(very preliminary and incomplete)

A Network Map of Information Percolation¹

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Abstract

We measure information percolation in securities markets for a one-security-many-markets setting. Applications range from over-the-counter dealer markets to centralized trading in securities and their derivatives (broadly defined). The outcome is a network map with markets as vertices and information flows as directional edges. The approach first removes pricing errors due to, for example, liquidity trades. It then measures the information flow from A to B by the strength of B's immediate response to A. To illustrate the approach we analyze information percolation in normal-market conditions and flash crashes.