

"A man is
great by
deeds, not by
birth"

-Chanakya

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Portfolio Risk and Stress across Business Cycle

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Abstract

Past research on market stress limits the scope to the extent of measuring tail loss (CVaR) by looking after joint asset correlations. We probe further the interactions of daily tail risk estimates of thirty market indices representing a broad spectrum of assets from 2003 till 2015 across the USA and other major financial hubs. We study the dependence structure through Conditional Copula augmented Markov-switching transitions. Results show extent of contagion of tail risk, cross-assets and cross-geographies formed during economy wide stress and role played by alternative assets to mitigate overall state wide risk. Our results also show magnitude of tail risk contagion amongst countries studied. Investment managers allocating capital on cross-border and cross-assets may benefit from the results. Large banks and other international financial institutions may assess potential tail risk awaiting their trade book.

JEL Classification: C34, C58, G11, G15, G20, G32

Keywords: Portfolio Risk; Conditional Copula; CVaR; Stress; Markov-Switching; Business Cycle; Alternative Assets.

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