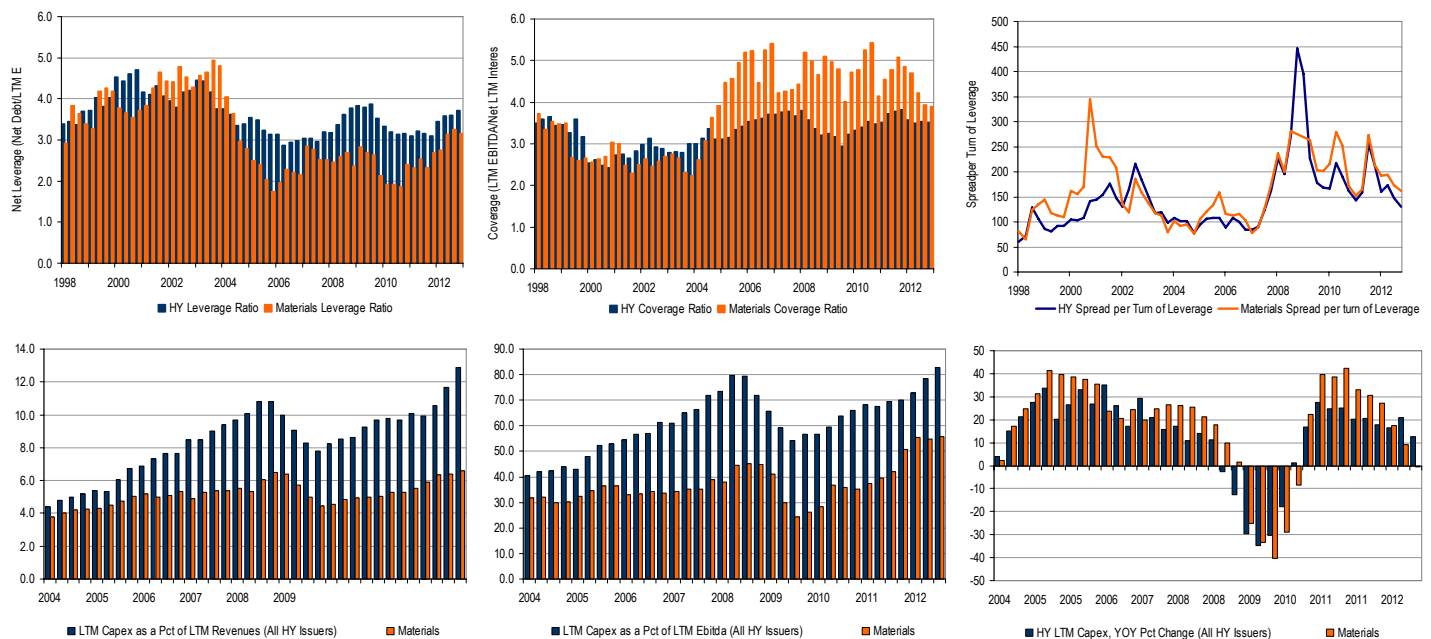


Source: BofA Merrill Lynch Global Research

Sector snapshots

Perhaps one of the most important improvements in our fundamental dataset is its ability to show most of the aforementioned factors on a sector level. For those readers accessing our model on HYDL page in Bloomberg, a drop-down menu option now presents an easy way to see these charts narrowed down to a particular sector, also overlaid with a broad market measure on that particular scale. Below, we are showing a snapshot of how such a sectoral breakdown looks like for Materials.

Figure 13: US HY Materials sector issuer fundamentals vs the broad market

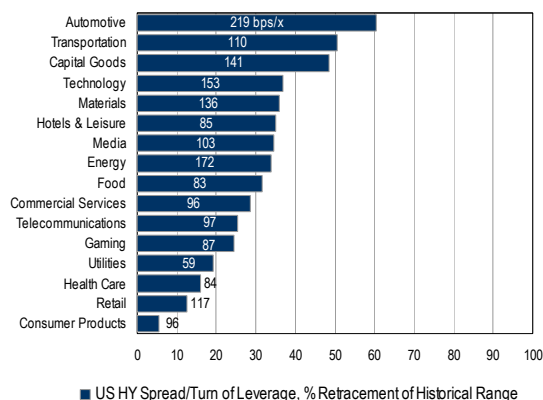


Source: BofA Merrill Lynch Global Research

Sector valuation model

Another interesting application of our fundamental dataset is a sector valuation model. Here we show spreads per turn of leverage on a sector level (e.g. 219bps/turn in Automotive in Figure 14 below) is shown as a number printed on each horizontal bar. The bar length itself is printed on a different scale – from zero to 100 – where the lower bound represents historical tights in spread/turn for each sector, and upper bound accordingly matches the wides. Historical range for this calculation covers 2004-present, and excludes Q4 2008 and Q1 2009 as those two quarters only reduce the quality of these measurements been such significant outliers.

Figure 14: US HY issuer retracement of sector spreads/turn



Source: BofA Merrill Lynch Global Research

Figure 15: Components of spread/turn retracement calculation

HY Sector	Current Statistics			Spread/Turn Range	
	Issuer Count	OAS	Leverage	Min	Max
Automotive	15	466	2.1	46	332
Transportation	8	598	5.4	41	178
Capital Goods	30	423	3.0	50	238
Technology	17	431	2.8	77	284
Materials	51	514	3.8	70	254
Hotels & Leisure	17	332	3.9	26	192
Media	34	426	4.1	25	252
Energy	64	423	2.5	81	349
Food	15	372	4.5	53	147
Commercial Services	22	402	4.2	44	227
Telecommunications	22	441	4.5	48	240
Gaming	10	477	5.5	29	266
Utilities	22	397	6.7	20	225
Health Care	36	362	4.3	64	185
Retail	26	444	3.8	85	338
Consumer Products	18	389	4.0	86	281

Source: BofA Merrill Lynch Global Research

All of this could be easier understood on a specific example. Continuing with the Automotive category, the current 219bp/turn spread is approximately 60% on its way from historical tights to historical wides for Automotive spread per turn of leverage. Readers can find all variables used in this calculation in the table in Figure 15. So this approach provides us with three different angles on the question of sector valuations: absolute value (219bps), relative to history (60% retracement), and relative to other sectors (the wides sector in our dataset¹). Accordingly, sectors at the top provide relatively attractive valuations based on these angles, and sectors at the bottom are relatively tight.

What this model does not tell us is what if the market is expecting Automotive leverage to deteriorate going forward and is pricing those expectations in accordingly. And even those this question indeed is not directly answered by this model, it almost brings it upfront for further examination. In other words, it almost begs the question: do we believe Automotive leverage is about to deteriorate as much as needed to bring its spread/turn retracement down to market average?

For the most inquisitive of our readers, this puzzle works out to 3.3x; this is the level of leverage that would bring Automotive spread/turn down to 140bp, which would be approximately 30% on its way from tights to wides. This level – 30% – appears to be the average across all sectors in US HY. Whether Automotive is in fact in a position to experience such a sharp increase in leverage is of course a

¹ Our model does not cover Financial and Real Estate sectors.

subjective question that requires as much, if not more, input from fundamental credit analysts as it does from strategists. We for one, do not see many reasons to believe this is a likely outcome. Of all the sectors in the US economy, Automotive is perhaps enjoying some of the strongest underlying dynamics, including (1) fully rebuilt balance sheets following a deep cleansing wave of bankruptcies in 2008; (2) significant aging of existing fleet experienced following a sharp drop in sales in 2008-09; (3) cheap raw material costs (steel, copper, aluminum at multi-year lows); (4) relatively low oil prices with a capacity to go even lower in the US; (5) cheap financing available to buyers. A similar type of analysis could be performed for other sectors measuring at extremes on this chart; this falls outside the scope of this particular report however.

Link to Definitions

Credit

Click [here](#) for definitions of commonly used terms.

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