

High Yield Talking Points

Measuring dispersion -- let me count the ways

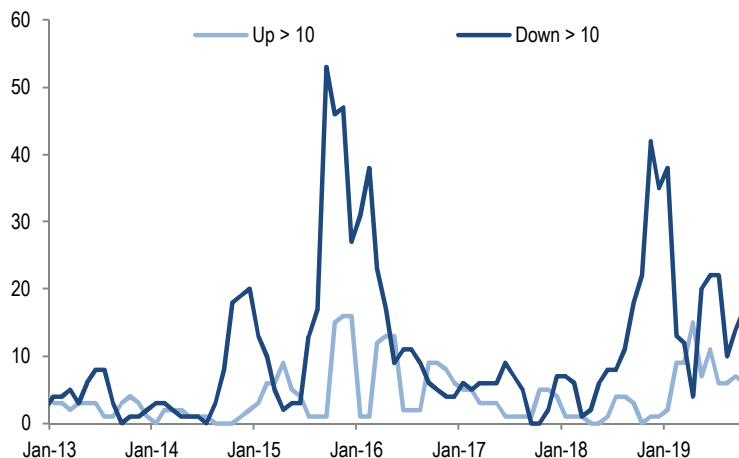
Single-name dispersion in the high yield market has been topical for some time now. Indeed, we can trace the origin of this theme back to the third-quarter of last year, when [issuer fundamentals peaked](#), default rates first began to rise, and large single-name price moves became more frequent (see [Dial D for Dispersion](#)).

Ever since then, we've had numerous requests for ways to represent dispersion graphically, presumably so that investors can point to the value of stock-picking in the current environment. Here are a few of our favourite measures, and where they currently stand.

Number of large price moves (Figure 1)

A simple yet popular chart illustrating the number of instruments moving 10 points in a month. Unlike in 2015-16, this measure shows a moderate volume of underperforming bonds even after the initial spike in decliners in 4Q18.

Figure 1: Number of High Yield Bonds Moving >10 Points per Month



Source: J.P. Morgan. Rolling 3 month total of rated euro and sterling HY bonds. Updated to 16 October 2019.

Spread percentiles (Figure 2)

This chart gives a perspective on the distribution of spreads over time. This is important because it can distinguish between different segments of the market: for example, we see that better quality credits have actually tightened since the middle of 2018, with most of the weakness concentrated in the widest 10% of credits. This measure is somewhat distorted by the growing cohort of yield-to-call bonds that trade at depressed spreads.

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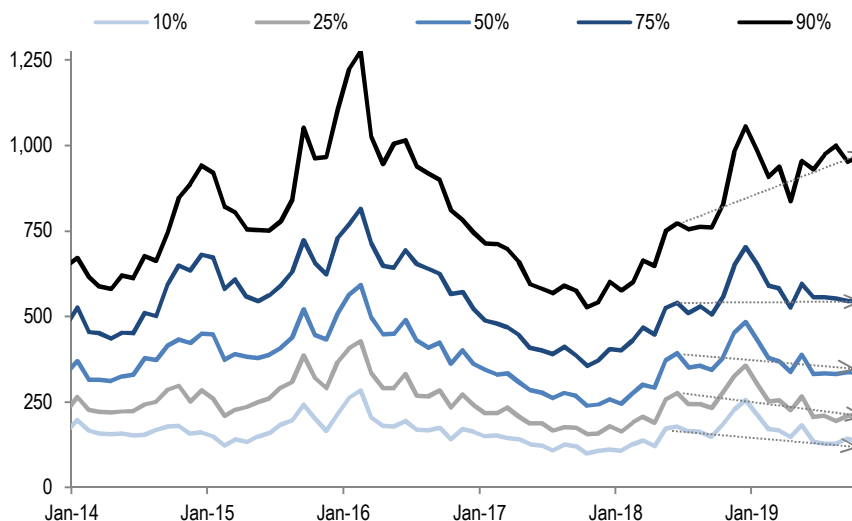
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Figure 2: European High Yield Spread Percentiles, bp



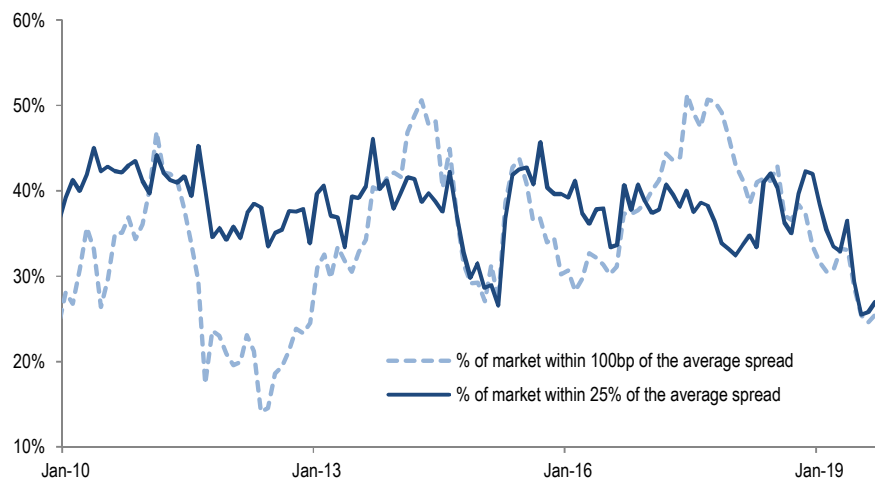
Source: J.P. Morgan, MARKIT Group.

Amount of outliers (Figure 3)

A metric we have not published before, this shows the proportion of the market that trades within a specified range of the aggregate index spread. In this case, we have used a fixed 100bp interval, as well as a variable 25% of spread; we think the latter is more relevant as it normalises for the overall spread level, and therefore gives a truer picture of dispersion.

Both series have trended down in 2019, indicating that the number of outliers has risen. **The proportion of bonds trading with 25% of the index spread is close to its lowest level this decade**, which tells us that the high yield market has become extremely bi-furcated.

Figure 3: Proportion of the High Yield Market within 100bp or 25% of the Average Spread

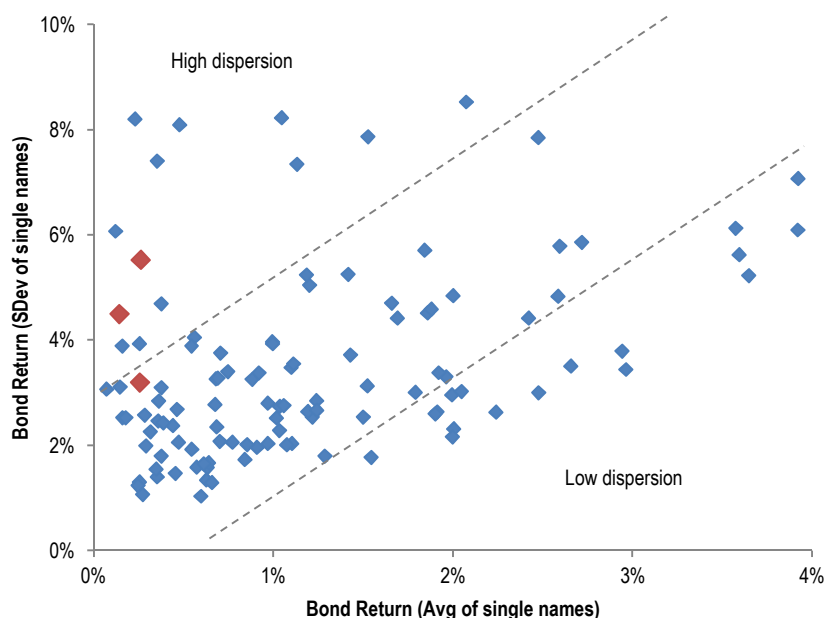


Source: J.P. Morgan, MARKIT Group.

Variance of price returns (Figure 4)

This chart highlights the variance of monthly bond returns across the high yield market, capturing more than just the large movers shown in Figure 1. In recent months, denoted by the red data points, absolute average returns have been relatively low, but the standard deviation of individual bond returns has been fairly high. This points to **an environment where there are lots of big winners and losers**, which effectively cancel each other out. The large variance reflects an opportunity for investors to generate (or lose) 'alpha' via stock selection, while the low market return shows the lack of a 'beta' trade.

Figure 4: Dispersion of European High Yield Bond Monthly Price Changes



Source: J.P. Morgan. Average returns are absolute values, i.e. always shown as positive numbers. Red data points are Aug, Sep, and Oct MTD 2019. Dashed lines are for context only.

Single-name CDS Dispersion (Figure 5)

Measuring dispersion of single names within a CDS index is more straightforward than a bond index, we think, since the number of constituents is typically smaller, the composition doesn't change as frequently, and all of the underlying contracts are of the same maturity and coupon. This latter point allows us to use upfronts instead of spreads, which is helpful for distressed credits that trade on price and where spreads are meaninglessly large.

Figure 5 shows the standard deviation of single-name CDS upfronts in iTraxx Crossover OTR, normalised by the average upfront. Each series – arising from composition changes due to the index roll or an on-the-run default – needs to be viewed independently. From S24 onwards, every Crossover series has experienced increased dispersion during its OTR lifetime, with the exception of S26. This can come from orphanings, or from issuers becoming distressed; S32 is already following the pattern of previous series, due to Hema widening abruptly in the past few weeks.

Figure 5: Dispersion of On-the-Run iTraxx Crossover Constituents



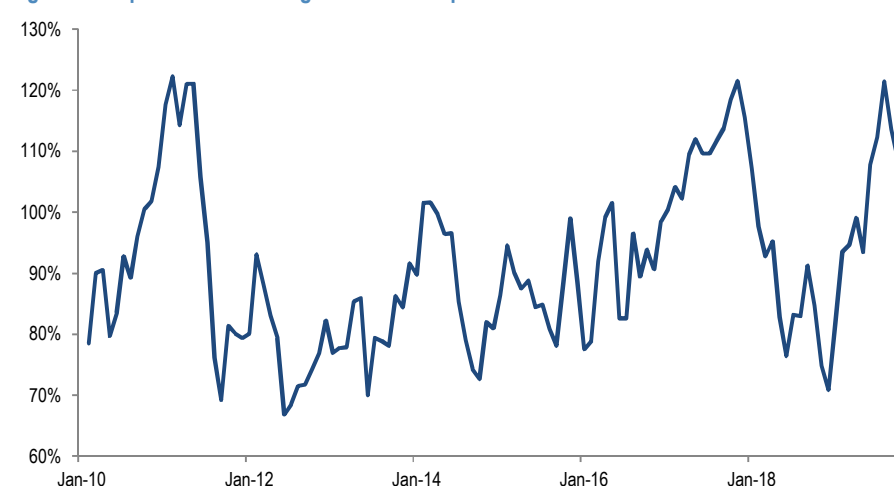
Source: J.P. Morgan. Standard deviation of CDS upfronts divided by average expected loss. Series changes at index roll or OTR default.

Single-name Bond Dispersion (Figure 6)

Finally, we perform a similar calculation to Figure 5 on the constituents of the euro high yield bond index. To mitigate distortions from distressed bonds trading at extremely wide spreads, and yield-to-call instruments at very tight spreads, we perform our dispersion analysis on the product of spread x duration.

We find that this measure of dispersion is at the upper end of its range from the past decade, having moved up from a trough at the end of 2018. Curiously, this metric was also elevated at the cycle tights of late-2017, a time when most investors would have considered dispersion to be very low, in our view. While interesting in its own right, we place less weight on this dispersion measure.

Figure 6: Dispersion of Euro High Yield Bond Spreads



Source: J.P. Morgan. Standard deviation of (spread x duration) divided by average (spread x duration).

How to trade dispersion

While most of the charts in this report cover the bond market, the best dispersion-themed macro trades involve CDS index products, in our view. Tranches in particular are a natural conduit for expressing views on the distribution of spreads within an index; the latest edition of [*CD Player*](#) runs through valuations in the index tranche market, including the new on-the-run S32 tranches.

The obvious trade for playing a continuation of the dispersion theme is buying protection on equity or junior mezz. However, Crossover tranche implied correlations have already fallen over the past year, making this trade costlier to implement.

For choice, **S28 or S30 junior mezz** are the tranches we would buy to position for further dispersion, as those series offer a combination of (i) a number of already defaulted credits, making the junior mezz more equity-like, and (ii) 3/4 years to expiry respectively. Our preferred trade remains **Crossover-Main decompression**, which has performed consistently over the past year due to a pick-up in idiosyncratic events.

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