

# De-risking India's Trade with China: Identifying Strategic and Critical Vulnerabilities

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Takshashila Discussion Document 2025-01 Version 1.0, January 2025 This study examines India's import dependence on China across three major categories—Organic Chemicals, Machinery and Mechanical Appliances, and Electrical Machinery and Equipment—which account for over two-thirds of India's total imports from China. Using the Strategic and Critical Vulnerability (SCV) Framework and Relative Impact Factor-Product Complexity Index (RIF-PCI) scale, the study finds that while India exhibits significant dependence on China for many items, most show 'low to moderate' product complexity, suggesting relatively easy substitutability and short to medium-term disruption potential rather than critical long-term vulnerabilities.

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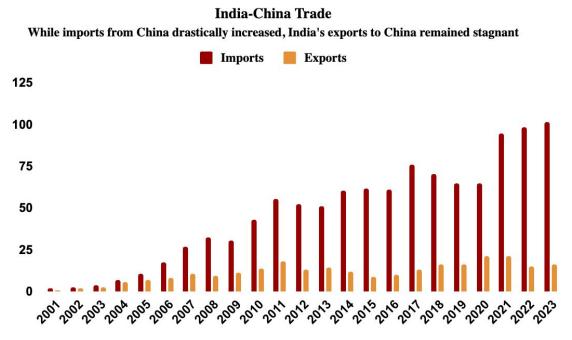
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### 1 Executive Summary

This paper examines India's import dependence on China across three product categories: Organic Chemicals, Machinery and Mechanical Appliances, and Electrical Machinery and Equipment. Given that these three categories account for over two-thirds of India's total imports from China, this study seeks to examine whether India's dependence renders it strategically vulnerable. Using the Strategic and Critical Vulnerability (SCV) Framework and Relative Impact Factor-Product Complexity Index (RIF-PCI) scale, this study finds that an overwhelming number of items imported from China exhibit a product complexity of either 'low to moderate' or less. Only a few items such as heterocyclic compounds, machine tools, metalworking tools and certain types of textile machines, exhibit 'high' to 'very high' product complexity. But none of the items imported from China display an 'Extremely High' product complexity, suggesting their easy substitutability in case Beijing decides to weaponise its position vis-à-vis New Delhi. The resultant shock from any form of induced disruption in these three categories is likely to be short-to-medium-term.

#### 2 Introduction

India's trade with China has traditionally been a contentious issue. India has often expressed concern about the burgeoning trade deficit vis-à-vis China. Over the years, the trade imbalance has surged from a mere ~US\$ 1 billion in 2001 to over US\$ 100 billion in 2023 (see Fig 1)[^1]. During this period, while imports from China witnessed an exponential rise, India's exports to China marginally increased. In fact, India's exports to China have remained largely stagnant during 2010–2023.



Source: Ministry of Commerce and Industry, Government of India

Figure 1: India-China Trade (2001–2023)

In light of the widening trade deficit with China, three broad discourses have emerged, centred on economic nationalism (protectionism), market distortion (unfair competition) and security (de-risking).

 $The \ economic \ nationalism \ or \ protection ist \ school \ regards \ imports \ as \ problematic \ and \ instead \ advocates$ 

Figure 1: IndiaChina Trade (20012023)The chart shows India-China trade from 2001-2023, with imports from China drastically increasing while Indias exports to China remained stagnant. Imports (shown in red) rose exponentially from near zero in 2001 to over 100 billion USD by 2023, while exports (shown in orange) remained relatively flat throughout the period.

national self-sufficiency [^2]. Indian firms and corporations with monopolistic and dominant market share in their respective sectors have been the biggest proponents of this narrative [^3], as it helps them avoid competition with foreign players. The emotive nature of the issue and its ability to easily resonate with people have allowed this school to find maximum purchase among the public. However, large corporations often flout the narrative under the pretext of boosting domestic manufacturing capacity and self-reliance, ostensibly for their benefit. But such protectionist measures would come at the cost of larger consumer welfare and economic interest.

The 'unfair competition' school of thought points to the long-standing concern of China's recourse to market-distorting practices that include subsidies, tax rebates and currency devaluation to make its exports competitive [^4]. The exponents of this discourse highlight that Beijing's unfair trade practices have created false incentives for Chinese players to achieve overcapacity at home. As a result, the dumping of cheap Chinese goods in the external market has consistently eroded the domestic manufacturing base of importing countries, including India. The issue is further compounded by China's restrictive policies and denial of market access to Indian products. However, this argument often tends to lead policies towards broad-based trade barriers across all products.

The issue of trade, which was hitherto limited to economic considerations, has lately acquired a third dimension, centring on security. The idea gradually took hold within the geopolitical West in general and the US in particular under the Trump presidency. However, the pandemic-induced supply shock and the episode in Galwan, where Indian and Chinese troops clashed, leading to casualties on both sides, further galvanised the idea of strategic vulnerabilities arising out of excessive import dependence on China.

Thus emerged the third and the most recent school of thought, centred on economic security [^5]. The de-risking school argues that import dependence may render a country susceptible to economic coercion, thereby leaving it strategically vulnerable.

The fact that China is the global manufacturing hub, producing around 30% of the global output [^6] and is deeply integrated into the Global Value Chains, gives it substantial leverage to extract strategic

gains. Further, China has displayed its willingness to resort to coercive economic tactics vis-à-vis its competitors and rivals to enforce its will or express its displeasure more than once[^7]. Finally, in light of a worsening India—China relationship, the plausibility of such actions vis-à-vis India cannot be discounted. Thus, an assessment of import dependence-induced strategic vulnerabilities becomes imperative from an Indian interests perspective. The de-risking school of thought has also found purchase among those who espouse greater protectionism. Recognising the relative unsustainability of the self-sufficiency argument, the proponents of the protectionist school have often attempted to piggyback on the security argument to promote autarchy, i.e., a restricted trade regime, to avoid foreign competition.

There is, however, a need to distinguish the motivations behind each of the three grievances and accordingly devise strategies to mitigate the concerns. Conflating the three distinct issues will lead to a disastrous policy outcome.

The protectionist cause, driven by economic nationalism, is devoid of any economic reasoning. Complete self-reliance is a pipe dream. No country, be it the US or China, can achieve absolute self-sufficiency. Even in cases where the trading regimes flout the principle of comparative advantages, appropriate response measures exist to counter them, as suggested by the proponents of the 'unfair competition' school of thought.

The trade imbalance arising from unfair market practices such as subsidies, tax rebates and currency devaluation can be tackled through countervailing and anti-dumping duties. However, two key factors need to be taken into account before imposing duties on imports from China: proportionality and domestic capability [^8].

Any imposition of countervailing or anti-dumping duties must be proportionate to rival state support to compensate for the cheap influx of goods. Not only does this allow for the correction of the distorted market prices of the imports from China and thereby protect domestic players against unfair competition, it also offers domestic consumers a fair choice to still opt for Chinese products, albeit at a higher price. For an economy to continuously innovate, the empowerment of its consumers is a

necessary precondition.

The second aspect to consider before imposing countervailing or anti-dumping duties on a commodity is assessing India's domestic capability in that segment [9]. In categories where domestic capability exists, duties are justifiable. However, using the same remedy for commodity segments where India's domestic capability is non-existent punishes a category of manufacturers and traders who rely on cheap imports (including from China) to add value and gain competitiveness in both domestic and external markets. Such a policy also adversely impacts the consumers by raising their cost of living.

If India's developmental goal is to bridge the wide economic asymmetry between China and itself, it shouldn't hesitate to freeride on its adversary's subsidies to aid domestic capability. Given that India's monetary and financial constraints are far greater than China's, it can act prudently by leveraging Beijing's policies to subsidise its own development. In this way, India can ensure that the cost of its development stays as low as it can at a time when the world increasingly turns inwards—a factor that has certainly raised the developmental cost for emerging economies.

Finally, with respect to the de-risking question, an ideal solution has been elusive. As acknowledged earlier, there is a possibility of India's strategic vulnerability arising from its import dependence in certain segments. This study, therefore, attempts to map areas with a high degree of dependence on China and highlight areas of strategic and critical vulnerabilities, if any.

The first section lays out the methodology and the framework that this study applies to examine India's imports from China. The second section highlights all the Harmonised Systems (HS)2 category items that exhibit a significant degree of dependence on imports from China. It subsequently filters the HS2 category items that require deeper scrutiny. The subsequent sections examine the entire list of HS6-level classifications within the selected HS2 categories to highlight areas that require state intervention.

## 3 Methodology and Framework

This study uses the data on the Harmonised Systems (HS) category goods of import from China in the financial year (FY) 2024, sourced from the Ministry of Commerce and Industry, Government of India[^10]. The HS system refers to the universal and standardised numeric coding system used to categorise and classify goods for international trade[^11]. The HS codes entail four layers of product classifications: HS2, HS4, HS6 and HS8. While the HS2 code is the broadest classification for traded goods, the HS6 and HS8 codes are the most detailed/fundamental descriptions of individual goods. The HS4 code is an intermediate-level classification that is more detailed than HS2 but relatively broader than HS6 or HS8.

This study employs the 'progression through elimination' methodology: progression through the HS categories (HS2 and HS6) and elimination using the percentage dependence, subjectivity filter, Relative Impact Factor (RIF) and Product Complexity Index (PCI).

The study first maps India's dependence on imports from China across all 99 HS2 categories. The study examines only those items with imports (from China) worth US\$ 1 million or more (roughly equating to 8.4 crores at the 2024 US\$/ exchange rate). Consequently, dependence and subjectivity filters are applied to eliminate most HS2 items that prima facie do not appear to hold strategic value. The HS2 items thus obtained are subjected to detailed scrutiny at their HS6-level classification. Every item with an import worth greater than US\$1 million is examined using the RIF-PCI scale.

The study finds the HS6 classification most suited to examine India's dependence and the resultant vulnerabilities for primarily three reasons. To begin with, this classification is nearly as detailed in capturing the description of traded goods and items as the HS8, allowing for reasonable and specific categorisation of goods. Secondly, it masks/eliminates unnecessary specifications that HS8 classifications often contain or deal with. Finally, the availability of corresponding data sets available for goods classified under HS6 is greater than that for those classified under HS8.

Furthermore, the amount or the value of imports at the HS8 level of classification is too low to employ

economic coercion. To impose effective sanctions, restrictions need to be placed at an intermediate level of classification, either HS4 or HS6. Thus, from a policy perspective, it is more relevant to scrutinise dependence and vulnerabilities at the HS6 level.

The limitation of 'progression through elimination' entails the possibility of omitting some items that may need scrutiny. On the other hand, the advantage of 'progression through elimination' lies in the fact that every item filtered through the process is worthy of scrutiny. It also allows the study to focus on items that are high in order of priority and scrutinise them first.

#### 3.1 Dependence Filter (D)

The study adopts a threshold of 30% to study India's import dependence on China. It eliminates all items with percentage dependence less than 30 from the scope of this exercise. It opts for a 30% cutoff as the figure roughly corresponds to China's global production capacity -both by volume and by value [^12]. Thus, a dependence above this threshold highlights the upward standard deviation from the mean. Secondly, the study regards that sufficient diversification exists for items with dependence less than 30%. Thus, by adopting this filter, the study ensures that items exhibiting significant dependence are subjected to maximum scrutiny. The study grades varying degrees of dependence (greater than 30%) into the following three categories:

Dependence Category	Range	Description
Moderate	[30<=Dependence<50]	Items that exhibit percentage dependence greater than or equal to 30 but less than 50.
High	[50<=Dependence<70]	Items that exhibit percentage dependence greater than or equal to 50 but less than 70.

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Dependence Category	Range	Description
Severe	[Dependence>=70]	Items that exhibit percentage dependence greater than or equal to 70.

#### 3.2 Subjectivity Filter

After applying the 30% dependence filter on all the HS2 category goods imported from China, a preliminary subjective analysis is done to eliminate items that prima facie do not appear to hold strategic value. These are categories that do not exhibit a high degree of complexity in the underlying labour and technology. Thus, items such as glass, fabric, leather, furniture, wood, toys, etc. are eliminated.

#### 3.3 Strategic and Critical Vulnerability Framework

Once the relevant HS2 items are selected, the entire list of their HS6 classification items (with imports worth greater than US\$1 million) was individually tested against the Strategic and Critical Vulnerability (SCV) framework adopted from "Defining Dependence-induced Vulnerabilities in an Asymmetrical Trade Interdependence" [^13]. The objective is to identify those product categories where India's dependence on imports from China could be a source of strategic or critical vulnerability.

In the context of asymmetric trade interdependence, the framework posits that an import dependence-induced strategic vulnerability arises when an adversarial state seeks to leverage a case of dependence to impose a strategic cost on its enemy/rival state.

To examine this, the framework proposes a six-stage test, the first two of which are mandatory while the third and fourth are mutually exclusive. If a case of dependence satisfies the first two tests and any of the latter two tests, the dependence would amount to strategic vulnerability. The framework proposes two more tests to distinguish between strategic and critical vulnerabilities.

Adversary Test: This assesses if the dependence is on an adversary that wields both the capability and the willingness to apply economic coercion to secure its strategic interests or maximise strategic gains. By default, all imported product categories where India's dependence on China is significant (>=30%) clear this test.

Substitutability Test: This test examines if there are existing alternatives that can replace the supply or service if the need arises. It assesses two sub-factors: a) Scalability of the alternative, to meet demand immediately b) Economic viability, that is, the switching cost must be reasonable

Incidence Test: This test is designed to capture the relevance and significance of finished items (or final products) for consumers. The test examines if the imported item has the capability to drastically affect the consumption pattern of a large section of the populace. To determine this, it examines both the size and significance of the disruption. Thus, two sub-factors become key here: a) Size of the population impacted: For instance, an 80% dependency on a luxury item (such as a vehicle) catering to less than 1% of the consumer class cannot be classified as a strategic vulnerability, while significant dependence on critical machinery tools and electronic equipment can be termed as a strategic vulnerability for India if these items satisfy other tests. b) Product's utility/significance to the populace: Soft toys, idols and decorative items cannot be considered as strategically vulnerable, while drugs (particularly vaccines), oilseeds, laptops and smartphones can be, provided they satisfy other tests.

Cascading Test: The test seeks to assess the cascading effect of the weaponisation of a dependency by an adversary on other domestic sectors within the supply chains or beyond. This test is designed to mainly capture the impact on capital goods and intermediate goods.

Further, if a case of strategic vulnerability satisfies any of the two following tests, it would amount to a Critical Strategic Vulnerability. The two tests entail:

Capability Gap: This examines the capability (technical know-how) gap between the adversary and the existing alternatives. If the adversary has a significant technical or capability lead over others in a sophisticated or specialised product that can neither be replicated nor sourced from other alternate destinations in the short (up to nine months) to medium-term (nine to eighteen months), it could become a source of critical strategic vulnerability. This test is very similar to the substitutability test. However, the difference lies in the fact that while the substitutability test primarily attempts to measure impact in the short to medium-term, the capability gap test measures long-term (more than 18 months) consequences.

National Security: This assesses dependence on imports from the adversary in sectors such as electricity grids, communications, satellites, banking & finance, digital infrastructure, as well as all Command, Control, Communications, Computers (C4) Intelligence, Surveillance and Reconnaissance (ISR) related sectors. Dependence in these sectors could mean high susceptibility to cyber-attacks. Any exploitation of such vulnerabilities, even through a short-term disruption, can significantly undermine national security and thereby influence decisions in the national interest.

LimitationsWhile the adversary test is easy to administer, the substitutability, incidence and cascading effect are relatively difficult to measure. To assess a commodity substitutability, alternate options must be mapped along with their existing capacities to arrive at a fair decision. Likewise, to measure the possible incidence effect resulting from a disruption in a commodity segment, an evaluation of imports from China as a share of the total domestic market/consumption (as opposed to overall trade) is key. Lastly, measuring the cascading effect should be based on assigning weight to sub-factors such as value addition and employment generation associated with the commodity. However, calculating this for the over two thousand items assessed in this study is unfeasible, primarily owing to the lack of publicly available data on each frontmarket concentration, market size, value addition or labour at the HS6-level classification.

#### 3.4 RIF-PCI Scale

To overcome the shortcomings associated with the Strategic Vulnerability Test, the paper adopts the RIF-PCI scale to model the SCV Framework closely and administer the associated tests.

The RIF-PCI scale uses two metrics, the Relative Impact Factor (RIF), and the Product Complexity Index (PCI), to assess India's strategic vulnerability to imports from China.

#### 3.4.1 Relative Impact Factor (RIF)

The study employs the RIF as a metric to calculate the factor of immediate disruption. Operating on the assumption that the disruption will be proportional to the aggregate import value and percentage import dependence on China, the factor by which immediate disruption will vary can be expressed as:

RIF Aggregate Import Value

RIF Percentage Import Dependence

Thus, the Relative Impact Factor is calculated as:

#### RIF = $[\{\text{Import from China (US$M) * Dependence (\%)}\}/10,000]$

The value is divided by 10,000 to limit the scale for better data representation.

It is important to emphasise two points:

- a) RIF is a measure of the factor of immediate disruption. It does not give an absolute measure of disruption. It simply indicates the proportion by which disruption for each item will vary. This explains the usage of the term 'relative.'
- b) Since it is a measure of the factor of immediate disruption, it doesn't consider the second-order effects of disruption. The variable for second-order effects will vary for each item and thus is an independent exercise.

The RIF score also standardises the inequity, variation or divergence in an item's value of import and dependence ratio. In that regard, it acts as a normalisation score to rank items for which wide variation exists in aggregate import value and percentage import dependence.

For instance, consider item A with a percentage import dependence of 100 but an aggregate import value of US\$ 10 million and item B with a percentage import dependence of 75 but an aggregate

import value of US\$ 50 million. Now, while item A exhibits a 100% dependence, the scale of the economy impacted by item B, which exhibits 75% dependence, will be higher because of the sheer size of the import. In this case, the RIF score for item A amounts to 0.1, while the same for item B would be 0.37. Thus, on the priority scale, item B would be higher than item A.

In part, the incidence and cascading effect will be proportional to the RIF score. This is based on the assumption that the higher the aggregate import value and percentage import dependence, the higher the incidence and cascading effect. However, since there is an element of subjectivity (qualitative analysis) involved in determining the incidence and cascading effect that will vary for every item, it is difficult to account for them using a mathematical formula. Nevertheless, this study acknowledges the scope for devising a more robust metric to measure the incidence and cascading effect. In the meantime, the RIF score serves as the closest indicator of the two effects.

Finally, the study adopts the following classification based on RIF score:

Impact Factor	Description	Range
Insignificant		RIF < 0.1
Substantially High		0.1 <=RIF< 1
Exponentially High		RIF >= 1

#### 3.4.2 Product Complexity Index (PCI)

A measure developed by Hidalgo and Hausmann in 2009[^14], PCI ranks internationally traded products based on the diversity and sophistication of the technological know-how required to produce them. In other words, PCI is both a measure of the technological complexity of a product and the diffusion of its knowledge or technology among countries.

The Atlas of Economic Complexity[^15] states:

A PCI is calculated based on how many countries, based on their respective economic complexity, can produce the product. A higher score on PCI means that only a few countries have the economic complexity to produce or manufacture the product.

In other words, PCI is a measure of how many countries can produce a product and their respective economic complexity, i.e., the diversity of products they can produce.

That means if a product is manufactured by only a few countries, but by those with lesser economic complexity, such a product will score low on the PCI scale, even if production is concentrated. Alternatively, if a product is produced and exported by a few countries but by those with high economic complexity, the product will score high on the PCI scale.

The PCI score for products roughly ranges between -3 and  $+3[^16]$ . On this scale, agricultural products and raw materials score the lowest (often negative), while machinery, electronics and chemicals score the highest.

Currently, two entities maintain a repository of PCI for internationally traded goods, namely the Harvard Atlas of Economic Complexity and the Observatory of Economic Complexity (OEC)[^17]. However, while the Harvard Atlas of Economic Complexity stores data only up to the HS4-level classification, the OEC database maintains data at the HS4 and HS6 levels. Since this study focuses on items at the HS6-level classification, it uses PCI sourced from the OEC database (2022). However, the classification of PCI data at the HS6-level is not exhaustive in the database. Thus, in cases where PCI scores were not available for items at the HS6-level, this study used their PCI scores at the HS4-level.

This study uses the PCI score to assess the relative substitutability of items (short-term/medium-term/long-term) imported from China that exhibit a percentage dependence higher than 30. In part, this score is also a measure of the capability gap or lead. A product with a higher PCI would prove difficult to substitute for two reasons:

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- a) A higher technical complexity underlying the product would mean that efforts to build alternate capacities will be capital- and knowledge-intensive and, therefore, costly.
- b) A lack of diversity or diffusion in technical know-how would mean either a paucity or absence of existing alternatives.

Similarly, a product with a lower PCI would be easier to substitute for two reasons:

- a) A lower technical complexity underlying the product would mean that efforts to build alternate capacities will be relatively inexpensive.
- b) Diversity, or diffusion, in technical know-how would mean alternatives can emerge quickly.

This study adopts the classification for technological complexity for products with PCI greater than 1 and their respective substitutability:

Complexity	Range	Substitutability/Disruption
Low	1<=PCI<1.25	Short-term
Moderate	1.25 <= PCI < 1.50	Short to Medium-term
High	1.50 < = PCI < 1.75	Medium-term
Very High	1.75 <= PCI < 2	Medium to Long-term
Extremely High	PCI>2	Long-term

On the RIF-PCI scale, RIF is an indicator of immediate shock, while PCI is an indicator of period of disruption (based on relative substitutability). Based on the RIF-PCI matrix, the following classification for Strategic and Critical Vulnerability is adopted:

Note: This classification is adapted solely for this exercise and shall be accordingly applied.

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Metrics (RIF/PCI)	Low (1<=PCI<1.25)	Moderate (1.25<=PCI<1.5)	High (1.5<=PCI<1.75)	Very High (1.75<=PCI<2)	Extremely High (PCI>=2)
Substantially High (0.1<=RIF<1)	Substantially High Shock & Short-term Disruption	Substantially High Shock & Short to Medium- term Disruption	Substantially High Shock & Medium- term Disruption	Substantially High Shock & Medium to Long-term Disruption	Substantially High Shock & Long-term Disruption
Exponentially High (RIF>=1)	Exponentially High Shock & Short-term Disruption	Exponentially High Shock & Short to Medium- term Disruption	Exponentially High Shock & Medium- term Disruption	Exponentially High Shock & Medium to Long-term Disruption	Exponentially High Shock & Long-term Disruption

Using the RIF-PCI scale, the study seeks to eliminate items with an RIF less than 0.1 and PCI less than 1 to arrive at a list of items at the HS6-level classification that require prioritised attention.

# 4 Mapping Dependence in the HS2 Category

This section maps India's dependence on imports from China across all HS2 categories [^18]. It finds that in 32 of the total 99 HS2 categories, dependence on imports from China exceeds 30%. These categories have been listed in the following table:

The table shows Strategic Vulnerability and Critical Vulnerability classifications based on the RIF-PCI matrix.

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HS2 ID	Description	$\begin{array}{c} {\rm China} \\ (M) Total({\bf M}) \end{array}$	D (%)	
66	Umbrellas, sun umbrellas, walking sticks, seat sticks, whips, riding crops and parts thereof	48	50	96
60	Knitted or crocheted fabrics	565	728	78
67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles of human hair	34	46	74
54	Man-made filaments	1203	1656	73
65	Headgear and parts thereof	29	45	64

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HS2 ID	Description	China $(M) Total(M)$	D (%)	
86	Railway or tramway locomotives, rolling stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical traffic signalling equipment	489	777	63
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use	465	772	60
96	Miscellaneous manufactured articles	440	740	59
70	Glass and glassware	1034	1784	58

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HS2 ID	Description	$\begin{array}{c} {\rm China} \\ (M) Total({\rm M}) \end{array}$	D (%)	
14	Vegetable plaiting materials; vegetable products not elsewhere specified	59	109	54
81	Other base metals; cermets; articles thereof	358	666	54
42	Articles of leather saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm) gut	262	509	51

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HS2 ID	Description	China $(M) Total(M)$	D (%)	
58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	102	200	51
69	Ceramic products	497	967	51
68	Articles of stone, plaster, cement, asbestos, mica or similar materials	503	1011	50
95	Toys, games and sports requisites; parts and accessories thereof	260	518	50
92	Musical instruments, parts and accessories of such articles	33	68	49

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HS2 ID	Description	$\begin{array}{c} {\rm China} \\ (M) Total({\bf M}) \end{array}$	D (%)	
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishing; lamps and lighting fittings not elsewhere specified or included	770	1592	48
83	Miscellaneous articles of base metal	564	1206	47
50	Silk	94	209	45
29	Organic chemicals	11449	26749	43
82	Tools implements, cutlery, spoons and forks of base metal; parts thereof of base metal	555	1361	41

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HS2 ID	Description	China $(M) Total(M)$	D (%)	
73	Articles of iron or steel	1993	5113	39
84	Nuclear reactors, boilers, machinery & mechanical appliances; parts thereof	22473	57418	39
85	Electrical machinery & equipment and parts thereof; sound recorders & reproducers, television image & sound recorders & reproducers, and parts thereof	31356	81095	39

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HS2 ID	Description	$\begin{array}{c} {\rm China} \\ (M) Total({\bf M}) \end{array}$	D (%)	
56	Wadding felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof	157	419	37
55	Man-made staple fibres	321	901	36
35	Albuminoidal substances; modified starches; glues; enzymes	278	853	33
43	Fur skins and artificial fur manufactures thereof	2	6	33
46	Manufactures of straw, of esparto or of other plaiting materials; basket ware and wickerwork	3	9	33

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HS2 ID	Description	$\begin{array}{c} {\rm China} \\ (M) Total({\bf M}) \end{array}$	D (%)		
64	Footwear, gaiters and the like; parts of such articles	242	724	33	
57	Carpets and other textile floor coverings	49	157	31	

On applying the preliminary subjectivity filter, 24 HS2 categories stand eliminated. These include items such as vegetable plaiting material, articles of leather, silk, fibre, yarn and textiles, wood, ceramics, stonework, glass and glassware, cutlery, musical instruments, furniture, bedding and toys.

Only three HS2 category items emerge with dependence greater than 30% that have the potential to induce strategic vulnerability: Organic Chemicals (HS 29), Machinery and Mechanical Appliances (HS 84), and Electrical Machinery and Equipment (HS 85). Incidentally, these three HS2 categories witnessed imports worth more than US\$ 10 billion each from China during FY 2024. These three categories constituted more than 65% of India's total imports from China in FY 2024.

Thus, the study progresses further with a focus on each of the HS6 items under these HS2 classifications. The successive sections individually examine these three HS2 classifications and test each item against the SCV Framework.

# 5 Organic Chemicals

Organic chemicals find wide-ranging applications across industries, including agriculture, leather, textiles, polymers, chemicals, food and, most importantly, pharmaceuticals.

The often-highlighted Active Pharmaceutical Ingredients (APIs), Key Starting Materials (KSMs) and Drug Intermediates (DIs) belong to the

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Endnotes

Notes



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