QPS FICC Abstract

Credit Spread Decomposition: Decomposing Bond-Level Credit OAS into Default and Liquidity Components

This is an abstract of a white paper, "Credit Spread Decomposition: Decomposing Bond-Level Credit OAS into Default and Liquidity Components" (originally published on 8 July 2010).

- We decompose a credit bond's OAS (over Treasuries) into three components: a market-wide risk premium, expected loss from default, and expected liquidity cost.
- We show that bond-level liquidity cost (as measured by Barclays Capital Liquidity Cost Scores – LCS) can help explain the OAS dispersion across bonds, even after accounting for differences in expected default losses. This holds for both investment grade and high yield bonds.
- Portfolio managers can use spread decomposition to help determine if a bond's spread has moved mainly because of liquidity or for default-related reasons. This information can potentially lead to better decisions regarding portfolio construction and positioning.
- Spread decomposition analysis indicates that, at the aggregate level, liquidity cost became an important determinant of OAS levels as early as mid-2007, during the early period of the mortgage crisis, before increases in expected default losses. Perhaps cash corporate market makers react more quickly to perceived corporate risk, by widening bid-ask spreads, than does the corporate default risk market.
- We show that spread decomposition can also help forecast credit spread changes, as well as help identify undervalued bonds.
- Finally, results from spread decomposition can improve the hedging of credit bonds by allowing managers to focus on default and liquidity components separately.

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[1] The team #1 in the Quantitative Analysis category in the *Institutional Investor* All-America Fixed Income Research Team Survey (2006-2008) and from 2017-2018. During 2009-2016, this category was not included. The team ranked #1 in the Quantitative Analysis category in the All- Europe Institutional Investor Fixed Income Research Survey (2013-2015).

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