CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE | DELHI NCR | PUNE

Notice for the PhD Viva Voce Examination

Mr Binu Joseph, Registration Number: 1830076, PhD Scholar at the Department of Economics, School of Social Sciences, CHRIST (Deemed to be University), Bangalore will defend his PhD thesis at the public viva-voce examination on Thursday, 04 December 2025 at 9.30 am in Room No. 044, Ground Floor, R&D Block, CHRIST (Deemed to be University), Bengaluru - 560029, Karnataka, India.

Title of the Thesis	:	**Symmetric and Asymmetric Relationship Between Oil Price, Gold Price and Stock Price: A Case Study of Bombay Stock Exchange**
Discipline	:	**Economics**
External Examiner - I	:	**Dr Rudra Narayan Mishra** Associate Professor Gujarat Institute of Development Studies (GIDR) Gota, Ahmedabad - 380009 Gujarat
External Examiner - II	:	**Dr S Harikumar** Professor Department of Applied Economics Cochin University of Science and Technology Kochi - 682022 Kerala
Supervisor	:	**Dr Rajeshwari U R** Associate Professor Department of Economics School of Social Sciences CHRIST (Deemed to be University) Bengaluru - 560029 Karnataka

The members of the Research Advisory Committee of the Scholar, the faculty members of the Department and the School, interested experts and research scholars of all the branches of research are cordially invited to attend this open viva – voce examination.

Registrar (Academics)

Place: Bengaluru
Date: 12 November 2025

ABSTRACT

This study deals with the three key economic indicators, oil prices, gold, and stocks, and their complex dynamics by examining symmetric and asymmetric relationships, especially under varying global economic conditions, including the 2008 financial crisis and COVID-19.

Symmetric analysis reveals no long-term relationship between these variables. However, in the short term, a 1% increase in oil prices leads to a marginal 0.02% rise in the SENSEX. Unidirectional causality is observed from oil prices to both SENSEX and gold prices, and from the SENSEX to gold. Impulse Response Function suggests that shocks in oil prices raise both the SENSEX and gold prices, while shocks in gold prices initially increase the SENSEX but stabilize oil prices after two days.

Asymmetric analysis demonstrates the existence of long-term relationships. A rise in gold prices results in a 0.48% increase in the SENSEX, while a reduction leads to a 0.60% increase, showing a stronger impact of negative changes. In the short term, a drop in gold prices causes a significant 1.08% decline in the SENSEX. Similarly, an oil price increase results in a 0.82% rise, whereas a decline causes a 1.40% drop in the SENSEX.

The 2008 financial crisis influenced these relationships significantly. Pre-crisis, gold prices had an asymmetric long-term impact, with positive shifts increasing the SENSEX by 2.37% and negative shifts by 3.12%. Post-crisis, rising gold prices led to a 0.47% decline in the SENSEX, while a drop caused a 0.52% decline. Short-term effects of oil price changes became negligible pre-crisis but altered post-crisis.

The study also evaluates COVID-19's impact, finding that before the pandemic, 1% reductions in gold and oil prices positively influenced the SENSEX in the short term. Post-COVID-19, one-day lags in the SENSEX continued to have a long-term effect.

In conclusion, the relationships between these variables have evolved, particularly during major economic crises. The study emphasizes the importance of stabilizing market sentiment, introducing tax incentives, and enhancing hedging mechanisms to manage risks effectively.

Keywords: *SENSEX, Stock Market, Gold Price, Causality, Oil Price, VAR, ARDL, COVID-19.*

Publications:

1. **Joseph, Binu.** (2023, January). Impact of Covid 19 on oil prices, gold prices and Indian stock market. In *International Conference on Economics, Business and Sustainability* (pp. 265-272). Singapore: Springer Nature Singapore.