

Short-Term Dynamics of Inbound MICE Demand in South Korea: A Time Series Analysis Using the VAR Model

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Abstract

This study examines the short-term dynamics of inbound Meetings, Incentives, Conventions, and Exhibitions (MICE) demand in South Korea using quarterly time series data from 2009Q1 to 2019Q4, excluding the COVID-19 pandemic period to avoid structural distortions. Employing a Vector Autoregression (VAR) model with international oil prices, KRW/USD exchange rates, total inbound tourist arrivals, and inbound MICE arrivals, we investigate interdependencies through Augmented Dickey-Fuller tests, Johansen cointegration, Granger causality, Impulse Response Functions (IRF), and Forecast Error Variance Decomposition (FEVD). Results reveal bidirectional causality between total inbound tourism and MICE demand, indicating mutual reinforcement, while oil prices significantly influence both, and exchange rates show limited effects. VAR estimates suggest MICE demand is primarily self-sustaining, with its own past values exerting the strongest influence. IRF analysis demonstrates that increases in general tourism positively impact MICE demand for one to two quarters, whereas oil price shocks negatively affect both markets. FEVD results show MICE demand variance is more diversely explained by other variables than vice versa. The findings highlight the strategic role of general tourism in boosting MICE performance and the sector's vulnerability to cost-side shocks. This research contributes to tourism economics by applying dynamic modeling to MICE demand, offering implications for policy design, marketing strategies, and risk management in high-value tourism segments.

Keywords: MICE industry, inbound demand, time series analysis, VAR model, Granger causality.