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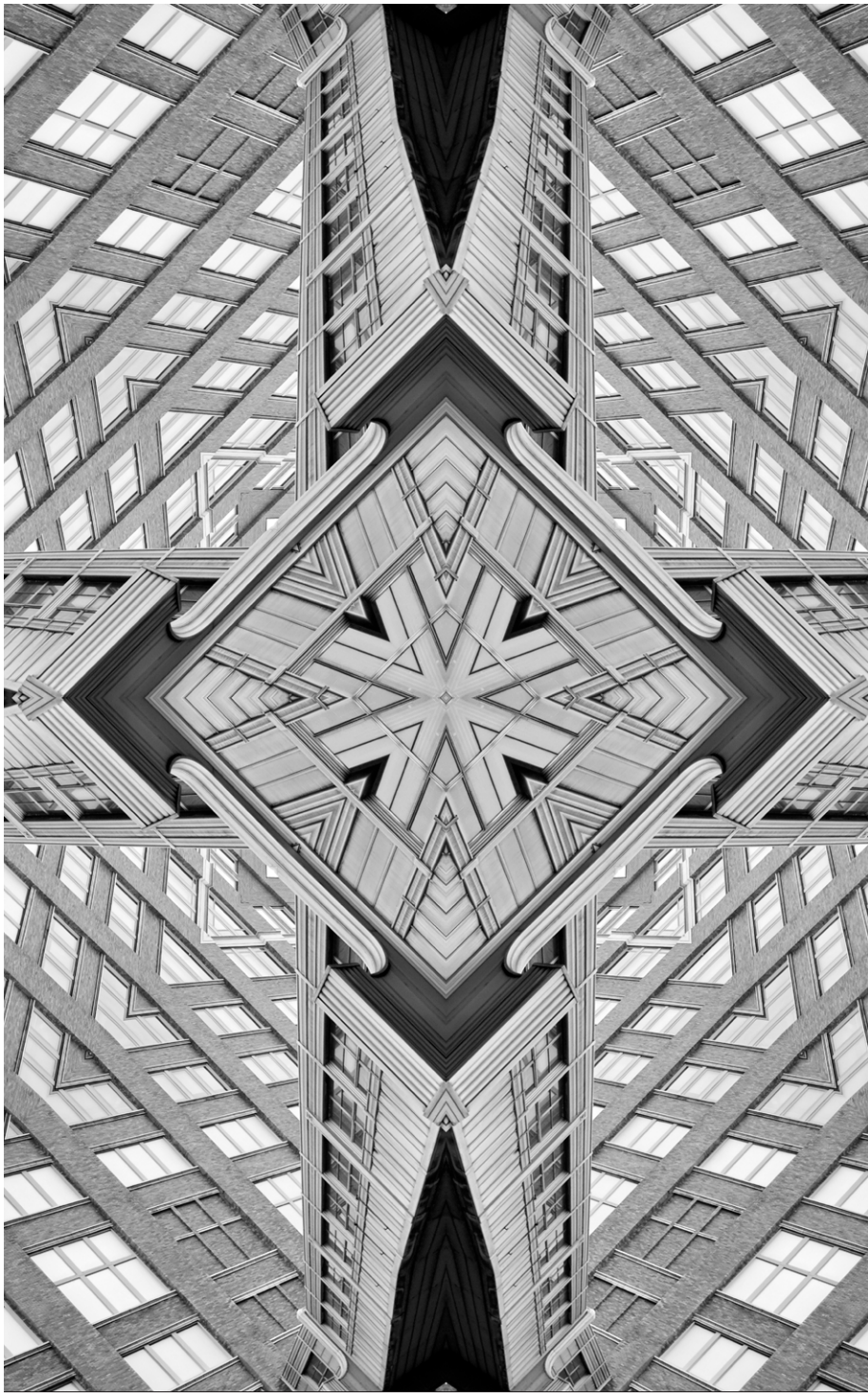

Foreign Direct Investment in Defence: Lessons from the Automobile Industry

Sudhish Kumar Jaini and Navin Varma

Abstract

India has emerged as a global automotive manufacturing hub, with exports contributing a significant revenue percentage for auto firms. This growth has been driven by liberalised FDI norms, competitive market dynamics, and positive policy interventions, attracting foreign auto firms to set up plants locally. In contrast, defence manufacturing continues to lag, constrained by regulatory bottlenecks, limited foreign participation, and non-availability of critical technologies, resulting in continued imports of defence equipment. This brief analyses the divergent trajectories of these sectors. Drawing on comparative policy analysis, it recommends measures such as differentiated FDI limits to catalyse defence manufacturing. The authors conclude that, if supported by market-aligned policies, defence manufacturing in India can replicate the auto sector's success and transform the country into a defence production powerhouse, thereby aiding in the achievement of the desired strategic autonomy.

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Introduction

Mobility provides advantages to combat forces. The Carthaginian general Hannibal's legendary crossing of the Alps in 218 BCE is one of history's most audacious demonstrations of strategic mobility, bypassing Roman forces and taking the fight directly to Italy via an unexpected northern route. Indeed, mobility is a key enabler for warfighting, allowing forces to reach critical areas faster than the enemy anticipates, enabling surprise and initiative. Mobile forces can better evade threats, reposition under fire, and adapt to changing battlefield conditions.

In contemporary times, most combat units in the Indian Armed Forces operate hundreds of vehicles, serving as weapon platforms, troop and logistics' carriers or executing operational tasks such as reconnaissance and combat manoeuvres. One can safely state that the Indian defence industry depends heavily on the automotive sector, as automobile technology drives the development of complex combat vehicles, such as armoured vehicles and weapon platforms, and provides a large number of components for various weapons systems.

At present, the majority of the vehicles for India's defence forces are sourced domestically, reflecting a commendable degree of *atmanirbharta* (self-reliance). A number of auto and auto-component manufacturers, such as Bharat Forge, Mahindra, HBL Engineering, Cummins India, and BEML, have successfully leveraged their expertise in auto/component manufacturing to contribute to defence production. In particular:

- Bharat Forge (Kalyani Group), a leader in forged components like axles and crankshafts, has built on its metallurgical and machining capabilities to develop state-of-the-art manufacturing facilities focused on developing advanced defence technology products like artillery guns systems, armoured protected vehicles, air defence solutions and defence electronics.[1] Through its subsidiary, Kalyani Strategic Systems Limited, in partnership with DRDO, Bharat Forge is moving rapidly towards user trials of its Mounted Gun System, a key project for India's artillery upgrade.[2]

- Mahindra, with its expertise in diesel vehicles like Armada, Scorpio, and Tractors, is now producing a range of military mobility solutions, including armoured light specialist vehicles, and logistics platforms, which are being inducted extensively in the Army's vehicular fleet.[3]

- BEML, which has long been engaged in heavy-duty vehicle manufacturing, has expanded its footprint in defence by producing and supplying various types of high mobility vehicles (HMVs) for defence applications.[4] SBU-HMV of BEML manufactures HMV variants for all-terrain operations, which are being used as platforms for radar systems, gun towing vehicles, missile launch vehicles, logistics vehicles and numerous types of bridging vehicles.[5]

Introduction

Components such as engines, motor pumps, and forged assemblies, earlier intended for civilian use, now serve across defence platforms, from naval propulsion and radar cooling units to missile launcher subsystems.[6] This cross-sectoral synergy reduces re-engineering overheads and enhances indigenous manufacturing capacity for the defence sector.

India allocated INR 6.81 lakh crore for defence expenditure for the financial year 2025-26, which made up 13 percent of the total Central government expenditure amounting to INR 50.65 lakh crore.[7] The capital expenditure portion is pegged at INR 1.8 lakh crore, out of which INR 1.49 lakh crore is allocated for the modernisation of critical military hardware through the capital acquisition route.[8] Any nation would expect such expenditure to generate local jobs and consequent economic multipliers (with the manufacturing sector generating approx. three times the economic multipliers of the money spent, i.e., INR 4.5–5 lakh crore worth of benefits for the economy).[9] However, despite the government's best efforts, this is not being achieved today.

The nation continues to import major weapons systems such as S-400, Rafale fighter jets, and critical components. The latest Stockholm International Peace Research Institute (SIPRI) Report of Arms Transfers stated that India was the second largest importer of military hardware in 2020–2024, accounting for 8.3 percent of the total global arms transfers. However, its imports decreased by 9.3 percent between 2015–2019 and 2020–2024,[10] clearly attributable to the policy of atmanirbharta in defence manufacturing. While the reduction in net arms imports is a welcome step towards strategic autonomy, the defence industry remains significantly reliant on imports for some more advanced systems, such as combat aircraft.[11]

An identical situation prevailed in the auto sector till the 1980s, when India had only a few cars, scooters, and trucks being manufactured locally, while the rest were being imported. A few auto companies, such as Hindustan Motors, TELCO, and Bajaj Auto, dominated the local market. These domestic companies had little incentive to innovate or improve technology due to a lack of competition in a regulated economy. Importing vehicles was prohibitively expensive, burdened by a multitude of tariffs and duties, and largely restricted to the affluent. In contrast, the situation in 2025 reflects a dramatic shift: new models are introduced frequently, with improved technology, providing consumers with an array of choices.

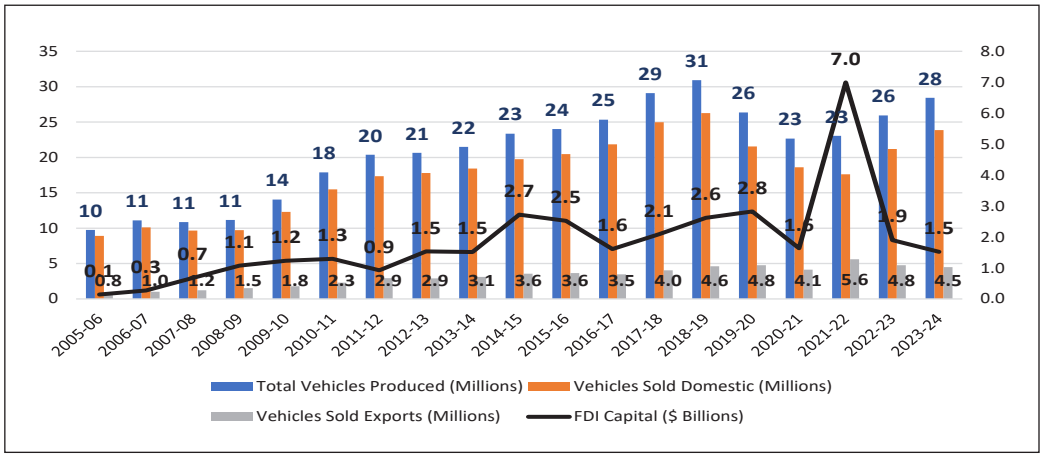
The reasons for such growth in the auto industry need to be understood and evaluated for application in the defence manufacturing sector.

Since Independence, India has maintained stringent regulatory oversight over the manufacturing sector, putting in place licensing controls and restrictions on imports, with the stated objective of promoting self-reliance and import substitution. The policy did not yield desired dividends[12] and with growing prosperity, the government was forced to change this restrictive policy and gradually liberalise the manufacturing sector. In 1981, the government launched Maruti Udyog Limited (MUL) with Suzuki Corporation of Japan, seeking to make an economical yet efficient car—the Maruti 800.

Suzuki brought in US$260 million for a 26-percent equity stake in MUL in October 1982.[13] Initially, MUL was granted rights to import 40,000 fully built cars to augment indigenous content by up to 33 percent later.[14] However, by 1991, MUL was sourcing almost 65 percent of components locally, primarily to improve its profit margins. Suzuki also encouraged the creation of a component supplier ecosystem around their plant and set up a captive engine manufacturing plant.

MUL quickly garnered a 62-percent market share in the passenger car segment,[15] overtaking established players with its superior technology and better value-for-money proposition. In May 2007, the government exited Maruti by divesting its remaining 10.3-percent stake to Suzuki for INR 2,360 crore.[16] India encouraged other joint ventures (JVs), leading to the emergence of companies such as Swaraj Mazda and Hero Honda. This provided the much-needed capital to the growing auto industry, spurring the growth further and simultaneously benefiting Indian firms with technology transfers. The government, while opening the sector to foreign firms, protected the domestic auto component industry with policies for up to 50-70 percent localisation of components.[17] This policy, along with very high tariffs, ensured that all foreign firms sourced auto components from domestic firms, as per laid-down localisation percentages.

Figure 1: Performance of Indian Auto Industry and FDI



Source: Authors' own, using data from SIAM Database and DPIIT FDI Factsheet April 2025

Figure 1[18] shows the progress achieved by India's auto sector. Due to the adoption of pragmatic policies and the consequent inflow of foreign capital into the sector (as visible on the chart's black line), domestic vehicle production grew from 10 million in 2005-2006 to approximately 28 million in 2023-2024.[19] The auto sector has grown at a stupendous rate of 15 percent annually over the last two decades,[20] and it is forecast to grow at 8.2 percent annually between 2025 and 2030.[21]

Today, the Indian auto industry is valued at approximately US$240 billion and contributes 7 percent to GDP, up from just 2.77 percent in 1992, and accounts for 22 percent of the manufacturing GDP.[22] As per the Annual Report 2024–2025 of the Ministry of Heavy Industries, the auto sector employs four million people directly and 26 million people indirectly. Auto component exports are booming and are expected to reach US$100 billion by 2030.[23] As of 2025, India manufactures the largest number of three-wheelers in the world and ranks among the top five global manufacturers of two-wheelers, passenger vehicles, and commercial vehicles.[24]

Evaluating the Performance of India's Automobile Industry

While the liberalisation in 1991 was the main driver of the boom in automobiles, certain specific policy decisions by the government allowed the sector to chart a path of remarkable growth in the last two decades. Some of the most relevant of these are discussed in the following paragraphs.

- Following the opening of the economy in 1991, a revised automobile policy was launched in 1993 which allowed the entry of global auto companies. Global affiliations and JVs infused the sector with essential capital and cutting-edge technology.

- Domestic firms were allowed to import hi-tech machinery, CKD kits, and critical components to improve efficiency, following amendments in licensing and tariff policies.

- The government allowed foreign firms to acquire a 51 percent stake in JVs through the automatic route in 1997.[25] This policy change turned out to be the defining moment for the auto sector, fundamentally reshaping the industry's trajectory.

- The industry has now been completely deregulated, with very few tariff restrictions still in place. The sector can receive up to 100 percent foreign investment without government intervention. The auto sector has received US$37.584 billion between April 2000 and March 2025 from foreign companies—around 5 percent of the total foreign direct investment (FDI) inflows into the country.[26]

- A large population base with a growing middle class ensured a huge market for small cars, leading to major international automakers vying for a piece of the growth sector.

- India provided low-cost labour compared with most countries, which contributed to the increase in production by foreign firms that focused on robust domestic manufacture, alongside exports, capitalising on the clear cost advantage.

Today, vehicle models ranging from entry-level hatchbacks to luxury sedans/SUVs, are readily available in the market. Formerly local manufacturers have upgraded facilities through fresh capital infusion and technology and are exporting a fair share of their production even to the home markets of many foreign firms. Several domestic auto companies are evolving from local players into dominant global contenders.

The Defence Manufacturing Sector

Given the limited capability to manufacture high-end military hardware in the country, a large percentage of critical defence equipment is still being imported. Though such imports close operational gaps and meet the immediate needs of the defence forces, they delay the process of indigenisation. Domestic manufacturing promotes investment, employment, and the growth of many ancillary industries within the country. India can also earn substantially from defence exports, as there is a huge global market for defence equipment, a stated objective of the current government. This, however, cannot be achieved by building weapons systems from scratch, as defence technology requires massive capital due to uncompromising quality requirements.

The most prudent approach is through collaboration with established foreign players, initially absorbing their technology and subsequently expanding independently, much like what Tata Motors and Mahindra did in manufacturing and exporting vehicles at scale.

Military equipment produced in India continues to incorporate a significant amount of foreign technology due to its non-availability locally. This is highlighted in a few cases of the indigenous products covered ahead. Following the Galwan clash in 2020, a need for a light tank resulted in the DRDO launching the Zorawar light tank project in March 2022, with L&T as the lead integrator. The prototype was unveiled on 6 July 2024 and preliminary automotive trials of Zorawar were conducted successfully by the DRDO in September 2024.[27] Numerous Indian industries were enlisted to produce many sub-systems, showcasing the growing strength of indigenous defence manufacturing. Though widely described as "indigenous,"[28] the prototype of the Zorawar tank will be powered by a Cummins VTA903E-T760 engine (760 hp).[29] The light tank was initially supposed to be powered by an 800 hp engine supplied by the German firm MTU, a subsidiary of Rolls-Royce, but it could not be delivered in time due to Germany's strict export control regime. It also features a Belgian 105 mm gun turret made by John Cockerill.

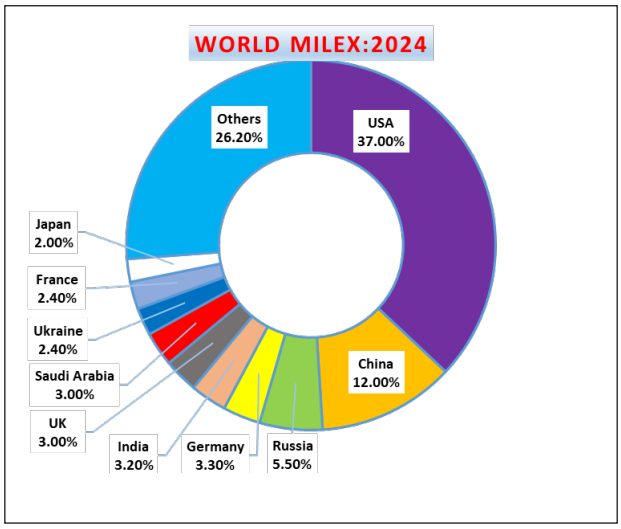
The engine of the indigenous Tejas is made by GE of the USA. Similarly, the light combat helicopter is equipped with a main armament suite from European manufacturer MBDA, the FZ275 LGR laser-guided rocket system developed by Thales, and an electronic warfare suite provided by Saab Group. INS Vikrant has approximately 24 percent import content to include arrestor gears, STOBAR systems for launch and recovery of fighters, and related diverse flight-handling equipment from Russia's Nevskoe Design Bureau.[30] The carrier's two aircraft lifts, used to house fighters three decks below the flight deck for storage, are from the UK, while the ammunition lifts are of American origin; the aircraft hangar doors are Swedish. Vikrant also has Israeli-origin Barak-8 medium-

range surface-to-air missiles, which are manufactured by Bharat Dynamics Limited in collaboration with Israel Aerospace Industries. These, in turn, were supported by the Israeli EL/M-2248 MF-STAR multifunction AESA radar.[31] The K9 Vajra, manufactured by L&T in collaboration with Hanwha of South Korea, has a German 1000 hp MTU diesel engine and a fully automatic US-origin Allison Transmission.

India has every reason to take pride in its indigenous military platforms, among them, the *Vikrants, Zorawars, and BrahMos,* which collectively showcase the nation's expanding domestic defence production capabilities. However, given the technological levels, in-service weapons systems will continue to have a significant volume of imported components. It is important to recognise that India is not the only country dependent on imports for its weapons systems. Even major defence-producing nations such as the USA and France depend on foreign technologies to support their defence infrastructure.

According to data from SIPRI, the US imported 365 engines, 271 missiles, and 50 naval weapons between 2018 and 2022. During the same period, France imported 367 aircraft, 108 engines, and 14 missiles. Explaining this reality, defence expert Walter Ladwig, a military scholar and lecturer at King's College London, stated,[32] "The percentage threshold you apply, whether you measure 'indigenous' in terms of the number of components, their financial value, or some other metric, determines the classification; these are all choices made by the analyst who wants to argue for one status or the other." There is no empirically correct answer to what "indigenisation" is.[33]

Figure 2: World Milex: 2024



Source: Stockholm International Peace Research Institute (SIPRI)[34]

India ranks fifth in defence expenditure and among the most sought-after markets for major arms exporters of the world. It is, therefore, surprising that India has attracted only a handful of foreign manufacturers to date to establish operations domestically, like Saab or Dassault.[35] As a result, India remains among the largest importers of arms, with foreign acquisitions making up around or above 40 percent of India's defence acquisitions, despite serious emphasis on 'Make in India' since 2014.[36]

Since 1991, defence procurement and offset policies have been amended multiple times, raising the permissible FDI percentages incrementally from zero to 74 percent, and in select cases, up to 100 percent. Despite such reforms, India has struggled to attract substantial foreign funds and associated technology transfers in the defence sector. The underlying reasons lie in the evolution of its FDI policies, which have progressed through the following iterations:

- Till 1991, public sector firms, Defence Public Sector Undertakings (DPSUs), and the Ordnance Factory Board (OFB) dominated defence manufacturing and were the only source of military goods, apart from imports.

- Post-liberalisation reforms of 1991, India allowed foreign participation in most of the sectors. However, the defence sector was opened much later in May 2001 for the private sector, and up to 26 percent FDI was permitted, though both were subject to licensing.

- In August 2014, the FDI limit was raised further to 49 percent, through the government route, and above that limit, through the Cabinet Committee on Security, wherever access to modern and state-of-the-art technology was part of the proposal.

- The FDI limit was later enhanced in May 2020 up to 74 percent through the automatic route and up to 100 percent through the government route, wherever access to modern technology was proposed.[37] The approval process, however, included numerous security clearances from the Ministries of Defence and Home Affairs.

While 74-percent ownership rights for foreign investors through the automatic route look inviting, there has hardly been any improvement in the desired investments over the past five years. India has received a meagre INR 5,077 crore in foreign investment in the defence sector from 2001 to March 2025, amounting to just 0.003 percent of the country's total foreign capital inflows,[38] whereas during the same period, the automobile sector has attracted an inflow of US$37.85 billion, approximately 5 percent of total FDI.[39] Thus, there is an urgent need to identify the reasons for this suboptimal performance of foreign investment policies in defence manufacturing and emulate the good practices followed by the demonstrably successful auto manufacturing sector.

The government has been in overdrive to reduce arms imports through indigenisation, while simultaneously striving to attract foreign capital and technology into the defence sector. However, data on foreign investments[40] in defence suggest that hindrances for significant foreign players continue to exist. These include:

- While investment under the extended band (74 percent) through the automatic route is no longer subject to any condition (if certain conditions for the industrial licences are met) or required to be justified by the prospective foreign original equipment manufacturers (OEMs), it will still need prior security clearance and can be vetoed by the government even after all clearances have been obtained. This discretionary overlay undermines investor confidence and operational predictability. Consequently, such investments cannot be considered as falling under the automatic route. The complex procedures and rules involved in obtaining security clearances dissuade major defence manufacturers from establishing bases in India.[41]

- India, while attempting to attract foreign investors in the defence sector, is still prioritising procurement from its public sector units and promoting indigenous production. For the current FY, a sum of INR 111,545 crore, 75 percent of the modernisation budget has been earmarked for procurement

through domestic sources, with INR 27,886 crore (25 percent of the domestic share) specifically allocated for procurement from domestic private industries,[42] implying 75 percent allocation will be reserved for DPSUs. Even the recent Defence Acquisition Council (DAC) approvals indicate that over 85 percent of contracts were to be awarded to Indian entities, mostly DPSUs. This creates confusion among investors regarding the government's true intent and the actual market opportunities available to foreign-invested entities, thereby dissuading FDI.

- Foreign OEMs often prefer government-to-government (G2G) deals or joint ventures with Indian private firms or DPSUs (e.g., HAL-Safran, BEL-Thales) to equity investments in these firms.[43]

- With a focus on indigenisation, the majority of proposals are being classified as Buy (Indian–Indigenously Designed, Developed, and Manufactured) [Buy (IDDM)] under DAP 2020.[44] As per various sources, such as Press Information Bureau (PIB) releases collated by the authors, over the last five years (2020–2025), DAC has accorded clearances for projects worth INR 3.74 lakh crore and the appreciated value of IDDM stands at approximately INR 2.75 lakh crore, constituting around 75 percent of the total value of the projects cleared. The extant policy permitting only domestic firms with at least 51 percent local ownership to serve as primary vendors for IDDM stands in contrast to the policy that allows foreign firms to invest up to 74 percent or more in domestic firms. The following criteria make the conditions for entering into an equity partnership with a foreign OEM and bidding for the most preferred route (IDDM) even more complex:

  - » Indian partner of the joint venture (if any) must hold more than 50 percent ownership of the subsidiary.

  - » Indian firm must purchase the intellectual property rights (IPR) of the product from the foreign OEM or own the systems-level IPR.

  - » Must ensure that the platform meets the 50 percent indigenous content requirement.

This implies that even though foreign companies are allowed to hold majority stakes, their market access within India's defence procurement ecosystem is severely limited. This 'dual policy' effectively restricts the type of FDI in defence and favours minority stakes or technology transfer without significant equity control, thereby impacting the scale and nature of foreign capital inflows despite the theoretical openness.

Foreign Capital for the Defence Manufacturing Sector

- Indian policies regarding arms exports have improved significantly over the past few years, with an increased number of items being added to the Open General Export List (OGEL). However, enhanced clarity is needed on this important issue. Foreign defence OEMs are looking to earn good returns on their investments, and exports help diversify the order pipeline. Saab management is still not clear about the projected export volumes of rocket launchers in the coming years. A study of the export SOP clearly highlights the fact that exporting weapons and ammunition needs multiple clearances from diverse ministries and therefore, remains underexploited.[45]

- Expenditure on R&D by domestic private firms is averaging even below the national R&D expenditure, amounting to 0.6456 percent of the GDP,[46] compared with the global average of 2.6 percent,[47] which deters foreign investors from investing in the defence sector.

- Defence manufacturing needs heavy investments, and investors (domestic or foreign) look for optimal returns on those investments. This means that a capacity installed should remain active; for this, clarity on regular order flow is essential. The example of K9 Vajra illustrates this anomaly clearly: although 100 K9 Vajra-T howitzers were contracted in 2017 as part of the first project, delivery was completed only by 2021. A fresh order for 100 additional guns was placed in December 2024 for INR 7,629 crore, with the Korean parent company expected to supply components for US$253 million).[48] The K9 gun manufacturing capacity remained idle between 2021 and December 2024, a very expensive proposition for any going concern.

- The offset execution is governed not only by Offset Guidelines 2020 but also by sector-specific licensing and security norms. One of the clauses in Offset Guidelines 2020,[49] states, “The Indian offsets partner (IOP) shall, besides any other regulations in force, also comply with the guidelines/licensing requirements stipulated by the DPIIT/ MHA as applicable.” To aggravate the situation further, foreign OEMs struggle to find a technologically compatible IOP.

- While the Offset Policy covered in DAP 2020 permits full equity participation in the Indian offset partner, the offset ecosystem favours non-equity collaborations (e.g., co-production, co-development) that attract higher offset multipliers, making them more attractive. Foreign OEMs prefer contractual partnerships over equity-heavy JVs to avoid long-term liabilities and governance issues that come with being a promoter. JVs with more than 30 percent indigenous content may be exempt from offset obligations altogether, incentivising leaner equity structures.

Foreign Capital for the Defence Manufacturing Sector

- As per the *US Trade Representative Report 2022*, India remains one of the world's most challenging major economies with respect to the protection and enforcement of IP.[50] Foreign OEMs generally express apprehension that India's IPR environment is extremely complex, making them reluctant to part with the technology in the absence of robust intellectual property protection.

- The shortage of a skilled workforce, which is 'industry-ready,' has been a serious challenge for the manufacturing sector. The defence and aerospace industry needs even higher levels of expertise, which is in short supply in the country.

- Both private and foreign firms need ironclad guarantees of governmental support to offset massive investments required to develop defence technologies. In the absence of firm orders/guarantees, foreign OEMs are reluctant to transfer sensitive technologies or set up JVs; domestic firms avoid desired investments in R&D due to uncertain monetisation prospects; and many startups struggle to cross the gap between demonstration/prototype and firm orders. The models being followed in the United States (US) and South Korea are illustrative. The US part-funded the development of autonomous defence systems through Anduril Industries. Once developed, supply orders were placed via the Defence Innovation Unit and other transaction agreements for Anduril's Lattice AI platform, effectively making it a programme of record (PoR). This PoR status ensures multiyear funding and deployment, de-risking Anduril's investment in proprietary AI and sensor fusion technologies.

- Currently, FDI rules tend to treat the defence sector as homogeneous. India's current FDI policy permits up to 74 percent under the automatic route and 100 percent under the government route in defence manufacturing, provided it leads to access to modern technology.[51] However, this blanket approach overlooks the heterogeneity of the defence manufacturing ecosystem, which includes low-tech ancillary components (fasteners, brackets), mobility platforms (for troop carriages, logistics, and weapons), embedded systems (fire control algorithms, avionics integration), platform-level assemblies (armoured vehicle hulls, aircraft fuselage), strategic systems (missiles, electronic warfare suites), and aerospace and propulsion technologies (jet engines, composite airframes).

Policy Recommendations

The Indian auto sector has flourished due to favourable government policies. Similarly, defence manufacturing can also become a growth driver for the nation, if prudent policies, based on market feedback, are implemented. Outlined below are key recommendations to accelerate the pace of indigenisation and increase the inflow of foreign capital, along with technology transfer:

- Encouraging foreign firms to set up manufacturing plants, 100 percent owned or with minority Indian ownership, will provide strong impetus to defence manufacturing, following the model of the automobile sector. This must be accompanied by requisite security safeguards, as exemplified by the Saab facility for manufacturing Carl-Gustav rocket launchers in Jhajjar, Haryana.[52] India should expect Saab to source maximum components locally to keep costs in control, mirroring the gradual increase in local content adopted by foreign automobile firms.

- India could adopt differentiated FDI caps based on the complexity and sensitivity of the product category. An illustrative table below shows the FDI caps for various categories.

Table 1: Suggested FDI Caps for Various Categories

Subsector	Suggested FDI Cap	Rationale
Ancillary Components	Up to 100%	Low strategic risk, high employment potential
Mobility Platform	Up to 100%	Limited strategic risk, high employment potential
Software & Simulation	Up to 74%	Encourages innovation, minimal physical security risks
Armoured Vehicle Assemblies	Up to 74%	Requires domestic integration and supply chain control
Missile Systems & Guidance	Up to 49%	High strategic sensitivity, IP and export control concerns
Jet Engines & Propulsion	Up to 49%	High R&D intensity, potential for tech transfer

Policy Recommendations

- There is a need to rationalise DAP 2020 to remove dualities within the policy framework that prohibit domestic companies from bidding as primary vendors in acquisition programmes (IDDM) if their foreign ownership exceeds 49 percent. Emphasis should also be placed on indigenous content requirements and the transfer of intellectual property rights to the Indian partner.[53] This acts as a significant disincentive for foreign firms to pursue majority stakes and consequent technology transfers, as it severely restricts their access to the lucrative domestic procurement market.

- The private industry has aspired for a level playing field when competing with DPSUs/ OFB. The government has made some efforts to remove anomalies, but the advantages enjoyed by the DPSUs are still significant. Foreign firms expect all manufacturers to be considered equal. This preference is creating a bias in foreign OEMs towards striking JVs with DPSUs, while avoiding the private sector for obvious reasons. The market should remain free for both the Indian public sector and private manufacturers.

- The issue of national security due to foreign ownership of defence firms can be addressed through suitable legislation, which can provide adequate supervision of foreign-owned defence firms, as is being ensured by Australia and the USA.

- As India deepens its focus on indigenisation and FDI-led capability infusion, a robust IPR framework is essential. Indian IPR laws and their implementation by courts need to be improved urgently. India also needs to address concerns such as its inclusion in the 'Priority Watch List' on IPR issues by the US, which significantly influence the decision-making of a large number of foreign defence OEMs.

- The Production Linked Incentive (PLI) Scheme, introduced in 14 manufacturing sectors, has been highly successful, garnering INR 1.61 lakh crores in investment, INR 14 lakh crore in production, and INR 5.31 lakh crore in exports; it has generated 11.5 lakh jobs till date.[54] India needs to incentivise defence manufacturing through a scheme like PLI, while refining the domestic value addition norms, learning from the evolution process in the auto sector.

- Obtaining numerous clearances is a significant deterrent for foreign firms. An enabling environment for smoother establishment of a manufacturing plant is the need of the hour. This could be ensured by creating defence special economic zones (SEZs), where clearances are easy to obtain. Other incentives can also be offered to domestic and foreign firms. The Dhirubhai Ambani

Policy Recommendations

Defence City in Ratnagiri, an SEZ developed by Reliance Infrastructure, is a commendable private initiative in this direction and warrants government support through appropriate incentives.

- There is a need to simplify the requirement of obtaining multiple clearances for investing up to 74 percent or more in a new manufacturing unit. A single window clearance model needs to be adopted, as has been implemented for numerous other priority sectors.

- It is necessary to remove all percentage requirements of indigenisation at the trial stage and instead adopt a model of progressive indigenisation, as implemented for the auto sector. All auto manufacturers today are attempting to increase the indigenisation of components to reduce costs and remain cost competitive. Similar outcomes should be expected in the defence manufacturing industry.

- There is also an urgent need to encourage foreign firms to acquire equity stakes in Indian offset partner firms, which may need a change in incentive mechanisms in the Offset Policy (such as multipliers). An equity stake in IOP would strengthen the commitment of foreign OEMs and facilitate the transfer of advanced technologies, benefiting both the IOP and the country.

- Currently, a substantial share of purchase orders for capital acquisitions is dominated by DPSUs such as BDL, HAL, BEL, and MDL. It is recommended that private firms with reasonable experience (L&T, Bharat Forge, Adani Defence, etc.) be allowed significant shareholding in these DPSUs. India may also look at divesting stakes in these DPSUs to foreign OEMs later, in exchange for technology transfers. This will enhance the productivity of the defence sector and help reduce net arms imports.

Conclusion

The importance of foreign capital in building a domestic industry and creating an enabling environment for the transfer of technology from foreign OEMs cannot be overemphasised, as has been proven by the success of the automobile sector. The current FDI policies have not been able to attract the desired inflows into the defence sector. Based on the experience in other sectors such as automobiles and IT, there is an urgent need to increase foreign participation in defence manufacturing. Security concerns could be addressed separately, as demonstrated by most countries with successful defence industrial bases.[55] India needs to urgently expand domestic defence manufacturing to meet the growing demands of the Armed Forces and to fully leverage the substantial budget allocations of a rising economy. Accordingly, the country will need to align expectations from atmanirbharta or 'Make in India' policies with global best practices/trends in collaborations with friendly nations to co-develop new technologies and attract foreign investment from established OEMs. This approach would foster healthy competition in the defence sector, much like the transformation seen in the automobile sector. After all, a rocket launcher made by Saab in India is better than one imported from Sweden.

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