

Dynamic Correlation and Emergent Factors: their Detection and Governance in Finance.

Financial engineers and risk managers commonly build one or two factor models to price and risk manage financial contracts, and in so doing, have posited static correlation structures. What has appeared in the risk management context is strong comovements among what were considered to be unrelated and weakly correlated markets, and we need to revise our risk management framework. To date, the basic dynamics in the markets have been the directly observable market prices. We examine a framework in which markets are driven by levered positions held by financial institutions, and suggest that a more successful risk management strategy may lie in the estimation of large position concentration to anticipate the emergence of new market dynamics and correlation structures. We propose that financial regulation versus free market tension may depend upon participating institutions providing a certain degree of position transparency.

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