Independent study title COMPARATIVE MEASURES OF SYSTEMIC

RISK USING DYNAMIC CONDITIONAL

CORRELATION MODELS: EVIDENCE FROM

THAI BANKING SECTOR

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## **ABSTRACT**

This study examines systemic risk in the Thai banking sector from 2005 to 2024 using two measures: Conditional Value at Risk (CoVaR) and Marginal Expected Shortfall (MES). The analysis employs the DCC-GARCH model and quantile regression, along with GMM panel estimation and network analysis, to assess the fragility of banks and how risks can spread throughout the banking system. The empirical results show that systemic risk intensified during the Global Financial Crisis (2007–2008) and the COVID-19 pandemic (2020). CoVaR produced more negative values than MES, reflecting its stronger sensitivity to contagion effects. We found that large banks exhibited deep MES and strong CoVaR spillovers, while smaller banks also experienced significant effects. We have seen several strong key drivers of systemic risk, which include non-deposit funding, interbank exposures, and global volatility (VIX). In addition, network analysis further demonstrates that domestically systemically important banks (D-SIBs) serve as primary transmitters of contagion across banks.

**Keywords:** Systemic risk, CoVaR, MES, Interconnectedness, systemically important banks, D-SIBs.