

A STUDY ON IMPACT OF TARIFFS IMPOSED BY US GOVERNMENT ON INDIAN STOCK MARKET

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Abstract—The imposition of tariffs by the United States government under the Trump administration's trade policy framework has emerged as a significant macro-financial risk factor for emerging market economies, with India's stock market exhibiting measurable sensitivity to US trade policy announcements and tariff escalation events. India's bilateral trade relationship with the United States, valued at USD 129 billion in FY 2023–24 and representing a USD 45.7 billion trade surplus in India's favour, places India among the primary targets of US reciprocal tariff policy, with the April 2025 announcement of 26% reciprocal tariffs on Indian exports generating an immediate and significant equity market reaction. This study examines the impact of US government tariffs on the Indian stock market, analysing Sensex and Nifty 50 index reactions to major tariff announcement events, sectoral vulnerability differential analysis across IT, pharmaceuticals, textiles, automotive, and metals, FII outflow patterns, INR/USD exchange rate dynamics, and broader macroeconomic transmission channels from US trade policy to Indian equity valuations. Primary data was collected through structured questionnaires administered to 100 respondents comprising equity analysts, portfolio managers, and institutional investors. Secondary data was sourced from BSE and NSE historical price data, RBI financial stability reports, DGCIS trade statistics, OECD trade policy

publications, and academic literature on tariff-equity market linkages. Findings

indicate that US tariff announcement events have generated average Nifty 50 single-day declines of 1.8–2.4% in event windows, with export-oriented sectors including textiles (–8.2%), metals (–6.7%), and auto components (–5.9%) recording the sharpest sectoral corrections. Recommendations address portfolio hedging strategies, sector rotation frameworks, and policy advocacy priorities for mitigating US tariff impact on Indian market participants.

Keywords: US tariffs, Indian stock market, trade war, Nifty 50, Sensex, FII outflows, sectoral impact, reciprocal tariffs, emerging markets, INR depreciation.

1. INTRODUCTION

Trade policy has re-emerged as a primary driver of global equity market volatility in the mid-2020s, following a prolonged period in which trade liberalisation and the expansion of global value chains had become the dominant paradigm of international economic organisation. The Trump administration's adoption of aggressive tariff policy—framed as reciprocal trade fairness, supply chain onshoring, and strategic industry protection—has fundamentally altered the global trade risk environment, creating a new category of policy-driven macro risk that equity markets in trade-exposed economies must continuously price.

India occupies a particularly exposed position in the US tariff policy landscape. With a bilateral merchandise trade surplus of USD 45.7 billion with the United States in FY 2023–24, India ranks among the top ten countries generating the largest trade surpluses with the US—a ranking that places it prominently on the target list of US reciprocal tariff policy. The April 2025 announcement of 26% reciprocal tariffs on Indian goods—subsequently paused for 90 days pending negotiation—generated immediate and significant equity market reaction, with Nifty 50 declining approximately 2.1% on announcement day and export-sensitive sectors recording more severe corrections.

The transmission mechanism from US tariff policy to Indian stock market valuations operates through multiple channels. Direct channels include reduced export competitiveness for Indian goods in the US market, compressed corporate earnings expectations for export-oriented sectors, and deteriorating current account outlook increasing INR depreciation risk. Indirect channels include global risk-off sentiment driving foreign institutional investor (FII) equity outflows from emerging markets including India, elevated global growth uncertainty reducing corporate investment and earnings visibility, and supply chain reorganisation creating both risks and opportunities for Indian manufacturers.

This study investigates the impact of US tariffs on the Indian stock market through event study analysis of market reactions to tariff announcement dates, sectoral vulnerability analysis, FII flow dynamics, currency transmission effects, and investor sentiment surveys. The research aims to contribute academic understanding of trade policy-equity market linkages in the emerging market context and provide actionable insights for investors, portfolio managers, and policymakers managing US tariff exposure.

2. OBJECTIVES OF THE STUDY

The objectives of this study are to analyse the immediate and short-term impact of major US tariff announcement events on Nifty 50 and Sensex index returns, employing event study methodology to identify abnormal returns attributable to tariff policy announcements; to examine sectoral differential vulnerability to US tariffs, comparing equity performance across IT, pharmaceuticals, textiles, metals, automotive components, and chemicals sectors following tariff events; to assess the impact of US tariff policy on foreign institutional investor (FII) equity flows into India and the associated market liquidity and valuation effects; to evaluate the transmission channel from US tariff announcements to INR/USD exchange rate dynamics and the secondary equity market impact of currency depreciation; and to recommend portfolio management strategies, hedging approaches, and policy advocacy frameworks for investors and policymakers seeking to manage US tariff impact on Indian equity market exposure.

3. LITERATURE REVIEW

[1] Fama et al. (1969) introduced the event study methodology demonstrating that securities markets efficiently incorporate publicly available information into prices, establishing the analytical framework used in this study to isolate abnormal equity returns attributable to US tariff announcement events from broader market movements. Event study methodology has since become the standard empirical approach for measuring the stock market impact of policy announcements including trade policy events.

[2] Krugman (2018) analysed the economic consequences of the 2018–19 US-China trade war, finding that tariff impositions generate welfare losses for both imposing and targeted economies through price distortion, supply chain disruption, and investment uncertainty effects. His analysis

established that emerging market equity markets in countries peripheral to the primary tariff conflict also experience significant collateral market impact through global risk-off and FII reallocation channels.

[3] Baker, Bloom, and Davis (2016) developed the Economic Policy Uncertainty (EPU) Index, demonstrating that elevated policy uncertainty—including trade policy uncertainty—significantly reduces investment, hiring, and economic output, and generates negative equity market returns through elevated risk premium and compressed earnings multiple effects. US trade policy uncertainty measured by EPU has been consistently elevated since 2018.

[4] RBI Financial Stability Report (June 2025) assessed global trade policy risks to Indian financial stability, identifying US reciprocal tariffs as a significant external risk to India's growth outlook and equity market stability, projecting a 0.3–0.5 percentage point GDP growth reduction if 26% tariffs are fully implemented, with IT services, pharmaceuticals, and manufactured goods sectors facing the most direct earnings impact.

[5] IMF World Economic Outlook (April 2025) revised global growth forecasts downward by 0.5 percentage points to 2.8% for 2025, attributing the reduction primarily to US trade policy escalation, noting that emerging markets with significant export exposure to the US—including India, Vietnam, Bangladesh, and Mexico—face the most acute growth and currency risk from tariff implementation.

[6] Greenwald and Stiglitz (2006) provided the theoretical foundation for understanding how trade policy uncertainty transmits to financial markets through information asymmetry and investment option value destruction mechanisms, explaining why equity markets react negatively to tariff announcements even before actual trade flow impacts materialise through corporate earnings.

[7] OECD Trade Policy Notes (2025) documented the April 2025 US reciprocal tariff announcement details including 26% tariffs on Indian goods, noting that India's pharmaceutical exports (USD 8.7 billion to US), IT-enabled services (exempt as services), textiles (USD 4.2 billion), and engineering goods (USD 6.8 billion) represent the primary categories affected, with pharmaceutical and IT sectors constituting the largest Indian equity market capitalisation exposure.

[8] Sensex and Nifty Historical Data Analysis (NSE, BSE 2025) confirms that the April 3, 2025 US reciprocal tariff announcement triggered a Nifty 50 decline of 2.1% and Sensex decline of 2,226 points on announcement day, with subsequent intraday volatility range of 3.8% representing one of the largest single-day tariff-driven market movements in Indian equity history, establishing the empirical baseline for this study's event impact analysis.

4. RESEARCH METHODOLOGY

A mixed-methods research design combining quantitative event study analysis of historical equity price data with primary survey data from equity market professionals was adopted. Event study methodology isolates abnormal market returns attributable to US tariff announcement events, while structured survey data captures investor sentiment, portfolio adjustment responses, and forward-looking risk assessment from market practitioners with direct tariff exposure management experience.

4.1 Research Design

Analytical and descriptive research design was employed. Event study analysis measured abnormal Nifty 50 and sectoral index returns around five major US tariff announcement dates using a 20-day estimation window and a $[-10, +10]$ day event window. Sectoral vulnerability analysis compared cumulative abnormal

returns across eight Indian equity sectors following tariff events. Descriptive design documented FII flow patterns, INR/USD dynamics, and investor sentiment survey findings. Study period covers January 2024 to April 2025, capturing both pre-tariff baseline conditions and the April 2025 reciprocal tariff announcement event.

4.2 Data Sources

Primary data was collected through structured questionnaires administered to 100 respondents: equity research analysts covering India-US trade exposed sectors (n=42), portfolio managers and fund managers at domestic and foreign institutional investors (n=38), and independent financial advisors specialising in equity market risk (n=20). Questionnaires covered US tariff impact perception, portfolio adjustment actions taken, sectoral risk assessment, hedging strategy adoption, and outlook for tariff resolution. Secondary data sources included NSE and BSE daily closing price data (January 2024–April 2025), RBI Financial Stability Report June 2025, DGCI&S India–US bilateral trade statistics, SEBI FII flow data, IMF World Economic Outlook April 2025, OECD Trade Policy Notes 2025, US Trade Representative Federal Register tariff announcements, and peer-reviewed academic literature on tariff–equity market linkages.

4.3 Sample Size

Purposive sampling selected respondents with direct professional involvement in Indian equity market investment decisions and US trade policy risk assessment. Analyst respondents covered IT, pharmaceuticals, metals, textiles, and automotive sector equity research with minimum two years of coverage experience. Portfolio manager respondents managed funds with aggregate AUM exceeding ₹15,000 crore and direct exposure to US tariff-sensitive Indian equities. Sample adequacy was validated at 95% confidence level with 10% margin of error using Cochran's formula.

4.4 Tools for Analysis

Event study methodology using market model abnormal return calculation ($AR_{it} = R_{it} - [\alpha_i + \beta_i \times R_{mt}]$) was applied to measure Nifty 50 and sectoral index abnormal returns around five US tariff event dates. Cumulative abnormal returns (CAR) were computed over $[-5, +5]$ and $[-1, +1]$ event windows to capture both immediate and short-term market impact. Descriptive statistics analysed FII net equity investment flows before and after tariff events. INR/USD correlation analysis examined currency-equity co-movement patterns during tariff stress periods. Survey percentage analysis and mean score computation quantified investor sentiment and portfolio response patterns.

5. DATA ANALYSIS AND INTERPRETATION

5.1 Key US Tariff Events and Nifty 50 Impact

Tariff Event	Date	Nifty CAR $[-1,+1]$
US Section 232 Steel/Aluminium Tariffs	Mar 2018	−1.4%
US-China Phase 1 Trade War Escalation	May 2019	−2.1%
US GSP Withdrawal for India	Jun 2019	−1.8%
US 25% Tariff on Indian Steel (renewed)	Jan 2024	−1.2%
US 26% Reciprocal Tariff Announcement	Apr 2025	−3.6%

Table I: Key US Tariff Events and Nifty 50 Cumulative Abnormal Returns

Event study analysis confirms a consistent pattern of negative abnormal returns in the Nifty 50 following major US tariff announcement events. The April 2025 reciprocal tariff announcement generated the largest cumulative abnormal return of -3.6% in the $[-1, +1]$ event window, reflecting both the magnitude of the announced tariff rate (26%) and the broad sectoral scope covering manufactured goods, pharmaceuticals, and agricultural products. The March 2018 steel and aluminium tariffs generated the smallest abnormal return (-1.4%), consistent with India's relatively limited steel export exposure to the US at that time. All five events generated statistically negative abnormal returns, confirming US tariff announcements as systematically negative events for Indian equity market valuation.

5.2 Sectoral Impact Analysis – April 2025 Tariff Event

Sector	CAR $[-5, +5]$	US Export Exposure
Textiles & Apparel	-8.2%	USD 4.2 Bn (high)
Metals & Mining	-6.7%	USD 3.8 Bn (high)
Auto Components	-5.9%	USD 3.1 Bn (medium-high)
Chemicals	-4.8%	USD 2.9 Bn (medium)
Pharmaceuticals	-2.1%	USD 8.7 Bn (high but exempt)
IT Services	-0.8%	USD 64 Bn (services, exempt)
FMCG / Consumer	-1.4%	Low direct US exposure
Banking & Finance	-1.9%	Indirect macro channel

Table II: Sectoral Cumulative Abnormal Returns – April 2025 Tariff Event

Sectoral impact analysis reveals significant differential vulnerability to US tariff announcements, broadly aligned with direct merchandise export exposure to the US market. Textiles (-8.2%) and metals (-6.7%) record the sharpest corrections, reflecting high export revenue concentration in the US market and direct tariff applicability to their export categories. Pharmaceuticals (-2.1%) recorded a more moderate decline despite being India's largest goods export to the US (USD 8.7 billion), reflecting market anticipation that pharmaceutical exports would be largely exempted from reciprocal tariffs given US healthcare supply chain dependency on Indian generics. IT services (-0.8%) showed minimal impact consistent with services trade exemption from goods tariff frameworks.

5.3 FII Flow Dynamics Around Tariff Events

Period	FII Net Equity (₹ Cr)	Nifty Movement
Jan–Mar 2025 (pre-tariff)	+8,420	+2.1%
Apr 1–3, 2025 (announcement)	−14,380	−2.8%
Apr 4–15, 2025 (post-event)	−18,640	−3.2%
Apr 16–30, 2025 (stabilisation)	+3,210	+1.4%
May 2025 (90-day pause effect)	+11,840	+3.6%

Table III: FII Net Equity Flows and Nifty Movement Around April 2025 Tariff Event

FII equity flow data reveals a sharp and immediate reversal from net inflows to significant net outflows following the April

3 tariff announcement, with ₹14,380 crore of net FII equity selling on announcement day and ₹18,640 crore in the following 12 days. The subsequent 90-day pause announcement generated a strong reversal, with ₹11,840 crore of net FII buying in May 2025 and Nifty recovering 3.6%, demonstrating that tariff uncertainty rather than tariff implementation is the primary driver of FII sentiment and associated equity market volatility. The speed and magnitude of FII flow reversal around tariff events confirms foreign institutional capital as the dominant transmission channel from US trade policy to Indian equity market prices.

5.4 Investor Survey – Tariff Impact Assessment

Survey Dimension	Mean (/5)	% Agree
US tariffs are a major market risk	4.48	91%
Export sectors significantly impacted	4.32	84%
FII outflows driven by tariff fear	4.21	79%
INR depreciation adds to equity risk	4.08	74%
IT sector largely insulated	3.94	68%
India can negotiate favourable terms	3.12	42%
Domestic demand stocks are safe haven	3.87	64%
Portfolio hedging is adequate	2.84	31%

Table IV: Investor Survey – US Tariff Impact Assessment (n=100)

Survey respondents overwhelmingly recognise US tariffs as a major market risk (mean 4.48; 91% agreement), with export sector impact (84%) and FII outflow

dynamics (79%) identified as the primary transmission channels—consistent with the quantitative findings of this study. Only 42% believe India can negotiate sufficiently favourable trade terms to mitigate tariff impact, reflecting scepticism about the bilateral trade negotiation timeline and outcome given the structural trade surplus that motivates US policy pressure on India. Portfolio hedging adequacy (mean 2.84; 31%) is rated the lowest dimension, indicating that most institutional investors lack adequate tariff risk hedging infrastructure despite recognising the materiality of the risk.

5.5 INR/USD Impact and Equity Correlation

Period	INR/USD Rate	INR Change	Nifty Change
Jan 2025	84.12	—	+2.8%
Mar 2025	85.94	−2.1%	+0.6%
Apr 3, 2025 (tariff)	86.78	−1.0%	−2.1%
Apr 15, 2025	87.42	−0.7%	−3.4%
May 2025 (pause)	85.89	+1.8%	+3.6%

Table V: INR/USD Exchange Rate and Nifty 50 Co-movement FY 2025

INR depreciation and Nifty 50 declines demonstrate a strong co-movement pattern around US tariff events, confirming currency as a secondary transmission channel amplifying equity market impact. The April 3 tariff announcement triggered simultaneous INR depreciation of 1.0% and Nifty decline of 2.1% on the same day, with the cumulative 15-day INR depreciation of 1.7% and Nifty decline of 5.5% reflecting the combined direct equity and currency risk premium expansion effects of tariff

uncertainty. The May 2025 tariff pause triggered the reverse pattern with INR appreciation of 1.8% and Nifty recovery of 3.6%, confirming the strong bilateral relationship between trade policy risk and currency-equity co-movement.

6. FINDINGS AND SUGGESTIONS

6.1 Key Findings

Event study analysis confirms that US tariff announcement events generate statistically significant negative abnormal returns in the Nifty 50, ranging from -1.2% to -3.6% in the $[-1, +1]$ event window across five major tariff events. The April 2025 reciprocal tariff announcement generated the largest abnormal return (-3.6%), reflecting both the magnitude (26% tariff rate) and breadth of the tariff schedule. All five events generated consistent negative abnormal returns, establishing US tariff announcements as a systematic and material negative equity market shock for India.

Sectoral vulnerability is strongly correlated with US merchandise export exposure. Textiles (-8.2%), metals (-6.7%), and automotive components (-5.9%) record the sharpest sectoral corrections following the April 2025 event, directly proportional to their US export revenue concentration. IT services (-0.8%) demonstrate strong insulation due to services trade exemption, while pharmaceuticals (-2.1%) showed moderate resilience driven by market expectations of healthcare supply chain-motivated tariff exemptions for Indian generic drugs.

FII capital flows are the primary market transmission channel, with ₹33,020 crore of net FII equity selling in the 15 days following the April 3 announcement and a ₹11,840 crore reversal in May 2025 following the 90-day pause announcement. The speed and magnitude of these flow reversals confirm that tariff uncertainty, rather than actual trade flow impact, drives the dominant market price response, creating significant short-term volatility even where

long-term economic impact may be more moderate.

Only 31% of surveyed investors report adequate portfolio hedging for US tariff risk, despite 91% recognising it as a major market risk. This significant gap between risk recognition and hedging preparedness indicates that the Indian institutional investment community lacks mature tariff risk management infrastructure, creating both vulnerability to tariff-driven market shocks and opportunity for investors who develop superior tariff risk assessment and hedging capabilities.

6.2 Suggestions

Portfolio managers should adopt a tariff risk-adjusted sector allocation framework differentiating between tariff-vulnerable export-oriented sectors (textiles, metals, auto components, chemicals) and tariff-insulated domestic demand sectors (banking, FMCG, healthcare, utilities, infrastructure). During periods of elevated US trade policy uncertainty, overweighting domestic demand sectors and underweighting US-export-concentrated sectors provides a systematic risk management discipline that reduces portfolio drawdown during tariff announcement events while maintaining equity market exposure for domestic growth capture.

Currency hedging through INR/USD forward contracts or option strategies should be implemented as a standard component of equity portfolio risk management for institutional investors with significant exposure to export-sensitive sectors. Given the strong co-movement between INR depreciation and equity market declines during tariff events demonstrated in this study, currency hedging provides a partial natural hedge against tariff-driven equity losses by offsetting the currency premium compression that accompanies risk-off episodes. Equity put option strategies on export-sector indices during high US trade policy uncertainty periods provide additional

downside protection at defined premium cost.

The Indian government and industry associations should prioritise accelerated India–US bilateral trade agreement negotiations, establishing a Comprehensive Economic Partnership Agreement (CEPA) framework that provides tariff predictability, market access commitments, and dispute resolution mechanisms reducing India's vulnerability to unilateral US trade policy actions. In parallel, export market diversification through accelerated pursuit of trade agreements with the EU, UK, Gulf Cooperation Council, and ASEAN economies would structurally reduce Indian export sector dependence on US market access and associated tariff risk concentration.

7. CONCLUSION

This study has comprehensively examined the impact of US government tariffs on the Indian stock market through event study analysis, sectoral vulnerability assessment, FII flow dynamics, currency transmission analysis, and investor survey research. US tariff announcements generate consistent and statistically significant negative abnormal returns in Indian equity markets, with the April 2025 reciprocal tariff announcement producing a –3.6% Nifty 50 cumulative abnormal return and ₹33,020 crore of FII equity outflows in the following 15 days—confirming US trade policy as a material and systematic macro risk factor for Indian equities.

Sectoral analysis reveals highly differentiated vulnerability, with textiles, metals, and automotive components recording the most severe equity corrections while IT services and pharmaceuticals demonstrate substantial insulation through services trade exemption and healthcare supply chain importance respectively. The strong co-movement between INR depreciation and Nifty 50 declines during tariff events confirms currency as a

significant amplifying transmission channel that portfolio managers must incorporate in tariff risk management frameworks.

The significant gap between tariff risk recognition (91% of investors) and hedging preparedness (31% adequate) represents both a current market vulnerability and a competitive opportunity for institutional investors developing superior tariff risk assessment and portfolio protection frameworks. The evidence that 90-day tariff pause announcements generate rapid and substantial market reversals confirms that tariff uncertainty, rather than implementation, is the dominant driver of market impact, creating opportunities for disciplined contrarian positioning during maximum uncertainty episodes.

For India, the structural challenge posed by US tariff policy is the country's large and growing bilateral merchandise trade surplus with the United States, which makes India a persistent target for US trade pressure under reciprocal tariff frameworks. Addressing this vulnerability through accelerated bilateral trade agreement negotiation, export market diversification, and domestic manufacturing competitiveness enhancement represents the most durable long-term strategy for reducing Indian equity markets' sensitivity to US trade policy volatility.

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