



THE UNIVERSITY OF
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Department of Statistics

MASTER'S THESIS PRESENTATION

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Assessing Market Index Dependence Using Conditional Time-Varying Copulas

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ABSTRACT

In this paper, we analyze the time dynamics of the dependence structure between S&P500 (Standard and Poor 500 Index) and the following three indexes: FTSE100 (Financial Times and London Stock Exchange Index), SSEC (Shanghai Composite Index). We follow Patton's (2006) conditional copula setting to capture the dependence structures. We conclude that the dependence between S&P 500 and the other indices has been quite stable after the 2008 financial crisis. Furthermore, we apply a goodness-of-fit test based on parametric bootstrap to select the best copula that fits the data. Finally, China's stock market and U.S. stock market doesn't show a lot of dependence.

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