

The Spectral Structure of the Credit Default Swap Market

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Abstract

Credit Default Swaps are popular derivatives contracts traded on reference entities with outstanding credit obligations. Using spectral clustering, CDS contracts are clustered based on the correlation matrix of their spread changes. There is significant change in what contracts are placed in what group when using different time periods of data, but whether or not these changes are systematic remains an open question. Further, it does not appear that the clustering of CDS contracts relates specifically to predefined sector labels. However, it does appear that the spectral clustering of the CDS market relates strongly to more widely traded Credit Default Swap Indices.