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OCCASIONAL PAPER

Reflections on China Shock 2.0: Implications for India and the Global Economy

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Revised Edition — May 2026

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Towards Neighbourhood First 2.0: A Reimagined Strategic Framework for India's Periphery -Foundations, Propositions and Implementation

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Table of Contents

Reflections on China Shock 2.0: Implications for India and the Global Economy

ASHOK K. KANTHA

I. Executive Summary

Four short scenes frame this paper's argument: a Zhejiang solar plant that splits output between domestic tenders and exports; a shuttered German module line that could not compete with cheaper Chinese imports; a major Indian green-energy investment that moves "wafer to farm" yet still relies on critical Chinese inputs; and the latest scene of the Iran war and the closure of the Strait of Hormuz further accelerating the global transition from petrostates to electrostates and reinforcing China's dominant position in clean-technology supply chains. Together, these four scenes capture the paradox of China Shock 2.0 with clarity: huge global gains from low-cost scale, accompanied by simultaneous strategic vulnerabilities for importers and competitors, and a geopolitical context that is reshaping who gains and who loses from China's industrial ascent.

But the strategic context in which China Shock 2.0 unfolds has shifted in a second, equally important direction. The Trump administration's unilateral and erratic policies, the fraying of the trans-Atlantic alliance, and Europe's triple whammy — the loss of cheap Russian energy, the loss of cheap American security, and the onslaught of China's mercantilist exports — have made collective resistance to China Shock 2.0 a more challenging proposition. China has shrewdly positioned itself as the "responsible" great power, accelerating the procession of European and Global South leaders to Beijing. India's predicament is compounded: its strategic space has shrunk, its relations with the United States are under strain, and its economic dependencies on China are deepening even as the thaw in bilateral relations raises questions about the wisdom and terms of re-engagement.

China Shock 2.0

China Shock 2.0 is an industrial policy-driven push into innovation-intensive, midstream and upstream sectors — semiconductors, batteries, EVs, solar and wind manufacturing, advanced materials, robotics and automation. China's 2025 trade surplus reached a record USD 1.19 trillion — the first time in economic history any country has posted a trillion-dollar surplus; stripping out commodities, the manufactured goods surplus approaches USD 2 trillion. The 2026 ASPI Critical Technology Tracker finds China ahead in 69 of 74 critical technologies, with a monopolistic lead in 41 of them — up from 57 of 64 in the 2023 tracker. China's bilateral surplus with India alone reached USD 116 billion in 2025 — nearly 10 percent of its entire global trade surplus, on bilateral trade of USD 155 billion.

Scale, Dynamics and Trade-offs

China's manufacturing footprint approaches a third of global manufacturing value-added (MVA), producing steep learning-curve effects and per-unit cost declines that are difficult for dispersed competitors to match. Inside China, "involution" and overcapacity mean many firms operate under chronic stress — as illustrated by the failed polysilicon cartel attempt of late 2025, which the State Administration for Market Regulation blocked on monopoly grounds — while political and fiscal support keeps production running, prolonging export pressure on global markets. Two new supply-chain security regulations issued by China's State Council in March and April 2026 institutionalise a permanent state of supply-chain

mobilisation, embedding national-security logic into industrial governance and providing legal tools to retaliate against perceived external coercion.

Global Policy Responses: Necessary but Insufficient

Advanced economies respond with trade defence, targeted industrial revival and supply-chain diversification. In Europe, Noah Barkin's "Watching China in Europe" newsletter identifies three schools of thought — decisive derisking, short-term opportunism, and muddled middle — with most capitals closer to the third than the first. Developing countries confront a pragmatic dilemma: accept affordable clean tech to meet urgent development and climate goals, or resist import surges to preserve nascent industrial learning. Trade instruments are necessary but blunt; rebuilding midstream ecosystems requires patient capital, industrial coordination and time.

Implications for India: A Dual Derisking Imperative

India faces a dual but differentiated derisking challenge.5 The first is a derisking from China across critical inputs in clean tech, electronics, pharmaceuticals and advanced manufacturing — a structural and strategic imperative. The second, no less urgent, is a derisking from excessive dependence on the United States in a period when Washington's reliability as a strategic and economic partner has become genuinely uncertain.

India confronts a stark, actionable choice vis-à-vis China. Cheap Chinese midstream inputs can accelerate deployment of renewables and EVs, helping meet climate and access goals and reducing near term fiscal burdens. Yet reliance on low cost Chinese supply deepens strategic vulnerability: chokepoints in polysilicon, wafer production, battery precursors and rare earth processing can be used as leverage through export restrictions, licensing or pricing tactics. India's recent moves to climb the value chain are essential but incomplete; wafer and cell plants alone will not eliminate dependence on specialised equipment and high purity inputs.

India needs a sustained, sequenced derisking strategy. In the short term, it must secure supply stability through long term contracts, strategic inventories and contingency clauses. In the medium term, it needs to scale domestic midstream capacity with production linked incentives, concessional patient capital and co investment by institutional funds, accepting higher unit costs during learning phases. In the long term, India should look to build integrated ecosystems supported by R&D, industrial finance vehicles and regional partnerships that spread capital and technical risk. Policy design should reward measurable capability upgrades, technology development and transfer, and innovation with short timelines.

India's solar manufacturing has made real if still incomplete progress. India's most striking PLI success story lies in mobile phone manufacturing, where it has become the world's second-largest producer with smartphone exports hitting USD 30 billion in 2025 — a model with lessons for other tech-led sectors. Press Note 2 of 2026 (amending PN3 of 2020 FDI restrictions) is a sensible clarification but must be structured through clear safeguards to prevent any single dependency from becoming a chokepoint.

Conclusion

The paradox of China Shock 2.0 is that the forces making India competitive today also deepen strategic dependence tomorrow. India must combine pragmatic engagement to keep its industrial transition affordable with a resolute, sometimes painful program of building capacity to secure autonomy. The political test is whether India has the patience, capital and policy imagination to pay now for sovereignty later. Derisking must be dual: reduce single supplier exposure to China while managing targeted dependencies and standards alignment with other partners.

II. The Spark

Four short scenes frame the conversation in this paper:

Scene 1 — Zhejiang, Winter 2024

At a solar-module plant in Zhejiang, a production supervisor pointed to two conveyor lines. "One line feeds the domestic tender; the other feeds exports," he said. "If prices fall here, we ship more abroad; if margins evaporate, local finance keeps the furnaces running."[1] This easy switch-ability is how the machines keep humming in China.

Scene 2 — Freiberg, Germany, March 2024

In Freiberg, Saxony, the last significant German module line was put on hold as photovoltaic (PV) manufacturer Meyer Burger began shuttering operations amid mounting losses and cheaper Chinese imports.[2] Germany, a global PV pioneer, saw its high-value production move offshore even as domestic policy debates about reshoring intensified.

Scene 3 — Visakhapatnam, Andhra Pradesh, April 2026

On April 23, 2026, a groundbreaking ceremony was held at Visakhapatnam for an Indian renewable energy giant's ambitious investment in Andhra Pradesh in new 6.5 GW solar ingot-wafer manufacturing facility.[3] The new facility will represent a striking move up the value chain, building on domestic policies towards integrated clean-tech industry capacity. Yet its success rests on key inputs where Chinese suppliers remain dominant such as high-purity polysilicon and ingots, specialised cell manufacturing equipment, rare-earth magnets and others. This is emblematic of India's dependence merely shifting up the supply chain, its targeted policies coming up against the Chinese manufacturing wall.

Scene 4 — The Strait of Hormuz, March 2026 Onwards

When the Iran war disrupted oil flows through the Strait of Hormuz, some countries scrambled and others adapted. China adapted with composure, drawing on its capacious strategic petroleum reserves, diversified crude import sources, rapidly electrified industrial base, and dominant position in global clean-tech supply chains.[4] For India, this was a live demonstration of how a decade of preparation translates into geopolitical advantage — and of how much work remains to be done.[5] The United States, doubling down on fossil-fuel geopolitics, found its structural leverage increasingly dated.

These four scenes — the Chinese factory floor that hedges between home and abroad, the European plant that could not withstand China's scale, the Indian effort to move up the chain while still buying critical inputs from China, and China's vindication as an electrostate amid global energy shock — together reflect the paradox of China Shock 2.0.

III. Defining China Shock 2.0, Compared to China Shock 1.0

The first China Shock, spanning the 1990s through the 2010s, was essentially a labour-cost and assembly story. Low wages, massive inflows of foreign investment, and export-led labour-intensive factories reshaped manufacturing globally, with China's WTO accession in 2001 accelerating the shift of production facilities to China on an unimagined scale. Scholars like Kyle Chan have correctly contextualised the famous Autor-Dorn-Hanson "China Shock" paper within the longer structural decline of US manufacturing employment that predates China's WTO entry.[6] In the political discourse, the original paper framed China as the singular cause of deindustrialisation, obscuring automation, productivity gains, and structural labour-market change.[7] While the impact was sharpest in advanced economies, especially the US and Europe, the disruption was largely confined to sectors at the lower end of the value chain, and many developing countries benefited from cheaper imports from China.

China Shock 2.0 is qualitatively different. It represents a structural transformation of global trade, driven significantly by China's domestic compulsions to sustain growth amid weak home demand and deflationary pressures. Beijing's recent industrial strategy prioritises exports of advanced manufactured goods, contesting sectors once dominated by the US and other advanced economies: artificial intelligence, telecommunications, microprocessors, legacy chips, robotics, quantum computing, biotechnology, pharmaceuticals, solar and wind power, electric vehicles (EVs), and lithium-ion batteries. Robin Harding argues in the Financial Times that China is increasingly pursuing self-sufficiency and making trade "impossible" — producing semiconductors, software, aircraft and ships, and machinery more cheaply domestically while limiting its imports of manufactured goods.[8]

China's progressive dominance of the high-tech manufacturing space rests on five decisive features:

1. Innovation and Technological Surge: The 2026 ASPI Critical Technology Tracker — covering the 2021–2025 data cycle — finds China leading in 69 of 74 critical technologies, up from 57 of 64 in the 2019–2023 cycle. China's lead is monopolistic in 41 of 74 technologies. The US leads in only 5 of 74. Notably, India ranks second in 16 of the 69 technologies where China leads.[9]

2. Industrial Policy at Scale: The IMF estimates the equivalent fiscal cost of China's industrial policy at approximately 4.4 percent of GDP per year through only four types of handouts, i.e. cash subsidies, tax benefits, subsidised credit, and subsidised land; total support could be as much as 7–8 percent of GDP.[10] While this underplays the fact that the US-led West has instituted its own extensive industrial policy regime since 2021[11], clearly, China has ambitious plans to scale and dominate global advanced manufacturing sectors. Its predatory pricing and "zombie firms" are deliberately discouraging key manufacturing capabilities in emerging economies, leading to premature de-industrialisation.[12]

3. Upstream Capture: China controls large shares of midstream inputs and machinery, and final products in other countries embed substantial Chinese value-added. Directed finance, procurement and massive domestic scale help upstream capture, concentrating critical inputs such as wafers, high-end machinery across sectors, rare-earth processing and a multitude

of other products inside China. A related dimension — the deliberate embedding of Chinese digital and telecommunications infrastructure in partner countries through below-market pricing, opaque loan terms and proprietary hardware lock-in — has been characterised by analyst Anatoly Motkin as the "Silicon Curtain": contracts with Chinese vendors that are, in practice, the first step toward making a country a technological satellite of Beijing, with hardware that cannot be replaced without removing the entire network, local staff trained as users rather than engineers, and loans that lock in dependency through compound interest and confidentiality clauses. India's exclusion of Chinese vendors from its 5G rollout in 2021 was an early and sound decision; sustaining that boundary as AI-related grid and data-infrastructure demand grows will require continued vigilance.

4. Process Mastery: China has moved beyond assembly to mastering the entire production process. As Dan Wang and Arthur Kroeber have argued in a Foreign Affairs article, Western firms struggle to compete because dispersed production systems cannot replicate China's integrated process ecosystems.[13]

5. Export Controls as Strategic Leverage: China has from time-to-time restricted exports of rare earths, permanent magnets, drone technologies, lithium batteries, and polysilicon equipment.[14] Such export controls are not just a response to perceived partner slights —they are often a deliberate industrial strategy to preserve pre-eminence in frontier manufacturing and to shape the terms of global technological competition.[15] Beijing's April 2026 restrictions on battery and EV technology exports illustrate how this weaponisation directly affects India's manufacturing ambitions.[16]

China Shock 2.0, driven in part by insecurity arising from US controls, thus fosters deep and strategic global industry and trade disruptions. While the earlier version displaced jobs and hollowed out low value-added segments in advanced economies, the reshaped shock affects the core of their innovation-driven industries at the heart of national security. Entire ecosystems of research, industrial capacity and technological leadership in these economies stand at risk.

For developing countries, the new shock represents a compounded challenge. China has not vacated the sectors it dominated in the first shock, maintaining its influence on China-centric supply chains. Low-income countries face rising dependencies across their value chains, leaving little room for developmental industrial and employment strategies.

The result is a shock that destabilises both developed and developing countries more profoundly than its predecessor, reshaping the global industrial order in ways that are harder to resist or reverse.

IV. Changed Geopolitics of Resistance to China Shock 2.0

The analysis of China Shock 2.0 must today move beyond economic dynamics to be situated in a dramatically changed geopolitical context. This has made effective collective resistance both more necessary and more difficult.

1. Trump's Unilateral and Erratic Policies

The second Trump administration has introduced an unprecedented degree of volatility into the global trading system and the architecture of Western alliances. Tariffs imposed on allies and adversaries, on advanced and emerging economies alike have disrupted the trade order. Questioning of NATO commitments, flirtation with Russia, and the subordination of geopolitical alliances to transactional bargaining have raised fundamental doubts about US reliability.[17] The US-China relationship itself has shifted from strategic competition toward managed accommodation as the Busan understanding of October 2025, extended through November 2026, produced tactical de-escalation on tariffs and rare-earth controls but no structural remedies to China's industrial policy architecture. Washington secured visible wins on optics; Beijing preserved its policy space.

2. Trans-Atlantic Discord and the Fragmentation of the West

Trans-Atlantic discord has never been deeper in the post-Cold War era. Europe and the United States are pursuing divergent strategies toward China, Russia, and the global trade order. American tariffs on European exports, US openness to engaging with Putin, and the questioning of security guarantees have deepened political, economic, and security rifts between Washington and Brussels. The Atlantic Council's comprehensive analysis identifies four drivers of European recalibration: US–China strategic competition and the uncertainty it creates for third parties; uncertainty about continued US engagement; Russia's war on Ukraine backed by China; and China's economic and competitiveness challenges to the EU. The interaction of these four drivers creates a contradictory and unstable European posture — condemning China's support for Russia while seeking commercial accommodation, warning about overcapacity while welcoming Chinese EV investment, calling for strategic autonomy while remaining dependent on Chinese supply chains.

3. Europe's Triple Whammy

Europe faces a triple whammy that has drained its political bandwidth, fiscal resources, and industrial resilience simultaneously. First, the loss of cheap Russian energy since 2022 has structurally raised European energy costs, eroding the competitiveness of energy-intensive industries. Second, the dilution of American security support has forced a rapid and expensive expansion of European defence budgets. Third, China's export surge is hurting key sectors of European manufacturing such as automotive, machinery, green tech, and electronics that contribute vitally to its economy.[18] Mario Draghi's 2024 report identified this triple squeeze as an existential challenge requiring a step-change in European industrial policy and strategic

investment, yet Europe's capacity to respond has been weakened by the same fiscal pressures, political fragmentation, and diplomatic distraction generated by the triple whammy.

4. China as the "Responsible" Great Power and the Parade to Beijing

China has skilfully exploited the volatility of Trump's America to position itself as the predictable, rules-respecting, stability-seeking great power. During the Iran war, China's calibrated response stood in deliberate contrast to American impulsiveness. Noah Barkin's analysis identifies a troubling pattern: while most European capitals are aware of the risks of dependency on China, they are simultaneously being drawn into bilateral deals that increase those dependencies, because the alternative — confronting China collectively with US backing — no longer seems available.[19] The Hungary example is instructive: hosting BYD's first European car plant (EUR 4 billion) and a EUR 7.3 billion CATL battery factory in Debrecen, with secretive contract terms and opaque practices that the EU has been largely unable to police. European leaders have thus been proactively engaging with China, with recent visits to Beijing from the heads of government of the UK, Germany and France, among others.

5. India's Diminished Strategic and Economic Space

For India, these shifts are uncomfortable and cumulative. The long positive trajectory of the India-US strategic partnership has been disturbed by friction over trade (US tariffs on Indian exports), Russia (India's refusal to join sanctions and the US punitive tariff due to India's purchase of crude from Russia), and Pakistan (the US-Pakistan thaw emanating from the Iran war).[20] The 'G2 overlay' between Washington and Beijing — visible in the Busan agreement and its extensions — creates the risk of deals struck over India's head. In this context, the conventional logic of leveraging US-China rivalry to advance India's interests works less reliably than before. India must be more self-reliant, more strategically patient, and more deliberately capability-focused than at any time in recent memory.

V. The Iran War and China's Electrostate Advantage

The early 2026 Iran war and the disruption of fuel flows through the Strait of Hormuz have dramatically accelerated the global transition from "petrostates" — countries whose geopolitical power derives from fossil fuel resources — to "electrostates," countries whose strategic advantage derives from dominance in electricity generation, grid technology, and the clean-tech supply chains that power the modern economy.[21]

China is overwhelmingly positioned as the world's dominant electrostate. Its relative insulation from the energy shock triggered by the Hormuz closure was the product of a decade-plus of deliberate preparation: diversifying crude imports, building the world's largest strategic petroleum reserve, electrifying its industrial base, and dominating global supply chains for solar modules, batteries, electric vehicles, and grid technologies. The US with its renewed focus on fossil-fuels faces a widening structural disadvantage in energy technology. The New York Times reported in April 2026 that Chinese companies dominate the manufacturing of nearly every component of a modern power grid — solar panels, high-voltage cables, transformers, and grid-scale batteries — and were already expanding abroad to help countries build grids designed to meet the heavy electricity demands of artificial intelligence, even before the Iran war added fresh urgency. Global shipments of grid-storage batteries — a sector dominated by Chinese firms — nearly doubled in the first three months of 2026. One Chinese battery manufacturer (CATL) saw surging demand in Europe for home battery systems and growing interest across Asia in grid storage, accelerating projects it had previously planned at a slower pace. Chinese firms producing grid software alongside hardware raises a further concern: governments wary of giving Chinese firms access to their grids through software may nonetheless keep buying the hardware — having few affordable alternatives — thus deepening rather than reducing structural dependency.[22]

Several dimensions of China's electrostate advantage deserve attention in the context of China Shock 2.0:

First, the war has validated China's strategic bet on clean technology. For years, China's investment in solar, wind, batteries and EVs was characterised in Western discourse as industrial policy distortion or political vanity. The Iran war has demonstrated that these investments have created genuine energy security, reducing dependence on fossil fuels and the geopolitical risks they entail.

Second, the disruption has created a global "learning moment" on clean-tech adoption. Countries that were ambivalent about reducing fossil-fuel dependence have received a powerful demonstration of its risks. This accelerates demand for the clean-tech products and supply chains that China dominates.

Third, China's response to the conflict — calling for a ceasefire, invoking international law, positioning itself as a measured stability-seeking actor — has enhanced its reputational standing in the Global South and the Gulf states, making it an easier commercial partner for developing countries.

Fourth, and most consequentially for the analysis of India's predicament, the Iran war has reinforced the argument for a "dual derisking" — reducing dependence on both China, which

dominates supply chains, and the US, which has demonstrated unreliability as a strategic anchor. India's growing import of energy through fossil fuels amplified its vulnerability during the Hormuz closure. A faster build-out of domestic clean-tech capacity, even at higher unit cost during the learning phase, is no more an industrial policy objective: it is a national security imperative.[23]

1. Impact of the Iran War Across Major Economies

The Iran war has not diverted "China Shock 2.0" from the agenda; it has reframed it. The conflict has reinforced the sense that geopolitics, energy security and industrial policy are now fused. A prolonged war that disrupts Gulf energy flows and Red Sea shipping tightens inflation and fiscal constraints just as advanced economies are pouring money into subsidies for semiconductors, EVs and clean tech to counter Chinese overcapacity. No major power wants to be simultaneously exposed to Middle Eastern shocks and dependent on Chinese inputs in critical sectors. The security-efficiency trade-off leans increasingly towards security where China Shock 2.0 is treated as part of a wider vulnerability map rather than a standalone trade issue.

For Europe and Japan, the Iran war is particularly corrosive because it compounds existing structural weaknesses. The EU is hit by higher energy costs and shipping disruptions while its firms already face a pincer of US subsidies and Chinese overcapacity in green tech, autos and machinery. Japan, facing a more dangerous regional environment and a distracted US, has doubled down on economic security: tighter investment screening, supply-chain alliances, and quiet but firm diversification away from Chinese manufacturing ecosystems. The Iran war does not divert from the diagnosis of China Shock 2.0; it adds to the shock's impact and accelerates the shift from WTO-era liberalism to managed, security-inflected trade.

For India and other developing countries, the Iran war raises energy and freight costs, squeezes budgets and complicates growth strategies that rely on cheap imports and stable shipping lanes. For many developing countries, however, the combination of war-driven shocks and China's export push in steel, autos, solar and machinery is economically damaging: they face higher energy and financing costs while being flooded by cheap Chinese goods, forcing them into a more transactional diplomacy and delayed developmental paths.

Going deeper, the war reinforces policymakers' view that a new normal is in place where energy routes can be weaponised, sanctions can be escalated, and great-power volatility is structural. In the new world, China Shock 2.0 goes beyond trade deficits or factory closures; it shifts attention to whether states can maintain industrial and technological sovereignty under conditions of permanent geopolitical stress.

VI. China's Scale: Nearly One-Third of Global MVA

China's manufacturing footprint is vast; various analyses place its share of global manufacturing value-added (MVA) at roughly one-third of the global total. A UNIDO report projects China's share of global MVA to reach 45 percent by 2030 (from 29 percent in 2023), compared with 11 percent for the US, 5 percent for Japan, and 3 percent each for India and Germany.[24]

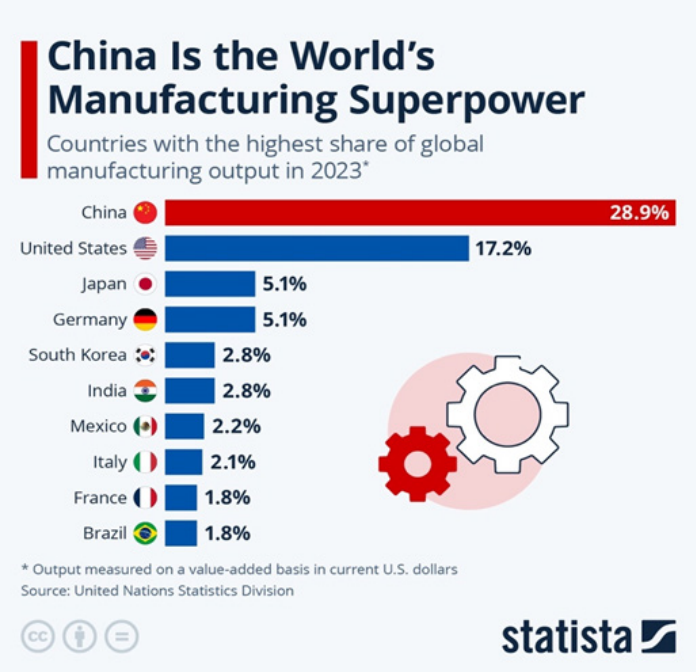


Figure 1: China's Share of Global Manufacturing (2023)

The sheer scale of the Chinese manufacturing engine impacts the world through five key vectors:

1. Policy Spillovers: Domestic choices in Beijing and provincial capitals have outsized international effects on prices, capacities and supply availability. A State Council circular can reshape global market structures within months.

2. Deployment of Excess Capacity: From steel to solar panels and consumer goods, China has built up excess capacities well beyond domestic requirements, and exporting has long been a core component of its growth strategy. The utilisation of this excess capacity has been a key driver of the Belt and Road Initiative, in place since 2012.

3. Learning and Cost Curves: Gigantic domestic volumes lower per-unit R&D and deployment costs, accelerating iterative improvement. The 80 percent fall in solar module prices over the

past decade is in large part a product of this dynamic.

4. Market Leverage: Scale lets Chinese firms sustain low prices longer than dispersed competitors can tolerate. The party-state extends support that enables non-profitable firms to survive for extended periods as long as they are instrumental in capturing an ever larger share of the global market.

5. Suppressed Consumption: Given Xi Jinping's repeated prioritisation of the "real economy" and manufacturing, and given that traditional growth engines like real estate are faltering and domestic demand remains stubbornly weak, any substantial reorientation towards consumption appears unlikely. Workplans for eight specific industries released by China's Ministry of Industry and Information Technology set out continued high growth targets for 2025 and 2026 in industries already suffering from overcapacity and overproduction, signalling that the government has no aggressive plans to counter excess capacity.[25]

From an internal Chinese perspective, this scale has given rise to a deep anxiety visible in the pages of the Communist Party's own theoretical journal, Qiushi. A senior Shanghai official writing in Qiushi in November 2025 argued that China must stop its manufacturing base from "shrinking too fast or too far," endorsing the Fourth Plenum's commitment to maintaining manufacturing's "reasonable share" of GDP.[26] The irony is striking: the same political system that generates overcapacity and involution is simultaneously alarmed about deindustrialisation.

VII. The Record Trade Surplus: $1.19 Trillion and Rising

In 2025, China's trade surplus reached a record USD 1.197 trillion — the first time in recorded economic history any country has posted a trillion-dollar annual trade surplus.[27] Stripping out imports of energy, food and raw materials, China's surplus in manufactured goods approached approximately USD 2 trillion, equivalent to the entire GDP of Russia and twice the level of 2020.[28]

Three features of this extraordinary surplus deserve emphasis:

First, the surplus emerged despite record high US tariffs. China's exports grew even as the US imposed tariffs that reached 125 percent before being reduced under the Busan agreement. This demonstrates the underlying price competitiveness of Chinese manufacturing and the difficulty of containing export pressure through tariff measures alone. Chinese exporters adapted by diversifying markets and redirecting to ASEAN, the EU, the Global South, and increasingly to the Gulf states.

Second, the composition of the surplus has shifted decisively toward advanced manufactured goods. Semiconductor exports rose by 24.7 percent over the period. EV and auto exports surged as Chinese firms made inroads into Japanese and German markets. High-tech goods outpaced overall export growth by 5.4 percentage points. China Shock 2.0 is not driven by cheap consumer goods any longer, but is characterised by sophisticated manufactured products.

Third, Goldman Sachs research concludes that for each 1 percentage point of export-driven boost to Chinese GDP, other economies see a 0.1 to 0.3 percentage point drag — with high-tech producers like Europe and Japan facing particularly acute pressures.[29] The phenomenon amounts to beggar-thy-neighbour growth: China's export success is coming at the direct expense of manufacturing capacity and growth elsewhere.

When a USD 19 trillion economy seeks to export its way out of a serious economic predicament — combining weak domestic demand, a deflating property sector, and demographic headwinds — it generates serious distortions in the global marketplace. Crucially, there is no easy self-correction mechanism. China's political economy militates against significant currency appreciation or a major demand-side stimulus that would boost imports. The US Federal Reserve's research has concluded that China's trade dominance has been amplified by its industrial policies in ways that standard comparative advantage models do not anticipate.[30]

VIII. Green-Tech Surge: Scale, Benefits and Trade-Offs

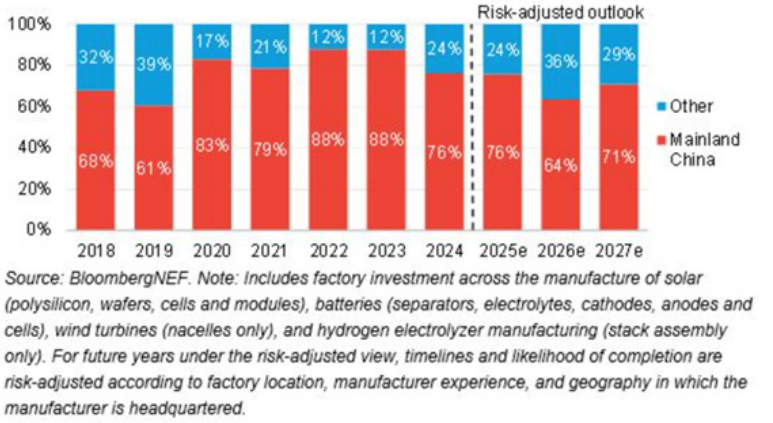
China's manufacturing dominance comes out the clearest in green technologies:

1. Solar: China accounts for over 80 percent of global solar PV manufacturing capacity across all stages — polysilicon, ingots, wafers, cells, and modules. Xinjiang alone produces about 40 percent of the world's polysilicon, while Chinese firms control 97 percent of wafer production. This dominance has driven module prices down by more than 80 percent in the past decade, making solar the cheapest electricity source in many regions.[31]

2. Batteries and EVs: Cell, pack and EV production have scaled rapidly, and Chinese companies now supply nearly 60 percent of global EV battery production capacity. Integrated domestic supply chains — from mining and refining lithium to cell and pack assembly — give China unmatched cost advantages and resilience.[32]

3. Wind and Electrification: In 2024, China installed 74.7 GW of new wind capacity, representing approximately 70 percent of global additions. Chinese OEMs — Goldwind, Envision, MingYang, Windey — occupy the top four spots globally for turbine manufacturing.[33] China's domestic market scale has propelled its firms to dominate component manufacturing, from blades and towers to rare-earth magnets essential for turbines.

Clean-tech factory investment by geography (Bloomberg NEF)



Source: BloombergNEF. Note: Includes factory investment across the manufacture of solar (polysilicon, wafers, cells and modules), batteries (separators, electrolytes, cathodes, anodes and cells), wind turbines (nacelles only), and hydrogen electrolyzer manufacturing (stack assembly only). For future years under the risk-adjusted view, timelines and likelihood of completion are risk-adjusted according to factory location, manufacturer experience, and geography in which the manufacturer is headquartered.

Figure 2: Clean-tech manufacturing by geography, showing China's dominance

The result is a complex trade-off: cheaper renewables and EVs accelerate global decarbonisation now, particularly after the Iran war has raised the urgency of reducing fossil-fuel dependence. But concentrated midstream capacity creates strategic vulnerability for importers later, and cheap Chinese supply compresses margins for foreign producers, provoking political pressure and protectionist responses. The world may be going through retarded industrialisation or outright de-industrialisation in the green energy space in developed and developing countries alike; China sucks oxygen out of the system, driving away competition.

The Iran war has sharpened this trade-off. Countries desperate to reduce fossil-fuel dependence after experiencing the Hormuz shock are pragmatically drawn to the cheapest and most rapidly deployable clean technology — which is Chinese. But acquiring it accelerates strategic dependence on China's supply chains at a time when these chains are being used as leverage instruments.

A similar story of strategic global dominance is playing out in other emerging industry sectors. China already deploys 54% of industrial robots[34] in the world, by far the largest global market with a stock of 2 million operational robots. In the biopharma space, the country has emerged as a key drug developer, accounting for a quarter of new drug candidates under active development supported by regulatory reforms to shift up the value chain from generics[35]. These are the outcome of, first, trend analysis and understanding emerging new technologies; two, careful planning and policy formulation; and three, shaping industry ecosystems through a mix of incentives, subsidies, cheap credit and ease land policies by both central and provincial governments. The results for the rest of the world translate into a new version of the China shock.

IX. Debate in Advanced Economies and Beijing's Counter-Moves

Unlike China Shock 1.0, where imports of cheaper consumer goods were not unwelcome, the current loss of manufacturing space in hi-tech sectors is being resisted, often ineffectually.

Developed countries are reacting in three interconnected ways:

1. Trade defence – involving measures such as anti-dumping duties, stricter rules of origin and tighter de-minimus thresholds

2. Industrial revival – providing targeted finance, procurement and R&D support to build midstream capacities

3. Supply-chain diversification – through incentives for friend-shoring and regional co-investment.

The USCC's 2025 Annual Report identifies China Shock 2.0 as a structural threat: "as China floods global markets with its goods, it will gain a more dominant share of key markets, gutting foreign competitors and propelling them into a downward spiral of deindustrialisation."[36] China's effective tariff rate in the US market — approximately 31.6 percent — has not prevented China's global export surge.[37]

The US National Security Strategy (NSS) 2025[38] and the U.S.–China Economic and Security Review Commission (USCC) 2025 Report[39] both assess China's economic behaviour as predatory and identify "China Shock 2.0" as a structural threat. They argue that Beijing's state directed overcapacity, subsidies, and export surges in advanced manufacturing (EVs, batteries, semiconductors, clean tech) are destabilizing global markets, eroding industrial bases in both developed and developing countries, and creating coercive supply chain dependencies. The recommended US response is selective decoupling, rebuilding domestic production, tightening trade enforcement, and consolidating economic statecraft tools to counter Beijing's leverage. In effect, their analysis leads into a strong revival of industrial policy, long abjured by global organisations, setting a new example for market-based economies.

The European response to China Shock 2.0 is best characterised as the "muddled middle" — a category identified by Noah Barkin in his "Watching China in Europe" newsletter. Barkin identifies three schools of European thought: (A) decisively derisk, diversify and deploy all economic policy tools; (B) give in to short-term opportunism and absorb any crumbs China leaves behind; and (C) a muddled, half-hearted mix of the two. His assessment is that most European capitals are closer to C than to A.[40]

The numbers are stark. Over twelve months through October 2025, imports of industrial robots from China into Europe rose 171 percent while prices fell 31 percent. Imports of integrated circuits rose 84 percent, with prices down 6 percent. Car imports more than doubled while prices dropped 15 percent. Germany — once the paradigmatic case of industrial excellence — is losing 10,000 industrial jobs a month, and its trade surplus with China has swung to a EUR 1.78 billion monthly deficit by October 2025, a 338 percent reversal over the decade.[41]

Germany's case is particularly instructive. Rhodium Group's February 2026 update "Germany's China Shock Revisited" documents a structural deterioration that has accelerated beyond earlier projections. German goods exports to China fell 9.3 percent in 2025 to EUR 81.8

billion — their lowest level in a decade and a 23 percent decline from the 2022 peak. German car exports to China have tumbled 66 percent since 2022, reaching their lowest level since 2009. German auto worker layoffs now exceed those during the 2008–09 global financial crisis or the COVID-19 pandemic. The yuan has lost nearly 20 percent of its value against the euro since mid-2022 — roughly 8 percent in 2025 alone — compounding the competitive disadvantage by eroding the effectiveness of the EU's trade defence instruments. German industrial giants and the auto suppliers' association CLEPA estimated European suppliers face a cost disadvantage of up to 35 percent versus Chinese competitors, with 350,000 European jobs at risk over the next five years. Chancellor Friedrich Merz, in office since May 2025, has adopted a somewhat more critical posture toward China than his predecessors. On his first official visit to Beijing he urged Beijing to rein in market-distorting subsidies, pressed for currency appreciation, and spoke openly about the risks of Chinese overcapacity. But concrete policy action has lagged rhetoric, as Merz has been consumed first by Ukraine and transatlantic diplomacy, and then by the domestic competitiveness agenda. Beijing, for its part, has offered no structural concessions.

The EU's response has sharpened considerably. Noah Barkin's May 2026 "Watching China in Europe" newsletter — a reliable barometer of Brussels' direction of travel — reports that the Commission has had enough of China ignoring European warnings and is preparing the groundwork for a forceful response. This would include the rapid deployment of safeguard measures across chemicals, machinery, and plug-in hybrid vehicles, and the development of a new instrument giving Brussels broad-based powers to counter Chinese overcapacities, akin to Section 301 in the United States. The Commission plans to seek a mandate from EU leaders at the European Council meeting of June 18–19. This marks a significant strategic shift: from technocratic restraint to political urgency. China's EU trade deficit reached EUR 360 billion in 2025 and continued to surge in the first quarter of 2026. As one senior EU official confided: "The current situation is not sustainable. Not taking a risk is also a risk. In this case I believe it is the biggest risk of all." The European Parliament has also commissioned a major study on industrial overcapacities with a focus on China.[42] But EU unity remains fragile. Paris is readier to act boldly; Berlin, torn between commercial dependencies on China and political commitments to de-risking, fumbles between the two. Robust Chinese retaliation — which EU officials regard as inevitable — will test whether the political resolve to "sustain pain" is real or rhetorical.

Beijing's counter is multifaceted: expand export credit and insurance to underwrite new buyers; encourage overseas assembly and investment in third countries to blunt origin-based restrictions; use tactical consolidation at home to arrest extreme price wars; and deploy export controls selectively when geopolitically useful. Tariffs blunt some flows but cannot by themselves rebuild midstream ecosystems. China has proved adept at dividing and ruling European capitals, offering selective commercial incentives to countries that maintain accommodating positions.

X. Debate in the Developing Countries

The conversation across developing economies regarding Chinese manufacturing dominance is pragmatic and sober but growing more anxious. The New York Times's Alexandra Stevenson identifies a second China shock that looks qualitatively different from the first: barred from the US market by tariffs and unable to sell enough domestically, China is redirecting exports to developing countries and setting up factories in them — in countries that have less control over how this unfolds and are more dependent on manufacturing to keep their economies growing. More than 300,000 people in Indonesia's garment factories and textile mills have lost their jobs to Chinese imports over two years. Thailand's central bank has warned about the "flooding of Chinese exports" and intensifying pressure from Chinese manufacturing overcapacity. China is also exporting the factories themselves, largely to circumvent US tariffs. This has worked reasonably well in Vietnam for labour-intensive sectors, but Malaysia illustrates the perils: its nascent solar industry was displaced by Chinese companies that built huge factories, then mothballed them when the US imposed tariffs on Chinese solar exports transshipped via Southeast Asia, leaving Malaysia's solar sector in ruins. The social consequences — youth unemployment, rising instability, anti-Chinese sentiment that could turn volatile — are emerging. As Stevenson writes, unlike the West, the countries bearing the brunt of the second China shock may not have asked for it, but they are going to need to brace for impact.[^e43a] Governments are weighing the benefits of affordable access to Chinese manufacturing ecosystems against the risks of structural dependence. The Iran war has further sharpened this dilemma.

Core concerns revolve around the disruptive effects of China's industrial overcapacity, which threatens to flood developing markets with surplus advanced manufacturing output, undercutting local industries before they reach viable scale. Many countries are unlikely to achieve domestic manufacturing in key products and are well-served by cheaper Chinese midstream products that enable them to develop local end-use products. However, anxieties about macroeconomic fundamentals such as trade imbalance and skilled employment opportunities persist.

Global South pushback, while real and growing, has had limited efficacy. China's exports to developing countries have surged as the US market became partially closed through tariffs; Chinese exporters have shown remarkable agility in redirecting surplus production. Mexico, Indonesia, and Brazil have imposed new tariffs on Chinese goods, but the systemic pressure continues. As Robin Harding writes in the Financial Times, if China will buy nothing from others but commodities and consumer goods, they must prepare to do the same or face the structural consequences of one-way trade.[43]

Regional perspectives diverge. In Asia, economies balance export integration with industrial sovereignty, exploring selective guardrails and upstream investments to avoid hollowing out domestic capabilities while tapping Chinese scale to lower transition costs. African policymakers focus on avoiding the raw material role trap, prioritising upstream processing and local assembly while guarding against import surges that crowd out early stage manufacturing and skill formation. Latin American debates emphasise battery grade materials, automotive electrification, and grid components, weighing decarbonisation affordability against the risks

of overreliance on a single supplier ecosystem.

A common tension runs through all developing-country responses: how to harness China's scale to lower transition costs (especially in clean energy) without surrendering industrial autonomy. The answer emerging in the more sophisticated policy discussions is managed openness: selective tariff safeguards while preserving access to affordable tech; layered industrial strategies that protect downstream assembly initially before moving upstream; and South-South cooperation in emerging sectors to dilute single-country dependence.

XI. Debate in China on "Involution"

Policymakers from the Politburo down have framed involution as a symptom of a deeper mismatch: production and investment expanding faster than domestic demand or exports can absorb, with local officials and state-linked finance subsidising firms to keep factories running. Xi Jinping has urged the "orderly exit" of outdated production capacity and called for curbing "disorderly" price competition. Beijing recognises excess capacity as not merely an economic side-effect but a political-fiscal problem that needs managed unwinding. Yet it simultaneously denies the very concept of a "China Shock 2.0". Official Chinese voices — epitomised by Su Liang's Xinhua-backed piece in the Beijing Channel newsletter — argue that the narrative is a "concoction" of Western protectionist thinking and that China's manufacturing exports are simply globalization at its most mundane and beneficial. As Michael Kovrig drily notes: never believe anything until the Party-state denies it. China's propaganda apparatus frames the competitive challenge as a "China Threat Theory" reprise, even as Xi's own speeches acknowledge the involution problem that the theory purports not to exist.[^e46a]

At an important forum in Beijing, this author mentioned that concerns about excess capacities were not confined to developed economies but were being articulated in developing countries like India as well. He was accused of parroting Western propaganda. More recently, he had the satisfaction of gently pointing out that Xi Jinping had apparently fallen for Western propaganda himself, given his own explicit references to the involution problem.

As things stand, China is not winning its battle against involution. Overcapacity piles up even in industrial segments that already had overproduction. All the investment in technology has not overcome the problem of sluggish productivity growth. Domestic demand refuses to pick up, forcing China to look towards exports for growth stimulus. Present trends suggest that China's trade surplus in 2026 will again be in excess of USD 1 trillion, despite facing historically elevated tariffs in its largest market.

The failed polysilicon cartel episode of late 2025 and early 2026 is the most instructive recent case study. The state's halting of the consolidation fund was a rational calculation protecting downstream consumers, but it left the structural problem of chronic losses and overcapacity unresolved.[44] The story's postscript — Tongwei's acquisition of Lihao — suggests consolidation may eventually happen through market forces rather than state-directed cartels, but this process is slower, less complete, and less likely to produce the sharp capacity reduction that would meaningfully relieve export pressure.[45]

The implication for external observers is twofold. First, China's industrial model can produce spectacular scale and rapid cost declines, lowering consumer and deployment costs worldwide. Second, this scale is sustained politically and financially even when corporate profitability weakens — making overcapacity and cross-border price pressure a structural feature of the system. For governments and firms outside China, that means trade instruments are necessary but insufficient; the deeper task is to build credible midstream alternatives, patient capital vehicles, and regional cooperation to attenuate strategic dependence.

XII. China's Dual Circulation and Limits of Anti-Involution

1. The Dual Circulation Strategy

Articulated in 2020 and embedded in subsequent five-year plans, China's "dual circulation" strategy aims to create a development pattern that "takes the domestic market as the mainstay while letting internal and external markets boost each other." In theory, this represents a pivot from export-led growth toward domestic consumption-driven growth. In practice, the strategy has evolved in a way that prioritises industrial self-sufficiency and export competitiveness over consumer welfare.

The dual circulation concept has three operational consequences that directly bear on China Shock 2.0. First, it provides ideological sanction for a "completionist" industrial policy — Xi wants China to be able to make everything itself, from semiconductors to aircraft, reducing reliance on imports of manufactured goods. Second, it legitimises restrictions on technology transfer and limits on foreign access to China's domestic market, while demanding access to foreign markets for Chinese exports. Third, it creates a structural surplus bias: if China produces ever more domestically while importing only commodities, the excess manufacturing output has nowhere to go but the export market. The dual circulation strategy, in other words, is structurally export-intensifying rather than import-expanding.

There is an inherent tension in the strategy. Genuine "dual circulation" would require strengthening China's social safety net, raising household incomes, and increasing consumption as a share of GDP — precisely the demand-side rebalancing that the IMF, economists like Alicia Garcia-Herrero, and many Chinese reformers have called for. But Xi's political economy resists this. Resources are mobilised for the "real economy" — manufacturing — not scattered for individual consumption.

2. Anti-Involution Measures and Their Limited Impact

As noted above, a growing policy and intellectual debate inside China has rallied around the term "involution" (neijuan), which describes a cycle of excessive internal competition where individuals and firms work harder without achieving proportional gains. The 15th Five-Year Plan marks the first time policymakers have formally integrated the anti-involution campaign into a document of such importance. Proposals include crackdowns on unhealthy competition and price wars (especially in cement, steel, EVs), and the creation of a "unified national market" to reduce local protectionism and redundant investment. In practice, however, these measures have had limited impact. MERICS analysis — including the April 2026 MERICS China Podcast by Jacob Gunter and Esther Goreichy — concludes that government campaigns to fight involution have not led to a meaningful rise in prices.[46] Beijing's economic model is generating intense overinvestment, overproduction, and overcapacity, with output growing while consumption fails to keep pace.[47]

3. Why Anti-Involution Measures Are Not Working

There are several reasons why anti-involution measures are not delivering results.

1. Geopolitical Logic Overrides Economic Rationality: China's industrial strategy is explicitly designed to reduce its dependence on others while making others dependent on China. The "Renmin School" of economic statecraft — outlined in a 2025 book by scholars at Renmin University — frames effective economic statecraft as a process of "strengthening asymmetric economic interdependence."[48] Maintaining manufacturing scale — even at a loss, even with overcapacity — is part of this strategic logic: it preserves export leverage, crowds out foreign competitors, and deepens import dependencies in other countries.

2. Youth Unemployment Imperatives: China's youth unemployment rate reached historic highs in 2024.[49] Manufacturing jobs — even in chronically loss-making firms — provide social stability and political legitimacy. The cost of factory closures is visible in unemployment and social unrest; the cost of continued overproduction is diffuse and global. Local officials consistently choose to absorb the latter.

3. Local Government Incentive Structures: Local governments are evaluated on growth and stability metrics, not profitability or efficiency. They have deep incentives to support firms and maintain employment even when those firms are loss-making.[50] The central government's anti-involution campaign runs headlong into this local political economy, and consistently loses in practice, even if it wins in rhetoric.

4. The Failed Polysilicon Cartel Attempt: Six leading producers — including Tongwei and GCL — proposed raising approximately CNY 50 billion (USD 7 billion) to buy out and idle roughly one-third of China's polysilicon production capacity. The State Administration for Market Regulation halted the plan in January 2026, citing monopoly risks.[51] The government had far more economic bets tied to the consumers of polysilicon (wafer, cell and module makers) than to its producers. The plan's failure illustrates the difficulties in engineering capacity reduction when the political economy pulls in the opposite direction.

5. Fixed-Asset Investment Collapse Offset by Export Pressure: China's fixed-asset investment contracted by 3.8 percent in 2025, turning from a major growth driver into a drag. Exports are being thus deployed as an alternate growth engine. This makes any meaningful voluntary restraint on export quantities politically untenable.

4. China's New Supply-Chain Security Architecture

Two new supply-chain security regulations issued by China's State Council — the Provisions on the Security of Industrial and Supply Chains (March 2026) and the Regulations on Industrial and Supply Chain Security (April 2026) — mark the consolidation of a decade-long shift in which supply-chain resilience has been elevated to a core national-security priority.[52] Both documents establish comprehensive mechanisms for risk monitoring, emergency response, and state intervention across critical sectors, while granting authorities broad powers to investigate and counter foreign actions deemed harmful to China's industrial security. They also formalise the requirement for "stable and continuous" flows of key inputs, mandate strategic reserves, and create new obligations for firms to cooperate with state investigations.

Together, they represent the first unified administrative framework for supply-chain security, signalling Beijing's view that industrial capacity, technological self-reliance, and national security are now inseparable.

These regulations build directly on earlier laws that have progressively securitised China's economic governance: the National Security Law (2015), the Cybersecurity Law (2017), the Export Control Law (2020), the Anti-Foreign Sanctions Law (2021), the Data Security Law (2021), and the Foreign Relations Law (2023). The new supply-chain regulations sit atop this architecture, operationalising earlier laws into a coherent system that allows the state to intervene across the entire industrial chain — from raw materials to advanced manufacturing — under the banner of national security.

The two new documents also reflect China's strategic anxiety about external shocks, technological choke points, and the weaponisation of supply chains. They codify Beijing's belief that vulnerabilities in semiconductors, critical minerals, and advanced manufacturing pose systemic risks to national development. At the same time, they provide legal justification for countermeasures against foreign governments, including investigations, export restrictions, and sanctions. This approach mirrors China's broader shift from defensive to proactive economic statecraft: securing domestic supply chains while building the legal tools to retaliate against perceived external coercion. In effect, China is institutionalising a permanent state of supply-chain mobilisation — a direct counterpart to the dual circulation strategy's completionist logic.

XIII. Two Case Studies

1. Case Study 1 — The Solar Power Industry

The solar sector is a case study in how involution plays out in practice. Chinese suppliers today account for more than 90 percent of global PV module shipments; yet multiple industry trackers have documented widespread losses and liquidity stress across hundreds of firms through 2024–25.[53] Leading players have cut capex, defended market share aggressively, and even litigated one another over emerging technology routes — behaviour symptomatic of a crowded, loss-making competitive landscape.

From the perspective of India and other importers, this creates a Faustian bargain. Chinese solar modules are extraordinarily cheap — cheaper than anything India can produce domestically in the near term. Every module deployed from China accelerates India's renewable energy build-out, reduces carbon emissions, and lowers electricity costs. But it also deepens dependence on a supplier that has demonstrated willingness to use supply-chain leverage for geopolitical purposes, and it limits the development of India's own midstream manufacturing ecosystem.

India's policy response — the ALMM framework, Basic Customs Duty, and PLI schemes for high-efficiency solar PV modules — has produced real gains: India's solar module manufacturing capacity doubled from 38 GW in March 2024 to 74 GW in March 2025, while solar PV cell manufacturing capacity tripled to 25 GW. But this progress has not yet translated into genuine upstream independence. India's current model largely involves importing Chinese cells and assembling them domestically — a position of "fragile supply chain" rather than genuine manufacturing sovereignty. Adding a further layer of complexity, China's Ministry of Commerce submitted a WTO consultation request regarding India's solar PV subsidies on December 19, 2025, and had earlier challenged India's EV subsidies in October 2025.[54]

The solar case study illustrates two durable lessons for India's industrial strategy. First, tariff barriers alone do not create manufacturing capability — they must be accompanied by consistent procurement policy, access to concessional patient capital, technology transfer arrangements, and investment in R&D capacity. Second, the gap between module-level domestic manufacturing and genuine upstream sovereignty (polysilicon, wafers, specialised equipment) remains substantial and will require years of sustained investment to close.

2. Case Study 2 — India's Mobile Phone Manufacturing

The dominant narrative about India's industrial policy centres on failure or at best partial success. The mobile phone manufacturing story challenges this narrative in important, if qualified, ways. India has become the world's second-largest mobile phone manufacturer. Mobile production rose from INR 180 billion in 2014–15 to INR 5.45 trillion in 2024–25 — a 28-fold increase over a decade. Smartphone exports reached a historic high of approximately USD 30 billion in 2025, up 47 percent year on year, making India a globally significant export hub for a high-technology product.[55]

Apple's decision to diversify manufacturing away from China has been the centrepiece of this transformation. By 2025, approximately one-third of Foxconn's iPhone assembly was happening outside China, with India playing the dominant role. Apple's manufacturing footprint in India includes five iPhone assembly plants — three operated by Tata Group entities and two by Foxconn. iPhone shipments from India have accounted for approximately 75 percent of India's total smartphone export value, exceeding USD 22 billion. The PLI scheme for large-scale electronics manufacturing has brought in over USD 21 billion in investment across all PLI sectors by 2025, generating more than 1.2 million direct and indirect jobs.[56]

Why has the mobile phone sector succeeded where so many others have struggled? First, there was a large and growing domestic market that gave manufacturers scale advantages and risk mitigation — India is the world's second-largest smartphone market. Second, the geopolitical moment was propitious: US-China tensions created a powerful incentive for Apple and its suppliers to diversify away from China, and India was the most credible alternative at scale. Third, the PLI scheme was well-designed for this sector — the production-linked incentive structure rewarded actual output rather than installed capacity, reducing the risk of sheltered inefficiency. Fourth, Tata Group's acquisition of Wistron's Indian operations and Pegatron's entry created domestic manufacturing anchors with real skin in the game.

The caveats are equally important. Four-fifths of domestic PLI participants in various schemes have not met incentive thresholds, suggesting the success has been concentrated in global firms (especially Apple's supply chain) rather than generating broad-based Indian industrial capability. The component ecosystem remains shallow — India assembles iPhones but produces very few of the complex components that go into them. Most camera modules, displays, batteries, and semiconductor chips still come from China, Taiwan, South Korea, or Japan. India's success in smartphones is real but it is still primarily assembly, not deep manufacturing.

The lessons for India's derisking strategy are nonetheless valuable. They suggest that with the right combination of domestic market scale, a credible geopolitical trigger for supply-chain diversification, well-structured performance-based incentives, and anchor investors willing to develop local supply chains, India can create genuine manufacturing hubs even in technologically complex sectors. The challenge is to replicate these enabling conditions in sectors like solar, batteries, and EVs where the competitive pressure from Chinese suppliers is even more intense.

XIV. Politics and Policy: The 15th Five-Year Plan and Xi's Refrain

The October 2025 Fourth Plenary Session of the 20th Central Committee of the Communist Party of China adopted recommendations for the 15th Five-Year Plan (2026–2030), and the Plan was formally approved at the National People's Congress in March 2026.[57] The Plan accelerates a clear, top-down pivot: Xi Jinping has doubled down on the "real economy" — manufacturing, industrial upgrading, and innovation-led growth — as the strategic mainspring of China's development for the next five years.

Xi Jinping's lines are telling: "The real economy must be preserved; manufacturing is the ballast stone of the national economy," and "we must seize the moment and accelerate the formation of iconic, original, and disruptive breakthroughs."[58] Those phrases are operational: they signal financing priorities and performance metrics to provincial cadres and shape who gets credit, contracts, and protection.

The 15th Five-Year Plan formally integrates the anti-involution campaign but, critically, does not step back from the industrial policy architecture that generates involution in the first place. The senior Shanghai official's article in Qiushi — endorsing the Fourth Plenum's commitment to maintaining manufacturing's "reasonable share" of GDP — captures the internal contradiction of China's economic strategy: simultaneously alarmed about overcapacity and involution from too much manufacturing, yet committed to manufacturing's dominant position in the economy.[59] The 15th Five-Year Plan does not resolve this contradiction; it institutionalises it.

The plan's policy mix is consequential. It elevates patient, mission-oriented finance, procurement-led demand, and cluster-led industrial projects while encouraging domestic consolidation where prices and capacity are fraying. Three external stress points are institutionalised:

First, export spillovers and pricing pressure will remain tools of industrial strategy, because low prices and scale are now policy instruments rather than market aberrations.

Second, foreign partners and markets will face persistent political friction as cheap Chinese supply displaces local producers; episodic administrative interventions (consolidation, subsidies, export credit) will be used to stabilise domestic employment at the expense of external competitors.

Third, technology self-reliance efforts and tightened export-control reciprocity raise the risk of selective decoupling in strategic inputs (advanced chips, battery materials, certain rare-earth processed goods), complicating trade and investment diplomacy.

Crucially, recent developments in U.S.-China trade negotiations have underlined how China will defend its policy space. During preparatory talks and at the Xi-Trump meeting in Busan on 30 October 2025, Beijing preserved the sovereign space for industrial policy: operational details about subsidies, capacity management and the sequencing of industrial consolidation were treated as domestic prerogatives, outside the remit of high-level trade diplomacy. The Busan engagement produced temporary tactical de-escalation on tariffs and rare-earth controls, but Beijing made clear that broader Western grievances about excess capacity and state support are political-economic choices China will manage on its own terms, using both

domestic administrative tools and calibrated external measures (export credits, insurance, selective export controls) to protect strategic objectives.

One day after the Busan meeting, the author had offered this assessment in an Op-ed in the Tribune: The Sino U.S. negotiations yielded U.S. concessions that deepened China's market penetration, while Beijing offered short term relief without sacrificing its long term industrial edge. By narrowing talks to transactional issues and imposing procedural conditions, China retained policy space and the option to re open pressure points later. Washington secured visible tactical wins but no structural remedies to alter the economic trajectory. Strategically, China managed escalation dominance more effectively, even as the U.S. claimed short run victory.[60]

Beijing announced a tactical suspension of a subset of export control measures after high level talks in Busan; the pause reduced the immediate risk of abrupt supply cut shocks but did not amount to a structural rollback of the instruments that give China leverage over midstream inputs.

Many US scholars like Rush Doshi assess that China has come ahead in extended negotiations culminating in the Busan meeting, while others like Bilahari Kausikan argue that China's power has peaked in Asia and that it is in a more precarious geopolitical position than it appears. There is an element of hubris on the Chinese side, and the US has real strengths in resilience and innovation that should not be underestimated. This economic contestation will be a prolonged one with uncertain outcomes.[61]

XV. What It Means for India

1. Growing Dependencies and the Trade Imbalance

For India, the challenge posed by China Shock 2.0 has sharpened considerably over the years. China accounts for nearly 17 percent of India's total imports, with heavy dependencies in critical sectors: active pharmaceutical ingredients, electronics, chemicals, solar components, industrial machinery, rare earth magnets, and critical minerals. India's bilateral trade with China reached a record USD 155.62 billion in 2025, with China's surplus against India hitting USD 116 billion — up from USD 99 billion in 2024.[62] According to International Trade Centre data, this USD 116 billion surplus represents approximately 10 percent of China's entire global surplus of USD 1.19 trillion.[63] While China's imports from India increased marginally to about USD 20 billion last year (well below the level of USD 28 billion in 2021), trade surplus with India hit a record level. China has also become India's largest trading partner in FY2025–26, surpassing the United States.

China's April 2026 controls on battery and EV technology exports directly illustrate the leverage that these dependencies create. India's largest companies are struggling to break Beijing's grip on the production of batteries, EVs, and critical minerals. China's WTO challenges to India's solar PV subsidies (December 2025) and EV subsidies (October 2025) add institutional pressure on top of supply-chain leverage.

2. The Dual Derisking Imperative

The author has argued in recent writings for a "dual but differentiated derisking" — a strategy that simultaneously addresses India's growing dependencies on China and manages new dependencies on the United States that the current geopolitical moment is generating.[64] The United States presents a different but equally real set of dependency concerns. The Iran war has demonstrated that Washington's reliability as a strategic anchor is genuinely uncertain. Trump's administration has treated India as an economic competitor rather than a strategic partner, imposing tariffs, taking punitive measures and demanding lop-sided concessions.

The G2 dynamic between Washington and Beijing — visible in the Busan agreement and its extensions — creates additional complications for India. The author has argued that the G2 idea acknowledges the duo's dominance in economic scale, military projection and technological prowess, and while a G2 architecture is unlikely at present, even the perception of a "G2 overlay", with Washington and Beijing giving the impression of tacitly coordinating responses on select issues could create a pervasive influence shaping decision-making. If Sino-US engagement is deployed to address systemic challenges, India could find itself reacting to bargains it did not help shape.[65]

India's derisking vis-à-vis China and the US must therefore be dual but differentiated. It needs to be differentiated because the two relationships involve fundamentally different risks and opportunities. China is a strategic competitor with a systematic doctrine of coercive economic statecraft, a demonstrated willingness to use supply-chain leverage, a boundary dispute that directly imperils India's security, and a strategic nexus with Pakistan that has become more

dangerous after Operation Sindoor. The US, by contrast, remains India's most consequential strategic partner for defence modernisation, critical technology cooperation, intelligence sharing, and the broader management of the Indo-Pacific — but it is increasingly unreliable, transactional, and prone to volatilising actions. Derisking vis-à-vis the US means managing dependencies prudently, investing in sovereign AI and industrial capabilities, and moderating expectations about external balancing — not adversarial positioning.[66]

India must also avoid the temptation of the "lazy option" — letting Chinese dependencies expand because Chinese inputs are cheaper and the alternative is painful. The Faustian bargain of accepting cheap Chinese clean tech to accelerate the renewable energy transition while deepening strategic vulnerability must be managed with far greater sophistication than it has been to date.

3. India's Limited Rapprochement with China

The India-China thaw that began with the Kazan meeting (October 2024) and the Tianjin meeting (August 2025) has produced some diplomatic re-engagement without fundamental resolution of any of the structural problems in the relationship. On the economic front, the most significant development is Press Note 2 of 2026 (PN2), announced on March 10, 2026, which amends the restrictions on land-bordering country (LBC) investments introduced by Press Note 3 of 2020.[67] PN2 has two main elements: it clarifies that investors with non-controlling LBC beneficial ownership of up to 10 percent can invest under the automatic route (largely formalising existing practice for PE/VC funds); and it provides for expedited 60-day approval of LBC investments in specified manufacturing sectors — capital goods, electronic capital goods, electronic components, polysilicon, and ingot-wafer.

Ananth Krishnan's analysis notes that the priority sectors — representing approximately 58 percent by value of India's imports from China in 2025 — signal a pragmatic recognition that China-plus-one supply-chain diversification requires some form of Chinese participation in India's manufacturing ecosystem, particularly in joint ventures and technology licensing arrangements.[68]

Manoj Kewalramani and Amit Kumar, writing in the Vivekananda International Foundation's National Security journal, propose a framework of "self-strengthening and de-risking".[69] On trade, their remedies include regularising government-to-government and business-to-business dialogue, identifying complementarities through continuous study, and boosting services exports. Crucially, where India lacks domestic manufacturing capability, they advocate "free-riding" on Chinese subsidies. On strategic vulnerabilities, they propose a dual metric — the Relative Impact Factor (measuring immediate shock potential) and the Product Complexity Index (measuring ease of substitutability) — to distinguish mere dependence from strategic vulnerability.

On investment, they call for replacing the current binary framework with a traffic-light system: red sectors (direct military or critical infrastructure implications) remain closed; green sectors (textiles, garments, consumer goods, selected transport, even partial participation in solar and wind supply chains) should be reopened through the automatic route; orange sectors (technology-intensive domains, data-sensitive activities, connected infrastructure)

should be subject to structured, time-bound review with clearly articulated criteria.

Some analyses go further, arguing for a bold and broad opening of Chinese capital, talent, and technology. This argument has surface plausibility but underestimates several risks. Sharmila Kantha offers a sobering prognosis.[70] China's direct cumulative investment in India between April 2000 and December 2025 stood at just USD 2.5 billion, despite China's total outward direct investment of approximately USD 175 billion in 2025. More tellingly, China has taken active steps to hinder India's manufacturing growth: curbs on exports of critical minerals and rare earths (2023–2025); informal delays in exporting electronics and solar manufacturing equipment; and pressure on companies to avoid sending technical personnel to India. The experience of Chinese FDI in ASEAN countries shows larger trade deficits without enhanced technology transfer.

There is little evidence that China is inclined to build India's capabilities or transfer technology in key sectors.[71] Beijing's strategic logic — as outlined by the Renmin School — is precisely the opposite: to strengthen asymmetric interdependence in ways that make others dependent on China while reducing China's own vulnerabilities. PN2 is a sensible clarification of PN3's unintended consequences for global PE/VC funds with minor Chinese stakes. But it should not be oversold as a path to genuine manufacturing partnership or as a solution to India's structural trade imbalance.

The record of India–China economic engagement over the past five years demonstrates an important reality: even at the lowest point of bilateral relations following Galwan, both countries maintained normal commercial ties. For instance, China's exports to India expanded from USD 75 billion in 2019 to USD 136 billion in 2025. Cooperation is not purely a function of the political temperature between the two capitals, and this baseline of continued engagement under acute stress is itself a strategic asset worth preserving. Where economic engagement with China continues — and it will and should in many areas — it must be structured through clear safeguards, transparency requirements, and diversification benchmarks that prevent any single dependency from becoming a chokepoint.

XVI. India's Strategic Response

India should treat China Shock 2.0 as a structural test of industrial strategy, not a temporary disturbance. The objective is to build resilient, higher-value midstream specialisations that reduce strategic vulnerability while enabling India to capture more upstream value in the global supply chain.

1. Manufacturing Push: PLI 2.0 and Beyond

A domestic manufacturing push through expanded and reimagined PLI schemes should strengthen solar modules, advanced chemistry cells, and electrolyzers. But the lessons of the mobile phone PLI must be applied: performance-linked incentives must reward actual manufactured output, not just installed capacity; domestic content requirements must escalate over time to build supply chain depth; and the scheme must be accompanied by consistent procurement policies that provide market certainty to investors. The ALMM framework must be strengthened and its application extended to cell manufacturing as rapidly as domestic supply permits. If India's ALMM list begins restricting cell imports in July 2026 without sufficient domestic cell capacity, the risk of a raw material shortage crisis in PV manufacturing must be managed carefully through a sequenced transition.

These lessons must also be applied to electronics, machinery, API, and other sectors where dependence on China is high and local capabilities can be expanded.

2. Strategic Prioritisation: Comparative Advantage Logic

India must focus on a limited set of midstream niches where quality-led competitiveness is viable. For example, PV ingot-wafer processing, battery precursor chemistry and cell assembly with local supply linkages, and power-electronics assembly can address regional clean energy markets. Prioritisation should be guided by cost-path modelling, credible timelines to competitiveness, and market-access guarantees from partner economies. India cannot do everything at once; spreading thin means achieving little.

3. Patient, Market-Smart Finance Architecture

Finance should be long-tenor, conditional, and structured to blend concessional public capital with private risk-sharing. Instruments like convertibles, revenue-share guarantees, and milestone-based tranches must be deployed. Support should remain time-bound, performance-linked, and designed to prevent subsidy dependence while enforcing private-sector discipline.

4. Innovation and R&D

India's R&D intensity has stagnated at approximately 0.6–0.7 percent of GDP[72] while China has surged to approximately 2.7 percent. This widening gap reflects China's enterprise-driven innovation push versus India's reliance on government funding. If China under Xi has

a technology obsession — leading to wasteful deployment of resources alongside major strides in critical areas — India's engagement with technology is distinctly underwhelming. Investment in next-generation R&D will help India leapfrog some cost disadvantages. Setting up technology funds where approvals are required for R&D is one way to do this, and R&D incentives to the private sector in terms of taxation, subsidies or procurement paths can support enhanced private sector spending. The ASPI 2026 tracker's finding that India ranks second in 16 of 74 critical technologies demonstrates untapped potential that can be nurtured.

5. Demand-Side Levers and Credible Commitments

Strategic procurement must generate predictable early demand for midstream suppliers. Contracts should be transparent, tied to certification and quality standards, and commercially credible to unlock private investment. Blanket protection should be avoided in favour of targeted, standards-driven demand creation. The procurement programmes of PSUs in renewables, railways, and defence must be coordinated with industrial policy to create anchor demand for domestically manufactured components.

6. International Co-Investment and Standards Diplomacy

India should pool capital with partners such as Japan, South Korea, the EU, and ASEAN to share risk, technology, and market access. Harmonising standards and procurement rules will create scale for non-Chinese suppliers and reduce demand fragmentation. Collaboration with countries like Austria and Germany — which have advanced technologies but face commercialisation hurdles — can accelerate technology transfer and innovation. The India-EU Trade and Technology Council and the India-US iCET framework are the right institutional vehicles; they need far more operational substance than they currently contain.

7. Securing Alternative Mineral Sources

Diversifying mineral supply chains and investing in domestic refining and processing is critical. The national critical minerals mission must act swiftly to secure cobalt, lithium, nickel, manganese, and rare earths through mining partnerships in Africa and Latin America, recycling programmes, and overseas equity stakes.[73] The existing dependence on Chinese processing of minerals mined elsewhere must be diversified urgently.

8. Pragmatic Use of Trade Instruments within a Time-Bound Strategy

Safeguards and temporary remedies should be used selectively, with clear exit rules and performance conditions. Trade protection must serve as an incubator for industrial upgrading, with predictable sunset clauses. The current Basic Customs Duty on solar modules is a legitimate temporary safeguard; it must be accompanied by credible timelines for achieving domestic competitiveness, failing which it becomes a hidden tax on India's renewable energy programme.

9. Governance and Industrial Project Delivery

Institutional governance must be strengthened through multi-stakeholder steering, transparent procurement, independent audits, and sunset clauses. Local incentives should be tied to measurable supplier development and export performance, avoiding fiscal distortions and overcapacity traps of the kind that have afflicted China itself. Without credible industrial upgrading, development of indigenous R&D capabilities, and a major overhaul of the ease of doing business, protectionist measures alone will not suffice.

XVII. Likely Trajectory and Candid Conclusions

China Shock 2.0 marks a structural shift in global trade that has deepened and accelerated with geopolitical developments of recent months. Confronted with weak domestic demand, a deflating property sector, and demographic headwinds, China is according high priority to exports of advanced manufactured goods. Deliberate overcapacity is integral to its model, driven by industrial policy, upstream control, and technological upgrading. The 15th Five-Year Plan formally adopted in March 2026 institutionalises this trajectory rather than channelising alternate growth forces. The anti-involution campaign, while real in its political salience, has had limited impact on the structural dynamics that generate export pressure. China's new supply-chain security regulations of March and April 2026 add a further institutional layer, embedding national-security logic into industrial governance and providing legal tools for retaliation against perceived external coercion.

The changed geopolitical context — Trump's unilateralism, trans-Atlantic discord, Europe's triple whammy, and China's adept positioning as the responsible great power — has made collective resistance to China Shock 2.0 a more challenging proposition. The Iran war has simultaneously validated China's electrostate strategy and accelerated global demand for the clean tech that China dominates. For advanced economies, the combination of weakened US leadership, European fiscal and political constraints, and China's strategic patience creates a structural disadvantage that is likely to persist.

For developing countries, China retains control over the sectors it dominated in the first shock while securing new advantages in advanced manufacturing, locking them into dependency at both ends of the value chain. The Iran war reiterates that "normal times" are not on the horizon now. In the changed conditions of permanent geopolitical stress, China Shock 2.0 affects not just businesses and economies across the world, but raises the question of industrial and technological sovereignty for advanced and emerging nations alike.

For India, the challenge is compounded by a USD 116 billion bilateral trade deficit with China in 2025, a limited and carefully qualified rapprochement, and the dual derisking imperative of managing both Chinese supply-chain dependence and American unpredictability. India's realistic objective is not to out-scale China but to build resilient, high-quality midstream capability in selected niches, use procurement and patient finance to scale firms, and partner internationally to pool capital and technology. The mobile phone manufacturing success story shows this is possible; the challenge is to replicate the enabling conditions — market scale, geopolitical tailwind, anchor investment, performance-based incentives — in more industry sectors.

China Shock 2.0 is likely to be an abiding challenge for developed and developing nations alike. Policymakers must consider urgent action to counter this rising technological dominance. The Iran war has demonstrated the value of structural preparation; the question for India is whether it has the political clarity, the patience, the capital, and the institutional capacity to pay for sovereignty now rather than confront strategic dependence later. The right mix is not reflexive protectionism but a disciplined industrial strategy that aligns finance, procurement, standards, and diplomacy around targeted and credible midstream objectives.

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65 Ashok K. Kantha, "US and China: Not a G2 reboot, but possibly a G2 overlay," The Hindustan Times, November 22, 2025, https://www.hindustantimes.com/opinion/us-and-china-not-a-g2-reboot-but-possibly-a-g2-overlay-101763830119936.html.

66 Ashok K. Kantha, "Why India Must Derisk from US & China," The Tribune (Chandigarh), April 8, 2026, https://www.tribuneindia.com/news/comment/why-india-needs-a-strategy-of-derisking-from-us-china/.

67 Government of India, "Press Note 2 of 2026 (amending Press Note 3 of 2020)," March 10, 2026, PIB Press Release ID: 2237806, https://www.pib.gov.in/PressReleasePage.aspx?PRID=2237806. The amendment: (a) clarifies that investors with non-controlling LBC beneficial ownership of up to 10 per cent can invest under the automatic route; (b) provides for expedited 60-day approval of LBC investments in capital goods, electronic capital goods, electronic components, polysilicon, and ingot-wafer sectors. Majority control must remain with resident Indian entities.

68 Ananth Krishnan, "India Opens to Chinese Investment: What Amending PN3 Means for India-China Relations," The India China Newsletter (Substack), March 11, 2026. Santosh Pai notes the 10 per cent de-minimis rule formalises current market practice for PE/VC funds; priority sectors representing approximately 58 per cent by value of imports from China will be processed within 60 days.

69 Manoj Kewalramani and Amit Kumar, "A Blueprint for Economic Engagement with China," National Security (Vivekananda International Foundation), Vol. 9, No. 2 (April–June 2026): 209–226, http://doi.org/10.32381/NS.2026.09.02.4. Proposes "self-strengthening and de-risking" across three domains: trade (addressing asymmetry via G2G/B2B dialogue and services exports; calibrated anti-dumping duties proportional to unfair subsidies; RIF/PCI dual metric to identify strategic vulnerabilities); investment (traffic-light system: red/closed, green/automatic route, orange/structured review); global governance (WTO reform, India-China Climate Change Dialogue, de-dollarisation discussions). Key data: FY2025 India imported USD 113 billion from China but exported only USD 14 billion; USD 161 billion in untapped export potential for India in China; China's ODI reached USD 192.2 billion in 2024.

70 Sharmila Kantha, "Press Note 3 Amendment Unlikely to Attract Significant Chinese FDI in Manufacturing," Basispointinsight.com / Sharmila Kantha's Substack, March 28, 2026, https://basispointinsight.com/Story/Home/press-note-3-amendment-unlikely-to-attract-significant-chinese-fdi-in-manufacturing_f0d6f93ed759.html. Key findings: China's cumulative investments in India (April 2000–December 2025) stood at just

USD 2.5 billion despite China's total ODI of approximately USD 175 billion in 2025; China has actively hindered India's manufacturing through curbs on critical minerals and rare earths, informal delays in equipment exports, and pressure on companies to avoid sending personnel to India; Chinese FDI in ASEAN contributed to larger trade deficits without enhanced technology transfer.

71 Bloomberg, "China's Controls on Battery, EV Tech Hurt India's Manufacturing Ambitions," Bloomberg News, April 14, 2026, https://www.bloomberg.com/news/features/2026-04-14/china-s-controls-on-battery-ev-tech-hurt-india-s-manufacturing-ambitions.

72 World Bank, "Research and Development Expenditure (% of GDP) – India." India's R&D intensity has stagnated at approximately 0.6–0.7 per cent of GDP; National Bureau of Statistics of China, "China's R&D Expenditure Exceeded 3.6 Trillion Yuan in 2024," NBS Press Release, January 2025, https://www.stats.gov.cn/english/PressRelease/202501/t20250119_1958312.html. China's R&D intensity is approximately 2.7 per cent of GDP.

73 Press Information Bureau, Government of India, "National Critical Minerals Mission," April 9, 2025, https://www.pib.gov.in/PressReleasePage.aspx?PRID=2120525&reg=3&lang=2.

About the Author

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