

CDS Market Liquidity

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The overall theme of the research project is liquidity effects in the credit default swap (CDS) market. A CDS contract is a form of insurance contract, where the buyer of protection pays a regular premium and, in return, receives a compensation for the losses incurred if a particular entity (typically a corporation) defaults. The CDS market is very large with the notional amount of outstanding contracts totaling 26.9 trillion dollars as of June 2012, according to recent statistics from the Bank of International Settlements. The research project distinguishes between two aspects of liquidity. One is the level of liquidity, which measures the ease and cost of trading a particular CDS contract at a given point in time. The other is liquidity risk, which is the risk that a particular CDS contract will realize a negative return, when market-wide CDS liquidity deteriorates. The first contribution of the research project is to construct a new measure of market-wide CDS illiquidity from divergences between the traded levels of credit indices and their theoretical levels. Credit indices are contracts that provide default protection on portfolios of entities, and theoretical levels can be obtained from portfolios of individual CDS contracts on the same entities. In normal times, arbitrage activity keeps traded levels of credit indices close to their theoretical levels. When CDS market liquidity deteriorates, traded levels can deviate more from theoretical levels before arbitrageurs become active. As such, we can use deviations from fundamental values as a measure of CDS market illiquidity. The second contribution is to use the market-wide CDS illiquidity measure to assess the impact of liquidity risk on expected returns of CDS contracts. For instance, is it the case that contracts that are more liquidity risky have higher expected returns? And does the effect of liquidity risk remain after controlling for the average level of liquidity of individual CDS contracts? Studying the impact of liquidity on CDSs is important for several reasons. From a theoretical perspective, CDSs are interesting as these contracts trade in a relatively opaque, dealer dominated, decentralized market and as such are subject to numerous sources from which illiquidity may arise. From a practical perspective, the issue is important for the trading, pricing, hedging, and risk management of CDSs. This is underscored by the recent 5 billion dollar trading loss at JP Morgan associated with relatively illiquid CDS market strategies. From a regulatory perspective, given the importance of a well-functioning CDS market for the stability of the financial system, quantifying liquidity effects is clearly also important.

Research Team

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Fields of Research

Capital Markets