Independent study title THE EFFECTS OF MACROECONOMIC

ANNOUNCEMENTS ON BITCOIN

VOLATILITY: A CROSS-COUNTRY

ANALYSIS

Author Thirapach Kaewpan

Degree Master of Science (Finance)

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(International Program)

Faculty of Commerce and Accountancy

University Thammasat University

Independent study advisor Associate Professor Konpanas Dumrongwong, Ph.D.

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ABSTRACT

This study investigates how macroeconomic announcements affect Bitcoin volatility across eleven countries, focusing on six key indicators: unemployment, GDP, CPI, PPI, exchange rate, and 10-year bond yields. Volatility is measured using the Garman–Klass estimator with daily data from 2013 to 2025, and extreme events are identified when volatility changes exceed the 90th percentile threshold.

The results show that unemployment news in Argentina and exchange rate announcements in India generate the strongest volatility responses. Bond yields and exchange rates account for the highest share of extreme events, while Saudi Arabia and India record the strongest country-level effects. Overall, the type of indicator, rather than its country of origin, plays the dominant role in driving extreme Bitcoin volatility, offering useful insights for investors and policymakers in managing risks around economic announcements.

Keywords: Bitcoin, Volatility, Macroeconomic Announcements