

# Quantile Connectedness between Sino-US Political Tensions and Stock Market Return of US and China

Hao Wen Chang<sup>1</sup>, Yifei Cai<sup>2</sup>, Thi Hong Phuong Vu<sup>3</sup>, Tsangyao Chang<sup>3</sup>, Mei-Chih Wang<sup>4</sup>

<sup>1</sup> National Yang-Ming Chiao-Tung University, Taiwan

<sup>2</sup> Teesside University, England

<sup>3</sup> Feng Chia University, Taiwan

<sup>4</sup> National Taichung University of Science and Technology, Taiwan

## ABSTRACT

This study analyzes how US-China political relation changes affect the stock market returns of the US and China through a Quantile Vector Autoregressive (QVAR) approach over the period of December 1990 to July 2022. Empirical results confirm the impacts of US-China political relation changes on stock market returns under different quantiles. The total spillover index under 0.25, 0.50, and 0.75 quantiles are 7.8%, 0.9%, and 1.1%, respectively, showing that asymmetric connectedness is found for different market conditions. The evidence of net directional connectedness is 3.4% for China, -0.5% for the US, and -2.9% for US-China PRI under the 0.25 quantile; those are -0.1% for China, 0.1% for the US, and 0.0% for US-China PRI under 0.50, and those are -0.3% for China, 0.2% for the US, and 0.1% for US-China PRI under 0.75, respectively. Our findings have important policy implications for investors, arbitrageurs, and speculators by providing the key investing signals. Specifically, the equity market in China is a net transmitter, and the equity market in the US and US-China PRI are net receivers when the market condition and political relationship are bearish and tense. However, when market conditions and political relationships improve, the equity market in China turns into a net receiver, the equity market in the US is a net transmitter, and the US-China PRI either is the net receiver or has no effect.

**Keywords:** Capital Markets, Connectedness, Political Tensions, Quantile VAR, Sino-US