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### **Policy Paper**

## The Economic Consequences of Escalation: India's War Ledger, May 7-10, 2025

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#### **Summary**

Using a sectorally disaggregated Computable General Equilibrium (CGE) model, inclusive of direct cost estimates for military assets, infrastructure damage, disrupted trade and service sector impacts, this study estimates that India's economy incurred at least \$94.962 billion in realized losses over the four-day war with Pakistan (May 7-10, 2025). This modelling framework includes fiscal balance-sheet pressures, such as a surge in the BJP government's budget deficit, which conventional market-capitalisation-based approaches overlook; treats lost output (GDP contraction) as a tangible economic cost, not merely a paper wealth decline; integrates non-tradable service sectors such as tourism, civil aviation, and public-information campaigns, which are often excluded from headline war damage assessments.

The findings serve as a stark economic warning for New Delhi: even short military escalations carry unsustainable costs for India's trillion-dollar economy undermining both fiscal stability and and compounding long-term economic vulnerabilities.

#### Introduction

In the anxiety-ridden days between May 7 and May 10, 2025, the specter of renewed hostilities between two nuclear-armed neighbors sent shockwaves far beyond the Line of Control. Markets trembled, families faced disrupted livelihoods, and the very fabric of regional cooperation threatened to unravel. Yet beneath the headlines of downed jets and suspended cricket matches lay an even more profound truth: the economy itself becomes a battlefield. When economic interdependencies fracture when remittances vanish, trade corridors shut, and consumer confidence evaporates the costs of conflict cascade through factories, farmhouses, and financial markets alike. This report reframes those four days of military engagement not merely as a clash of arms but as an acute economic shock, one that impaired production, reversed years of developmental gains, and imperiled the social safety nets upon which millions depend.

Just as a diplomat seeks the subtle levers of negotiation, so must policymakers understand the intricate levers of macroeconomic resilience. Only by quantifying how a sudden surge in defense spending crowds out education and healthcare, how an oil-price spike reverberates through household budgets, and how shuttered borders choke the engines of growth can we appreciate the true price of war and chart a path to peace.

#### **Rationale for the CGE Framework**

To capture this web of interdependencies, we employ a Computable General Equilibrium (CGE) model built on India's 2023–24 Social Accounting Matrix. Unlike simpler cost tallies, the CGE framework reflects how shocks in one sector be it defense, energy, or tourism propagate across the entire economy, altering prices, incomes, and output in every corner. It allows us to:

- 1. Quantify Direct and Indirect Effects: By explicitly modeling consumption, investment, government spending, and trade flows, the CGE approach shows how a 2.5 percent surge in defense outlays can reduce household consumption, depress private investment, and widen the fiscal deficit.
- 2. Incorporate Second-Round Feedbacks: Rising energy prices feed into production costs, stoking inflation that further erodes real wages; collapsing exports undermine foreign exchange reserves, weakening the currency and making imports more expensive this model captures those cascading loops.
- 3. Compare Scenarios with Precision: Whether simulating a brief four-day escalation or a longer confrontation, the CGE framework permits consistent, transparent "what-if" analyses, enabling policymakers to weigh the costs of continued conflict against the benefits of de-escalation.
- 4. Ground Policy Recommendations in Data: The model's detailed sectoral breakdown informs targeted interventions from shoring up critical foreign exchange buffers to incentivizing alternative export markets ensuring that each recommendation addresses the precise channels through which shocks damage the economy.

In deploying this methodology, the subsequent analysis spanning shock assumptions, immediate outcomes, aggregate costs, and sustainability thresholds rests on a solid, policy-relevant foundation. It transforms abstract macroeconomic concepts into actionable insights, guiding leaders toward the one true victory: preserving both lives and livelihoods by averting the ruinous toll of war.

Shock Specification: We impose the following exogenous shocks for a one-month simulation,

Shock Category	Magnitude	Rationale
Defense Spending Surge	+2.5% of GDP	Captures extraordinary wartime mobilization beyond normal budget cycles
Energy Price Spike	+30%	Reflects global oil surges (historical peaks ~20–40%) and supply risks
Trade Collapse	-35%	Emulates total border and maritime closures (past conflict patterns).
Remittance Fall	-25%	Based on diaspora risk aversion behavior in regional/global crises (COVID, Gulf wars) and transfer suspensions.
Tourism & Hospitality Hit	-50%	IPL suspension plus halted leisure travel, hotel cancellations
Financial Market Shock	-2% of GDP	Equity and bond market wealth erosion, credit- spread widening.

then pro-rate results to the **4-day conflict duration** ( $\approx$  13% of a month):

#### **Simulation Steps**

- Baseline Solve: Reproduce SAM flows (GDP, prices, household income).
- Shock Application: Apply all six shocks simultaneously.
- Equilibrium Re-solve: Compute new prices, outputs, incomes.
- **Outcome Extraction**: Record changes in key aggregates (GDP, CPI, poverty, government deficit).
- Prorating to 4 Days

All month-long impacts are multiplied by  $4/30 \approx 0.13$  to reflect the actual conflict duration. Immediate Outcomes (4-Day Equivalent)

Indicator	One-Month Shock Impact	4-Day Pro-Rated Impact	Interpretation
GDP	-7.0%	-0.9%	Nearly 1% loss of India's monthly output within four days.
Inflation (CPI)	+25 pp	+3.3 pp	Sharp consumer-price surge, eroding purchasing power.
Currency Depreciation	-8.0%	-1.0%	Rupee weakens further, raising import costs and debt burden.
Poverty Headcount	+4 million persons	+0.5 million	Hundreds of thousands pushed below poverty line immediately.
Fiscal Deficit	+1.8 pp GDP	+0.23 pp	Government borrowing spikes, crowding out development spending.

#### Explanation

Within just four days, the combined shocks would slash India's output by nearly 1% of its monthly GDP (~\$356 billion/12  $\approx$  \$29.7 billion  $\rightarrow 0.9\% \approx$  \$267 million of monthly GDP per

day  $\times 4 =$ **\$1.07 billion** of GDP lost in 4 days). Although equity markets may seem a "paper" loss, their collapse quickly bleeds into the real economy eroding household wealth, tightening credit, and chilling investment. To capture this, our CGE framework incorporates a **-2 percent of GDP "Financial Market Shock,"** reflecting the \$60–80 billion in market–capitalization wiped out during the crisis week. In practice, this shock feeds through lower consumer spending and higher borrowing costs, magnifying the contraction of output and intensifying fiscal strains. By embedding the stock–market decline directly into GDP (as part of our combined shock profile), we ensure that what might otherwise be dismissed as a transient valuation drop is treated as a genuine, measurable hit to economic activity and public-sector balance sheets Inflation jumps over **3 percentage points**, straining household budgets. Currency pressures and fiscal stresses mount rapidly, foreshadowing wider economic instability.

#### **Detailed Cost Breakdown**

Cost Component	Monthly Cost (USD)	4-Day Cost (USD)	Notes
GDP Loss	\$29.7 billion × 7% = \$2.08 bn	\$2.08 bn × 0.13 $\approx$ \$0.27 bn	Permanent loss of production; lost consumption and investment.
Consumer Price Impact	n/a	n/a	Inflation surge costs households but not directly monetized.
Fiscal Deficit Increase	$1.8 \text{ pp} \times $4.27 \text{ tn}$ = \$77 bn	$77 \text{ bn } \times 0.13 \approx$ \$10.0 bn	New borrowing to cover defense & subsidies.

#### D.1 Macro-Economic Cost (CGE-Based)

Subtotal (CGE-modeled GDP + fiscal): GDP output loss: \$270 million Additional fiscal borrowing: \$10.0 billion Total: \$10.27 billion

#### D.2 Sectoral and Direct Costs

Category	Estimate (USD)	Calculation Details
Financial Market Loss	\$83.00 billion	1.6% drop in India's \$5.2 trn market cap over May 7–10 $\rightarrow$ 0.016 × \$5.2 trn $\approx$ \$83.2 bn $\rightarrow$ \$83.00 bn.
Military Equipment Losses	\$0.52 billion	Replacement cost of 6 fighters ( $420 \text{ m}$ ) + 77 UAVs ( $100 \text{ m}$ ) = $520 \text{ m} \rightarrow 0.52 \text{ bn.}$
Ordnance & Operations	\$0.038 billion	11 BrahMos × $3m = 33m$ 20 PGMs × $0.1 m = 2m$ ~50 sorties × $0.06 m = 3m \rightarrow 38m$ $\rightarrow 0.038 bn.$
Infrastructure Repair	\$0.04 billion	Repair of ~200 homes/shops (@\$15 k each = \$3 m), schools/religious sites = \$20 m, utilities (power, water) = \$17 m $\rightarrow$ Total \$40 m $\rightarrow$ \$0.04 bn.
Humanitarian Relief &	\$0.007 billion	Ex-gratia for ~26 fatalities/injuries =

Compensation		0.74  m + relief camps/medical care = m $\rightarrow$ $0.007 \text{ bn}.$
Cybersecurity Response	\$0.007 billion	Emergency CERT-In alerts, IT hardening, incident-response drills across banks & ministries $\rightarrow \approx \$7 \text{ m} \rightarrow \$0.007 \text{ bn}.$
Tourism & Events	\$1.00 billion	IPL suspension & related industry losses (broadcast, sponsorship, ticket refunds) $\approx$ \$1.0 bn.
Aviation Disruptions	\$0.03 billion	Cancellation/rerouting of hundreds of flights; Pakistan airspace closure costs $\approx$ \$30 m $\rightarrow$ \$0.03 bn.
Trade Disruptions	\$0.05 billion	Halted Indo-Pak border trade and associated logistics delays $\rightarrow \approx $50 \text{ m} \rightarrow $0.05 \text{ bn}.$

Subtotal (Sectoral & Direct): \$84.692 billion

#### **Comprehensive Total Cost**

Component	USD	Description
Macro-Economic	\$10.27	CGE-modeled GDP contraction and fiscal deficit increase
( <b>D.1</b> )	billion	(prorated to four days).
Sectoral & Direct	\$84.692	Detailed market, military, infrastructure, humanitarian, cyber,
( <b>D.2</b> )	billion	tourism, aviation, and trade disruption costs.
<b>Total Estimated</b>	\$94.962	Combined macro-economic and sectoral/direct losses over
Cost	billion	the May 7–10 conflict window.

The CGE model captures the broad macroeconomic fallout: \$10.27 billion in lost output and the corresponding surge in fiscal borrowing.

Detailed sectoral and direct outlays—including military hardware replacement, munitions and sortie costs, infrastructure repairs, tourism and aviation disruptions, trade stoppages, humanitarian relief, and cybersecurity response—total \$84.692 billion.

Thus, the four-day conflict inflicted approximately \$94.962 billion in real-economy and direct costs on India—a figure that far exceeds the \$30 billion market-cap "paper loss," because this framework monetizes both the tangible output and fiscal impacts alongside on-the-ground material damages.

#### About the Author

**Dr** Aneel Salman holds the prestigious OGDCL-IPRI Chair in Economic Security at the Islamabad Policy Research Institute (IPRI), Pakistan. A distinguished international economist, he specialises in monetary resilience, macroeconomic stability, behavioural economics, transnational trade dynamics, and strategy-driven policy design. He is also at the forefront of national efforts to shape Pakistan's Artificial Intelligence (AI) policy, providing thought leadership at the intersection of emerging technologies and economic security.

His research, cited for its analytical rigour and policy relevance, has directly influenced strategic planning across key public institutions. Dr Salman is also a Master Trainer, having delivered high-impact capacity-building programs for bureaucrats, law enforcement agencies, military officers, diplomats, and other stakeholders committed to evidence-based decision-making in Pakistan and abroad.