

# COMPARATIVE ANALYSIS OF FACTORS INFLUENCING INDUSTRIAL VALUE ADDED IN CHINA AND THE UNITED STATES: EVIDENCE FROM DYNAMIC ECONOMETRIC MODELS

Yuxin DENG<sup>1</sup> and Panutporn RUANGCHOENGCHUM<sup>1\*</sup>

<sup>1</sup> College of Graduate Study in Management, Khon Kaen University, Thailand;  
rpanut@kku.ac.th (Corresponding author)

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## ABSTRACT

This study compares drivers of industrial value added in China and the United States, 2000-2024. Multiple linear regression and dynamic panel models assess fixed-asset investment (FAI), foreign direct investment (FDI), research-and-development (R&D), and electricity production (EP). R&D is most influential in the United States ( $\beta = 5.78$ ,  $p < 0.001$ ), whereas EP prevails in China ( $\beta = 3.26$ ,  $p < 0.001$ ); FDI is significant only for China. Robustness is supported by explanatory power ( $R^2 = 0.998$ , China; 0.974, United States). Results highlight investment- and energy-led growth in China versus innovation-led growth in the United States, guiding policy despite limitations.

**Keywords:** Industrial Value Added, Fixed Asset Investment, Foreign Direct Investment, R&D, Dynamic Econometric Models

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