

**CHRIST**(DEEMED TO BE UNIVERSITY)  
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## Notice for the PhD Viva Voce Examination

Mr Freddy Thomas, Registration Number: 1830071, PhD Scholar at the Department of Economics, School of Social Sciences, CHRIST (Deemed to be University) will defend his PhD thesis at the public viva-voce examination on Friday, 05 June 2026 at 11.00 am in Room No. 628, 6th Floor, R&D Block, CHRIST (Deemed to be University), Bengaluru - 560029, Karnataka, India.

<b>Title of the Thesis</b>	:	<b>Anti-Dumping and Countervailing Duties in India's Steel Industry: Macroeconomic Determinants, Petition Drivers and Firm-Level Performance Effects</b>
<b>Discipline</b>	:	<b>Economics</b>
<b>External Examiner - I</b>	:	<b>Dr Sayanthan Bandhu Majumder</b> Assistant Professor St Xavier's University, Kolkata Action area III, B, Newtown West Bengal - 700160
<b>External Examiner - II</b>	:	<b>Dr Vilas M Kadrolkar</b> Senior Professor Department of Studies and Research in Economics Tumkur University Bengaluru - Honnavar Road Tumakuru - 572103 Karnataka
<b>Supervisor</b>	:	<b>Dr Marie Joseph Gerard Rassendren</b> 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.

**Place:** Bengaluru  
**Date:** 01 June 2026

**Registrar (Academics)**

## ABSTRACT

The Indian steel industry occupies a strategic position in the nation's economic landscape, serving as a core sector with strong linkages to infrastructure, manufacturing, construction, and capital goods. Over the past three decades, the industry has been shaped by a combination of domestic reforms, global market shifts, and fluctuating macroeconomic conditions. At the same time, the proliferation of Anti-Dumping (AD) and Countervailing Duty (CVD) measures worldwide has elevated trade policy as a key determinant of industry competitiveness. India, now one of the most frequent users of trade remedies globally, has increasingly relied on AD and CVD measures to shield its steel producers from injury caused by low-priced or subsidized imports. Despite this heightened reliance, the actual motivations for filing petitions and the effectiveness of these trade remedies in improving industry performance remain underexamined. This study addresses that lacuna by integrating macroeconomic dynamics, petition-filing behavior, and firm-level impacts into a unified econometric framework.

The first objective evaluates the influence of macroeconomic variables on the performance of the Indian steel industry. Using annual secondary data from 1990–2023, the study employs the Augmented Dickey–Fuller (ADF), Phillips–Perron (PP), and KPSS tests to establish the order of integration. Granger causality tests confirm short-run relationships, while the Johansen cointegration method identifies long-run equilibrium among key variables such as GDP, the real exchange rate, and openness. A Vector Error Correction Model (VECM) captures both adjustment dynamics and short-term deviations. The results indicate that steel production is positively associated with GDP, openness, and the real exchange rate in the long run, while short-run responses vary across indicators. Variance decomposition and impulse-response analyses further reveal that although macroeconomic shocks affect steel production, the industry retains considerable endogenous momentum.

The second objective examines the determinants of AD and CVD petition filings using annual petition data from 1997–2023. Given the count nature of the dependent variable, the study estimates Poisson and Negative Binomial regression models; overdispersion tests confirm the suitability of the latter. The findings highlight that declines in net profit margins, increases in steel import penetration (as a share of GDP), appreciation of the real exchange rate, and fluctuations in foreign exchange earnings are significant drivers of petition activity. These results underscore the political-economy dimension of trade remedy usage, revealing that domestic producers are more likely to seek protection during periods of adverse macroeconomic conditions or heightened competitive stress.

The third objective evaluates the causal impact of AD/CVD measures on firm-level performance outcomes using a Difference-in-Differences (DiD) framework. Focusing on major petition-filing firms such as JSW Steel and AMNS India and comparing them with non-filing firms including Tata Steel, the analysis measures the effect of trade remedies on after-tax profits, profit margins, export intensity, and product-level pricing. The DiD estimates suggest that petition-filing firms exhibit statistically significant improvements in profitability and price recovery following the imposition of duties, though effects on export intensity are mixed. These results indicate that while trade remedies provide short-term competitive relief, their broader implications for long-term efficiency and market structure warrant cautious interpretation. Overall, this study provides an integrated assessment of how macroeconomic conditions, firm behavior, and trade protection mechanisms jointly shape the performance of the Indian steel industry. By synthesizing time-series, count-data, and quasi-experimental econometric approaches, it contributes to industrial policy debates on the role and effectiveness of AD and CVD measures in a liberalizing economy. The findings offer meaningful insights for policymakers seeking to balance domestic industry protection with global trade commitments, while highlighting the need for calibrated, evidence-based application of trade remedies.

**Keywords:** Anti-Dumping, Countervailing Duty, Steel Industry, Macroeconomic Determinants, Trade Remedies

**Publication:**

1. Thomas, F., & Rassendren, G. (2026). Macroeconomic Determinants in India and Their Impact on the Indian Steel Industry. *Social Science in Perspective*, 18(1), 62–85.