

## Research Note

# Understanding the Risks in the Indian Automobile Manufacturing Sector

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*Abstract: This paper discusses the history and current environment of the automobile-manufacturing sector in India. The analysis begins by providing the historical and cultural context necessary for identifying and understanding the key risks to the sector in both the public and private sectors. Building upon this knowledge, the author explores some of the potential solutions aimed at improving both domestic and international confidence in this key sector, which is a dominant contributor to the country's economic output.*

## Introduction

The “Make in India” campaign, the brainchild of India’s Prime Minister Narendra Modi, was launched in September 2015 to bolster the contribution of the manufacturing sector towards the country’s Gross Domestic Product (GDP).<sup>1</sup> The campaign’s goal is to put India at the forefront of global manufacturing by encouraging investments, motivating innovation, and supporting skill development. In 2016, the week of February 13 to 18 was India’s first ever “Make in India Week.”<sup>2</sup> Prime Minister Modi kicked off the weeklong showcase of India’s capabilities in the field of manufacturing. In his speech, he highlighted the four ‘Ds’ that work in favor of the Indian market – democracy, demography, demand, and deregulation.<sup>3</sup> He supported this claim with the statistic that the Foreign Direct Investment (FDI) inflows have increased by 48 percent since May 2014, at a time when the global GDP was not that strong. This is indeed an exciting time for the Indian manufacturing sector with new processes (de-licensing and deregulation), new infrastructure (development of industrial corridors and smart cities, fortified Intellectual Property Rights regime), new sectors (FDI availability in defense production, construction, and

railways infrastructure), and a new mindset (a pro-business, pro-industrialization government).<sup>4</sup> It is important to note that the risks faced by the Indian manufacturing sector overall are equally applicable to the automobile- specific segment of manufacturing – so too are the government regulations and policies undertaken to mitigate these risks.

In order to be well oriented with the topic of this paper, it is essential to understand why this government initiative has gained so much traction in all quarters, leading to it being touted as *the* development factor for the country's growth. From 1947 (year of independence) until 1990, the Indian economy was closed and controlled by the state, where business development was in the hands of the government. This period has been specifically labeled as the "Permit/License Raj" (rāj, meaning "rule" in Hindi), which was initiated by the first prime minister of the country, Jawaharlal Nehru.<sup>5</sup> In this period, if any private company aspired to manufacture a commodity, it had to acquire a license from the government to be able to do so. This process was tied up with red tape, thereby making it rather cumbersome for private sector companies to flourish. As if this were not enough, the State also had a say in what was being produced, how much quantity was being produced, the selling price of the commodity, and even the sources of capital for production.<sup>6</sup> This practice continued for more than four decades and the then governments were in support of import substitution industrialization.<sup>7</sup> Consequently, business leaders and marketers shied away from getting their systems and people involved in an uncondusive business environment. By 1980, the consequences of this planned economy were highly noticeable – low growth rates, pessimism among businessmen, macroeconomic instability, and marginalization of India in the world market.<sup>8</sup>

In 1991, the Indian government began the shift from a planned economy to a market economy, restructuring its role in the economic administration, opening the market to the private sector - including foreign investment. Many economic and trade policies were modified in a systematic manner to make the market more favorable for investors. Deregulation was undertaken across the manufacturing sector to attract competent business entities and enhance productivity. Industrial licensing was eliminated in almost all industries except defense production, atomic energy generation, and railway transport.<sup>9</sup> Gradually import licensing was abandoned in 1993 for capital goods and raw materials. Processes that limited the quantity and quality of manufactured consumer goods and agricultural products were done away with in 2001. Financial policies had to be eased to accommodate the demand that rose out of opening up the economy. Interest rates and reserve requirements were liberalized.<sup>10</sup> According to the World Bank Indicators, the annual GDP growth in 1990 was 5.5 percent, slowed to 3.8 percent in 2000, and is currently hovering at 7.3 percent in 2015.<sup>11</sup> It has remained steady in the first half of fiscal year 2015-16, making India the world's fastest growing economy, according to KPMG India.<sup>12</sup> Also, to align with the manufacturing sector's contribution to the GDP, a point can be made that in 2000, manufacturing contributed to the GDP by approximately \$71 billion (USD) and this figure soared to about \$348 billion in 2014, a fivefold increase. The Indian government is expecting manufacturing to contribute 25 percent of India's approximate current GDP of \$2 trillion.

## Public Sector Major Players

The first step is to identify the government entities involved in the Indian automobile manufacturing sector and their respective roles in the decision-making process. Multiple governmental and non-governmental entities influence the growth and policies in the manufacturing sector and subsequently the automobile industry. Initial research shows that the Ministry of Commerce and Industry (MCI) and the Ministry of Heavy Industries and Public Enterprises (MHIPE) are the leading government ministries that govern the policies and reforms in this sector. The Department of Industrial Policy and Promotion (DIPP) under the MCI<sup>13</sup> is in charge of strategizing for industrial development, facilitating Foreign Direct Investment (FDI) policy, and policies related to Intellectual Property Rights (IPR) among other functions.<sup>14</sup> As part of the Make in India initiative, an agency named 'Invest India', a joint effort of DIPP and Federation of Indian Chambers of Commerce & Industry (FICCI) (a non-government trade association), was set up to provide expansive investment opportunities.<sup>15</sup> MHIPE and Society of Indian Automotive Manufacturers (SIAM) have together come up with an Automotive Mission Plan 2006-2026 in order ensure that India emerges as the destination of choice for the design and manufacture of automobiles. The long-term goal is to eventually have India rank in the top three automotive industries in the world by 2026.<sup>16</sup>

## Public Sector Risks

The following section outlines the risks and potential mitigation prospects concerning the related government agencies face in handling global investors, the country's corporate entities, and progressive reforms.

1. Lack of innovation - Most of the Indian Original Equipment Manufacturing units (OEMs) launch several new models of vehicles, but no pioneering ideas have gained any momentum in the automobile-manufacturing sector.<sup>17</sup> Even with the Global OEMs, only the globally successful models are launched in the Indian markets.<sup>18</sup> This largely affects competition negatively among the companies within the industry as it limits the options available in the market. Competition is directly proportional to productivity which impacts the country's per capita income. High productivity and flexible policies that stimulate innovation are key factors in retaining the market advantage that the global OEMs are looking for.<sup>19</sup> To handle this risk, the Automotive Mission Plan 2006-26 has brought about a 200 percent weighted tax reduction in the Research and Development expenditure to in-house and outsourced R&D facilities.<sup>20</sup> This has attracted a lot of attention of the foreign companies, who are now expanding their R&D operations. Some examples include Mercedes-Benz, Mahindra and Mahindra, Tata Motors, and Hero MotoCorp.<sup>21</sup>
2. Environmental Regulations and Emission Norms - The automobile industry is directly impacted by the verdict of the judiciary in cases against the companies of this sector who are often blamed for rise in the atmospheric pollution.<sup>22</sup> These decisions are often taken in favor of the prosecution, which has encouraged the perception that the automobiles

industry is the reason for polluting the environment. There are no clearly demarcated emission standards that would facilitate transparent and fair court proceedings. This makes global automobile companies more hesitant in expanding their operations in India. The Automotive Mission Plan (AMP) 2026 mandates that a scientific and transparently conducted study be done of the cities where automobile-manufacturing plants are based, to outline the causes of air pollution. In addition, emission standards are set to be specified structurally to help stakeholders take informed decisions.

3. Political Obstructionism<sup>23</sup> - A very native feature of the Indian political system, political obstructionism is a major risk that impedes the speed of development and consequently growth of the country overall. The law of majority in the parliament houses affects the execution of the various laws or reforms that are pitched in the upper house.<sup>24</sup> In order to mitigate the consequences of political obstructionism, Competitive Federalism has been charted. Under this framework, all 29 states will be ranked along a 98-point action plan.<sup>25</sup> If an investor seeks to invest in a particular region, they would be required contact the state authorities. Each state has their own policy competing to enhance the ease of doing business and attract investors.
4. Complex Tax and Customs Formalities - Automobiles are the most heavily taxed manufactured products in India and pose a lot of burden on the sellers and buyers alike.<sup>26</sup> The Curtain Raiser document for the AMP 2016-2026 plan mentions a 53 percent to 73 percent tax incidence for cars, which poses a major risk for the companies in this sector. To top this, the domestic tax system is a cobweb of multiple taxes applicable at different points in the automobile manufacturing lifecycle, as well as the existing heavy excise duties. Propositions like Goods and Services Tax (GST), excise duty concessions, and a fiscally supportive government have been included in the AMP 2026 as an attempt to mitigate this risks.
5. Poor Return Of Invested Capital (ROIC) Values - McKinsey & Company - a global management consulting firm – reports that only 46 percent of manufacturing companies (and 41 percent of automobile companies) have an return on invested capital (ROIC) greater than the average cost of capital in 2006.<sup>27</sup> This makes investment in India a less lucrative proposition for foreign companies. Again, this is a significant risk if India aims to increase the automobile manufacturing sector’s contribution to the country’s GDP to \$300 billion by 2026. Therefore, the government ministries and agencies need to work on ensuring that these percentages increase and the foreign companies keep India at the top of their list of countries when they think of expansion.
6. Lack of a Robust Online Legal Infrastructure – There are various online portals established to sell the manufacturing sector to the world (Make in India, Invest India, DIPP), but there are very few efforts made to digitize the judicial system. During the Make in India week, the Prime Minister himself stated that the “formation of the Company Law Tribunal is at the final stage.”<sup>28</sup> The fact that it is not already in place and

functioning demonstrates that the provision to deliver justice in a streamlined manner has not been top priority so far. While it is true that these facilities are available on-ground, one would expect them to be available online in the face of technological advancements and the government's own directive of "Digital India."<sup>29</sup> This could be taken as a learning lesson for future policy implementation in the hope that the proposed tribunal would be in place soon. However, efforts should be made to streamline other tribunals of the judiciary (Income Tax, Securities and Excise) before the need for their digitization springs up and eventually lead to delay in the delivery of justice.

## Private Sector

When reviewing the private automobile manufacturing companies, it is possible to see how far they have come since the License Raj period. Until 1982, the automobile manufacturing market was dominated by three manufacturers - Hindustan Motors, Premier Automobiles, and Standard Motors Products. Then Maruti Udyog (now Maruti Suzuki) was founded in 1982 as a government initiative in collaboration with Japan's Suzuki.<sup>30</sup> In the liberalization era, the market opened to both joint venture and foreign-owned brands. The automobile industry consists of four sub sectors: two-wheelers (2W), three-wheelers (3W), passenger vehicles (PV), and commercial vehicles (CV).

## Private Sector Risks

This section covers the risks faced by the companies of this sector and their mitigation with examples.

1. Fuel Economy - For the growing middle class in India, the decision of buying a car is solely based on oil prices. The 2W segment has an 81 percent market share<sup>31</sup> (also the largest) because of fuel-efficient products being rolled out by manufacturers. The same is applicable for four-wheelers. Manufacturers need to create models catering to such buyers if they wish to make an impact in the sector. Not every manufacturer understands this feature of an Indian car buyer. Maruti Suzuki has been the market leader with largest car manufacturing in India. A quick search on the Internet shows that in the five most fuel-efficient cars in India, four have been manufactured by Suzuki.<sup>32</sup>

2. Labor productivity and training- McKinsey & Company reports that production planning, supply chain management, quality, and maintenance are the four key operational areas that affect Indian manufacturers' productivity.<sup>33</sup> This influences a worker's productivity directly and it has been found that Indian workers are four and five times less productive than Chinese and Thais, respectively.<sup>34</sup> Similar sentiments were echoed in an analysis by Cisco of the manufacturing sector.<sup>35</sup> Companies expanding their operations in India would need to incorporate these facts into their labor training and strategy. If they fail to do so, the cost of capital would increase because of project delays arising out of poor productivity. Maruti Suzuki, for example, arranged for training its workers in six technical institutes. They utilize these training sessions not only to enhance a worker's productivity but also to inculcate a sense of the company's culture.<sup>36</sup>

When Tata Nano initiated such training programs for their workers, they were able to deduce that the company's decision to construct a factory at a site would lead to displacement of residents living at that site. Here, the company faced the risk of facing backlash from the residents of that site against a factory construction, potential political intervention, and an indefinite halt in the construction. However, when they promised to get the residents on board with the project and train them to enhance their productivity, they were able to stick to their business plan.

3. Lack of Infrastructure - Even with flexible policies and pro-investment market regulations, manufacturers like Tesla are shying away from setting up shop in India.<sup>37</sup> This is primarily because of three reasons - inadequate infrastructure, less demand and high import duties. At present, India does not have the infrastructure in place to set up charging stations for Tesla's customers and build an Electric Vehicle (EV) network.<sup>38</sup> Secondly, it is not as though the demand for Tesla's models is so high that the manufacturer would think twice before saying no to this business proposition. Thirdly, pricing will be a challenge to sustain a market in India for Tesla. With high import duties, it will be difficult to control the prices of even its third-generation car, which is aimed for sale in emerging markets like India.<sup>39</sup> While the current policies and market seem favorable for 2Ws, 3Ws, 4Ws, PVs and CVs, India has a long way to go before it can create a robust environment for the deep penetration of next-generation automobile technology.

## Next Steps

The automotive manufacturing sector in every country is dependent on other sectors like transport, physical infrastructure (road, rail, port and power), digital infrastructure (streamlined online portals for carrying out business operations remotely) and social infrastructure (automotive hubs), labor, and land acquisition. All these factors play an important role in ensuring the business continuity in the automotive manufacturing sector. For example, trucks carrying cargo in developed countries can cover up to 500 kilometers a day whereas this figure is around 250-300 kilometers in India due to bad road conditions. In Hong Kong, it takes up to 12 hours for ship loading and unloading, whereas in India it takes up to 4 days to complete the work. In order to boost the transportation speeds, the Dedicated Freight Corridor project is scheduled to be completed by 2019.<sup>40</sup>

The current policy and reforms is bound to reap profits adding to the growth of the Indian automotive manufacturing industry. However, there are certain things that can still be incorporated by the manufacturing companies to accelerate the process of meeting set targets. Productivity can be boosted by making controls across the supply chain more sophisticated. Cisco has identified some useful solutions that could reinforce the potential of this sector.

1. Intelligent Network Manufacturing - This vision entails an integrated solution that collects data right from the manufacturing plant floor and transmits it to the business systems.<sup>41</sup> This is referred to as the 'Ethernet to the Factory' solution that empowers the employees with information on-demand abilities, thereby enabling the visibility to the factory

floor without disrupting the production line.<sup>42</sup>

2. Collaborated Product Development - This solution is worth implementing to increase the participation of stakeholders in the decision-making processes and enforce high standards of transparency in the functioning of the company.<sup>43</sup> When all the stakeholders are subjected to the same information, collaboration becomes easier, decisions are taken faster, and ultimately productivity is enhanced.

## Conclusion

The government on the other hand should focus on creating a conducive business environment by boosting the infrastructure and digitizing the judicial systems. When investors are confident of these factors, the potential for successful business increases manifold, and investors become more willing to test the market. So in essence, if all the dependent sectors are strengthened, then manufacturing can reach greater heights in fulfilling the demands of the people and the government. In addition, more efforts can be made to ensure that the government's online portals - the gateway to the manufacturing sector - add value to the investors' decisions in addition to just being updated. For example, creating a section that contains the 'success stories', opinions, and other relevant information on the companies who are currently running their operations from India would go a long way in helping investors make an informed decision.

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<sup>5</sup> "License Raj." *Wikipedia*. Wikimedia Foundation. Web. 07 Mar. 2016.

<sup>6</sup> *Ibid*.

<sup>7</sup> "Import Substitution Industrialization." *Wikipedia*. Wikimedia Foundation. Web. 07 Mar. 2016.

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<sup>11</sup> "World Development Indicators." The World Bank. May 2015. Accessed Mar. 2016 <[www.data.worldbank.org](http://www.data.worldbank.org)>.

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