

**ACMA**

Automotive Component Manufacturers  
Association of India



Department of Heavy Industry  
Ministry of Heavy Industries & Public Enterprises  
Government of India



# **Study on Impact of Trade Agreements on Auto Component Industry in India**

**ICRA Management Consulting Services Limited**





**ACMA**



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*Study on Impact of Trade  
Agreements on Auto  
Component Industry in India*

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*August, 2017*

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*ICRA Management Consulting Services Limited*

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## FOREWORD

Indian auto component Industry has developed its competencies and technologies during the last two decades to become one of the most up-to-date industries in India having a strong global footprint. This has been a significant achievement by the industry which has always been on its toes to grow, be technologically modern and seek new opportunities. The Automotive Component Manufacturers Association (ACMA) has also played a pivotal role in this growth by acting as a strong liaison between the Government and the industry, shaping the policies that has taken auto component industry to greater heights and also co-ordinating in identifying new business, new market prospects and keeping the industry upraised of the changing market dynamics and emerging technologies through a number of research works.

With ambitious growth targets set under the Automotive Mission plan 2026, ACMA along with the Government of India and the industry, sought to understand the effectiveness and impact of trade agreements on India's auto component trade. With the objective of developing auto component trade, ACMA and ICRA Management Consulting Services Limited (IMaCS) joined hands to assess the impact of existing trade agreements, identify prospects of upcoming trade agreements and devise a sound strategy that India should employ while negotiating trade agreements.

India's auto component exports in 2015-16 were estimated at USD 10.8 billion, having witnessed an 11% Compound Annual Growth Rate (CAGR) from 2008-09 to 2015-16, accounting for 28% of total auto component industry turnover. The European countries (34%) and North America (27%) are the key export destinations followed by Asia (12%) and ASEAN (8%) with USA, Germany, Turkey and UK as the largest importing countries. Auto component imports during the same period was estimated at USD 15 billion, having grown at 4.8% CAGR with China, EU and ASEAN being the largest exporting countries to India. This growth in Indian auto component exports has been driven by cost competitiveness, strong trade relations and supportive trade agreements in the International market. For further strengthening of exports, it is imperative that market access be strengthened through bilateral and regional trade agreements negotiated in a manner that would open new markets, increase penetration in existing ones and at the same time provide a level playing field for domestic manufacturers.

This report developed by ACMA in partnership with IMaCS provides an in depth assessment of auto component trade across specific regions/countries where India has signed trade agreements namely ASEAN, Thailand, Japan, South Korea, MEROSUR and Chile, along with a review of various trade



policies, non-tariff measures and other trade barriers being employed by the major competing auto manufacturing and automotive market countries - Japan, South Korea, Indonesia, Thailand, Malaysia, Germany, Brazil, and USA. The reports highlights the insights derived from interactions with the auto industry in India, review of non-tariff barriers to trade, review of cost competitiveness and ease of doing business across countries, to provide a way forward for increasing global market access and a strategy to negotiate trade agreements.

We would like to sincerely thank the support from the Government of India, key industry members and the team from ICRA Management Consulting Services Limited (IMaCS) for their relentless efforts and outstanding commitment and contribution in development of this report. We also extend our sincere gratitude to all ACMA members, past presidents and ACMA Executive Council members for their continuous support and guidance. We extend our special gratitude to ACMA leadership – Mr. Srivats Ram, Mr. Harish Laxman, Mr. Arvind Balaji, Mr. Nirmal Minda, whose feedback, guidance and counsel have been instrumental in development of this report. We also thankful to ACMA Secretariat, especially Mr. Vinnie Mehta, Ms. Subhag Naqvi and Mr. Sushil Rajput for addressing Members' view and issues with IMaCS for shaping this study meaningful for the benefit of Industry

Mr. Rattan Kapur

President, Auto Components Manufacturers  
Association of India

Mr. Ashok Taneja

Past President & Chairman, ACMA Committee  
for Knowledge Partner Engagement

गिरीश शंकर, आईएएस  
सचिव  
GIRISH SHANKAR, IAS  
SECRETARY



भारत सरकार  
भारी उद्योग एवं लोक उद्यम मंत्रालय  
भारी उद्योग विभाग  
उद्योग भवन, नई दिल्ली-110 011  
GOVERNMENT OF INDIA  
MINISTRY OF HEAVY INDUSTRIES & PUBLIC ENTERPRISES  
DEPARTMENT OF HEAVY INDUSTRY  
Udyog Bhawan, New Delhi-110 011  
Tel. : 011-23063633, 23061854  
Fax : 011-23062633  
E-mail : shioff@nic.in


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MESSAGE

At a time, when the Government of India is making significant efforts to develop domestic manufacturing and entrepreneurship in India through its ambitious "Make in India" program and strengthening political and economic ties with leading countries across the world through continuous efforts of our Hon'ble Prime Minister Shri Narendra Modi, this report timely brings out the insightful findings on how trade agreements have shaped India's auto component exports. The report highlights the various trade barriers that exporters across countries face, identifies key markets and also recommends sound prospects and strategies to further grow the auto component exports. This comes as an essential input that would help in shaping of new policies and developing a coherent strategy regarding foreign trade and trade negotiations.

During the period 2008 to 2015, auto component exports grew at a CAGR of 11% which was significantly higher than the overall merchandise exports growth of around 6%. The performance of the industry is laudable and has been driven by a combination of inherent competitiveness in manufacturing as well as various global alliances. The trade agreements signed by India have also complemented this growth over the period. However, going forward, with the daunting challenge of achieving 4.5 times to 6 times growth in auto component exports by 2026 as envisaged under the AMP 2026, the auto component industry must fast track its already accelerated growth. This requires not just developing further on its competence with respect to intrinsic factors of production but also by having better market access through right global alliances, trade agreements and economic partnerships. I am pleased to say that this report provides strategic pointers so as to enable drawing up of appropriate trade negotiation strategies as well as identifying new export opportunities.

I believe this report would help in opening new doors for foreign trade and help in developing a more focused approach to trade negotiations. I would like to commend both ACMA and ICRA Management Consulting Services Limited (IMaCS) for their efforts and contribution in publication of this report, which will lay the path forward for expanding auto component exports and conducting successful trade negotiations.

  
(Girish Shankar)

## EXECUTIVE SUMMARY

Indian Auto component industry worth USD 39 billion (Rs. 256 thousand crore) in 2015-16, grew at a CAGR of 6% between 2010 and 2016. The industry has a thriving presence in export markets, with USD 10.8 billion (Rs. 71 thousand crore) worth of exports in 2015-2016 accounting for 28% of the industry's turnover and CAGR of 11% between 2010-2016

The industry exports 34% of its total exports to European countries and 27% to North America, followed by 12% to Asia and 8% to the ASEAN region. USA, Germany, Turkey and UK are the leading export destinations. Auto-component imports into India during the same period were estimated at USD 15 billion, having grown at a CAGR of 4.8% over a six year period. Imports into India are primarily from China, EU and ASEAN. A review of the trade across regions indicates that only 18% of India's export goes to regions and countries where India has signed trade agreements. India continues to have a trade deficit with partner countries/regions in auto components trade, except in MERCOSUR and Chile, as imports were significantly higher than exports even prior to signing of the agreements. Export growth has been driven mainly by engine parts and transmission & steering that contribute 16% and 28% respectively to the export basket. Products classified as "Others" are significantly the largest group contributing 32%.

To further strengthen India's auto component industry, it is required that auto component exports grow significantly and contribute to a larger share in the industry's turnover. This necessitates that the Indian auto component industry be supported, not only through improving the ease of doing business but, also by facilitating growth through India's strategic economic partnerships and global alliances so as to increase trade and provide better market access to this significant segment of India's manufacturing industry. With this objective, the study was conducted to ascertain the impact of existing trade agreements on India's auto component exports and to strategise the way forward for negotiating on going and future trade agreements.

Review of the trade policies and trade agreements of select developing countries that are also major auto and auto component manufacturing countries indicates a shift from higher tariffs and import license based regimes to non-tariff based measures during the last 40-50 years. Earlier trade policies in 1960s and 1970s included presence of high tariff on imports, import ban on Completely Built Units (CBUs); import quota, licensing restrictions; technology transfer requirements; high local content requirements; high tariff on imports and limiting the number of players in the domestic market. These policies witnessed significant changes during the 1980s and 1990s and there was gradual



reduction in import tariffs and relaxation of local content schemes. In parallel to these changes, there was an increased focus on trade policies towards inclusion of non-tariff measures like presence of standards and certifications on cars and auto components, further relaxation/removal of local content requirements, high luxury tax and after sales taxes on imported vehicles, incentivizing local manufacturing, and strong auto standards being set-up and third party certifications for imports. Restricting imports by specifying requirements of specific and stringent adherence to local automotive standards, requirement of third party or country certifications, discriminatory taxation and high after sales service costs as well as restricting distribution and after sale service networks are the most commonly used non-tariff measures.

Consistent lowering of tariff barriers and custom duties on auto components has triggered an immediate requirement for India to develop a sector specific and tariff line wise strategy when negotiating trade agreements. It is necessary to negotiate for maximum market access while protecting vulnerable segments of domestic industry from an onslaught of imports. A comparison of trade agreements signed by India with those of other leading auto manufacturing countries, indicates that other countries have been more stringent in formulating rules of origin (ROO) requirements with a higher value add and tariff header change requirement, in comparison to those agreed to by India in its earlier trade agreements. Taking into account the capabilities of the domestic auto component industry, there is a need for India to revisit its ROO requirements across all on-going and future trade agreements. Appropriate tariff heading change and value addition norms should be put in place. This will prevent import of low value add products while ensuring that manufacturers in India have greater access to foreign markets.

The Government of India, in discussion with industry and all stakeholders, has formulated the Automotive Mission Plan 2026 (AMP 2026). The AMP envisages substantial growth in the auto component industry. It is forecasted that the industry will grow four times in size from the 2015-16 level of USD 39 billion (Rs. 464 thousand crore) to USD 200 billion (Rs. 1890 thousand crore) by 2026. Similarly, the AMP 2026 also estimates a 4.5 times growth in exports from USD 10.8 billion (Rs. 71 thousand crore) in 2015-16 to USD 70-74 (Rs. 4.3 -4.6 lakh crore) by 2026. This requires increased market access and development of sustainable cost competitiveness so that the AMP 2026 target can be achieved. India must therefore look at developing new bilateral trade agreements with regions and countries such as Brazil, South Africa and Iran that show high potential for auto component imports.

Indian auto component industry has already made a mark in both domestic and global markets on account of its cost competitiveness. It is a key supplier to both domestic, as well as, export markets.

While India's cost competitiveness in auto component manufacturing is driven by availability of skilled labour at competitive costs, coupled with lower logistic costs, it still has to cover significant gap when it comes to ease of doing business, infrastructure, power and other utility costs. The tax structure in India has been significantly simplified with removal of cascading impact of taxes through implementation of Goods and Services Tax (GST).

A review of segment wise competitiveness and financial ratios of the industry indicates that Indian auto component manufacturers enjoy cost competitiveness, better operating margins and higher returns on capital employed in comparison to their US, Japanese and German counterparts, despite the higher cost of capital in India.

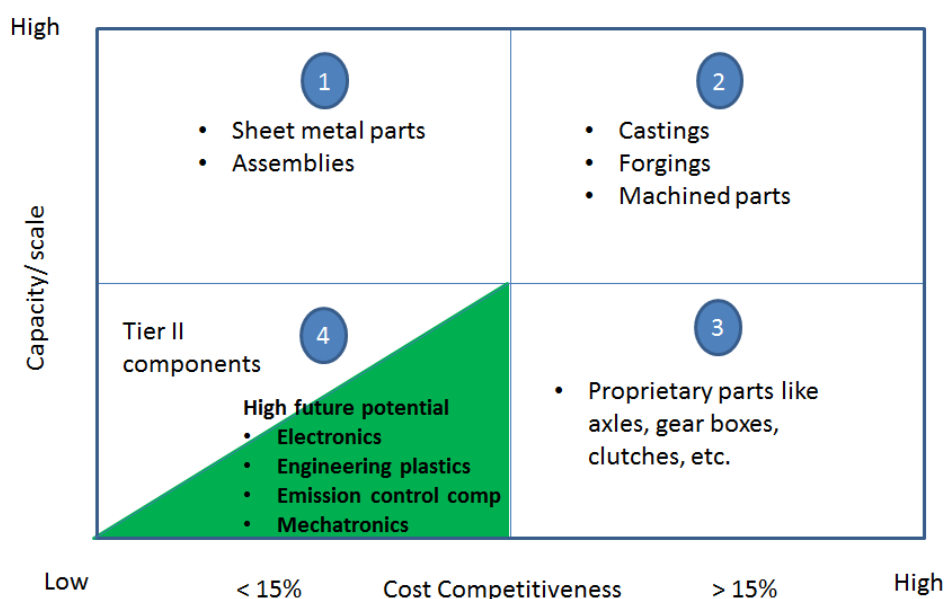
Very few exporters actually claim benefits due to lack of awareness regarding existing trade agreements and the preferential tariff rates available to them. In addition, there are different interpretations related to the descriptions of products and tariff lines across different Government departments of customs, excise and commerce, resulting in additional documentation. This also acts as a hindrance and deterrent for the exporter in claiming preferential tariff benefits. In certain instances exporters have been unable to claim benefits as the HS code and product description do not match that of the partner country. Unfavourable methodology for calculation of import duties and regulatory requirements in the country of import are also barrier to trade under trade agreements. It is imperative that such issues be resolved and at the same time adequate awareness regarding the preferential tariffs, required documentation and process for claiming tariff benefits be created in the country.

### **The way forward . . . .**

In order to increase India's auto component exports and further strengthen the industry so as to achieve the ambitious target set under the Automotive Mission Plan 2026, India should focus on increasing market penetration in existing markets and develop ties with new emerging markets of Brazil, Iran, South Africa, etc. through bilateral agreements and expansion of existing trade agreements like MERCOSUR PTA that is up for discussion and renewal. Negotiations should aim to include auto component specific tariff lines, limit non-tariff barriers and increase market access. This requires developing a tariff line specific strategy with focus on the following aspects – (1) on products and segments where India has manufacturing competitiveness, (2) promoting transfer of new emerging technologies into India while providing a level playing field to domestic manufacturers in these products and (3) opening of export markets having high potential and where India enjoys cost competitiveness with respect to global peers (4) Consideration for global value chains. Such a

tariff line specific strategy should be a trade-off aiming at opening of foreign markets for products where India has high competitiveness and high manufacturing scale and promoting domestic manufacturing in vulnerable and emerging segments.

The following matrix indicates the strategy that India could follow while negotiating trade agreements. However, the parts/segments highlighted in this matrix are indicative and specific HSN Codes will need to be discussed between the Government and ACMA and finalised depending on the country/region against which the trade agreement is being negotiated.



Source: IMaCS analysis

Note: The component categories highlighted in this matrix are only indicative and not exhaustive

1. **Quadrant numbered 1 – High scale and Low competitiveness**– This quadrant includes components where India has low competitiveness but high manufacturing capacity. This segment requires support for technology upgradation so as to enable it improve its global competitiveness. A premature opening of these component segments to imports could significantly jeopardize domestic manufacturing and result in large scale job losses. Therefore, components/segments in this quadrant should be accorded higher tariff and non-tariff protection.
2. **Quadrant numbered 2 – High scale and High competitiveness**–The second quadrant represents components where India has high competitiveness and manufacturing capability. This quadrant includes metal and machined parts, where India has both the scale and the

skill to compete on domestic and global turf. Indian Industry is competitive in these product groups and its strength could be leveraged when negotiating for greater market access.

3. **Quadrant numbered 3 – Low scale and High competitiveness**– This quadrant includes components where industry has high competitiveness but limited scale of operations. Therefore, adequate caution needs to be exercised during the negotiating in opening market access to these components/product groups. Domestic industry should leverage its competitive advantage and focus on building higher scale to tap this opportunity.
4. **Quadrant numbered 4– Low on scale and low on competitiveness –low value add and routine components- White zone** - The upper half of the 4<sup>th</sup> quadrant (white zone) indicates auto-components that have limited future potential and where India has low scale and relatively lower competitiveness in comparison to global players. These should be the focus for trade negotiations and be the first to be opened to imports as it would be extremely difficult to build scale and competitiveness in these components.
5. **Quadrant numbered 4 – Low on scale and low on competitiveness- High potential emerging components- Green Zone** - Within the 4<sup>th</sup> quadrant, the lower green zone indicates a group of components that expected to gain importance. These components are expected to command a high market value and share in the vehicle. Based on the changing face of both the domestic and global automotive industry, It would be strategic for the Indian auto component industry to develop capabilities for making investments in the manufacture of the following: –
  - a) Electric Vehicle/Hybrid technology components;
  - b) Turbochargers, EGR, SCR Valves etc.
  - c) Safety components viz., ABS, air bags, etc.
  - d) Mechatronic components related to CVT etc.
  - e) Engineering plastics and composites
  - f) Auto –electronics like Reverse Parking Guides, telematics, etc.

Indigenous manufacturing and R&D for such product segments should be encouraged through appropriate policies and schemes so that Indian auto component industry develops competitiveness and scale to emerge as a key player in the domestic and global automotive value chains.

In addition to having a tariff line strategy, India must also focus on developing measures that will restrict imports. Developing automotive standards across products particularly those that are vulnerable to imports and ensuring strict compliance is one such measure. Promotion of certification regarding product quality and adherence to standards and implementation of strong IPR protection

measures can help in further restricting unwanted and sub-standard imports. India also needs to revise its Product Specific Rules of Origin (PSRs) in respect to the auto components segment. A higher originating value addition content as per the “Build up” basis of 40% to 50% as compared to current 35% and a requirement of change in tariff heading (CTH) level for child parts and change in tariff sub-heading (CTSH) level for assemblies/ sub-assemblies, would further help in restricting import of products having lower originating content and low value addition, while promoting Indian exporters, who have over a period of time achieved competence across most auto component segments and can provide higher value addition with significant share of originating raw material. Focus should be on CTH and CTSH with bilateral accumulation while negotiating regional trade agreements like RCEP.

Further, in order to realise higher benefits, it is important that uniformity of tariff line description across different Government departments be maintained. Widespread and adequate awareness regarding preferential tariffs, related processes and documentation should be created in the auto component industry through combined efforts of the Government, ACMA and other relevant organisation. Further, paperless documentation for exports and stringent check of ROO certifications along with test certifications and COP certifications would help curb spurious imports into the country. Setting up of a Helpdesk at ACMA regional centres providing inputs regarding new export opportunities across different geographies, support regarding policies and incentives and associated documentation, tracking of market potential and export data will help in facilitating growth of auto component exports from India.

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## GLOSSARY

<b>S.No</b>	<b>Abbreviation</b>	<b>Definition</b>
1	AFTA	ASEAN Free Trade Agreement
2	AIS	Automotive Industry Standards
3	AMP	Automotive Mission Plan
4	ASEAN	Association of South East Asian Nations
5	BNDES	Brazilian Development Bank
6	BTIA	Broad-based Trade and Investment Agreement
7	CAGR	Compounded Annual Growth rate
8	CBU	Completely Built Unit
9	CCC	China Compulsory Certification
10	CECA	Comprehensive Economic Co-operation Agreement
11	CEPA	Comprehensive Economic Partnership Agreement
12	CKD	Completely Knocked Down
13	CIF	Cost Insurance and Freight
14	CTH	Change in tariff Heading
15	CTSH	Change in tariff sub-heading
16	DGFT	Director General Foreign Trade
17	EBITDA	Earnings Before Interest Tax and Depreciation
18	EHS	Early Harvest Scheme
19	EPA	Economic Partnership Agreement
20	EU	European Union
21	FTA	Free Trade Agreement
22	GDP	Gross Development Product
23	HS code	Harmonized system code
24	INMETRO	National Institute of Metrology, Quality and Technology
25	IPR	Intellectual property Rights
26	LAC Program	Latin America and Caribbean Program
27	MERCOSUR	Mercado Común del Sur - Southern Common Market
28	MoC	Ministry of Commerce, Govt. Of India
29	MFN	Most Preferred Nation
30	MITI	Ministry of International Trade and Industry, Japan
31	NAFTA	North American Free Trade Agreement
32	NTB	Non-Tariff Barriers
33	OEM	Original Equipment Manufacturer
34	PTA	Preferential Tariff Agreement
35	QVC	Qualifying Value Content
36	RCEP	Regional Co-operation and Economic Partnership
37	RCV	Regional Content Value
38	ROCE	Return on Capital Employed
39	ROO	Rules of Origin
40	RTA	Regional Trade Agreement
41	SKD	Semi Knocked Down
42	SBAC	Brazilian Conformity Evaluation System
43	SNI	Indonesian National Standards
44	SME	Small and Medium Enterprises
45	SISCOMEX	Integrated Foreign Trade System of Brazil
46	TPP	Trans Pacific Partnership
47	TTIP	Transatlantic Trade and Investment Partnership
48	UN Comtrade	United Nations Comtrade Database
49	UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
50	USD	United States Dollars
51	WTO	World Trade Organisation

## 1. INTRODUCTION

Indian Auto component industry was worth USD 39 billion (Rs. 255.6 thousand crore) in 2015-16 growing at a CAGR of 6% from 2010-11 to 2015-16. The industry caters to not just the requirements of the thriving automobile industry of India but also exports USD 10.8 billion (Rs. 70.6 thousand crore) worth of auto components across the world accounting for 31% of the total industry turnover. The key export destinations for Indian auto component manufacturers are USA, Germany, Turkey, UK and Thailand. The auto component exports from India have witnessed a growth of 18% CAGR from 2010-11 to 2015-16, indicating significant potential and high acceptance of Indian products in global market.

With an aim to further enhance India's exports and strengthen our competitiveness with respect to global peers, the Government along with the industry came out with the Automotive Mission plan 2026 (AMP 2026) in 2015-16 which aimed at the growth of the auto component industry by four times from USD 39 billion (Rs. 256 thousand crore) in 2016 to USD 225 billion (Rs. 1400 thousand crore) in 2026. The AMP has set a target of 4.5X growth for auto component exports from India till 2026. To achieve such targets, it is important that the competitiveness of Indian auto component manufacturers be promoted through not just intrinsic factors but also by having the right global alliances, trade agreements while extracting maximum benefits of existing trade agreements and economic partnerships. With this aim, the current study aims at analysing and assessing the impact of the existing trade agreements that India currently has with key auto component consumers and manufacturers

### 1.1. SCOPE OF WORK

The scope of the study was to analyse the impact of various trade agreements signed by India on the EXIM Trade of Auto Components and identify the critical areas, which need to be addressed in all trade agreements that India is currently negotiating or will enter into in future to mitigate any negative impact on Auto Component Industry. The engagement covers the following present and upcoming trade agreements.

1. The engagement will cover Free Trade Agreements (FTAs) with Thailand, Japan, ASEAN & South Korea
2. Preferential Trade Agreements (PTAs) with Chile and MERCOSUR
3. Trade agreements under discussion like Regional Comprehensive Economic Partnership (RCEP), EU and Russia. TPP, Transatlantic Trade agreement.

## 1.2. TERMS OF REFERENCE

The Terms of Reference corresponding to the scope of work are as follows:

1. IMaCS analysed the trend in imports and exports on the following dimensions:
  - a. At Aggregate
  - b. Category-wise (based on ACMA segmentation)
  - c. Region/country wise with specific reference to partner countries/regions where India has already signed trade agreements
2. Identified factors responsible for India's trade deficit with respect to partner countries/regions on the lines of:
  - a. Tariff barriers
  - b. Non-tariff barriers
  - c. Rules of origin, Transfer pricing and other factors
3. Analysed the proposed India-EU FTA and RCEP
4. Identified business / export opportunities based on trade agreements signed/being signed by other automobile/ auto component manufacturing countries
5. Suggested suitable action points that will enable Indian auto component industry to "Make in India" for the world

## 1.3. APPROACH

IMaCS approached this study in three distinct modules, with the objective of analysing international trade trends, policy support and trade measures used by different competing countries, assessment of cost competitiveness and recommendations for negotiating trade agreements going forward.

### **Module 1: Assessment of impact of FTAs/RTAs/PTAs on Indian Auto component industry**

The module focused on assessing the impact of the various FTAs/RTAs/PTAs signed by India on the auto component industry through trend analysis of imports and exports of auto components with key regions and countries where India currently has trade agreements and draw a comparative of export performance across regions/ countries with trade agreements and where currently no trade agreements are present.

IMaCS then analyzed this trend from the perspective of the trade agreement to determine factors that have impacted this trend. The various dimensions of this analysis are as follows:

- Product lines

- Tariff structure
- Rules of origin
- Non-tariff barriers
- Any other factors for e.g. OEM supply chain arrangements

The outcome of this analysis enabled us to identify the key factors that need to be focused while negotiating current and future trade agreements.

## **Module 2: Identification of business/export opportunities for Indian Auto component industry**

The objective of this module was to identify potential business opportunities for Indian auto component industry resulting from other FTA/RTAs/PTAs that the competing countries/regions are planning to sign. In order to evaluate this, we will consider the following parameters:

- Macroeconomic indicators and investment climate
- Structure of the automobile and auto component industry
- Cost advantages/ disadvantages that either country could have
- Possible adjustments that may be made to tariffs depending on Rules of Origin and their mode of implementation

Based on this analysis, iMaCS has:

- Assessed the attractiveness of the countries as investment destinations vis-à-vis India
- Sustainability of the current business environment in the countries under evaluation
- Applied the results of the analysis for ascertaining the cost competitiveness of the Indian automobile industry (OEMs)

The countries under evaluation might be signatories to other FTAs, PTAs and RTAs. Some PTAs, RTAs and FTAs might also be under advanced stages of discussion. These will be analysed with a view to assess the following:

- Preferential tariff rates as prevailing currently and likely to prevail in future for automobiles/ auto components
- Rules of origin

Based on these analyses, iMaCS has

- Mapped the auto component markets in the countries under evaluation
- Identified export opportunities in terms of automotive component segments for Indian automotive component manufacturers

## Module 2: Analysis of India-EU FTA and RCEP

- Based on the inputs derived from Module 1, IMaCS analysed the proposed India-EU FTA and RCEP. The objective of this analysis was to assess the various benefits and drawbacks of the FTA with EU and being part of RCEP for the Indian auto component Industry.

### 1.4. METHODOLOGY

IMaCS has carried out this study through a mix of primary survey and secondary (desk) research.

#### 1.4.1. Primary survey

IMaCS team had approached all major industry stakeholders and held interactions with industry stakeholders via different modes such as face-to-face interview, structured questionnaires on telephone/ email based on discussion guide<sup>1</sup>. In addition to that IMaCS also created a web based questionnaire survey for inputs regarding the benefits being availed and perceived from different current trade agreements as well as potential trade agreements and circulated it with all the members of ACMA. In addition to that for in depth understanding, IMaCS interacted with select few leading auto component manufacturers through individual face to face discussions that have been listed in annexure A to the report.

#### 1.4.2. Secondary/ Desk research

IMaCS reviewed and analysed information available in the public domain which was considered reliable. They include government websites, UN Comtrade, WTO and related websites, industry association websites, export councils' website, research reports of reliable agencies/ individuals/ experts, DGCI&S/DGFT, UN-Comtrade or such other reports, databases among other sources. Relevant information from Government websites of various countries has also been considered.

## 2. INDIA'S AUTO COMPONENT TRADE PERFORMANCE

### 2.1. GLOBAL TRADE OVERVIEW

Global merchandise trade is estimated to be worth USD 16 thousand billion for the year 2015. It has remained stagnant during the last decade growing at a mere 3.2% from USD 12 thousand billion in 2006. The poor trade performance can be attributed to the recessionary economic situation in the US and European markets in 2009, which led to stark decline in global trade from USD 16 thousand billion in 2008 to USD 12 thousand billion in 2009. The trade recovered in 2010 and 2011 and has remained stagnant since then till 2014, when due to the Chinese economic crisis the global trade declined to US 16 thousand billion in 2015.

While global trade has had a dismal performance in the last decade (2006 to 2015), India's share in global exports has been consistently growing from 1% in 2006 to 1.7% in 2015 growing at CAGR of 6% reaching USD 264 billion. While exports have increased, due to the growing domestic market driven by the increasing purchasing power, the imports have also witnessed a significant growth at 9% CAGR during the same period with imports reaching USD 391 billion (2.5% of global trade) in 2015, widening the trade deficit to USD 126 billion in 2015 from USD 57 billion in 2006.

### 2.2. GLOBAL AUTO COMPONENT TRADE OVERVIEW

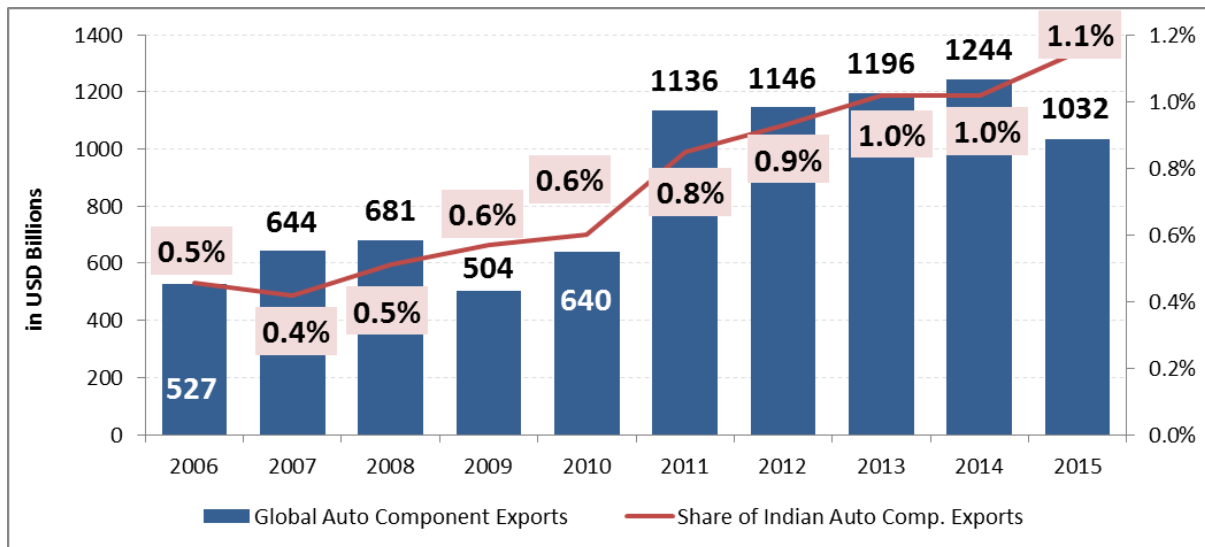
Global auto component exports are estimated to be worth USD 1,035 billion<sup>2</sup> for the year 2015. It has witnessed a growth of 7.8% CAGR in the last decade from USD 527 billion in 2006. Both exports and imports have witnessed similar growth rates of 7.8% CAGR in last decade despite witnessing a decline in 2008-09. Exports stood at USD 1.03 trillion in 2015 while Imports were estimated to be worth USD 1.05 trillion in 2015.

Germany led auto component exports in 2015 accounting for 14.6% of total exports, while USA was the largest importer of auto components in 2015 accounting for 17.3% of total imports. India's share in global auto component exports grew from 0.5% in 2006 to 1.1% in 2015 and stood at USD 11.8 billion. The trade trends are indicated in the following exhibit.

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<sup>2</sup>As per UN comtrade data for 125 select HS codes for a calendar year

Exhibit 1: Global auto component exports

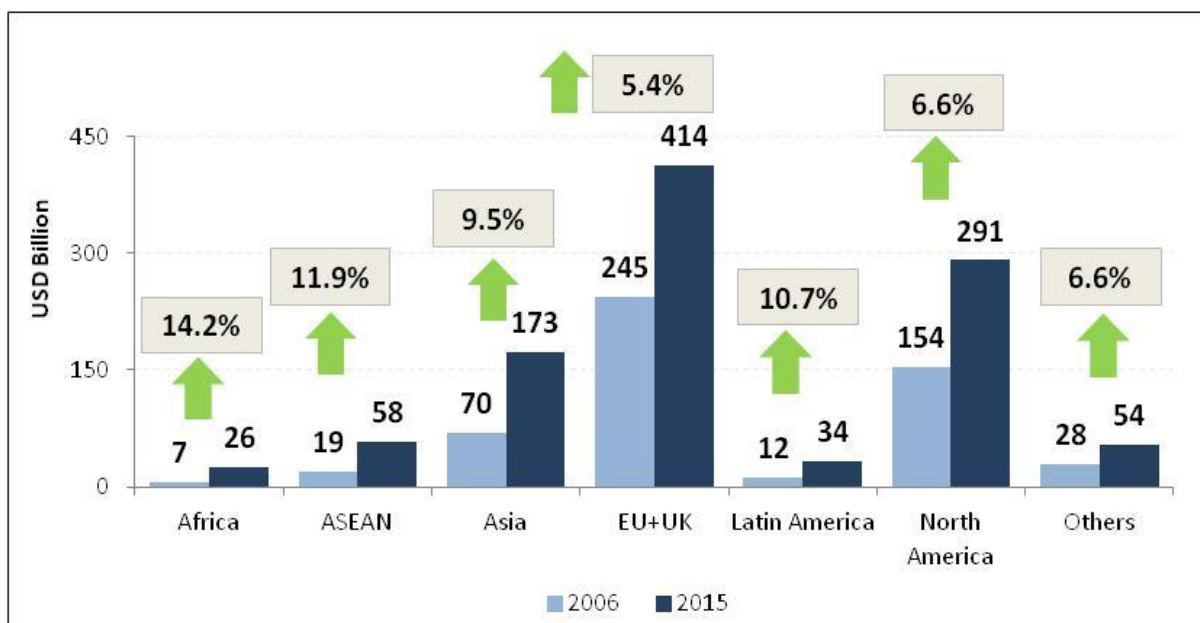


Source: DGFT, UN ComTrade, IMAcS analysis

\*The analysis is limited to coverage of 125 HS codes identified in discussion with ACMA

Global imports of auto components grew at 7% CAGR from USD 534 billion in 2006 to USD 1049 billion in 2015. The European Union along with UK and the United States of America remained the top importers of auto components contributing 39% and 28% of total imports respectively. Africa, ASEAN and Latin America are emerging new destinations for auto components as they registered high growth in imports in the last decade. Africa grew the fastest at a CAGR of 14.2% followed by ASEAN with 11.9% CAGR and Latin America with 10.7% CAGR.

Exhibit 2: Top destinations for Global Auto Component Imports

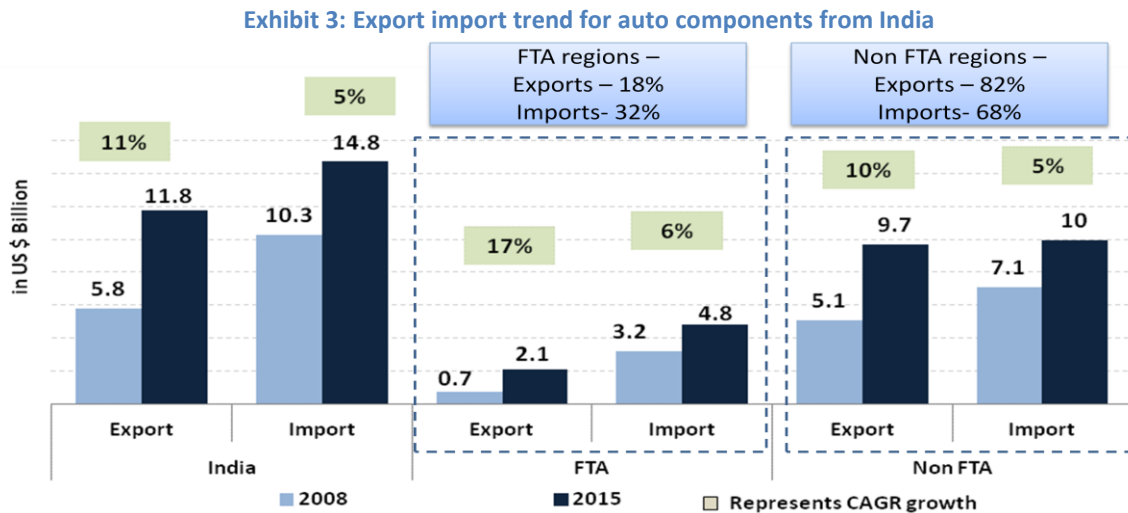


Source: DGFT, UN ComTrade, IMAcS analysis



### 2.3. INDIA'S AUTO COMPONENT TRADE OVERVIEW

India's auto component exports are estimated at Rs. 11.8 billion<sup>3</sup> for 2015. It has witnessed a growth of 11% CAGR from 2008 to 2015 growing from Rs. 5.8 billion in 2008. A bulk of the exports currently go to the European countries and North America which account for 39% and 23% of the total auto component exports from India. On the other hand, imports have witnessed a growth of 6% CAGR during the same period. Overall India still has trade deficit of USD 2.8 billion in auto components. The trade trend from 2008 to 2015 is indicated in the following exhibit.

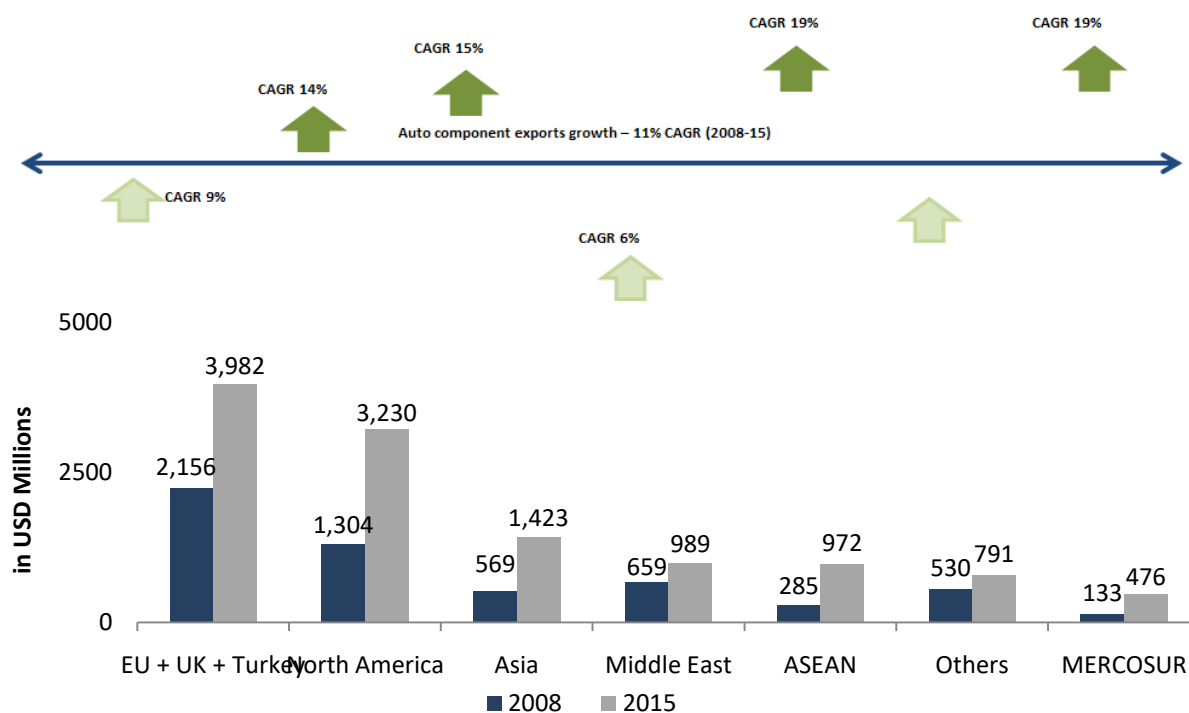


Source: DGFT, UN ComTrade, IMaCS analysis

From the exhibit, it can be observed that a majority of India's exports in auto components is to the countries and regions where there is no trade agreement is present (82%) while only 18% of the exports is with regions having trade agreements. However, the regions having trade agreements have witnessed a significantly higher growth of 17% CAGR as compared to the other region (11% CAGR). A region wise growth of auto component exports from India as shown in the following exhibit indicates that the exports have witnessed a higher growth rate in the emerging regions of Asia, ASEAN and Latin America and normal growth in regions of Europe and North America.

<sup>3</sup>Based on assessment of data of UN Comtrade for the calendar year for 125 HS codes identified in discussion with ACMA

Exhibit 4: Region wise export of auto components from India (2015)



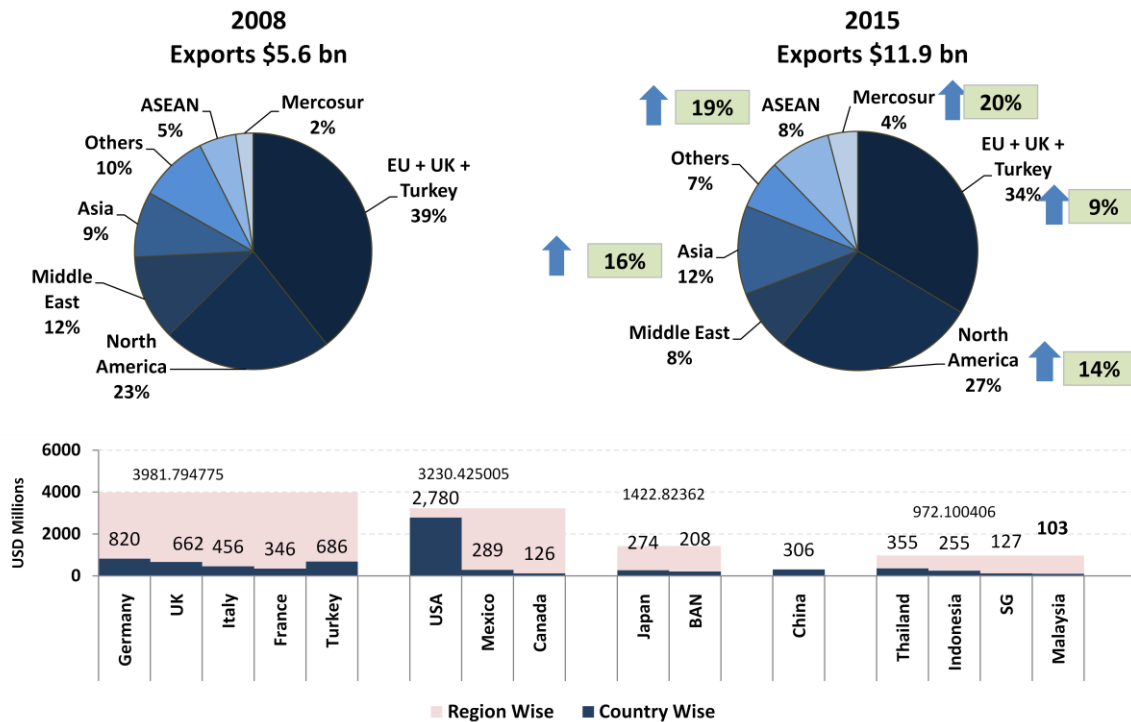
A detailed region and country wise assessment of exports is indicated in following sections.

## 2.4. REGION WISE ASSESSMENT OF TRADE

### 2.4.1. Auto component exports

The European Union (34%) and USA and Canada (27%) are the largest export destinations for Indian auto component manufacturers accounting for 61% of the total market followed by Asia (12%), ASEAN region (8%), Middle East (8%) and the MERCOSUR region (4%). The overall market has witnessed growth across all locations, with higher growths across the ASEAN region, Asia and MERCOSUR, with Asia and ASEAN regions steadily commanding a higher focus from Indian exporters. Country wise assessment indicates that USA is the largest market accounting for 23% of total market followed by Germany (7%), U.K (6%) and Turkey (6%). In Asia and ASEAN region Thailand is the largest destination at 3% followed by China (3%), Japan (2%) and Indonesia (2%). The overall trend is indicated as follows:

Exhibit 5: Exports of auto component across regions - 2008 to 2015

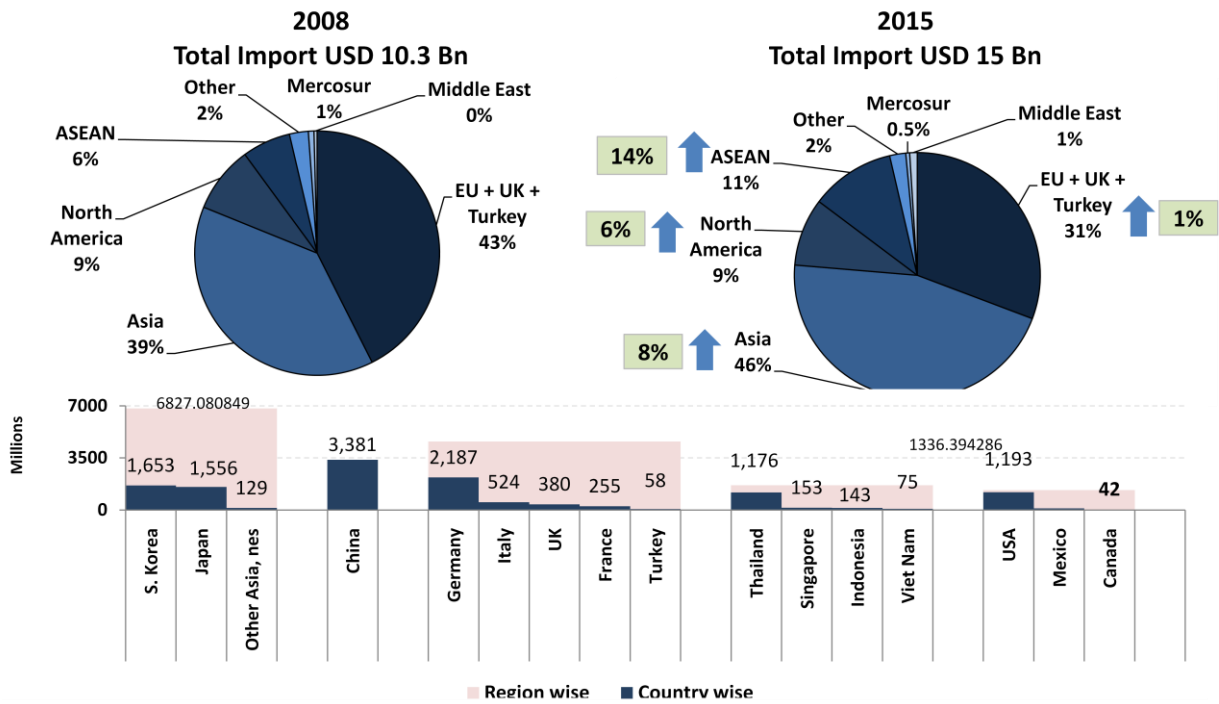


Source: UN Comtrade, \*Data reported for 2015 & IMaCS analysis

## 2.4.2. Auto component imports

The imports of auto component have increased from USD 10.8 billion in 2008 to USD 15 billion in 2015, witnessing a 4.8% CAGR growth. Over the years, Asia with 46% share in 2015 growing from 39% in 2008 has replaced E.U which currently accounts for 31% of imports compared to 43% in 2008 to become the largest auto component supplier to Indian market. The growth of imports from Asia is driven by China which accounts for 49.5% of total imports coming from Asia. During the same period the imports from ASEAN have also witnessed a 14% CAGR growth and currently accounts for 11% of total Indian imports. Country wise China (23%) and Germany (15%) are the largest exporters of auto components to India, followed by S. Korea (11%), Japan (10%), Thailand (8%) and USA (8%). Together these countries account for 74% of the auto component imports coming into the country. The region wise imports for 2008 and 2015 are indicated in the following exhibit.

**Exhibit 6: Auto components region wise imports to India – 2008 to 2015**



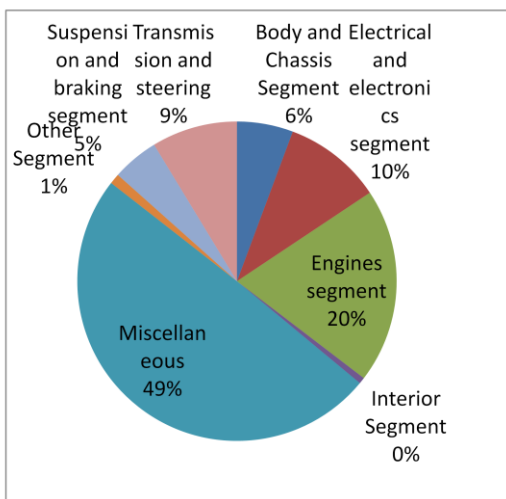
Source: UN Comtrade, \*Data reported for 2015 & iMaCS analysis

## 2.5. SEGMENT WISE ASSESSMENT OF EXPORTS

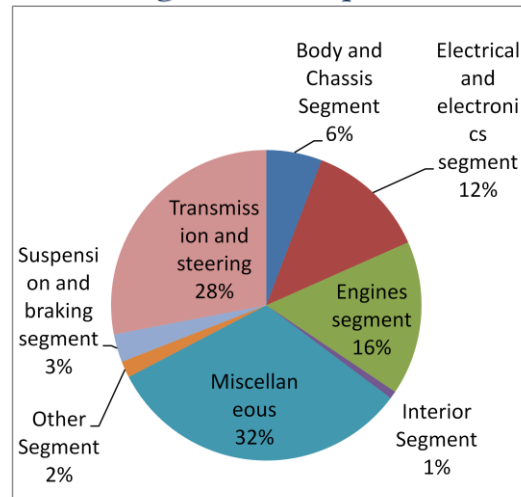
The following graphs indicate the segment wise exports for 2009-10 and 2015-16 respectively.

**Exhibit 7: Segment wise exports of auto components**

*Share of segments to export 2009-2010*



*Share of segments to exports 2015-16*



\* Others include fan belts, die castings, sheet metal parts

Source: MoC, iMaCS' Analysis

Disclaimer – Due to high misc. classification, it cannot be derived as to how different segments have performed

Transmission and Steering as well as the engine segment constitute the largest exports segments for India accounting for 28% and 16% of auto component exports in 2015-16 respectively. Over the years from 2009 the share of transmission and suspension exports has witnessed a significant jump from 9% to 28% while the exports of engine parts has lost share currently accounting for 16% of exports as compared to 20% in 2009. However in absolute terms both these segments have witnessed growth with overall auto component exports growing from USD 5.6 billion 2008 to USD 11.8 billion in 2015. The segment wise assessment highlighted that a majority of exports going out from India are classified in the segment miscellaneous. The share of miscellaneous products was as high as 32% in 2015-16 and 49% of in 2009-10. This significantly hinders the analysis as it cannot be ascertained as to which segment these products belong to and hence the actual share of different segments cannot be truly represented in the analysis. In addition to that by classifying a product in miscellaneous segment, the exporter also loses on to the product HS code specific preferential tariff benefit.

### 3. ASSESSMENT OF IMPACT OF TRADE AGREEMENTS

Trade Agreements are arrangements between two or more countries or trading blocs that primarily agree to reduce or eliminate customs tariff and non-tariff barriers on substantial trade between them. These agreements normally cover trade in goods (such as agricultural or industrial products) or trade in services (such as banking, construction, trading etc.). It can also cover other areas such as intellectual property rights (IPRs), investment, government procurement and competition policy, etc. The brief note on different types of global economic and trade agreements is provided as Annexure B to the report.

#### 3.1. TRADE AGREEMENTS SIGNED BY INDIA

With objective of boosting international trade, India has signed ten FTAs and five PTAs in the last two decades which are enumerated and indicated as follows

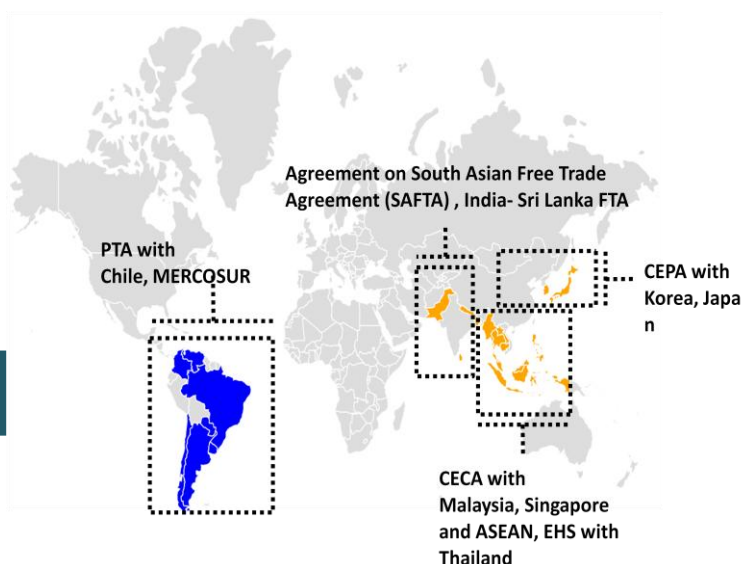
**Exhibit 8: An illustrative list of FTAs and PTAs signed by India**

##### FTAs signed by India are

- India - Sri Lanka FTA - 2001
- South Asian Free Trade Agreement (SAFTA) –2006
- Revised Agreement of Co-operation with Nepal –2002
- India - Bhutan Agreement –2006
- India - Thailand FTA (EHS) –2004
- India - Singapore CECA –2005
- India – ASEAN CECA –2011
- India - South Korea CEPA – 2010
- India - Japan CEPA – 2011
- India - Malaysia CECA –2011

##### PTAs signed by India are

- Asia Pacific Trade Agreement – 1976
- India - Afghanistan PTA - 2003
- India - MERCOSUR PTA - 2009
- India - Chile PTA - 2007
- SAARC Preferential Trading Arrangement (SAPTA) – 1995



Source: Ministry of Commerce (MoC)

The free trade agreements, preferential trade agreements and the different economic partnerships have been initiated and signed with different strategic and economic objectives of boosting trade

and exports as well as securing resources and technologies. With respect to the auto component industry, the trade agreements with ASEAN, Republic of Korea (Here after referred as South Korea), Japan, Thailand, MERCOSUR, and Chile are of utmost importance as these have a thriving auto component market and manufacturing base.

A preliminary assessment of trade across these select regions indicates that the exports to these regions have witnessed a growth of 8% to 20% post signing of trade agreement. However, while the FTAs have given a boost to exports they have also helped in opening of Indian markets to foreign imports with imports from most of these locations having witnessed a growth from 2% to 8% during the period from 2007 to 2015. In absolute terms the imports coming into India are much higher than exports from India to these regions and countries leading to a trade deficit which is growing at a declining rate. Region and country wise assessment of trade agreement and its impact on auto component exports and imports is detailed in the forthcoming section.

### 3.2. TRADE AGREEMENT WISE ASSESSMENT

The trade agreements analysed as part of this report have been classified as full-fledged free trade agreements as part A comprising of trade agreements with ASEAN, South Korea and Japan in a chronological order and part B –other trade agreements including preferential trade agreements and Early harvest Schemes in a chronological order. The part B includes the trade agreements of EHS with Thailand, PTA with MERCOSUR and PTA with Chile

#### Part A - Free trade agreement signed by India

The Free trade agreements signed by India that have been analysed as part of this study have been listed as follows. A detailed assessment of these FTAs has been provided in following sub-sections.

Sl. No.	Description	Year of enforcement
1	ASEAN India CECA	January 2010
2	Rep. of Korea – India CEPA	January 2010
3	Japan – India CEPA	April 2011

The following free trade agreements which command high vehemence have been assessed as follows:

### 3.2.1. ASEAN

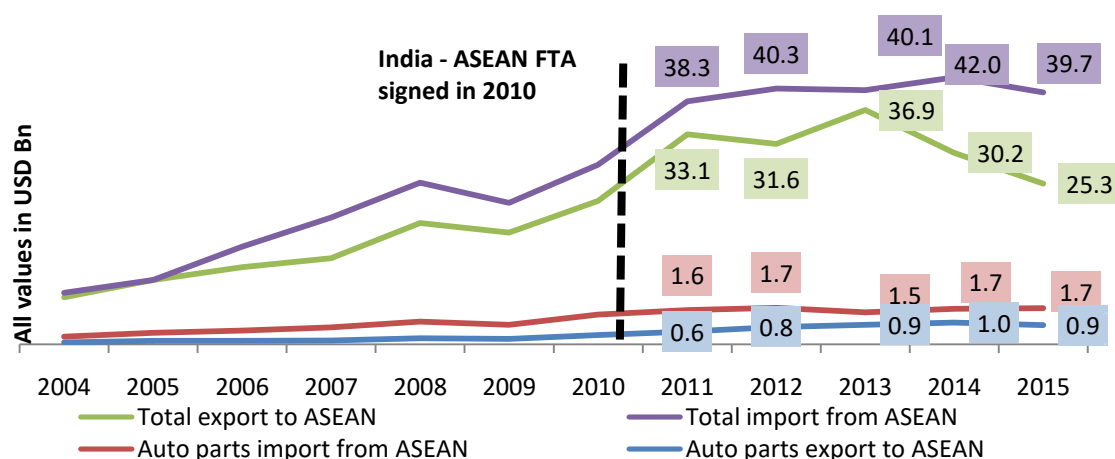
The South East Asian countries of Thailand, Malaysia, Indonesia, Vietnam, Philippines, Laos, Cambodia, Brunei, Singapore and Myanmar together form the Association of South East Asian Nations (ASEAN) commonly known as the ASEAN countries. Formed in 1967 with Indonesia, Malaysia, Philippines, Singapore and Thailand as the first members, ASEAN has expanded over the period to include 10 members with an objective of accelerating economic and social growth and providing social-economic and political stability to the region.

Formed by one of the leading developing markets of Asia, the ASEAN market has witnessed a significant rise in its prominence to world trade in the past decade. It has become one of the largest trade blocs in terms of trade value comparable to other leading trade blocs such as EU and NAFTA. ASEAN has signed strategic trade agreements with the major nations and is also an important player in major global trade negotiations currently undergoing such as Trans-Pacific Partnership (TPP) and Regional Comprehensive Economic Partnership (RCEP).

#### *Analysis of EXIM trade trends*

India’s total exports to ASEAN region was worth USD 25 billion in 2015 having witnessed a growth of 2% CAGR during the period 2010 to 2015. Total imports from ASEAN was USD 40 billion in 2015 posting a 7% CAGR growth during the same period, leading to a trade deficit for India of USD 15 bn. India exported auto components worth USD 0.9 billion to ASEAN in 2015 recording a growth of 15% on a CAGR basis during the period 2010 to 2015 and imported auto components worth USD 1.7 billion, growing at 4% CAGR from ASEAN during the same period. While exports have witnessed a significantly higher growth in percentage, the higher base of imports have led to similar growth in absolute terms and as a result, the trade deficit has marginally reduced from USD 1 billion to USD 0.8 bn. A trend of overall and auto component trade between India and ASEAN is indicated in Exhibit 9.

**Exhibit 9: Analysing India’s trade with ASEAN Post signing of FTA**

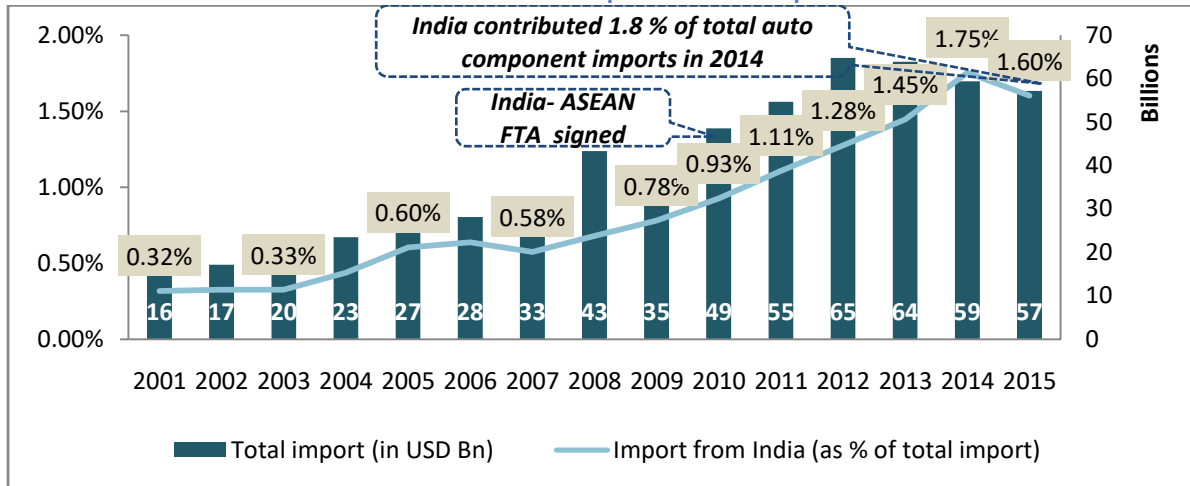




Source: DGFT, UN ComTrade, IMaCS analysis

Share of India’s exports to ASEAN in comparison to the total imports of auto components in ASEAN has improved to 1.6% in 2015 from 0.9% in 2010, post signing of the trade agreement. During the same period of 2010 to 2015, the total import market for auto components to ASEAN has grown at 3% during the same period. Auto component exports to ASEAN market is indicated in Exhibit 10.

Exhibit 10: India’s share in total import of auto components to ASEAN

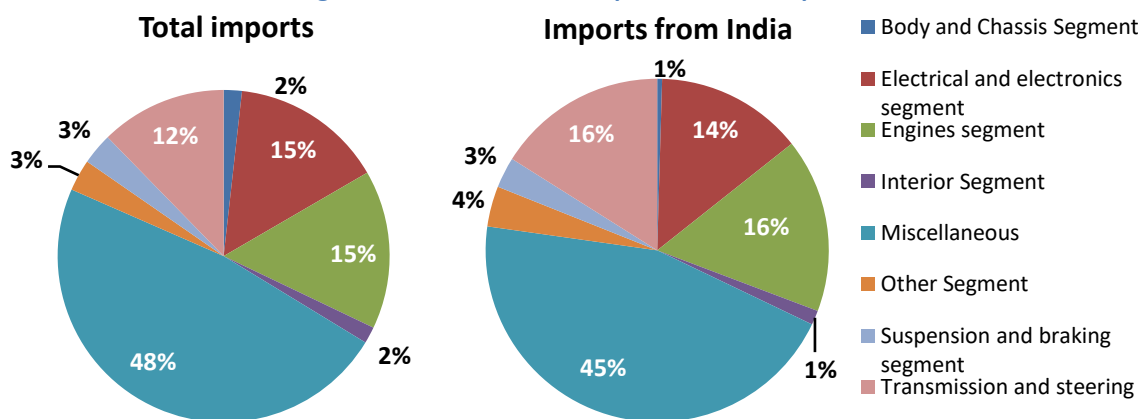


Source: DGFT, UN ComTrade, IMaCS analysis

Segment Analysis

A segment wise analysis indicate transmission and steering (16%), Engine parts (16%) and Electrical and electronics segment (14%) are the most exported from India with a major chunk of exports also going as miscellaneous items which account for 45% of total exports going from India. An analysis of total global imports of auto components coming into ASEAN region, indicate a very similar trend as that with India, with Miscellaneous accounting for 48% followed by Engine parts (15%), electrical and electronics (15%) and transmission and steering (12%). The following Exhibit 11, indicate the segmental pie chart for global auto component imports and imports from India coming into ASEAN.

Exhibit 11: Segmental share of India’s export of auto components to ASEAN



Source: DGFT, UN ComTrade, IMaCS analysis

### Leading exporters of auto component to ASEAN

A country wise assessment of auto component imports coming into ASEAN show that Japan (26%) is the leading exporter of auto components to ASEAN region mainly due to the strategic alignment of supply chain of Japanese OEMs that ensures strong trade between the Japan and ASEAN. It is closely followed by China (18%), Thailand (10%), USA (7%), Germany (6%) and South Korea (4.5%). Other leading exporters include Indonesia, Malaysia and Singapore. India's exports to ASEAN constitute about 1.7% of total auto component imports amounting to USD 0.9 billion in 2015, growing at a CAGR of 15% during the period 2010 to 2015. A review of the top auto component exporting Countries as indicated in exhibit 45 show that ASEAN has a Trade agreement with all leading suppliers except USA and Germany, where the trade agreements are under negotiation. Exports from China and India are growing at the fastest pace of 15.3% CAGR during 2010 to 2015 followed by South Korea which is growing at 10.9% CAGR. The exports from Japan is declining whereas that from USA is growing at only 0.2% CAGR, indicating a futuristic shift, where China, South Korea and India are expected to gain pivotal positions along with Japan in the auto component import market of ASEAN. The ASEAN Free Trade Agreement (AFTA) allows duty free trade between all ASEAN member states facilitating sourcing and assembly options anywhere in ASEAN and has been very supportive to the supply chain strategy for global OEMs. The intra- ASEAN trade was more USD 30 billion in 2015 with Thailand, Indonesia, Malaysia and Singapore being the exporters within ASEAN.

**Exhibit 12: Major countries importing auto components to ASEAN**

Country	Rank(in total imports to ASEAN)	% of imports (in 2015)	Imports in 2015 (USD Billion)	CAGR (2010-2015)	FTA signed
Japan	1	26.1%	14.9	-2.6%	2008
China	2	18.5%	10.5	15.3%	2005
Thailand	3	9.7%	5.5	3.7%	AFTA
USA	4	7.2%	4.1	0.2%	Under negotiation
Germany	5	6.2%	3.5	3.2%	Under negotiation
S. Korea	7	4.5%	2.6	10.9%	2007
Indonesia	8	4.0%	2.3	4.1%	AFTA
Malaysia	9	3.8%	2.2	3.5%	AFTA
Singapore	10	2.9%	1.6	-0.1%	AFTA
India	11	1.6%	0.9	15.3%	2010

Source: UN ComTrade, iMaCS analysis

### Brief of Trade agreement between India and ASEAN

ASEAN India Comprehensive Economic Cooperation Agreement (CECA) was signed in 2010 as part of India's "Look East policy". The parties agreed to exchange tariff concessions on a total of 105 tariff lines through this agreement. In addition, India granted concessions on additional 111 tariff lines to the new ASEAN member states, countries comprising of Cambodia, Laos, Myanmar and Vietnam. A snapshot of the India – ASEAN FTA is shown in Exhibit 13.

**Exhibit 13: A snapshot of India – ASEAN FTA**

Description	India ASEANFTA																																	
Date of enforcement	January 2010 : Malaysia, Singapore, Thailand June 2010 : Vietnam September 2010 : Myanmar October 2010 : Indonesia November 2010 : Brunei January 2011 : Laos June 2011 : Philippines August 2011 : Cambodia																																	
Tariff lines	Annex A: Common products parties agreed to exchange tariff concession - 105 Annex B: Products on which India accords to the New ASEAN Member – 111																																	
Number of tariff lines pertaining to auto component industry	Annex A: 4 Annex B: 4																																	
Number of tariff lines pertaining to auto component industry as per individual member schedules	<table border="1"> <thead> <tr> <th></th> <th># at 6 digit</th> <th># at 8 digit</th> </tr> </thead> <tbody> <tr> <td>Thailand:</td> <td>48</td> <td>65</td> </tr> <tr> <td>Indonesia:</td> <td>48</td> <td>68</td> </tr> <tr> <td>Malaysia:</td> <td>53</td> <td>63</td> </tr> <tr> <td>Philippines:</td> <td>47</td> <td>56</td> </tr> <tr> <td>Singapore:</td> <td>125</td> <td>213</td> </tr> <tr> <td>Cambodia:</td> <td>48</td> <td>65</td> </tr> <tr> <td>Laos:</td> <td>101</td> <td>125</td> </tr> <tr> <td>Myanmar:</td> <td>29</td> <td>57</td> </tr> <tr> <td>Viet Nam:</td> <td>41</td> <td>64</td> </tr> <tr> <td>India:</td> <td>122</td> <td>202</td> </tr> </tbody> </table>		# at 6 digit	# at 8 digit	Thailand:	48	65	Indonesia:	48	68	Malaysia:	53	63	Philippines:	47	56	Singapore:	125	213	Cambodia:	48	65	Laos:	101	125	Myanmar:	29	57	Viet Nam:	41	64	India:	122	202
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Laos:	101	125																																
Myanmar:	29	57																																
Viet Nam:	41	64																																
India:	122	202																																

Source: Indian trade portal, website of MoC

The following exhibits list the details of the common tariff lines as well as the individual country wise schedules offered under ASEAN – India FTA.

**Exhibit 14: Common Auto component items included in the agreement on which the parties agreed to exchange tariff concession**

HS Code	Code description	Rate on the date of signing	Rate as on 1 <sup>st</sup> January 2016
848220	Tapered roller Bearings, Including Cone And Tapered Roller Assemblies	0%	0%
848299	Other: Part Of Balls And Roller Bearings	0%	0%

HS Code	Code description	Rate on the date of signing	Rate as on 1 <sup>st</sup> January 2016
848360	Clutches And Shaft Couplings (Including Universal Joints)	18%	6%
848410	Gaskets Of Metal Sheetting Combined With Other Material	0%	0%

Source: Indian trade portal, website of MoC

These four items contribute less than 2% of total auto component imports to ASEAN.

**Exhibit 15: HS Codes relating to auto component industry in which India accords concession to NEW ASEAN Member States\***

HS Code	Code description	Rate on the date of signing	Rate as on 1 <sup>st</sup> January 2016
870899	Other: Motor Vehicle Parts (Reservoir for Hydraulic Power Steering Systems and Steering Gear Systems and Parts)	15%	0%
841480	Other Pumps, Compressors Etc.	5%	5%
843149	Parts Of Cranes,Work-Trucks,Shovels and Other Construction Machinery, Wheels	0%	0%
851180	Other Equipment	20%	20%

Source: Indian trade portal, website of MoC

\*NEW ASEAN Member States: Cambodia, Laos, Myanmar, and Vietnam

**Exhibit 16: Auto component HS codes included in the schedule of Thailand under ASEAN India FTA**

Classification	Classification description	Number of Auto component tariff lines included in FTA (at 6 digit level)	Number of Auto component tariff lines included in FTA (at 8 digit level)	Base rate (MFN 2007 at 8 digit level)
EL	Excluded list	7	17	12 items: 10% 4 items: 30% 1 item: 80%
NT1	Normal Track 1/ Reduction of tariff rate to zero in 3 years for Thailand	28	34	1 items: 0% 5 items: 1% 3 item: 5% 22 items: 10% 1 items: 20% 2 items: 30%
NT2	Normal Track 2/ Reduction of tariff rate to zero in 6 years for Thailand	6	6	6 item: 10%
ST	Sensitive Track/ Reduction of tariff rate to 4% or 5% in the pre-decided time frame	7	8	1 item : 5% 6 items: 10% 1 item: 30%

Source: Indian trade portal, website of MoC

**Exhibit 17: Auto component HS codes included in the schedule of Indonesia under ASEAN India FTA**

Classification	Classification description	Number of Auto component tariff lines included in FTA (on an 6 digit level)	Number of Auto component tariff lines included in FTA (on an 10 digit level)	Base rate (MFN 2007 at 10 digit level)
HSLC	Highly Sensitive list/ Reduction of tariff rate to 50%, by 50% or 25% in 9 years depending up on the respective category for Indonesia	1	1	12.5%
NT1	Normal Track 1/ Reduction of tariff rate to zero in 3 years for Indonesia	13	21	18 items : 0% 3 items :5%
NT2	Normal Track 2/ Reduction of tariff rate to zero in 6 years for Indonesia	3	7	5%
ST	Sensitive Track/ Reduction of tariff rate to 4% or 5% in the pre-decided time frame	31	39	19 items : 5% 9 items :10% 2 items: 12.5% 5 items : 15% 4 items: NA

Source: Indian trade portal, website of MoC

**Exhibit 18: Auto component HS codes included in the schedule of Malaysia under ASEAN India FTA**

Classification	Classification description	Number of Auto component tariff lines included in FTA (on an 6 digit level)	Number of Auto component tariff lines included in FTA (on an 9 digit level)	Base rate (MFN 2007 at 9 digit level )
HSL C	Highly Sensitive list/ Reduction of tariff rate to 50%, by 50% or 25% in 9 years depending up on the respective category for Malaysia	3	3	30%
EL	Excluded list	4	4	30%
NT1	Normal Track 1/ Reduction of tariff rate to zero in 3 years for Malaysia	21	21	9 items : 0% 10 items :5% 1 item :10% 1 item :30%
NT2	Normal Track 2/ Reduction of tariff rate to zero in 6 years for Malaysia	12	22	7 items : 0% 5 items :5% 1 item :10% 2 item :20% 3 item :25% 4 items :30%
ST	Sensitive Track/ Reduction of tariff rate to 4% or 5% in the pre-decided time frame	13	13	5 items : 5% 8 items :30%

Source: Indian trade portal, website of MoC

**Exhibit 19: Auto component HS codes included in the schedule of Philippines under ASEAN India FTA**

Classification	Classification description	Number of Auto component tariff lines included in FTA (on a 6 digit level)	Number of Auto component tariff lines included in FTA (on an 8 digit level)	Base rate (MFN 2007 at 8 digit level)
EL	Excluded list	8	13	7 items : 1% 1 items :3% 5 items : 10%
HSL C	Highly Sensitive list/ Reduction of tariff rate to 50%, by 50% or 25% in 12 years depending up on the respective category for Indonesia	2	2	1 items : 3% 1 item: 15%
NT1	Normal Track 1/ Reduction of tariff rate to zero in 8 years for Philippines	28	31	19 items : 1% 7 items :3% 1 item: 5% 3 items : 10% 1 items : 15%
NT2	Normal Track 1/ Reduction of tariff rate to zero in 9 years for Philippines	5	5	2 items : 7% 3 items :10%
ST	Sensitive Track/ Reduction of tariff rate to 4% or 5% in the pre-decided time frame	4	5	5 item: 10%

Source: Indian trade portal, website of MoC

**Exhibit 20: Auto component HS codes included in the schedule of Brunei Darussalam under ASEAN India FTA**

Classification	Classification description	Number of Auto component tariff lines included in FTA (on an 6 digit level)	Number of Auto component tariff lines included in FTA (on an 8 digit level)	Base rate (MFN rate at 8 digit level)
EL	Excluded list	13	26	3 items: 0% 3 items: 5% 4 items: 15% 16 items: 20%
NT1	Normal Track 1/ Reduction of tariff rate to zero in 3 years for Brunei Darussalam	17	25	13 items: 0% 12 items: 20%
NT2	Normal Track 2/ Reduction of tariff rate to zero in 6 years for Brunei Darussalam	6	9	4 items: 0% 1 item: 15% 3 items: 20%
SL	Sensitive Track/ Reduction of tariff rate to 4%/5% in the pre-decided time frame	3	6	1 item: 5% 4 items: 15% 1 item: 20%

Source: Indian trade portal, website of MoC

**Exhibit 21: Auto component HS codes included in the schedule of Cambodia under ASEAN India FTA**

Classification	Classification description	Number of Auto component tariff lines included in FTA (at 6 digit level)	Number of Auto component tariff lines included in FTA (at 8 digit level)	Base rate (MFN 2007 at 8 digit level)
EL	Excluded list	2	2	15%
NT1	Normal Track 1/ Reduction of tariff rate to zero in 8 years for Cambodia	29	34	2 items : 0% 5 items :7% 14 items: 15% 13 items: 35%
NT2	Normal Track 2/ Reduction of tariff rate to zero in 11 years for Cambodia	2	2	1 item : 7% 1 item : 35%
SL	Sensitive Track/ Reduction of tariff rate to 4% or 5% in the pre-decided time frame	15	27	12 items: 7% 9 items :15% 6 items: 35%

Source: Indian trade portal, website of MoC

**Exhibit 22: Auto component HS codes included in the schedule of Laos under ASEAN India FTA**

Classification	Classification description	Number of Auto components items included in FTA (at 6 digit level)	Number of Auto components items included in FTA (at 8 digit level)	Base rate (MFN 2007 at 8 digit level)
EL	Excluded list	4	4	3 items : 30% 1 item :40%
NT1	Normal Track 1/ Reduction of tariff rate to zero in 8 years for Laos	75	86	60 items : 5% 26 items :10%
NT2	Normal Track 2/ Reduction of tariff rate to zero in 11 years for Laos	5	13	13 item : 10%
SL	Sensitive Track/ Reduction of tariff rate to 4% or 5% in the pre-decided time frame	17	22	2 items : 5% 6 items :10% 3 items :20% 6 items: 30% 5 items :40%

Source: Indian trade portal, website of MoC

**Exhibit 23: Auto component HS codes included in the schedule of Myanmar under ASEAN India FTA**

Classification	Classification description	Number of Auto component tariff lines included in FTA (at 6 digit level)	Number of Auto component tariff lines included in FTA (at 10 digit level)	Base rate (MFN 2007 at 10 digit level)
EL	Excluded list	5	12	4 items : 1% 5 items :3% 1 item: 5% 2 items : 30%

Classification	Classification description	Number of Auto component tariff lines included in FTA (at 6 digit level)	Number of Auto component tariff lines included in FTA (at 10 digit level)	Base rate (MFN 2007 at 10 digit level)
NT1	Normal Track 1/ Reduction of tariff rate to zero in 3 years for Myanmar	15	27	4 items : 1% 5 items :1.5% 13 items: 5% 5 items : 7.5%
ST	Sensitive Track/ Reduction of tariff rate to 4% or 5% in the pre-decided time frame	9	18	13 items : 1% 5 items: 5%

**Exhibit 24: Auto component HS codes included in the schedule of Viet Nam under ASEAN India FTA**

Classification	Classification description	Number of Auto component tariff lines included in FTA (at 6 digit level)	Number of Auto component tariff lines included in FTA (at 10 digit level)	Base rate (MFN 2007 at 10 digit level)
EL	Excluded list	17	36	NA
HSL C	Highly Sensitive list/ Reduction of tariff rate to 50%, by 50% or 25% in 14 years depending up on the respective category for Viet Nam	4	5	1 item : 0% 2 items: 5% 2 items: 10%
NT1	Normal Track 1/ Reduction of tariff rate to zero in 8 years for Viet Nam	14	17	3 items : 0% 2 items :3% 4 items: 5% 4 items : 10% 1 item : 20% 3 items : 35%
NT2	Normal Track 2/ Reduction of tariff rate to zero in 11 years for Viet Nam	5	5	3 items : 0% 2 items :5%
ST	Sensitive Track/ Reduction of tariff rate to 4% or 5% in the pre-decided time frame	1	1	1 item: 3%

Source: Indian trade portal, website of MoC

**Exhibit 25: Auto component HS codes included in the schedule of India under ASEAN India FTA**

Classification	Classification description	Number of Auto components items included in FTA (at 6 digit level)	Number of Auto components items included in FTA (at 8 digit level)	Base rate (MFN 2007 at 8 digit level)
EL	Excluded list	37	75	1 item : 0% 46 items:7.5% 28 items: 10%
NT1	Normal Track 1/ Reduction of tariff rate to zero in 3 years for India	41	67	36 items:7.5% 31 items: 10%

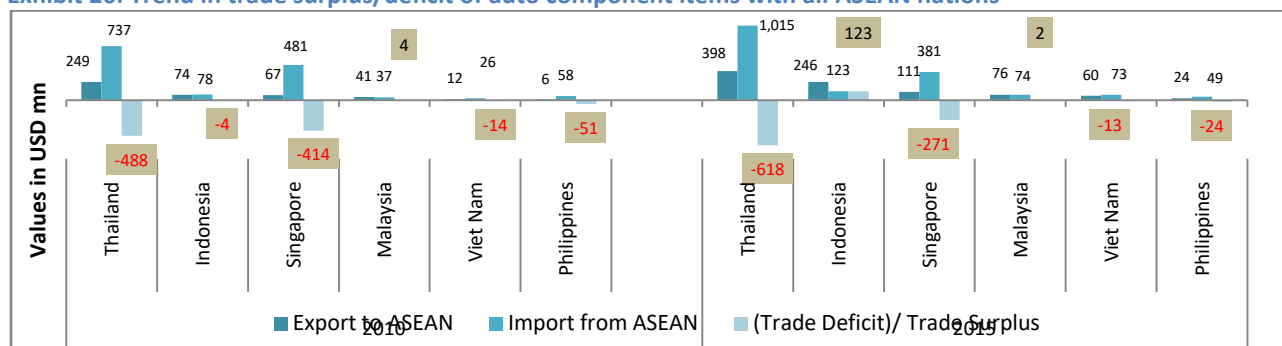


Classification	Classification description	Number of Auto components items included in FTA (at 6 digit level)	Number of Auto components items included in FTA (at 8 digit level)	Base rate (MFN 2007 at 8 digit level)
NT2	Normal Track 2/ Reduction of tariff rate to zero in 6 years for India	9	10	3 items:7.5% 7 items: 10%
ST	Sensitive Track/ Reduction of tariff rate to 4% or 5% in the pre-decided time frame	35	50	16 items:7.5% 34 items: 10%

Source: Indian trade portal, website of MoC

Post signing of the trade agreement, India’s trade scenario with all individual member countries except Thailand has improved from 2010 to 2015, with either reduction in trade deficit or increase in trade surplus for the auto component sector. Indonesia is the only member nation where India enjoys a measurable trade surplus of USD 123 million, with a small surplus of USD 2 million for Malaysia. Thailand is the leading export as well as import destination for India amongst all the ASEAN countries, accounting for 43% of total auto component exports from India to the region. It has a trade deficit with India which is growing at 5% CAGR during 2010 to 2015.

**Exhibit 26: Trend in trade surplus/deficit of auto component items with all ASEAN nations**



Source: DGFT, UN ComTrade, iMaCS analysis

India’s exports to all the major ASEAN nations have grown in double digits and have outgrown the imports, albeit a low base. The share of different ASEAN countries in total auto component exports going out from India to ASEAN is indicated in Exhibit 27.

**Exhibit 27: Leading auto component trade partners for India within ASEAN**

Country	% share of Indian export to trade bloc	Value of Indian export to trade bloc ( USD Million)	Exports CAGR (2010-2015)	Imports CAGR (2010-2015)
Thailand	43%	392	9.8%	6.6%
Indonesia	27%	246	27.1%	9.4%
Singapore	12%	109	10.6%	-4.5%
Malaysia	8%	73	13.0%	14.9%
Viet Nam	7%	64	37.4%	22.9%

Country	% share of Indian export to trade bloc	Value of Indian export to trade bloc ( USD Million)	Exports CAGR (2010-2015)	Imports CAGR (2010-2015)
Philippines	3%	27	31.4%	-3.3%

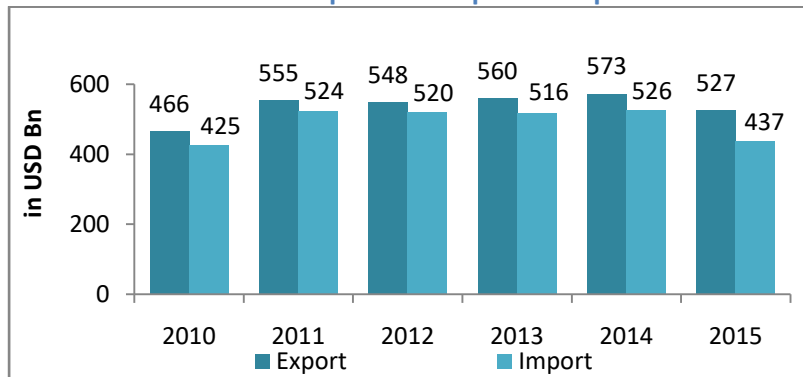
Source: UN ComTrade, IMaCS analysis

The ASEAN FTA (AFTA) has been a booster for International trade and investments for India, the prospective FTA with EU would significantly open the markets, making ASEAN a key competition while exporting to EU and giving an upper hand to European companies while competing with Indian counterparts while exporting to ASEAN region. With the strategic realignment of supply chain globally, ASEAN is tipped to be the leading destination for sourcing parts and low cost manufacturing of auto components. With these events and trade agreements, the competition for India is expected to significantly increase in the coming future with a lot of global OEMs preferring ASEAN for manufacturing and sourcing. There is a need to review and strategically expand the trade agreement while restructuring tariff and non-tariff measures so as to promote auto component exports from India to ASEAN. Tariff rate currently on exporting from India to ASEAN is slightly more than for exporting from ASEAN to India and this factor is skewed in favour of ASEAN nations. Further, focussing on strengthening trade with relatively less developed and upcoming markets of Cambodia, Laos, Malaysia and Vietnam can provide a beneficial stance to Indian exporters in these countries.

### 3.2.2. REPUBLIC OF KOREA (S. KOREA)

Republic of Korea (S. Korea) is the 12<sup>th</sup> largest economy in the world and the 3<sup>rd</sup> largest economy in Asia. South Korea had a gross domestic product (GDP) of USD 1,378 billion in 2015 growing at 4.7% CAGR from 2010 to 2015. South Korea exported goods worth USD 527 billion which accounted for 38% of its GDP in 2015. The exports have witnessed a steady growth at 2% CAR from 2010 to 2015, with a decline of 8% in 2015. The trend of exports and imports is indicated in exhibit 28. Integrated circuits, refined petroleum, auto components and CBU cars, passenger/cargo ships and LCDs and electronic components are the key products being exported from South Korea. Imports account for 31% of South Korea's GDP in 2015 valued at USD 437 billion. The imports have witnessed 1% CAGR growth from 2010 to 2015 with a sharp decline of 17% in 2014. Crude petroleum, petroleum gas and coal briquettes are the key products being imported by South Korea.

**Exhibit 28: Trends in Export and Import of Republic of Korea**

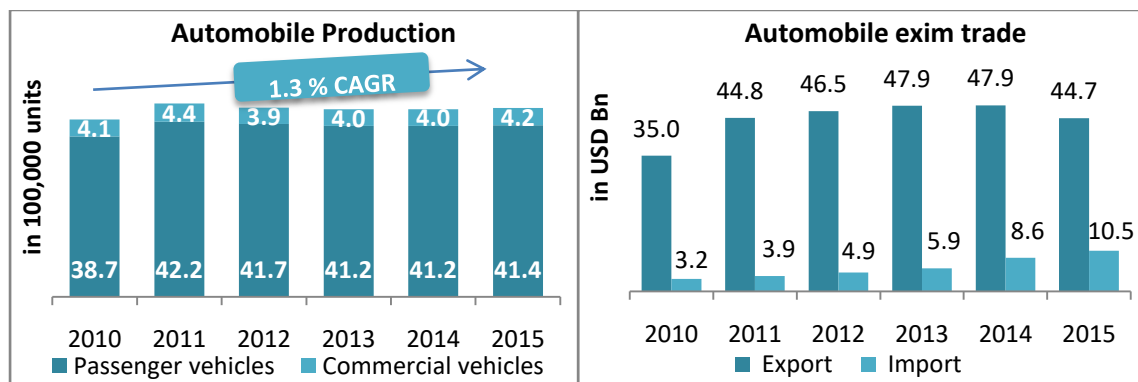


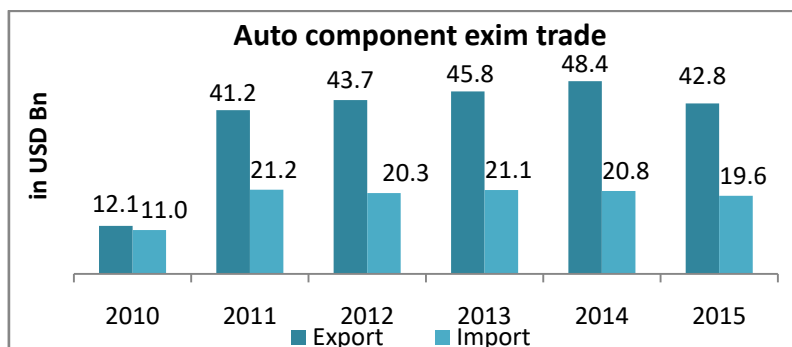
Source: Secondary sources

**South Korean Auto component industry**

South Korea is the fifth largest auto parts manufacturer in the world with ~879 tier - I suppliers well diversified across all key auto component segments. South Korea is also a leading manufacturer of automobiles in the world. South Korea manufactured 4.56 million automobiles in 2015 and ~91% of it was passenger vehicles. The automobile exports from South Korea stood at USD 43 billion in 2015 accounting for 8% of its total exports from South Korea. South Korea is also a leading player in the auto component industry, commanding a significant presence both in domestic supply as well as in the exports market. The auto component exports from South Korea has been growing at a CAGR of 6% between 2011 to 2014 with a decline of 11% in 2015 owing to the falling global trade particularly decline in China. The trends for automobile production, EXIM trade in automobiles and auto components is indicated in following exhibit.

**Exhibit 29: Automobile production and international trade trends - Republic of Korea**





Source: IMaCS analysis, Secondary sources

South Korea has signed free trade agreements with all major economies in the world. The Trade partners of South Korea accounts for 75% of the world's economy. Major trade agreements signed are listed as follows:

**Exhibit 30: FTAs signed by South Korea**

Sl. No.	Description
1	Rep. of Korea-US FTA
2	Rep. of Korea -EU FT
3	Rep. of Korea -EFTA Trade Agreement
4	Rep. of Korea -Chile FTA
5	Rep. of Korea -Canada FTA
6	Rep. of Korea -China FTA
7	Rep. of Korea - Australia FTA
8	Rep. of Korea - ASEAN CEPA
9	Rep. of Korea – New Zealand FTA
10	Rep. of Korea – Turkey FTA
11	Rep. of Korea – Peru FTA
12	Rep. of Korea -Vietnam FTA
13	<b>Rep. of Korea – India CEPA</b>

Source: Secondary sources

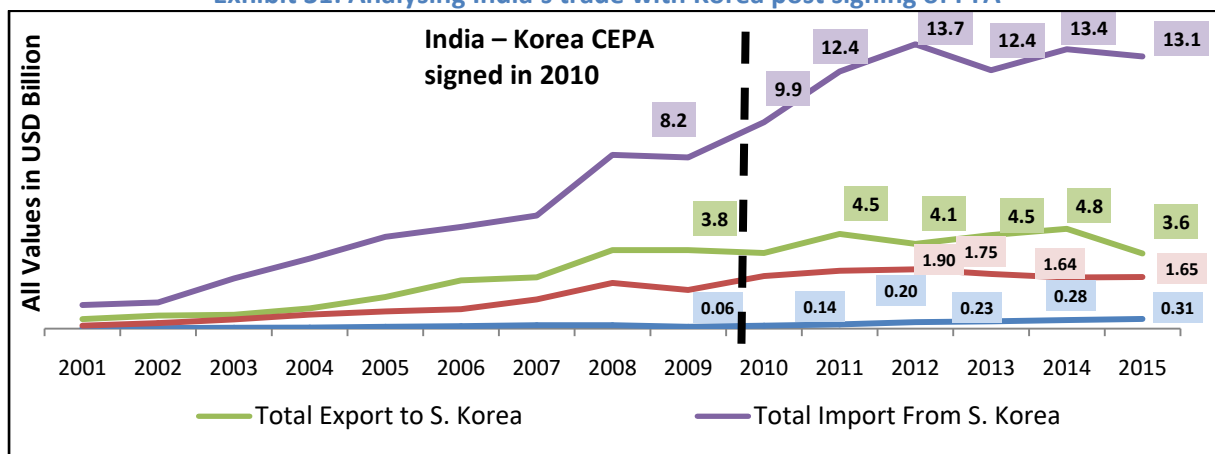
### ***Analysis of EXIM trade trends***

India exported goods worth USD 3.6 billion to South Korea in 2015 with auto component accounting for 8% of the total exports valued at USD 0.3 billion in 2015. On the other hand, the imports from South Korea were almost four times higher at USD 13.1 billion in 2015 with auto component imports amounting to USD 1.7 billion for 2015. India's total exports to Korea posted a growth of 7.2% CAGR during 2010 to 2014 with decline of 24% in 2015 due to global economic slowdown. The imports from South Korea on the other hand steered through the slowdown witnessing a growth of 8% during 2010 to 2014 and posted nominal decline of 2.6% due to the slowdown in 2015.

The auto component trade with South Korea, unlike the overall trade, witnessed a much higher growth in Indian exports at 20% CAGR during 2010 to 2015, posting a positive growth even during

the downturn of 2014-15. The imports from South Korea remained stagnant at USD 1.7 billion witnessing a slight decline of 0.4% during 2010 to 2015. The trade trends are indicated in Exhibit 31.

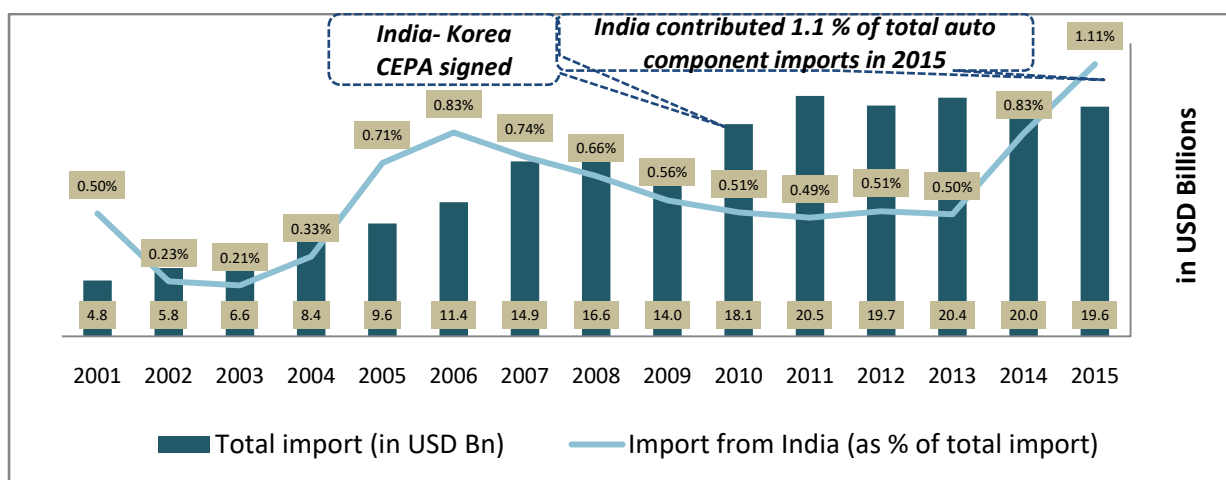
**Exhibit 31: Analysing India's trade with Korea post signing of FTA**



Source: DGFT, UN ComTrade, IMaCS analysis

India's share in total auto component import of South Korea has improved from 0.5% in 2010 to 1.1% in 2015 since signing of CEPA in 2010. During the same period 2010-15, the overall auto component imports of South Korea have witnessed a 1.6% growth while the exports from India has witnessed a 20% growth indicating that the trade agreement has significantly boosted export opportunities to South Korea. However a significant part of this growth can be attributed to the last three years from 2012 to 2015 when the auto component exports have witnessed a 30% CAGR growth growing from USD 90 million in 2012 to USD 265 million in 2015. The growth of share of Indian auto component exports to South Korea is indicated in the following exhibit.

**Exhibit 32: Auto component exports from India w.r.t South Korean imports**

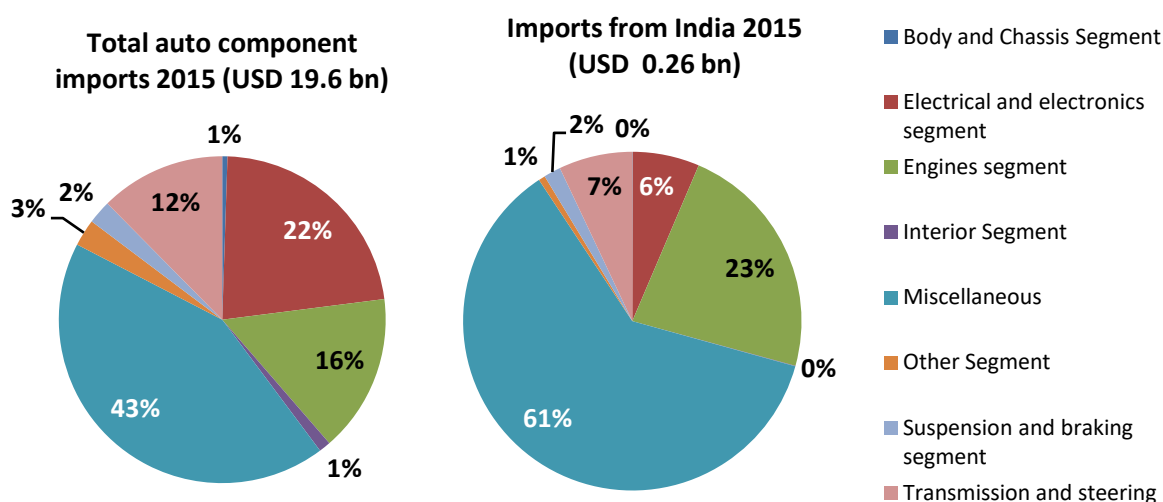


Source: DGFT, UN ComTrade, IMaCS analysis

### Segment wise analysis

Electrical segments (22%), engine segment (16%) and transmission and steering (12%) are the most imported auto components in South Korea together accounting for 50% of total auto component imports. The miscellaneous classification accounts for another 43% of imports. India exports mainly engine parts (23%), electrical and electronics (7%) and transmission and steering (6%) parts to South Korea. The segmental break indicates that there is potential to export more in the Electrical and Electronics segment and Transmission and steering segments. Given the small share that India commands in total auto component imports of South Korea, there is a significant potential to further increase India's presence in the market. The segment wise breakup is as indicated in the following exhibit

Exhibit 33: Segmental share of India's export of auto components to S. Korea



Source: DGFT, UN ComTrade, iMaCS analysis

### Leading exporters of auto component to South Korea

China is the largest exporter of auto components to South Korea with a share of 29% growing at 4.8% during 2010 to 2015, followed by Japan (16%), USA (12%) and Germany (11%). Other leading auto component exporters to South Korea include France, Norway, Italy, U.K and Mexico with each accounting for 2% to 3% of total share. Out of these countries South Korea has a FTA in place with China, USA and EU and is currently negotiating FTA with Japan, indicating that over two-third of auto component imports coming into South Korea are from regions and countries where South Korea has an FTA. A closer look at the growth rates indicate that while china's export to South Korea is growing at 4.8%, the imports coming from Japan and USA have been declining. Over the period the exports from EU nations and Mexico have witnessed mild growth. This indicates that India's growth of 20% is significantly higher as compared to other exporting nations mainly because of the small

value of exports, and there is a potential for further growth and strengthening of India's position in South Korean import market. The key auto component exporting countries to South Korea have been listed in the following exhibit.

**Exhibit 34: Major countries exporting auto components to South Korea**

Country	Rank(in total imports to Korea)	% of imports (in 2015)	Value of Imports in 2015 (USD Billion)	CAGR (2010-2015)	FTA signed
China	1	29%	5.7	4.8%	2015
Japan	2	16%	3.1	-6.9%	Under negotiation
USA	3	12%	2.3	-1.3%	2012
Germany	4	11%	2.1	-1.7%	EU FTA in 2010
France	5	3%	0.6	-2.5%	EU FTA in 2010
Norway	6	3%	0.6	-4.7%	2006
Italy	7	3%	0.6	9.3%	EU FTA in 2010
UK	8	3%	0.6	6.7%	EU FTA in 2010
Mexico	9	2%	0.4	6.6%	Under negotiation
India	11	1%	0.2	20%	2010

Source: DGFT, UN ComTrade, IMaCS analysis

### ***Brief of Trade agreement between India and South Korea***

The Comprehensive Economic Partnership Agreement between India and Republic of Korea henceforth referred as India- Korea CEPA came into effect on the 1<sup>st</sup> of January 2010 seeking to enhance the trade between these two nations. The CEPA with Korea was signed with an aim to increase India's access to South Korean market in Agriculture and Services sector, while South Korea sought advantages in electronics and automobile sector. The CEPA covered the tariff lines comprehensively as compared to prior agreements signed by India Post signing of CEPA, Indian exports to South Korea have witnessed a growth of 7% CAGR during the period 2010-2014, while imports have also posted a similar growth of 8% during the same period, albeit, a much higher base. India's trade deficit with South Korea remains high despite higher growth in exports due to the significantly higher base of imports from Korea, which leads to a higher growth of imports compared to exports in absolute terms. A snapshot of the CEPA and the offerings for auto component manufacturers is indicated in the following exhibit:

**Exhibit 35: A snapshot of India – Korea CEPA**

Description	Korea India CEPA
Date of enforcement	1st January 2010
Tariff lines	Korea:11200 India: 5200

Description	Korea India CEPA
Number of tariff lines pertaining to auto component industry	Korea's offer: 115 India's offer: 205
Tariff reduction range	0%-100%
Rule of origin	Regional value content of at least 35%

Source: India's Trade portal, Ministry of Commerce (MoC)

While South Korea offered tariff benefit across 11,200 tariff lines, India offered benefits across only 5,200 tariff lines. The inclusion of auto component tariff lines was significantly higher compared to other trade agreements with increased liaisoning by the South Korean automobile and auto parts manufacturers during trade negotiations. South Korea offered 115 tariff lines in auto component space, India offered benefits across 205 tariff lines. Tariff reduction ranged from 0% to 100% across segments, as indicated in the Exhibit 36 and Exhibit 37, with the regional value content agreed at least 35%.

**Exhibit 36: Auto component items included in Korea's offer to India**

Category	Category Explanation	Auto parts included (8 digit level)	Major items	Base Rate (%)	Tariff rate as on 1 <sup>st</sup> January 2017 (in %)
E-0	Zero duty from date of entry	34	Interior segment(Instrument panel of clocks of vehicles),Suspension & Breaking segment(Brake, Brake hubs & their parts),Electrical segment(Automobile lighting equipment),Engine segment(Reciprocating piston for vehicle),Body & chassis segment (wheels, rims, spokes),Other segment	8	0
E-5	Duty eliminated in 5 equal annual installments from 2010	65	Engine segment(Diesel),Transmission & Steering(Gear box),Body & Chassis(Chassis & body parts of cars,buses,tractor,trucks),Electric segment (taximeter, Speedometer),Miscellaneous(ball bearings, washers, rubber parts)	8	0
E-8	Duty eliminated in 8 equal annual installments from 2010	7	Miscellaneous(Road wheels, Bearing housings, Sparking plugs)	8	0
E-0/E-5/E-8	Duty eliminated immediately/ 5/8 equal annual installments from 2010*	9	Other items	8	0

**Note: For the motor vehicles falling within heading 87.02 is E-0 for Taximeters is E-5 & for Milometer's is E-0 For others is E-8, And For the motor vehicles falling within heading 87.04,87.05 is E-5**

Source: India's Trade portal, Ministry of Commerce (MoC), secondary research



South Korea offered immediate reduction of duties to 0% from date of entry across 34 key segments including engines, suspension & braking, electrical, body and chassis and wheels. In addition duty elimination in five equal annual instalments was proposed for 65 tariff lines which included Diesel engine and parts, Gearbox and Body - Chassis amongst others. While South Korea's offering were more liberal, India offered a slower tariff reduction schedule. However, India's return list offered to Korea was a more protectionist one with slower tariff reduction schedule with no offerings of immediate tariff reduction, duty elimination in five equal annual instalments across 15 tariff lines, and duty elimination in 8 equal annual instalments across 36 lines. In addition, 121 tariff lines pertaining to Suspension & Braking, transmission and steering, engine parts for diesel engines, etc. were put in the negative list with no tariff benefits. The key tariff benefits by India were offered in the segments of electrical and electronics and power transmission. The item wise offerings from India are indicated in the following exhibit.

**Exhibit 37: Auto component items included in India's offer to Korea**

Category	Category Explanation	Auto parts included (8 digit level)	Major items	Base Rate (%)	Tariff rate as on 1st January 2017
<b>E-0</b>	Zero duty from date of entry	0		0%	0%
<b>E-5</b>	Duty eliminated in 5 equal annual installments from 2011	15	Power transmission, Electric segment(parts of automobile lamps),interior segment(Instrument panel of clocks of vehicles)	5/12.5	0%
<b>E-8</b>	Duty eliminated in 8 equal annual installments from 2011	36	Electrical Segment(sealed beam lamp units),Engine segment(motorcycle),Miscellaneous(Roller chain, adapter ball bearings),Suspension & Braking segment(Breaks, Hub breaks & their parts)	12.5	0%
<b>RED</b>	Duty reduced to 1 to 5% from base rate in 8 equal annual installments from 2011	22	Electrical Segment(Lighting equipment),Engine Segment(Parts of Diesel Engine, Piston, fuel nozzles)	7.5/12.5	1%/5%
<b>SEN</b>	Duty reduced to 50% of base rate in 10 equal annual installments from 2011	11	Crank Shaft for engines, Transmission & Steering(Gear boxes & their parts),Miscellaneous(Road wheels)	12.5	4.5%
<b>EXC</b>	Items in this category are eliminated from any reduction in	121	Suspension & Braking segment(Break-linings, leaf springs),Transmission & Steering(Clutches & their parts,	7.5/12.5	7.5/12.5

Category	Category Explanation	Auto parts included (8 digit level)	Major items	Base Rate (%)	Tariff rate as on 1st January 2017
	rates		Steering wheels),Interior Segment(Seats, seat belts, Taximeter),Engine Segment(Piston, Injection pumps for diesel engine, Petrol engine parts),Electrical Parts(Horns, ignition wiring sets),Body & Chassis of tractors, three wheeled vehicles, Miscellaneous(Rubber parts, washers, Gaskets)		

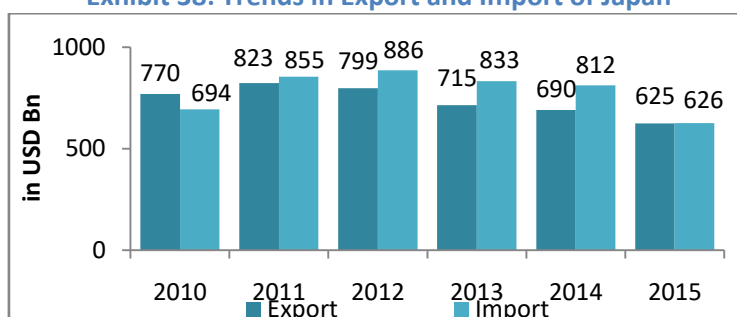
Source: India's Trade portal, Ministry of Commerce (MoC), secondary research

As indicated in Exhibit 37, it can be observed that the exports of auto components from India to South Korea has witnessed a high double digit growth post signing of CEPA with South Korea, at a time when imports of South Korea has witnessed nominal growth and most other competing countries have seen either low single digit growth or a decline. Therefore, while the exports have significantly been benefitted, the large size of auto component imports coming in from South Korea continues to command a major share and the trade deficit remains.

### 3.2.3. JAPAN

Japan is the world's third-largest economy. It has been struggling with the issues of ageing population and deflating economy. The GDP of Japan was estimated at USD 4383 billion in 2015 and has witnessed a decline by 5.1% CAGR during 2010 to 2015. Japan's service industry contributes 73% to the GDP and is the fastest growing sector with manufacturing and industry accounting for another 25.5%. Overall exports from Japan clocked USD 625 billion in 2015, declining by 4% CAGR during 2010 to 2015. Cars, vehicle parts, integrated circuits, industrial printers and refined petroleum are the major export items for Japan. Imports to Japan were worth USD 626 billion in 2015, de-growing at 2% CAGR from 2010 to 2015. Crude petroleum, petroleum gas, computers and coal briquettes are the key import products

**Exhibit 38: Trends in Export and Import of Japan**

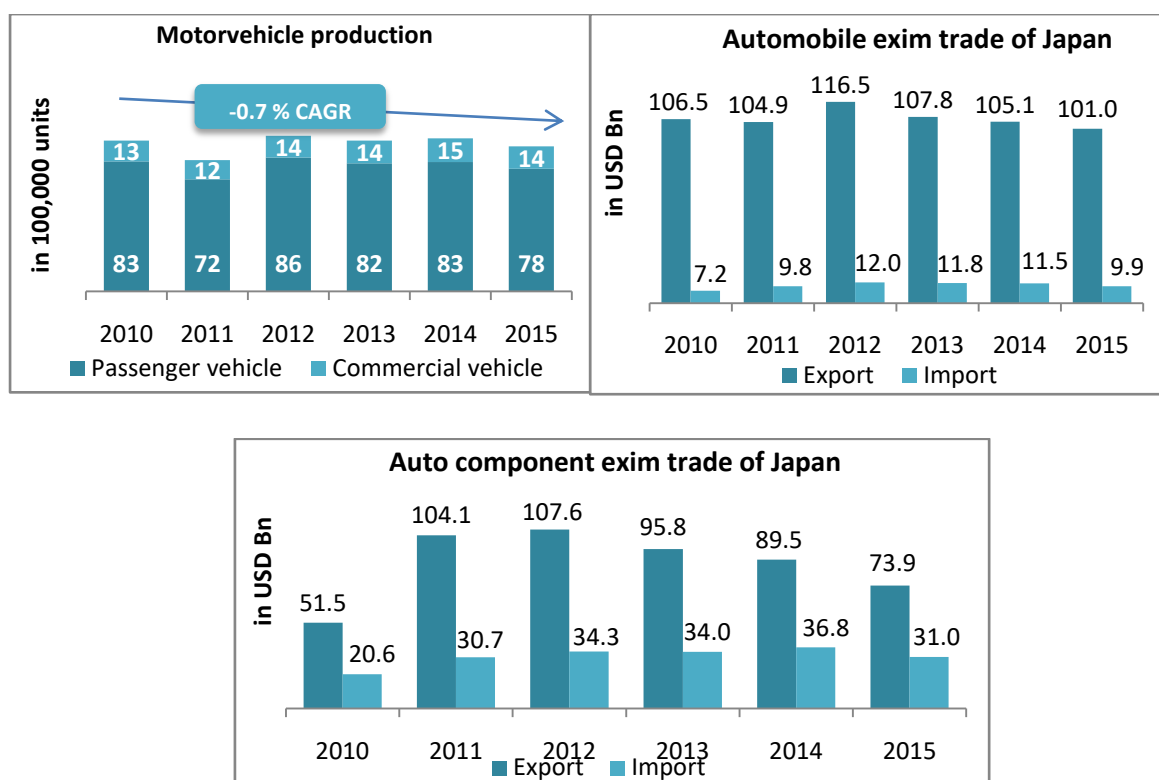


Source: UN Comtrade, IMAcS analysis

#### ***Japanese Auto component industry***

Japan is the third largest automobile manufacturer in the world and is home to eight of the world's largest automobile manufacturers. Automotive and auto component manufacturing sector accounts for 89% of the country's manufacturing. Japan produced 9.2 million motor vehicles in 2015 with ~85% being passenger vehicles. However it has been declining at 0.7% CAGR from 2010 to 2015. Japan is a net exporter of automobiles with exports worth USD 74 billion in 2015 and imports worth USD 31 billion. However the auto exports witnessed a sharp decline of 30% y-o-y in 2015 after remaining stagnant at USD ~105 billion for the last four years. 2015 also witnessed a steep increase in imports of 169% on a y-o-y basis after witnessing a steady growth of 12% CAGR in import of motor vehicles during 2010 to 2014. The aberration in 2015 can be attributed to the global economic slowdown which affected both production as well as exports of motor vehicles from Japan. The trends for automobile production and EXIM trade in automobiles and auto-components are indicated in the following exhibit.

Exhibit 39: Snapshot of automobile production and international trade in Japan



Source: UN Comtrade, IMAcS analysis, secondary reports

The key trade agreements signed by Japan are listed as follows:

Exhibit 40: FTAs signed by Japan

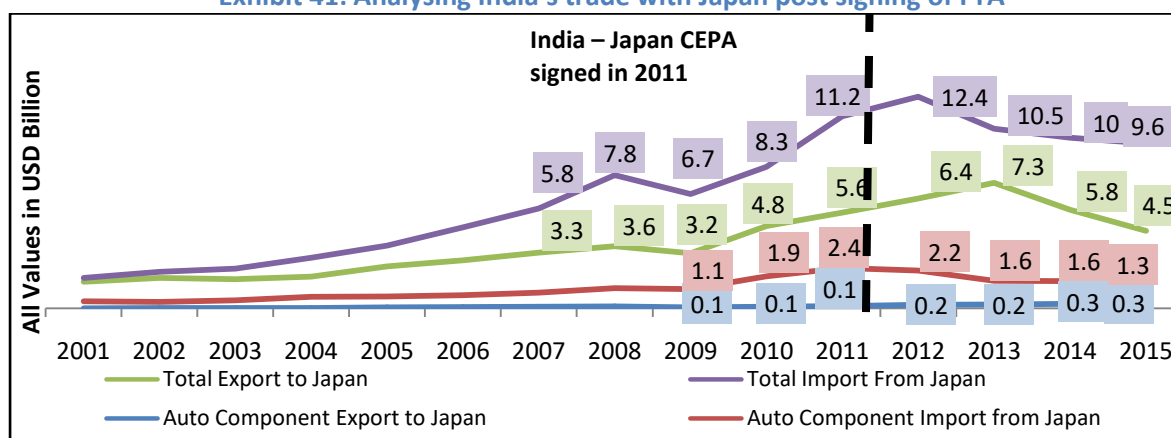
Sl. No.	Description
1	Japan- Thailand EPA
2	Japan-Indonesia EPA
3	Japan – Malaysia EPA
4	Japan -Chile EPA
5	Japan -Mexico EPA
6	Japan-Viet Nam FTA
7	Japan - ASEAN CEPA
8	Japan-Peru EPA
9	Japan-Philippines EPA
10	Japan-Australia EPA
11	<b>Japan – India CEPA</b>

### Analysis of EXIM trade trends

India exported goods worth USD 4.5 billion to Japan in 2015 which was almost half of total imports from Japan of USD 9.6 billion in the same period. India’s export to Japan fell during the last two years, reflecting the slowdown in economy. The exports to Japan have declined by (5%) on a CAGR basis during the period 2011 to 2015 whereas the imports from Japan have witnessed a (3%) decline

during the same period. Unlike overall exports, Auto component exports from India to Japan witnessed a 22% CAGR growth recording exports worth USD 0.3 billion while imports witnessed a 13% decline and were recorded at USD 1.3 bn. However albeit the higher initial base of auto component imports, the absolute trade deficit continues to grow despite a higher growth rate of exports, mainly due to smaller base of exports, which fail to make a significant mark on the trade deficit. The following exhibit indicates the y-o-y movement of international trade between India and Japan.

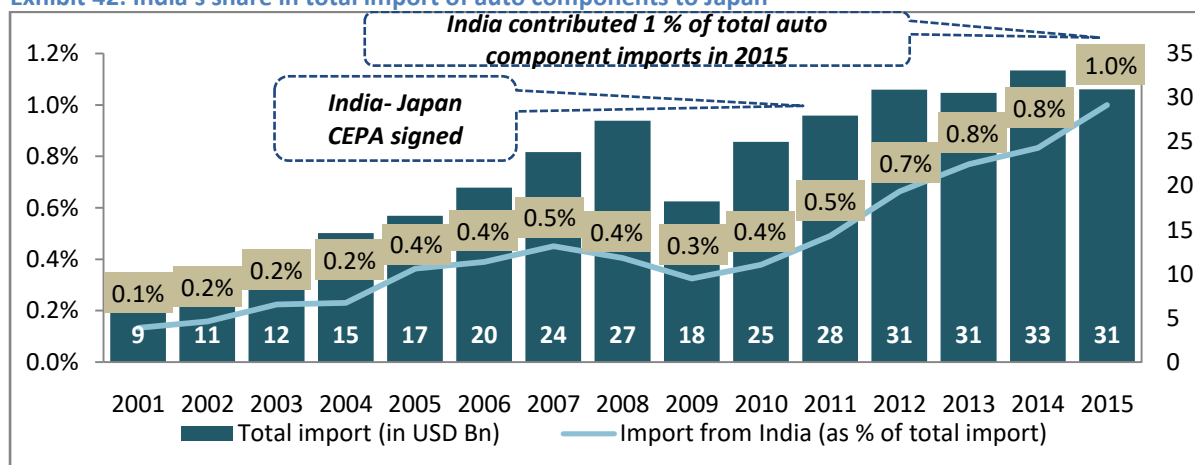
**Exhibit 41: Analysing India’s trade with Japan post signing of FTA**



Source: DGFT, UN ComTrade, IMaCS analysis

India’s share in the total auto component import of Japan grew steadily to 1% (USD 276 million by value) in 2015 from 0.5% (USD 137 million by value) in 2011 after the signing of CEPA in 2011. The total auto component imports of Japan have remained stagnant at close to USD 31 billion since 2012, while India’s exports have improved continuously post signing of trade agreement. The growth trend is indicated the following exhibit.

**Exhibit 42: India’s share in total import of auto components to Japan**

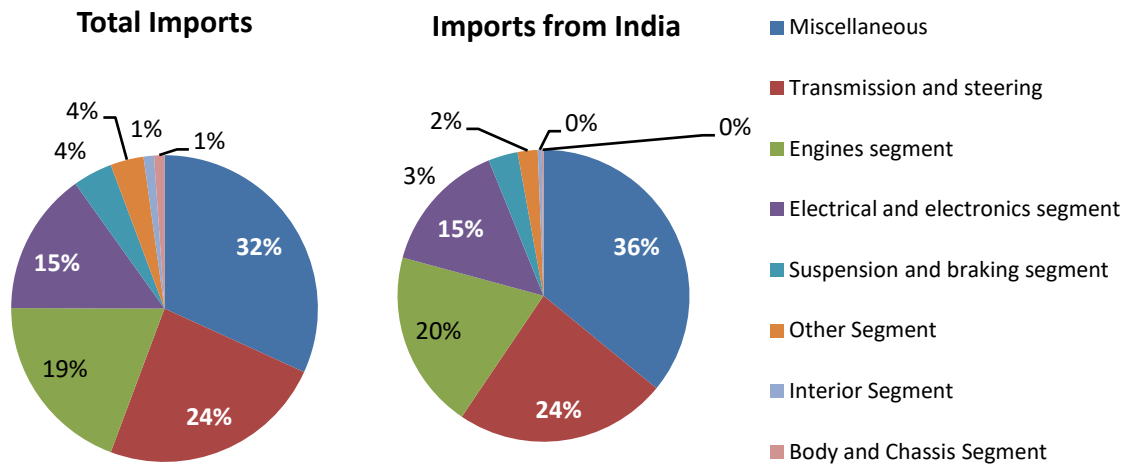


Source: DGFT, UN ComTrade, IMaCS analysis

**Segment Analysis**

Indian auto component exports to Japan was mainly constituted by transmission and steering (24%), engine parts (20%) and electrical and electronics (15%) constituting almost 49% of total exports. Other key segment was of miscellaneous constituting 36%. A comparative of the total imports of auto components and auto component exports are indicated in the following exhibit.

**Exhibit 43: Segmental share of India’s export of auto components to Japan**



Source: DGFT, UN ComTrade, IMaCS analysis

**Leading exporters of auto component to Japan**

A review of the auto component imports coming into Japan from different regions/ countries indicate that China is the largest exporter of Auto component to Japan accounting for 37% of total exports, followed by USA (10%) and the ASEAN regions (20% to 24%). Other key regions exporting to Japan include South Korea (7%), Germany (6%), France (2%), Italy (2%) and India (1%). Out of the top ten sourcing countries, Japan has a trade agreement with five countries and four other trade agreements including those with China and EU are under negotiation. Exports from India (23% CAGR) and Vietnam (13% CAGR) have witnessed high growth during the period 2011-15 while growth of exports from most other countries ranged between 1% to 4% CAGR with de-growth in France and Italy. Due to the alignment of supply chains of Japanese OEMs promoting sourcing from ASEAN backed by low cost manufacturing and low duty rates post Japan-ASEAN FTA, there has been significant growth of import of auto components from ASEAN nations, with strongest growth from Vietnam. Toyota’s subsidiary in Vietnam, namely, Toyota Vietnam (TVM) is the major production hub for auto parts supplying to Japanese auto production facilities in 13 countries including India, Brazil, S. Africa and other ASEAN countries. The growing preference of Japanese auto makers for low cost sourcing destinations in ASEAN region poses a significant competition for auto component

exports from India. India currently exports auto components worth USD 276 million making it the 15<sup>th</sup> largest importer of auto components to Japan. The following exhibit indicates the rank, share and growth of auto component exports coming in from different countries to Japan for 2015.

**Exhibit 44: Major countries exporting auto components to Japan**

Country	Rank(in total imports to Japan)	% of imports (in 2015)	Value of Imports in 2015 (USD Billion)	CAGR (2011-2015)	FTA signed
China	1	37%	11.5	2%	Under negotiation
USA	2	10%	3.1	2%	Under negotiation
Thailand	3	9%	2.8	4%	2007
Viet Nam	4	7%	2.2	13%	2008
Korea	5	7%	2.2	1%	Under negotiation
Germany	6	6%	1.9	2%	EU- Japan FTA is Under negotiation
Philippines	7	4%	1.2	2%	2006
Indonesia	8	4%	1.2	5%	2007
Other Asia	9	3%	0.93	0%	NA
France	10	2%	0.62	-3%	EU- Japan FTA is Under negotiation
Italy	11	2%	0.62	-3%	EU- Japan FTA is Under negotiation
India	15	1%	0.31	23%	2011

Source: DGFT, UN ComTrade, IMaCS analysis

### ***Brief of Trade agreement between India and Japan***

India- Japan Comprehensive Economic Partnership Agreement (CEPA) was signed in 2011 covering 1800 items across all segments. India followed a precautionary approach on tariff lines where benefits were given to Japan and most of the major items were either excluded or provided with extended tariff schedule in the list. Japan offered 203 tariff lines for preferential tariff in the auto component sector while India offered 107 tariff lines. The CEPA aimed at reducing the tariff lines by 0% to 100%. A snapshot of the CEPA is indicated in the following exhibit. The CEPA has benefitted Japanese auto lobby more as they are able to create synergies in their supply chain by effectively utilizing their FTAs with ASEAN to procure part and import those parts to India to manufacture cars at a reduced tariff rate.

**Exhibit 45: A snapshot of India – Japan CEPA**

Description	Japan India CEPA
Date of enforcement	1st April 2011
Tariff lines	1800 lines

Description	Japan India CEPA
Number of tariff lines pertaining to auto component industry	Japan's offer: 213 items India's offer: 107 items
Tariff reduction range	0%-100%
Rule of origin	Regional value content of at least 35%

Source: India's Trade portal, Ministry of Commerce (MoC)

As shown in the annexure above, all auto component items were included in A category with effect of immediate removal of tariff in Japan's list to India. However, there was no significant tariff advantage since the duty rates were either zero or minimal prior to signing of trade agreement. In return offer to Japan, India followed a precautionary approach excluding major items (included in X list) or offering an extended tariff reduction schedule (included in category B10) of up to 11 years, as indicated in Exhibit 46. Tariff schedule for all items is shown in the following exhibit.

**Exhibit 46: Auto component items included in India's list to Japan**

Category	Category description	Auto parts included (8 digit level)	Major items	Base Rate (%)	As on 1 <sup>st</sup> January 2017
A	Zero duty from date of entry	1	Miscellaneous(Rubber parts-EPDM)	-	0%
B10	Duty eliminated in 11 equal annual installments from 2011	103	Suspension & Breaking segment(Break-linings, leaf springs),Power Transmission, Interior Segment(Seats, Geophysical Instruments),Engine Segment (Crankshaft),Electrical Parts(Horns, Ignition wiring sets),Body & Chassis, Miscellaneous(Ball bearing, washers, gaskets, articles of iron & Steel)	10/7.5	3.6%
B5	Duty eliminated in 6 equal annual installments from 2011	1	Miscellaneous (Flat rolled iron)	5	0%
Pa	Duty shall be reduced in accordance with terms & conditions	1	Diesel Engines	-	-
Pb	Duty shall be reduced in accordance with terms & conditions	1	Transmission for motor vehicles	-	-
X	Negative list	106	Engine Segment(Petrol) & Parts, Electrical & electronics segment(Head lamp, Tail lamp),Body & Chassis	-	-

Source: India's Trade portal, Ministry of Commerce (MoC)



In the CEPA agreement, Japan offered to reduce tariffs across 9041 tariff lines with commitments by Japan at 9 digit HS codes, which were later carefully examined with respect to Indian HS code structure and identified as 9041 different tariff lines. Japan's offering to India mainly constituted of agro based farm product, marine products and forest products. The category wise offering by Japan is indicated as follows:

**Exhibit 47: Japan's offering to India – Auto Component HS codes**

Category	Category description	Auto parts included	Base Rate (%)	As on 1 <sup>st</sup> January 2017
A	Zero duty from date of entry	213 items included	1.6% - 16%	0%

Japan has over the years eliminated all tariffs<sup>4</sup> for auto component HS codes chapters ranging from 72 to 90 with Ferro- silicon and Ferro tungsten articles as exception where tariff ranges in 0.2% to 1.8%.

## **Part B - Preferential Trade Agreements and Other trade agreement signed by India**

With reference to the auto component industry the following preferential trade agreements and other trade agreements have been assessed as part of this report.

Sl. No.	Description	Year of enforcement
1	India – Thailand EHS	September 2004
2	India – Chile PTA	August 2007
3	India – MERCOSUR PTA	June 2009

The detailed assessment of trade agreements is indicated as follows:

### **3.2.4. THAILAND**

Thailand is the second largest economy in Southeast Asia after Indonesia. Thailand's economy grew at 3% on a CAGR basis during the period 2010 to 2015 reaching a GDP of USD 395 billion in 2015. The services and industrial sectors are the main contributors to the gross domestic product of Thailand, accounting for 55% and 36% of GDP respectively.

Thailand exported goods worth USD 211 billion in 2015 growing at a CAGR of 1.5% since 2010. However this was due to a decline of 7.4% in exports in 2015 compared to 2014 on account of global economic slowdown. Major products exported from Thailand are computers, LCV trucks, integrated circuits, refined petroleum and cars. Imports to Thailand were worth USD 205 billion in 2015 growing at CAGR of 2% between 2010 and 2015. Like the exports, imports had also witnessed a global

<sup>4</sup>Source:[http://www.customs.go.jp/english/tariff/2017\\_4/index.htm](http://www.customs.go.jp/english/tariff/2017_4/index.htm)

economic slowdown in 2015 and as a result the imports declined by 10% y-o-y over 2014. Major products imported by Thailand are Crude petroleum, petroleum gas, gold and refined petroleum. The trend of exports and imports of Thailand from 2010 to 2015 are indicated in the following exhibit.

Exhibit 48: Trends in Export and Import of Thailand

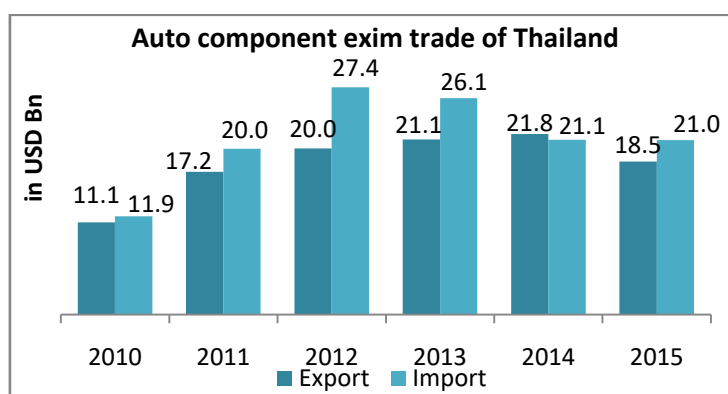
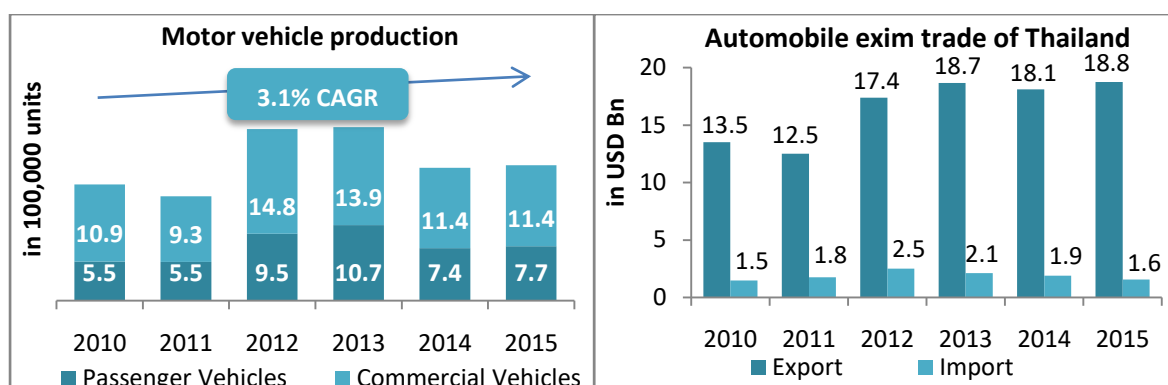


Source: UN ComTrade, IMaCS analysis

### ***Thailand's Auto component industry***

The automotive sector is a major driver of the economy of Thailand and accounts for 12% of GDP in 2015. There exists a vast network of small and large, local and foreign auto and auto component manufacturing and trading companies all along the entire value chain of automobile production. Various factors such as location proximity to ASEAN region, developed domestic market and reinforcements in the form of various investment promotion policies from the government aid in attracting the world's leading automobile manufacturers to set up production capacity in Thailand. A brief review of the auto and auto parts manufacturing industry of Thailand indicate that the total motor vehicle production in Thailand stood at 1.9 million units, growing at CAGR 3.1% from 2010 to 2015 with passenger vehicles accounting for 60% of the total production. The export of auto components stood at USD 18.5 billion with imports worth USD 21.4 billion growing at 5% CAGR and 7% CAGR respectively from 2010 to 2015. The trend of automobile production and auto parts trade is indicated in the following exhibit.

Exhibit 49: Motor vehicle production and auto parts EXIM trade



Source: UN ComTrade, Secondary sources, IMaCS analysis

The economy of Thailand is heavily export-dependent, with exports accounting for more than two-thirds of the total output. Over the last several years, the government of Thailand have actively pursued trade – liberalizing agreements. Major trade agreements signed by Thailand are listed as follows:

Exhibit 50: FTAs signed by Thailand

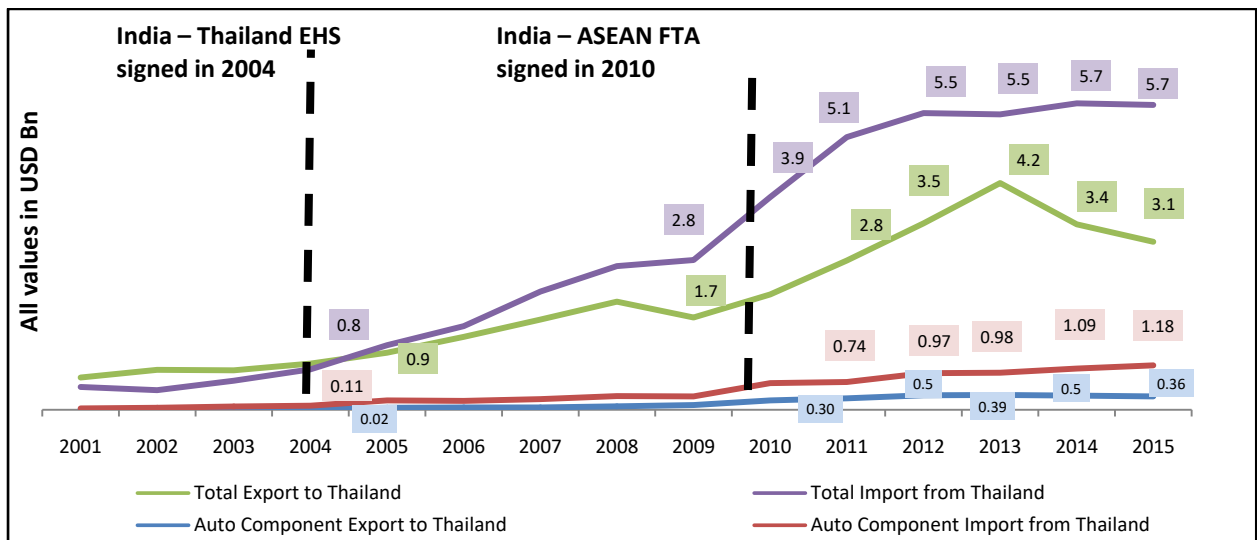
Sl. No.	Description
1	ASEAN Free Trade Agreement (AFTA)
2	ASEAN- Australia & New Zealand FTA
3	ASEAN – Japan CEPA
4	ASEAN -China CECA
5	ASEAN-Rep. of Korea CECA
6	Thailand-Japan FTA
7	Thailand-China FTA
8	Thailand – Chile FTA
9	Thailand-Peru FTA
10	<b>Thailand-India EHS</b>
11	<b>ASEAN – India CECA</b>

Source: secondary sources

**Analysis of EXIM trade trends**

Total exports from India to Thailand stood at USD 3.1 billion in 2015 witnessing a 12.4% CAGR growth from 2004 to 2015, with 16% CAGR growth from 2004 to 2010 prior to signing of Indian-ASEAN FTA and 8% CAGR growth from 2010 to 2015 post signing of Indian – ASEAN FTA in 2010. After the signing of EHS in 2004, exports from Thailand stood at USD 5.7 billion witnessing a steady and robust growth at 20.4% CAGR during the period 2004 to 2015, with higher growth of 32% during the EHS period from 2004 to 2010 and a imports growth of 7% during 2010 to 2015 post signing of Indian – ASEAN FTA. Both Auto component exports as well as imports have witnessed a significant growth at 28% CAGR from 2004 to 2015 and 24% CAGR respectively post signing of the EHS and the India- ASEAN FTA. The period from 2004 to 2010 post signing of the EHS witnessed high growth of 48% CAGR and 37% CAGR in exports and imports of auto components respectively and post 2010 after signing of the India- ASEAN FTA the growth moderated to 7% and 11% for exports and imports respectively. Albeit the higher base of imports of auto components and the higher growth of imports with respect to exports, the trade deficit between India and Thailand is continuously growing. The EXIM trend for India and Thailand for 2001 to 2015 is indicated in the following exhibit.

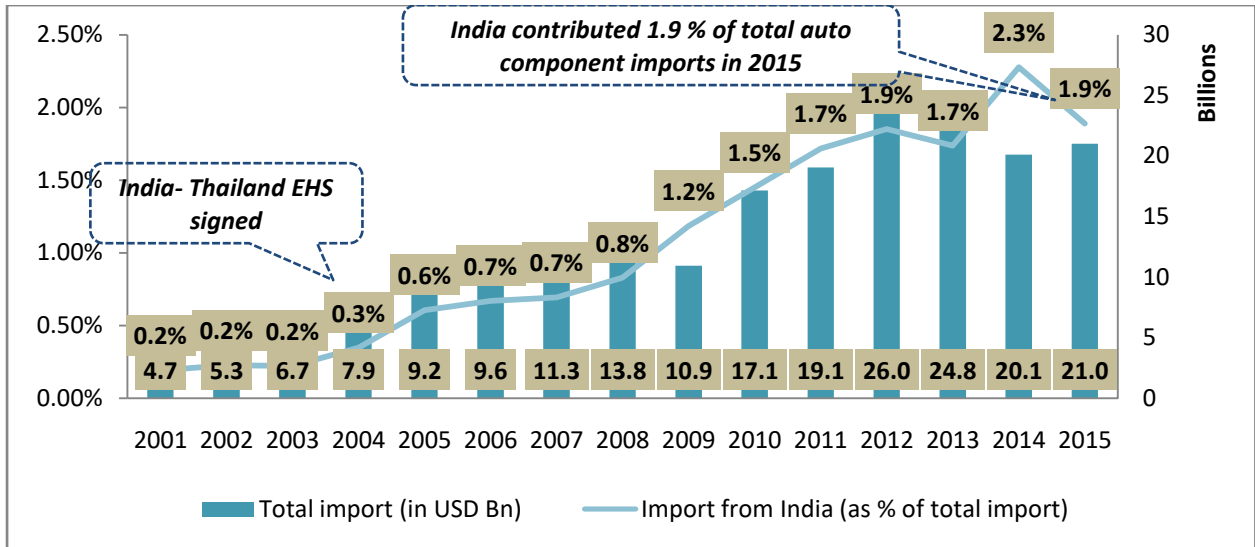
**Exhibit 51: Analysing India’s trade with Thailand Post signing of EHS**



Source: DGFT, UN ComTrade, iMaCS analysis

India’s exports to Thailand grew from USD 24 million in 2004 to USD 355 million in 2015 accounting for 1.9% share in total auto component imports of Thailand as compared to 0.3% in 2004, witnessing a 28% CAGR growth. During the same period, the total auto component imports to Thailand grew at a CAGR of 9% with consolidation of ASEAN region as a major automobile manufacturing base. The growth of share of India’s export in Thailand’s total auto component imports is shown in the following exhibit

Exhibit 52: India's share in total import of auto components to Thailand

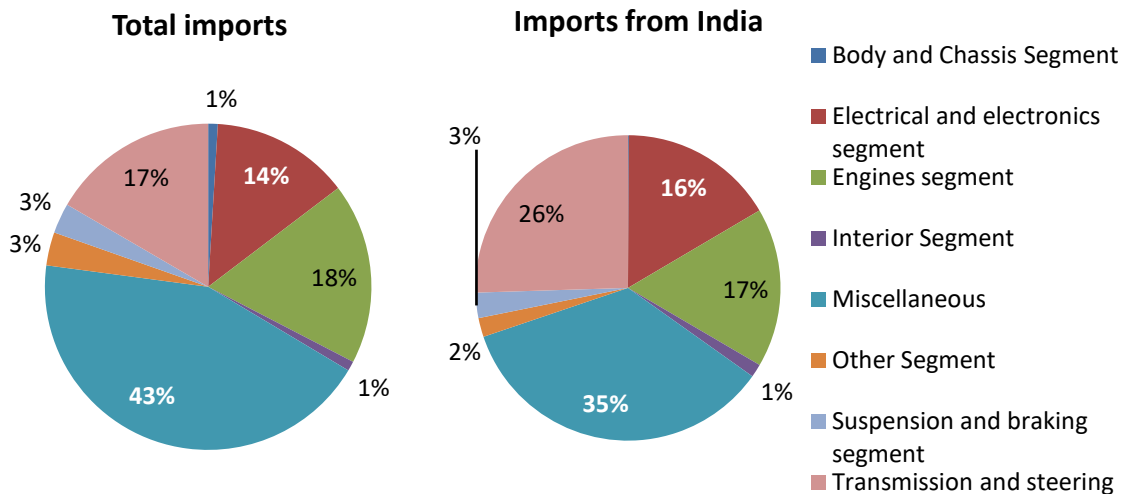


Source: DGFT, UN ComTrade, IMaCS analysis

**Segment Analysis**

India exports items from all major segments to Thailand, however bulk of the exports are miscellaneous items including spare parts and accessories. Transmission and steering items (26%), Engines and parts thereof (17%) and Electrical and electronics segment (16%) are the key export products from India to Thailand accounting for 59% of total exports. In addition, a total of items are exported as miscellaneous which account for another 35% of exports. A comparative of auto component exports from India with respect to total auto component imports of Thailand is shown in the following exhibit

Exhibit 53: Auto component imports of Thailand from India and world



Source: DGFT, UN ComTrade, IMaCS analysis

### Leading auto-component exporters to Thailand

A country wise assessment of imports coming into Thailand show that Japan (37% of total auto component imports) and China (22% of total auto component imports) are the largest suppliers of Thailand followed by Germany (5%), USA (5%), Indonesia (4.7%) and Malaysia (3.4%). Thailand has emerged as a major destination for sourcing auto parts as well as low cost manufacturing of automobiles. Japanese OEMs, post Japan - ASEAN FTA have invested significantly into Thailand to strengthen their supply chain in the region. As a result close to 37% of the auto component imports into Thailand come from Japan growing at 4.7% CAGR. China is the second leading supplier of auto components exports of which has grown at an impressive 25% CAGR during the period 2004 to 2015. India accounts for 1.9% of total auto component imports coming into Thailand worth USD 355 million in 2015, growing at 28% since 2004. ~85% of total imports of auto component coming into Thailand are from regions where Thailand has a trade agreement and out of the remaining places, it is already in talks with EU for a trade agreement. The trade agreement with EU may have detrimental effects on exports of auto components from India to both EU as well as Thailand. The major countries exporting to Thailand along with their respective share in auto component imports of Thailand are indicated in the following exhibit.

**Exhibit 54: Major countries exporting auto components to Thailand**

Country	Rank(in total imports to Thailand)	% of imports (in 2015)	Value of Import in 2015 (USD Billion)	CAGR (2004-2015)	FTA signed
Japan	1	37.1%	7.8	4.7%	2007
China	2	22.5%	4.7	25.1%	2003
Germany	3	5.1%	1.1	8.8%	EU FTA is under negotiation
USA	4	5.1%	1.1	9.2%	TPP is under negotiation (subject to final ratification from USA)
Indonesia	5	4.7%	0.99	16.3%	AFTA
Malaysia	6	3.4%	0.71	7.8%	AFTA
Philippines	7	2.6%	0.55	6.2%	AFTA
Rep. of Korea	8	2.3%	0.48	9.2%	NA
<b>India</b>	<b>9</b>	<b>1.9%</b>	<b>0.40</b>	<b>27.5%</b>	<b>2004</b>
Viet Nam	10	1.8%	0.38	23.6%	AFTA
France	11	1.0%	0.21	15.6%	EU FTA is under negotiation

Source: DGFT, UN ComTrade, IMaCS analysis

### Brief of Trade agreement between India and Thailand

India signed the Early Harvest Scheme (EHS) with Thailand in 2004 as a precursor to the trade agreement. The objective of signing the EHS was to identify potential for expanding trade between

both countries and boost the trade of already items. Thailand was later included as part of the India – ASEAN FTA signed in 2010. The bilateral trade between both nations have grown at 17% on a CAGR basis during the period 2004 to 2015. While imports from Thailand have witnessed a 20% CAGR growth during this period, exports from India have grown by 12% CAGR during this period leading to an increasing trade surplus in favour of Thailand. A brief of the India – Thailand EHS is indicated in the following exhibit.

**Exhibit 55: A snapshot of India – Thailand EHS**

Description	India Thailand EHS
Date of enforcement	1st September 2004
Tariff lines	82 items covered
Number of tariff lines pertaining to auto component industry	11
Tariff reduction range	0%-100%
Rule of origin	Change in Tariff Sub-Heading (CTSH) + Local Content of 35%

*Source: India's Trade portal, Ministry of Commerce (MoC)*

India – Thailand EHS, by nature, was meant to be precursor to a trade agreement, thus the coverage was limited to 84 line items. Among these, 11 tariff lines corresponded to auto component items. These items were included with strict Rules of Origin criteria regarding requirement in change in Tariff Sub-heading and a local content requirement of minimum 35%. Tariff benefit ranged from 0% to 100% and currently the tariff across all these HS codes is 0%. The auto component related HS codes that were included along with descriptions are enumerated in the following exhibit.

**Exhibit 56: Auto component items included in EHS**

HS Code	Code description
851220	Other Lighting Or Visual Signaling Equipment :
732020	Helical Springs
732690	Other Articles Of Heading 7326
840991	Parts Suitable For Use Solely/Principally With Spark-Ignition Internal Combustion Piston Engines other Than Parts For Aircraft Engine
841381	Other Pumps
841490	Parts Of Air/Vacuum, Pumps, Compressors And Fans
842199	Other Parts Of Filtering/Purifying Machinery
848210	Ball Bearings
848350	Flywheels And Pulleys, Including Pulley Blocks
870840	Gear Boxes And Parts Thereof
903289	Other Automatic Regulating/Controlling Instruments and apparatus

*Source: India's Trade portal, Ministry of Commerce (MoC)*

A further detailed analysis of export with respect to the select 11 items included in the EHS scheme indicate a significant growth in exports across all the items with items 732690 – other articles under heading 7326 and 870840 – Gear box and parts made a mark in the Thailand market accounting for 16% and 10% share in total imports of Thailand in 2015 each growing at 32% CAGR between 2004 to 2015. Item wise growth of trade is indicated in the following exhibit.

**Exhibit 57: Growth in export of items (included in EHS) to Thailand**

HS Code	Code description	Tariff rate (Jan '04)	Current tariff rate	Share of item in total Imports of Thailand (in 2015)	Value of Import of Item in 2015 (USD Billion)	CAGR - Indian export to Thailand (2004-2015)
851220	Other Lighting Or Visual Signaling Equipment :	15%	0%	1%	0.21	77%
732020	Helical Springs	15%	0%	0%	0	40%
732690	Other Articles Of Heading 7326	15%	0%	16%	3.4	32%
840991	Parts Suitable For Use Solely/Principally With Spark-Ignition Internal Combustion Piston Engines other Than Parts For Aircraft Engine	15%	0%	3%	0.63	17%
841381	Other Pumps	1%	0%	0%	0	1%
841490	Parts Of Air/Vacuum, Pumps, Compressors And Fans	15%	0%	2%	0.42	69%
842199	Other Parts Of Filtering/Purifying Machinery	5%	0%	1%	0.21	11%
848210	Ball Bearings	1%	0%	1%	0.21	20%
848350	Flywheels And Pulleys, Including Pulley Blocks	10%	0%	0%	0	20%
870840	Gear Boxes And Parts Thereof	30%	0%	10%	2.1	32%
903289	Other Automatic Regulating/Controlling Instruments and apparatus	10%	0%	4%	0.84	80%

Source: DGFT, UN ComTrade, IMaCS analysis, MoC

Further of signing of India – Thailand EHS, India also signed a Free trade agreement with the ASEAN region where the scope of agreement was widened. Although with respect to auto components, there were only four more new additions to the list. Thus, there are only a few auto component items included in the list for tariff advantages on trade with Thailand. India faces stiff competition from Japan which remains India’s major competitor in trade in auto parts with Thailand based on strategic sourcing decision of major Japanese OEMs. This can be countered only by increasing the scope of agreement to cover other prominent auto component items as well.

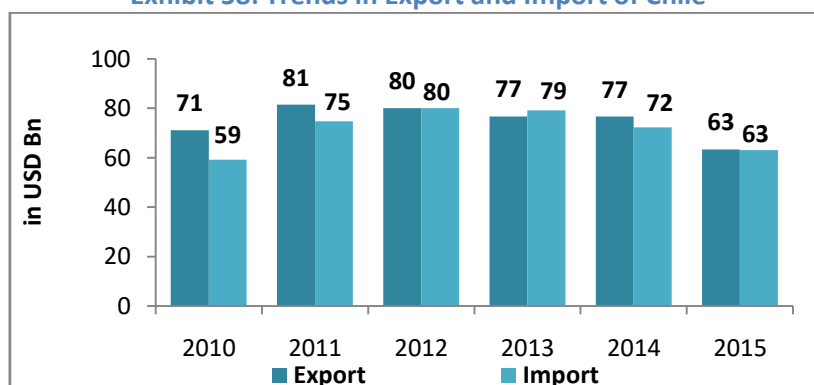


### 3.2.5. CHILE

Chile is a leading South American economy with a gross domestic product of USD 241 billion in 2015 growing at 2.1% CAGR during the period 2010 to 2015, mainly driven by the growing services sector. Rapid development of communication and technology, education and an increase in specialist skills are translating to the rising contribution of service sector to the economy of Chile.

Chile exported goods worth USD 63 billion in 2015, declining at 2% CAGR during 2010 to 2015. Major products exported from Chile are copper ore, fruits and nuts, fish and wood pulp. Imports to Chile were also worth USD 63 billion in 2015, growing at 1% CAGR during 2010 to 2015. Major products imported by Chile are Crude petroleum, refined petroleum, cars, trucks and petroleum gas. The trend of exports and imports are indicated in the following exhibit.

**Exhibit 58: Trends in Export and Import of Chile**

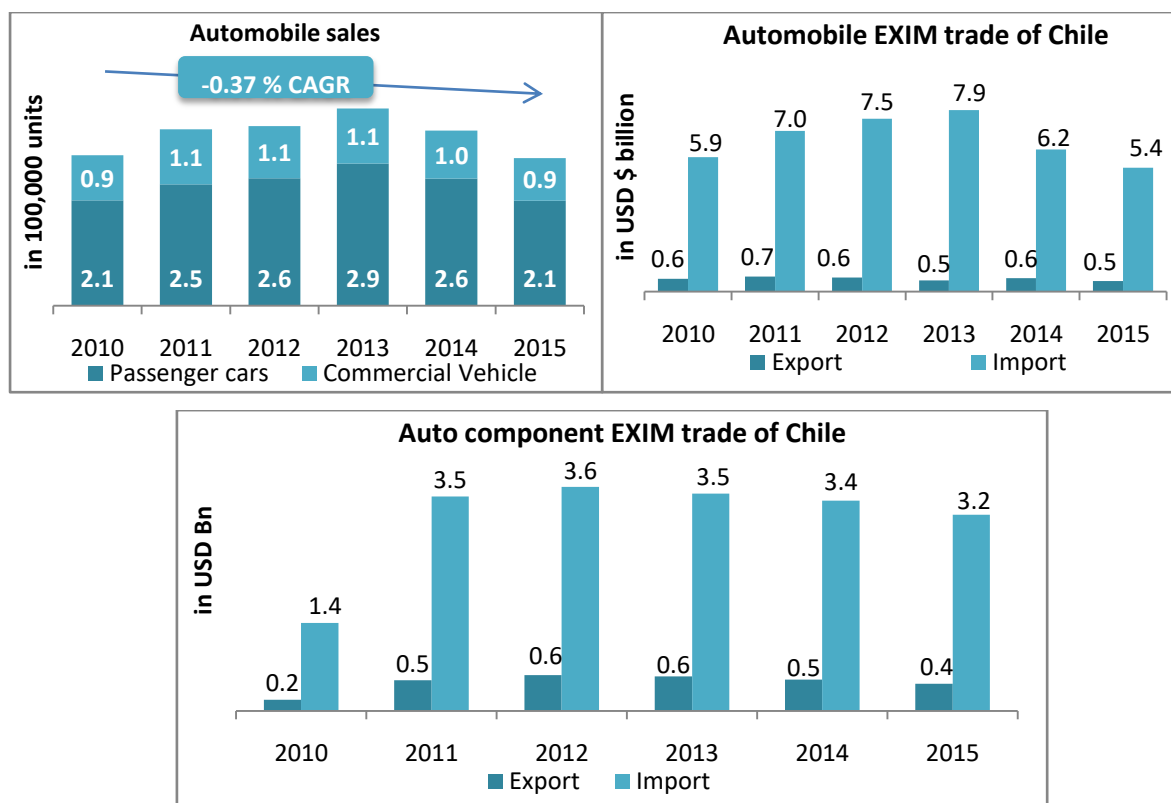


Source: DGFT, UN ComTrade, IMaCS analysis

#### ***Chilean Auto component Industry***

The Automobile industry accounts for less than 2% to the GDP of Chile most of which is import dependant catering mainly to the aftermarket requirements since domestic automobile production in Chile ceased in 2008. With near zero custom duty on close to 90% of the vehicles and auto parts, Chile is considered to be one of the most open car markets in the world. The trends for automobile sales and automobile and auto component EXIM trade are indicated in the following exhibit.

Exhibit 59: Snapshot of automobile production and international trade in Chile



Source: UN ComTrade, IMaCS analysis, secondary sources

Over the last several years, Chilean government have actively pursued trade – liberalizing agreements and in an effort, Chile has signed many trade agreements with leading economies and auto and auto part supplying countries across the world. Major trade agreements signed by Chile are listed as follows:

Exhibit 60: Trade Agreements signed by Chile

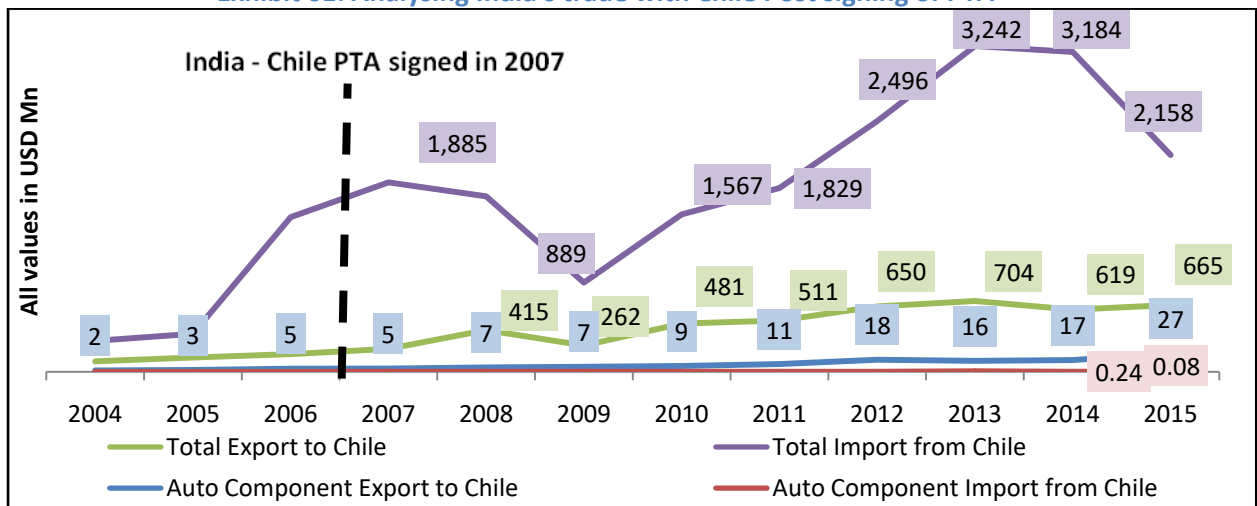
Sl. No.	Description
1	Chile – USA FTA
2	Chile – Canada FTA
3	Chile – Australia FTA
4	Chile – Japan FTA
5	Chile -China FTA
6	Chile -Rep. of Korea FTA
7	Chile -EU FTA
8	Chile- Mexico FTA
9	Chile – Viet Nam FTA
10	Chile – Argentina PTA
11	Chile – Turkey FTA
12	Chile – Colombia FTA
13	Chile – Peru FTA
14	<b>Chile – India PTA</b>

Source: secondary sources

**Analysis of EXIM trade trends**

A review of the trade trends between India and Chile for the last decade across all product segments and auto components indicate that post signing of PTA total Chilean imports to India have grown at a CAGR of 7.8% during the period 2007 to 2014, while India’s exports to Chile have grown at 15.3% CAGR. However, the trade deficit is significantly high due to large volume of copper being imported from Chile. A considerable decline in imports of copper in 2015 has led to steep decline in imports from Chile which reached USD 2,158 million in 2015 as compared to USD 3,184 million in 2014. India exported auto components worth USD 27 million to Chile in 2015, witnessing a growth of 24% CAGR during the period 2007 to 2015 post signing of PTA, while the imports of auto component have remained insignificant during the same period. The following exhibit indicates the trend of EXIM trade between India and Chile.

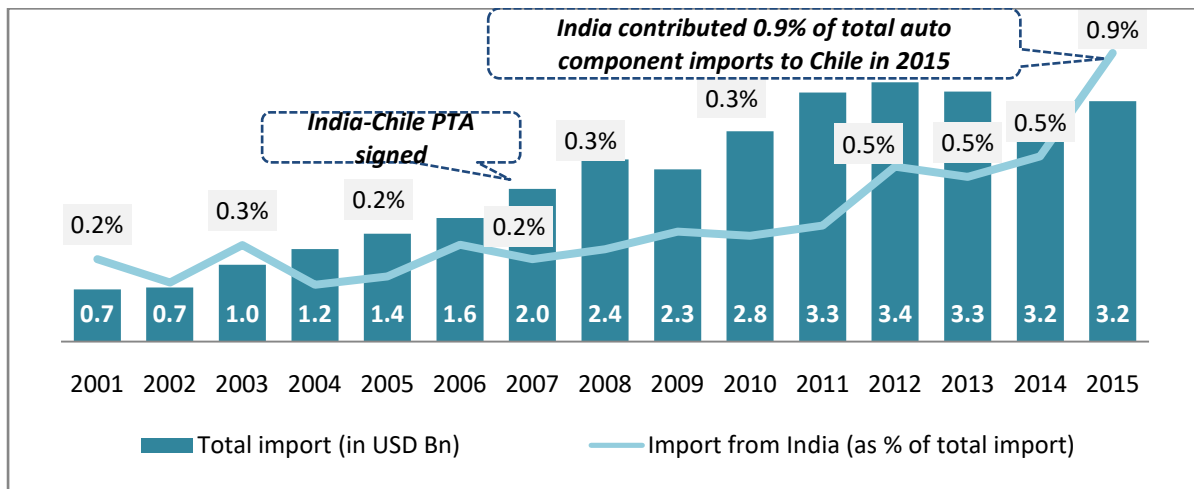
**Exhibit 61: Analysing India’s trade with Chile Post signing of PTA**



Source: DGFT, UN ComTrade, IMaCS analysis

India’s share in auto component imports of Chile has grown from USD 5 million in 2007 to USD 27 million in 2015 growing from 0.2% share to 0.9% share in the Chilean auto component imports, as indicated in exhibit 52. During the period 2010 to 2015, while the total imports of Auto components to Chile grew at a CAGR of 2.7%, the Imports from India witnessed a 25.5% CAGR growth. The growth of India’s export of auto components to Chile vis-à-vis the Chilean auto component market is indicated in the following exhibit

Exhibit 62: India's share in total import of auto components to Chile

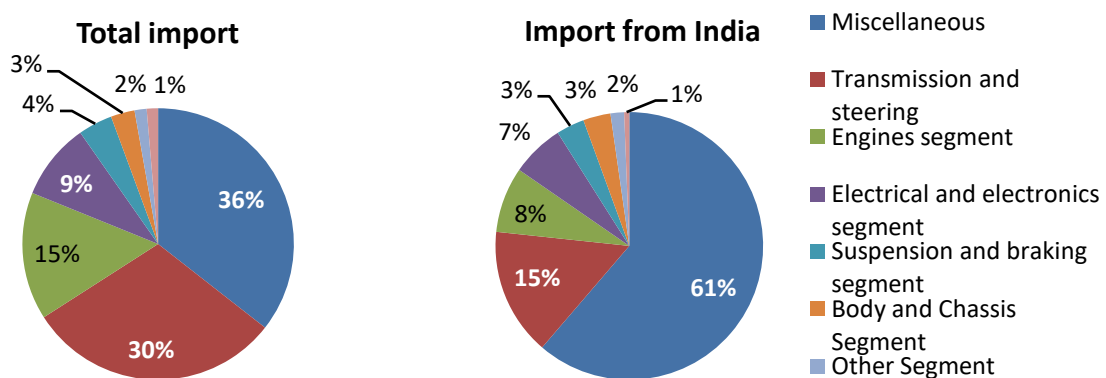


Source: DGFT, UN ComTrade, IMaCS analysis

**Segment analysis**

Segment wise review of trade for 2015 indicate that a majority of auto components from India are being exported as miscellaneous items (61%), with other leading exports being of transmission and steering (15%), engine components (8%) and electrical and electronics (7%). A comparative of the overall segment analysis of Chilean auto component imports, indicate that there is potential for enhancing exports in the transmission and steering as well as engine part segments.

Exhibit 63: Segmental share of India's export of auto components to Chile



Source: DGFT, UN ComTrade, IMaCS analysis

**Leading exporters of auto component to Chile**

A review of leading suppliers to the USD 3.2 billion auto component import market of Chile indicate that North America, EU & Asia are the largest exporters of auto components to Chile contributing more than 70% of total imports in 2015. The duty free import from NAFTA region following the trade

agreement of 2004, accounts for more than 30% of auto component import of Chile. USA was the largest exporter accounting for 29% of imports growing at 1.7% CAGR during 2007 to 2015. Strong line of credit of China in the Latin American region has aided Chinese exporters in improving their auto component imports to Chile, making China the second largest exporter of auto components to Chile with 12% share growing at 11.2% CAGR during 2010 to 2015. Both USA and China have trade agreements with Chile since 2004 and 2006 respectively. Other leading auto component suppliers include Germany (6%), Japan (4%) and South Korea (3%). The key auto component exporting countries along with their respective share are enumerated in following exhibit.

**Exhibit 64: Major countries importing auto components to Chile**

Country	Rank(in total imports to Chile)	% of imports (in 2015)	Value of Imports in 2015 (USD Million)	CAGR (2010-2015)	FTA signed
USA	1	29.0%	870	1.7%	2004
China	3	12.0%	360	11.2%	2006
Germany	4	6.0%	180	1.8%	NA
Japan	5	4.0%	120	2.5%	2007
Korea	7	3.0%	90	5.9%	2004
Italy	8	2.0%	60	3.2%	NA
Spain	9	2.0%	60	4.3%	NA
France	10	2.0%	60	8.8%	NA
Mexico	14	1.0%	30	-3.2%	1999
Canada	18	1.0%	30	3.0%	1997
India	19	1.0%	30	25.5%	2007

Source: UN Comtrade, iMaCS analysis

### ***Brief of Trade agreement between India and Chile***

Preferential trade Agreement (PTA) with Chile was signed as a part of India's Focus LAC program (Latin America and Caribbean) and it came to effect in 2007. The PTA was mainly aimed at securing copper resources from Chile while facilitating opening of Chilean and South American markets to Indian exports. The agreement has significantly boosted copper trade between the two countries with copper accounting for ~70% of bilateral trade between India & Chile. Post trade agreement, India has witnessed a 14% CAGR export growth & 2% CAGR growth in imports during 2007 to 2015, albeit on a high base for Chilean imports. In September 2016, the PTA with Chile was expanded and Chile offered tariff benefits ranging from 30% to 100% across 1798 tariff lines as compared to 296 tariff lines earlier. India also offered tariff benefits ranging from 10% to 100% across 1031 tariff lines. A snapshot of original India – Chile PTA is exhibited as follows in the following exhibit.

### Exhibit 65: A snapshot of India – Chile PTA

Description	India Chile PTA
Date of enforcement	August 2007
Tariff lines	India's offer to Chile: 178 Chile's offer to India: 296
Number of tariff lines pertaining to auto component industry	Chile's offer: 10 India's offer: 0
Tariff reduction range	10%-15% by India 10%-100% by Chile
Rule of origin	Total value of non-originating materials <= 60% (of FOB value)
<b>Expansion of India – Chile PTA – Sept. 2016</b>	
India's offering	1031 tariff lines with benefits ranging from 10% to 100% reduction
Chile's offering	1798 tariff lines with benefits ranging from 30% to 100% reduction

Source: Indian trade portal, MoC

Through the PTA, India opened up 178 tariff lines, while Chile opened up 296 tariff lines. Tariff reduction was in the range of 10% to 100% with Rules of origin criteria set at value of non-originating materials kept at less than or equal to 60%. Copper(HS Code: 260300) import from Chile constituted more than 70% of bilateral trade post signing of the trade agreement. The trade agreement had little focus on auto components and while Chile offered preferential tariff across 10 tariff lines pertaining to the auto component sector, India offered none. The items on which Chile offered a 20% Margin of Preference to India is: Engine segment (Pistons, valves, and nozzles), electrical equipment (incl. head lamps, tail lamps), transmission & steering parts (clutch etc.). A detailed HS-code wise tariff schedule is indicated in the following Exhibit 66.

### Exhibit 66: Auto component items included in Chile's offer to India

HS Code	Description	Margin of Preference
400921	Tubes, Pipes And Hoses Of Vulcanized Rubber Reinforced/Otherwise Combined Only With Metal Materials Without Fittings	20%
401032	Endless Transmission Belt/Belting Of Trapezoidal Cross-Section(V-Belt),Other Than V-Ribbed of circumference Between 60 Cm And 180 Cm.	20%
401699	Articles Of Vulcanized Rubber Excluding Hard Rubber	20%*
840999	Parts Of Other Engines(Diesel/Semi Diesel) Other Than Parts For Aircraft Engines	20%*
848220	Tapered Roller Bearings, Including Cone And Tapered Roller Assemblies	20%
851220	Other Lighting Or Visual Signaling Equipment	20%*

HS Code	Description	Margin of Preference
853929	Other Filament Lamps Excl U-V/Infra-Red Lamps	20%
870893	Clutches And Parts Thereof (Sintered Friction Materials(SFM) Products)	20%*
870899	Other: Motor Vehicle Parts (Reservoir For Hydraulic Power Steering Systems & Steering Gear Systems And Parts)	20%*
871499	Other Parts and accessories Of Bicycles and Other Cycles	20%*

Source: Indian trade portal, MoC

As per the tariff schedule agreed upon during the signing of PTA, the tariff rate for the 10 items included in PTA were to follow a Margin of preference of 20%, leading to a reduction of the current tariff rate of 6% to 4.8% for all of these 10 items while exporting from India. However, the tariff benefit is yet to percolate to certain HS codes, where the current tariff remains at 6%, making Indian exporters less competitive. In addition, Indian exports have to pay a higher custom duty as compared to imports from other competing countries which have duty free imports, putting exporters at a disadvantage. Therefore in spite of the preferential rates, these 10 items contributes ~28% (~ USD 7 million) of India's total auto component export to Chile. With no automobile production in Chile currently, the market is completely is mainly for spare parts and accessories.

A detailed assessment of exports across the 10 leading auto component tariff lines that had preferential tariff indicate a considerable growth in exports to Chile across most of these items, mainly due to the smaller exports base to start with. These 10 items constitute about 30% of total imports from India and was USD 8 million in 2015. A HS code wise growth and share of exports from India in Chilean auto component market is indicated in the following exhibit. Other motor vehicle parts (*HS code – 870899*), is the single largest item in the export basket of Chile, accounting for 17% of total imports coming into Chile and recording a growth of 31% CAGR during 2007 to 2015. Parts of other engines - Diesel/ semi Diesel (*HS code- 840999*) also commands a significant share in Chilean market at 3.66% growing at 21% CAGR during the same period.

**Exhibit 67: Trade in export of items (included in PTA) to Chile**

HS Code	Number of HS code (8 digit level)	Code description	Current tariff rate	Margin of Preference	Share of item in total Imports of Chile (in 2015)	Value of Imports of item in 2015 (USD million)	CAGR - Indian export to Chile (2007-2015)
400921	1	Tubes, Pipes And Hoses Of Vulcanized Rubber Reinforced/Otherwise Combined Only With	4.8%	20%	0.47%	14	35.64%

HS Code	Number of HS code (8 digit level)	Code description	Current tariff rate	Margin of Preference	Share of item in total Imports of Chile (in 2015)	Value of Imports of item in 2015 (USD million)	CAGR - Indian export to Chile (2007-2015)
		Metal Materials Without Fittings					
401032	1	Endless Transmission Belt/Belting Of Trapezoidal Cross-Section(V-Belt),Other Than V-Ribbed of circumference Between 60 Cm And 180 Cm.	4.8%	20%	0.07%	2	-4.60%
401699	1	Articles Of Vulcanized Rubber Excluding Hard Rubber	6%	20%*	1.22%	37	22.63%
840999	1	Parts Of Other Engines(Diesel/Semi Diesel) Other Than Parts For Aircraft Engines	6%	20%*	3.66%	110	20.39%
848220	1	Tapered Roller Bearings, Including Cone And Tapered Roller Assemblies	4.8%	20%	0.64%	19	48.32%
851220	1	Other Lighting Or Visual Signaling Equipment :	6%	20%*	1.34%	40	16.21%
853929	1	Other Filament Lamps Excl U-V/Infra-Red Lamps	4.8%	20%	0.23%	7	-11.30%
870893	1	Clutches And Parts Thereof (Sintered Friction Materials(SFM) Products)	6%	20%*	1.55%	47	13.08%
870899	1	Other: Motor Vehicle Parts	6%	20%*	17.51%	525	30.88%
871499	1	Other Parts and accessories Of Bicycles and Other Cycles	6%	20%*	0.33%	10	4.04%

Source: Indian trade portal (website of MoC), UN Comtrade, ACMA

Note: As per the tariff schedule signed in 2007, a Margin of preference of 20% was provided for the 10 items in table above. As per this, the duty rates should have reduced from the initial rate of 6% to 4.8%. However, Indian trade portal reports that at least 6 among the above mentioned 10 items does not get the advantage in tariff currently.



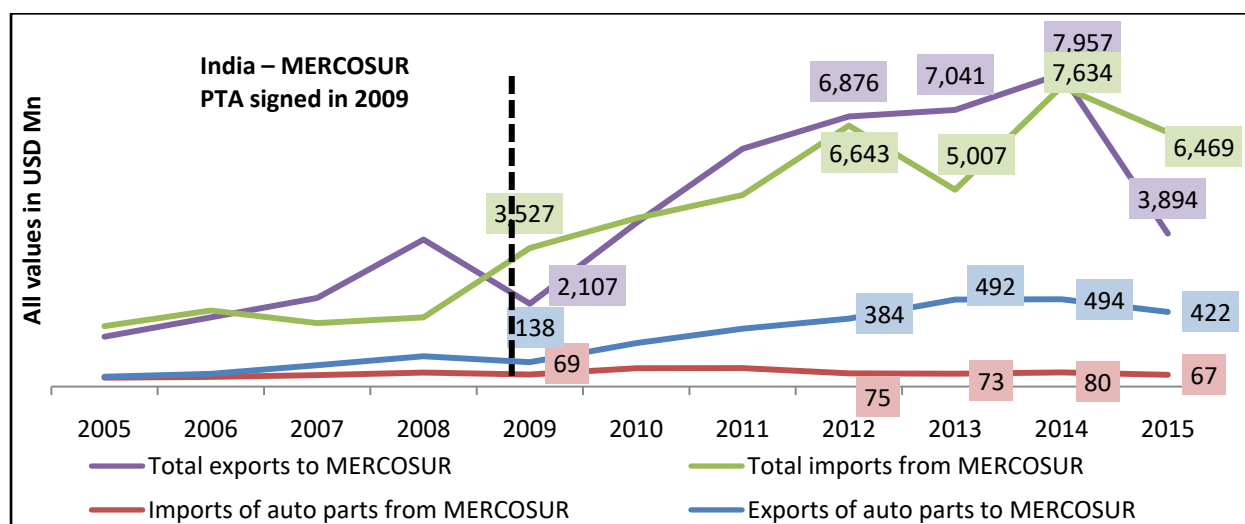
### 3.2.6. MERCOSUR

MERCOSUR stands for Mercado Común del Sur in Spanish and Southern Common Market in English is the sub-regional trade bloc of South America constituted by Argentine, Brazil, Paraguay, Uruguay and Venezuela. MERCOSUR was established in 1991 by the treaty of Asuncion with an aim to promoting free trade and easy movement of goods, people and currency within the trade bloc.

#### Analysis of EXIM trade trends

An analysis of the trends in EXIM trade between India and MERCOSUR region during the last decade, indicate that after PTA was signed in 2009, total imports from MERCOSUR to India have witnessed a grown at a CAGR of 30% during the period 2007 to 2014<sup>5</sup>. During the same period, India’s total exports to MERCOSUR also witnessed a 30% CAGR growth, leading to a trade surplus since 2010 to 2014. In 2015 both exports and imports witnessed a significant decline leading to a trade deficit scenario, owing to the global economic slowdown in 2015. India exported auto components worth USD 422 million to MERCOSUR in 2015 witnessing a growth of 29% CAGR during the period 2007 to 2014 and then slowing down to 20% in 2015. Import of auto components to India from MERCOSUR is considerably lower at USD 67 million and has remained stagnant since 2009. Overall, India enjoys a trade surplus of USD 355 million in auto component trade with MERCOSUR in 2015. The following exhibit shows the y-o-y trade movement between India and MERCOSUR region.

Exhibit 68: Analysing India’s trade with MERCOSUR Post signing of PTA



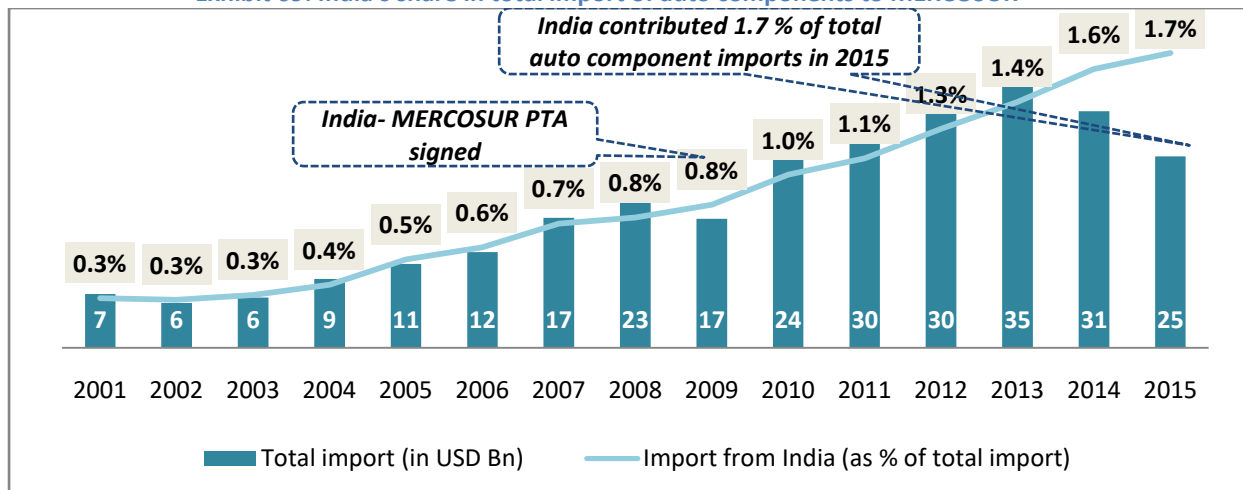
Source: DGFT, UN ComTrade, iMaCS analysis

India’s share in import of auto components of MERCOSUR increased from 0.8% in 2009 to 1.7% in 2015 growing from USD 138 million in 2009 to USD 422 million USD in 2015 at a CAGR of 20%.

<sup>5</sup>Trade trends have been considered from 2007 instead of 2009 factoring in the recession of 2008-09 which led to significant decline in trade during that period

During the same period, total auto component imports of MERCOSUR grew at 7% CAGR, indicating that exports from India grew at a much faster pace leading to increased market share. The trend of overall imports of auto components in MERCOSUR region and share of India’s exports are indicated in the following exhibit. Although overall imports of auto components in MERCOSUR have been declining since 2013, Indian exports continue to grow at a steady rate.

**Exhibit 69: India’s share in total import of auto components to MERCOSUR**

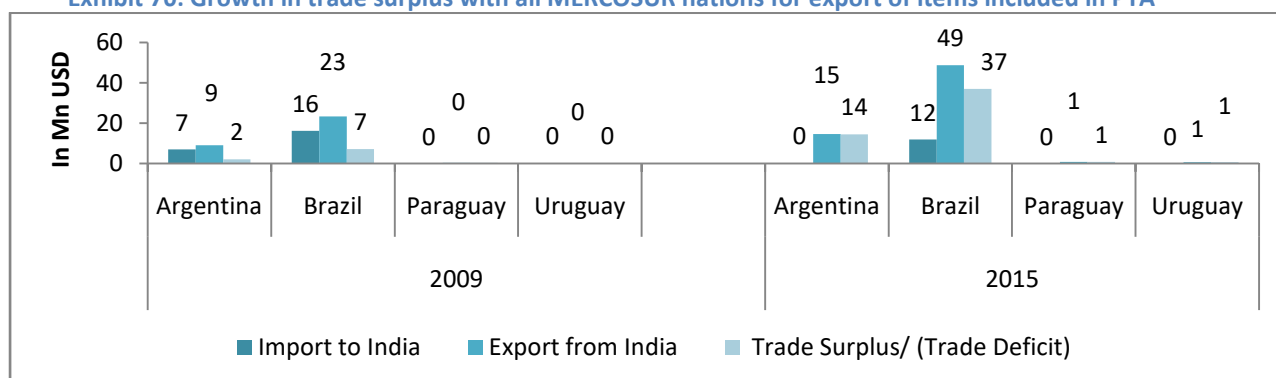


Source: DGFT, UN ComTrade, IMAcS analysis

**Country wise EXIM trade analysis**

A country wise assessment of exports going into MERCOSUR region within the 14 tariff lines considered under the PTA, show a significant growth in export of auto components to Brazil and Argentina with each accounting for USD 49 million and USD 15 million worth of exports respectively. The country wise exports and trade surplus or deficit scenario for 2009 and 2015 are indicated in the following exhibit

**Exhibit 70: Growth in trade surplus with all MERCOSUR nations for export of items included in PTA**



Source: DGFT, UN ComTrade, IMAcS analysis

Brazil is the most important market for Indian exports to MERCOSUR which constitutes more than 85% of India’s exports to MERCOSUR followed by Argentina (14%). While the growth across all the four countries have been in double digits ranging from 15% to 35%, the share of Indian exports going

to Paraguay and Uruguay has been insignificant. The following exhibit show country wise Indian auto component exports to MERCOSUR for 2015.

**Exhibit 71: India’s trade with MERCOSUR member countries**

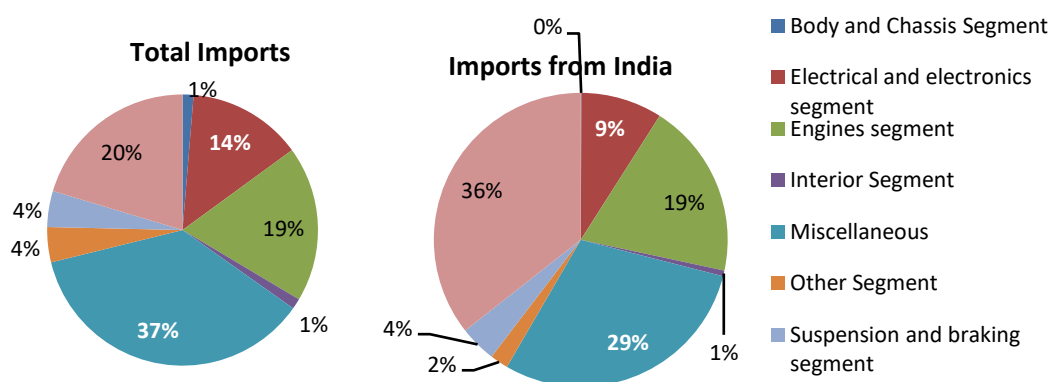
Country	% share of Indian export to trade bloc	Value of Import in 2015 (USD Billion)	Exports CAGR (2009-2015)	Imports CAGR (2009-2015)
Argentina	14%	3.5	25.9%	-20.1%
Brazil	84%	21	29.7%	5.5%
Paraguay	0%	0	16.2%	NA
Uruguay	1%	0.25	32.3%	NA

Source: DGFT, UN ComTrade, IMaCS analysis

### Segment analysis

Segmental break up of total auto component imports in 2015 indicate that transmission and steering (36%), engine parts (19%) and electrical and electronics (9%) are the most exported products from India. In addition 29% of auto components are exported as miscellaneous products across different HS codes, as indicated in the following exhibit. A comparative with the total import of auto component into MERCOSUR indicate that while India has fared well in transmission and steering segment, there is potential to grow in electrical and electronics segment.

**Exhibit 72: Segmental share of India’s export of auto components to MERCOSUR**



Source: DGFT, UN ComTrade, IMaCS analysis

### Leading exports of auto components to MERCOSUR

An assessment of the key auto component suppliers to MERCOSUR region indicate that China is the leading exporter of auto components to MERCOSUR with 14% share in 2015, followed by USA (12.5%), Germany (9.6%), Japan (7.9%) and South Korea (5.8%). Strong line of credit offered by China to the Latin American regions plays a major role in aiding their exports growth at an impressive 21.8% growth on a CAGR basis during the period 2009 to 2015. Further to stiffen competition to

European and American imports to the region is China is also negotiating a trade agreement with MERCOSUR. European Union (EU) is another leading supplier accounting for 30% of total auto component imports of MERCOSUR growing at a CAGR of 4% during 2009 to 2015 and is also in the process of finalising a trade union with MERCOSUR.

South Korea and Mexico are other key supplies to the region which are growing at 41% and 27% CAGR respectively. While Mexico has already signed an FTA with MERCOSUR region and is further aided by proximity to the market, Republic of Korea is negotiating trade agreement with MERCOSUR. Exports of auto part from ASEAN, especially Thailand have also witnessed growth in the last few years. Unlike most other locations, in MERCOSUR the growth on Indian auto components is sub-optimal at 20% CGAR as compared to other leading suppliers competing with India like China (21.8% CAGR), South Korea (41.4% CAGR) and Mexico (27% CAGR) indicating a stiff competition for Indian players exporting to the region. The key supplying nations along with their respective share and growth rates have been enumerated in the following exhibit.

**Exhibit 73: Major countries exporting auto components to MERCOSUR**

Country	Rank(in total imports to MERCOSUR)	% of imports (in 2015)	Value of Imports in 2015 (USD Million)	CAGR (2009-2015)	FTA signed
China	1	13.8%	345	21.8%	UN
USA	2	12.5%	313	6.8%	2009
Germany	3	9.6%	240	1.4%	UN
Japan	4	7.9%	198	-0.8%	NA
S. Korea	5	5.8%	145	41.4%	UN
Mexico	6	4.7%	118	27.0%	2006
Italy	7	4.6%	115	6.6%	UN
France	8	4.2%	105	2.0%	UN
Sweden	12	1.5%	38	4.3%	UN
India	11	1.7%	43	20.4%	2009

Source: DGFT, UN ComTrade, IMaCS analysis

### ***Brief of Trade agreement between India and MERCOSUR***

India signed a Preferential Trade Agreement (PTA) with MERCOSUR in 2009 as an attempt to increase India's access to the growing Latin American markets. This PTA has helped increase Indian exports to region leading to reversal of the trade deficit in 2009 to a trade surplus in 2014. However, the global slowdown in 2015 led to severe decline in overall exports widening the trade deficit to

USD 2575 million. The total export to MERCOSUR region grew by 30% CAGR post signing of PTA from 2009 to 2014 and was recorded at USD 7.9 billion in 2014. In 2015, due to the global economic slowdown, the export almost halved to USD 3.9 bn. The total imports from MERCOSUR grew at 17% CAGR post Preferential Tariff Agreement (PTA) during 2009 to 2015 and was recorded at USD 7.6 billion in 2014, falling by 15% y-o-y in 2015 to USD 6.5 billion due to global slowdown. A snapshot of India – MERCOSUR PTA is indicated in the following exhibit.

**Exhibit 74: A snapshot of India – MERCOSUR PTA**

Description	India MERCOSUR PTA
Date of enforcement	1st June 2009
Tariff lines ( at 8 digit level)	MERCOSUR's offer list to India: 452 India's offer list to MERCOSUR: 450
Number of tariff lines pertaining to auto component industry (8 digit level)	MERCOSUR's offer list to India: 18 (14 at 6 digit level) India's offer list to MERCOSUR: 35 (19 at 6 digit level)
Tariff reduction range	10%-100%
Rule of origin	Total value of non-originating materials <= 40% (of FOB value)

Source: India's Trade portal, Ministry of Commerce (MoC)

Through this PTA, India offered preferential tariff across 450 tariff lines and MERCOSUR offered preferential tariff across 452 tariff lines. Tariff reduction was in the range of 10% to 100% with Rules of origin criteria set at value of non-originating materials kept at less than or equal to 40%. The coverage of auto component industry in the PTA was limited to offering of 14 tariff lines by MERCOSUR which together accounted for 27% of total auto component imports of MERCOSUR and 19 tariff lines by India. A Margin of preference of 20% was offered on these 14 items on importing from India, subject to rules of origin. The HS-code wise tariff schedule is given in the following exhibit.

**Exhibit 75: Auto component items included in MERCOSUR's offer to India**

HS Code	Description	Margin of preference offered by MERCOSUR
848220	Tapered Roller Bearings, Including Cone And Tapered Roller Assemblies	10%
851220	Other Lighting Or Visual Signaling Equipment :	20%
400931	Tubes, Pipes And Hoses Of Vulcanized Rubber Reinforced/Otherwise Combined Only With Textile Materials Without Fittings	10%
840991	Parts Suitable for use Solely/principally with Spark-Ignition Internal Combustion Piston Engines other Than Parts For Aircraft Engine	10%
841330	Fuel, Lubricating/Cooling Medium Pumps For Internal Combustion Piston Engines	10%
841480	Other Pumps, Compressors Etc.	10%
848210	Ball Bearings	10%
848240	Needle Roller Bearings	10%
848250	Other Cylindrical Roller Bearings :	10%
848299	Other: Part Of Balls And Roller Bearings	10%

HS Code	Description	Margin of preference offered by MERCOSUR
848330	Bearing Housings, Not Incorporating Ball Or Roller Bearings Plain Shaft Bearings	20%
850110	Motors Of An Output Not Exceeding 37.5w	10%
870829	Other Parts And Accessories Of Bodies (Including Cabs) :Other	10%
870894	Steering Wheels, Steering Columns And Steering Boxes; Parts Thereof	10%

Source: Indian trade portal, MoC

A detailed HS code wise trade performance for the 14 tariff lines that enjoyed preferential tariff has been indicated in the following exhibit. Amongst the 14, majority of trade has been under three key tariff lines - other parts and accessories of bodies (HS code – 870829), Parts of petrol engines –spark ignition (HS code- 840991) and steering wheel and steering column and parts (HS code- 870894) which have witnessed a growth of 47%, 29% and 64% CAGR respectively during 2007 to 2015 accounting for 7%, 2.8% and 2% respectively of total auto component imports of MERCOSUR in 2015. Exports in these 14 tariff lines was estimated at USD 60 million in 2015 and together account for ~15% of total auto component imports from India.

**Exhibit 76: Growth in export of items (included in PTA) to MERCOSUR**

HS Code	Number of HS codes at 8 digit level	Code description	Current tariff rate	Share of item in total Imports of MERCOSUR (in 2015)	Value of Import in 2015 (USD Million)	CAGR - Indian export to MERCOSUR (2007-2015)
848220	1	Tapered Roller Bearings, Including Cone And Tapered Roller Assemblies	14.4%	0.7%	18	-1.0%
851220	1	Other Lighting Or Visual Signaling Equipment :	14.4%	1.4%	35	37.2%
400931	1	Tubes, Pipes And Hoses Of Vulcanized Rubber Reinforced/Otherwise Combined Only With Textile Materials Without Fittings	12.6%	0.2%	5	44.7%
840991	2	Parts Suitable for use Solely/principally with Spark-Ignition Internal Combustion Piston Engines other Than Parts For Aircraft Engine	14.4%	2.8%	70	29.0%
841330	1	Fuel, Lubricating/Cooling Medium Pumps For Internal Combustion Piston Engines	16.2%	1.1%	28	1.3%
841480	3	Other Pumps, Compressors Etc.	12.6%	1.6%	40	11.3%
848210	1	Ball Bearings	14.4%	1.2%	30	2.3%
848240	1	Needle Roller Bearings	14.4%	0.2%	5	4.6%
848250	1	Other Cylindrical Roller Bearings :	14.4%	0.2%	5	-1.6%
848299	1	Other: Part Of Balls And	12.6%	0.5%	13	0.4%

HS Code	Number of HS codes at 8 digit level	Code description	Current tariff rate	Share of item in total Imports of MERCOSUR (in 2015)	Value of Import in 2015 (USD Million)	CAGR - Indian export to MERCOSUR (2007-2015)
		Roller Bearings				
848330	1	Bearing Housings, Not Incorporating Ball Or Roller Bearings Plain Shaft Bearings	12.8%	0.6%	15	9.1%
850110	2	Motors Of An Output Not Exceeding 37.5w	16.2%	1.0%	25	20.1%
870829	1	Other Parts And Accessories Of Bodies (Including Cabs) :Other	1.8%	7.0%	175	46.8%
870894	1	Steering Wheels, Steering Columns And Steering Boxes; Parts Thereof	16.2%	2.0%	50	64.2%

Source: Indian trade portal (website of MoC), UN Comtrade, ACMA

The following exhibit indicates the list of auto components included in India's offer to MERCOSUR.

**Exhibit 77: Auto Component items included in India's offer to MERCOSUR**

HS code (6 digit level)	Number of HS code at 8 digit level	Description presented by MERCOSUR	Margins of preference offered by India
731822	1	Non-Threaded Articles : Other Washers	20%
731824	1	Cotters And Cotter-Pins	20%
732010	1	Leaf-Springs And Leaves Therefor	20%
732020	1	Helical Springs	20%
732090	2	Other Springs And Leaves	20%
841330	2	Fuel,Lubricating/Cooling Medium Pumps For Internal Combustion Piston Engines	20%
841391	5	Parts Of Pumps For Liquid Whether Or Not Fitted With A Measurg Device	20%
841520	1	Air-Conditioning Machines Of A Kind Usd Frpersons, In Motor Vehicles	20%
848210	3	Ball Bearings	20%
848220	4	Tapered Rolled Bearings, Including Cone And Tapered Roller Assemblies	20%
848230	1	Spherical Roller Bearings	20%
848240	1	Needle Roller Bearings	20%
848250	6	Other Cylindrical Roller Bearings :	20%
848299	1	Other: Part Of Balls And Roller Bearings	20%
848330	1	Bearing Housings, Not Incorporating Ball Or Roller Bearings Plain Shaft Bearings	20%
848410	1	Gaskets Of Metal Sheetting Combined With Other Material	20%

HS code (6 digit level)	Number of HS code at 8 digit level	Description presented by MERCOSUR	Margins of preference offered by India
848420	1	Mechanical Seals	20%
850110	1	Motors Of An Output Not Exceeding 37.5w	20%
902910	1	Revolution Counters, Production Counters, Taximeters, Mileometers, Pedometers and the Like	20%

Source: Indian trade portal, MoC

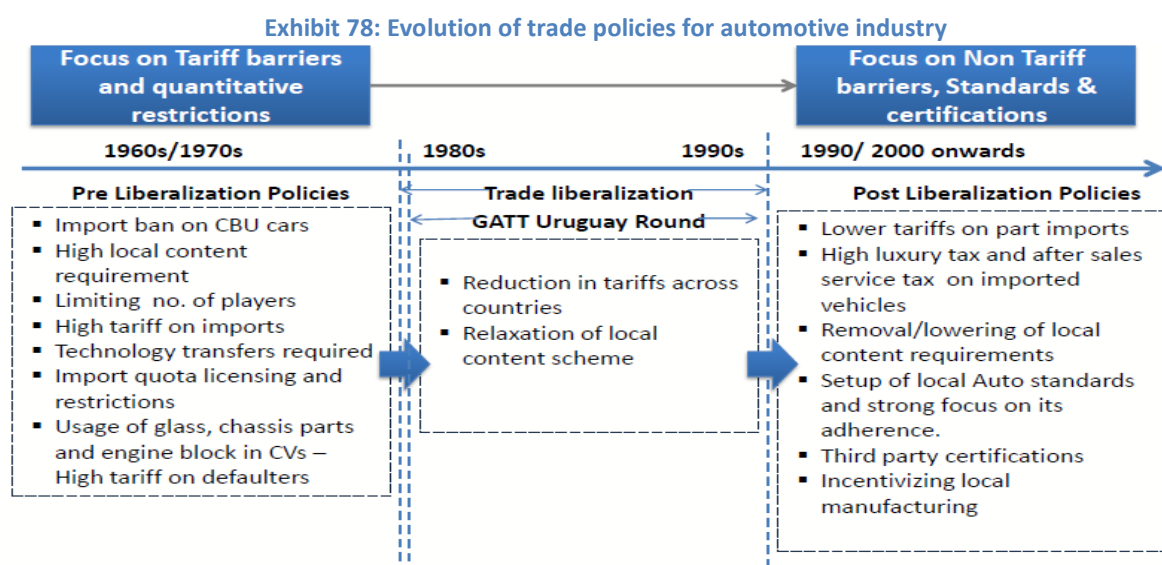
MERCOSUR is one of the largest integrated trade blocs after EU & NAFTA and has potential to be prominent growing market for Indian auto component exports. However India faces stiff competition from other leading supplier nations of China, Mexico, South Korea and ASEAN region all of which have trade agreements under negotiation with MERCOSUR. Further, India – MERCOSUR PTA covers less than 15% (in trade value) of India’s export to MERCOSUR and there is a need to re-negotiate the PTA with inclusion of more items with potential such as in Electrical & Electronics segment, Engine segment (including fuel injection), spare parts (spring pad, bracket, ball bearing), gear box, alloy steel forging and Transmission, etc. with an aim to enhance competitiveness of Indian suppliers across these segments. To further strengthen trade, the possibility of a bilateral agreement with Brazil, which accounts for major auto component demand in the region, can also be explored.



## 4. REVIEW OF TRADE POLICIES OF AUTO MANUFACTURING COUNTRIES

This section focuses on the trade policies of key auto manufacturing countries. The trade policies affecting automotive industry with a special focus on auto component industry have been reviewed for both pre and post-liberalization periods, to identify policies and regulations that have helped these countries in developing their auto component industry both in terms of building capacity and expanding in foreign markets through international trade and to derive similarities that can be successfully replicated in India so as to promote the auto component industry and its exports.

A high level view of the trade policies of these select countries as depicted in exhibit 65, indicate that global trade policies have moved from tariff and import license based regime in pre-liberalization to non-tariff based measures during the last 40-50 years, especially post-liberalization. Pre-liberalization policies in 1960s and 1970s included presence of high tariff on imports, import ban on Completely Built Units (CBUs); import quota, licensing and restrictions; technology transfer requirements; high local content requirements; high tariff on imports and limiting the number of players in the domestic market. These policies witnessed significant changes during liberalisation era of 1980s and 1990s and there were gradual decrease in import tariffs and relaxation of local content schemes. Post liberalization regime was also characterised by increased focus on trade policies towards inclusion of non-tariff measures like presence of standards and certifications on cars and auto components, further relaxation/removal of local content requirements, high luxury tax and after sales taxes on imported vehicles, incentivizing local manufacturing, and strong auto standards being set-up and third party certifications for imports. A high level view of the shift of global trade policies during the last 50 years has been depicted in the following exhibit



Source: Secondary research, IMaCS analysis

It indicates that global trade policies have moved from tariff and import license based regime in pre-liberalization to non-tariff based measures during the last 40-50 years, especially post-liberalization. Pre-liberalization policies in 1960s and 1970s included presence of high tariff on imports, import ban on Completely Built Units (CBUs); import quota, licensing and restrictions; technology transfer requirements; high local content requirements; high tariff on imports and limiting the number of players in the domestic market. These policies witnessed significant changes during liberalisation era of 1980s and 1990s and there were gradual decrease in import tariffs and relaxation of local content schemes. Post liberalization regime was also characterised by increased focus on trade policies towards inclusion of non-tariff measures like presence of standards and certifications on cars and auto components, further relaxation/removal of local content requirements, high luxury tax and after sales taxes on imported vehicles, incentivizing local manufacturing, and strong auto standards being set-up and third party certifications for imports.

Trade policies and Non-tariff barriers present in the following countries have been reviewed in this section.

- |                                 |                             |
|---------------------------------|-----------------------------|
| 1. Republic of Korea (S. Korea) | 5. Malaysia                 |
| 2. Japan                        | 6. Turkey                   |
| 3. Indonesia                    | 7. United States of America |
| 4. China                        | 8. Germany                  |

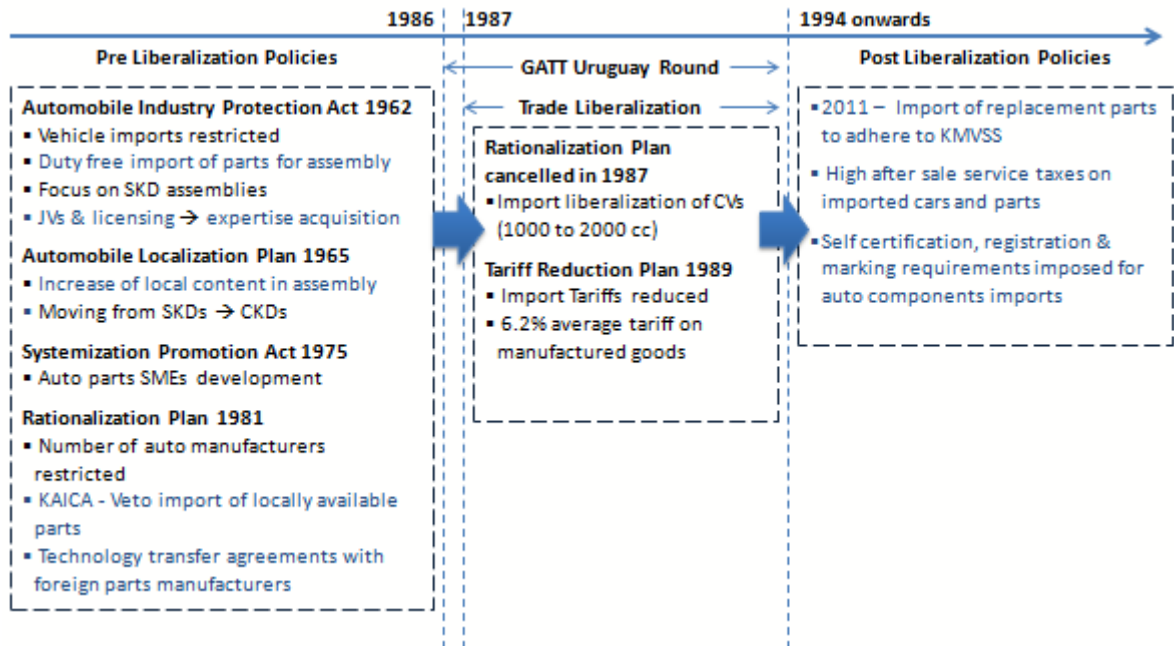
A detailed assessment of these countries under review is provided in the subsequent sub-sections.

## **4.1. REVIEW OF TRADE POLICIES**

### **4.1.1. REPUBLIC OF KOREA (S. KOREA)**

South Korea is the fifth largest vehicle producer in the world which grew at 1.38% CAGR in last five years having a total production of 4.5 million units in 2015. The automotive and auto component industry of South Korea is a major contributor to South Korea's economy. The auto component industry contributes to around 5.6% of total manufacturing output of the country. The key policies and regulations around the auto and auto component industry of South Korea are indicated in the following exhibit.

Exhibit 79: Evolution of Trade policies in South Korea



Source: Secondary research, IMaCS analysis

**Pre-liberalisation:** South Korean automotive industry was promoted as a key focus industry by the Government in 1960s. The major focus was on assembly of imported parts of foreign vehicle manufacturers. Kia Motors was the first vehicle manufacturers of South Korea formed in 1952. Kyungsung Precision Industry which manufactured steel tubing and bicycle parts since 1944, it changed its name to Kia Motors in 1952 and started building Honda licensed motorcycles (1957), Mazda licensed trucks (1962) and cars (1974). The other key players who were present during the initial years of the automotive industry were Hyundai Motors Industry, Sinjin Automobiles (Daewoo's predecessor) and Ha Dong-hwan Car Assembly Shop (SsangYong's predecessor). **“The automobile industry protection act”** of 1962 was adopted to promote and protect the automobile industry with aim to build a competitive domestic industry which would utilize local content to a maximum level in future, thereby, helping in the development of an auto parts industry. The key measures taken in this policy were prohibition of CBU vehicle imports, duty free imports of parts for local assembly, focus on Semi Knocked Down (SKD) assembly, and promotion of Joint Ventures (JVs) with major foreign automobile manufacturers in order to acquire technology and improve capability of the industry. Through this initiative the Korean automotive industry began acquiring the expertise in vehicle manufacturing. Since the initial plan allowed duty free imports of parts for assembly, the local content in vehicles was negligible.

In 1965, “**The automobile localisation plan**” was introduced with the aim to increase the local content in vehicle assembly. The objective of this plan was to achieve 90% local content in vehicles by 1967. This plan also focussed on assembly of Completely Knocked Down (CKD) parts as compared to SKD parts earlier. The plan was successful and by 1975 South Korean automobile industry progressed from CKD assembly to a mass production hub having a high local content value of ~90% by 1970s. It was at this juncture that the automotive manufacturers felt the need to have increased focus on the quality of parts leading to the introduction of “**SME Systematization Promotion plan**” in 1975 which aimed at developing auto parts SME so that they meet the quality standards and demand of local vehicle manufacturers. The **SME Systematization Promotion plan** was successful in promoting SMEs in auto component industry and by 2005 ~92% of the auto component manufacturers were SMEs<sup>6</sup>.

In 1979, the oil crisis and subsequent recession hit the South Korean automotive industry with low vehicle demand in both domestic and export markets resulting in significant unutilized capacities with domestic players. To counter this, in 1981 the Government came up with “**Rationalization plan**” that limited the number of domestic automobile manufacturers to four – Hyundai, Daewoo, Kia Motors and Asia Motors – and assigned manufacturing of specific vehicles to individual players with the belief that focussing on specialization would increase output through economies of scale. Hence, the local automotive body – “Korean Auto Industries Co-operative Association (KIACA)” – also vetoed against the import of auto parts, which were being manufactured locally. In 1985, Korean government opened auto parts industry for foreign investments, foreign ownership and technological cooperation and ~300 technical cooperation agreements and ~100 Joint ventures were formed.<sup>7</sup> Technology transfer agreements with foreign parts manufacturers were signed in order to improve the productivity and quality of auto parts produced in South Korea. The government also initiated public and private investments in R&D through National R&D Plan, promoting private research labs, promoting industrial R&D.<sup>8</sup>

**Trade Liberalisation:** This phase of liberalisation of South Korean auto component industry began during mid-1980s with the commencement of GATT Uruguay round. The rationalization plan of 1981 was abandoned in 1987 and import liberalization of commercial vehicles of capacity between 1000cc to 2000cc was carried out. In 1989 under the “**Tariff Reduction Plan**” voluntary tariff reductions were carried out between 1989 and 1994. Average tariff rate was reduced from 18.1% in 1988 to 7.9% in 1994. Tariffs on manufactured goods averaged around 6.2% by 1994.

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<sup>6</sup>Source: South Korean automotive policies @icapitaleducation.biz

<sup>7</sup>Source: East Asia: Regional Economic Integration and Implications for the United States

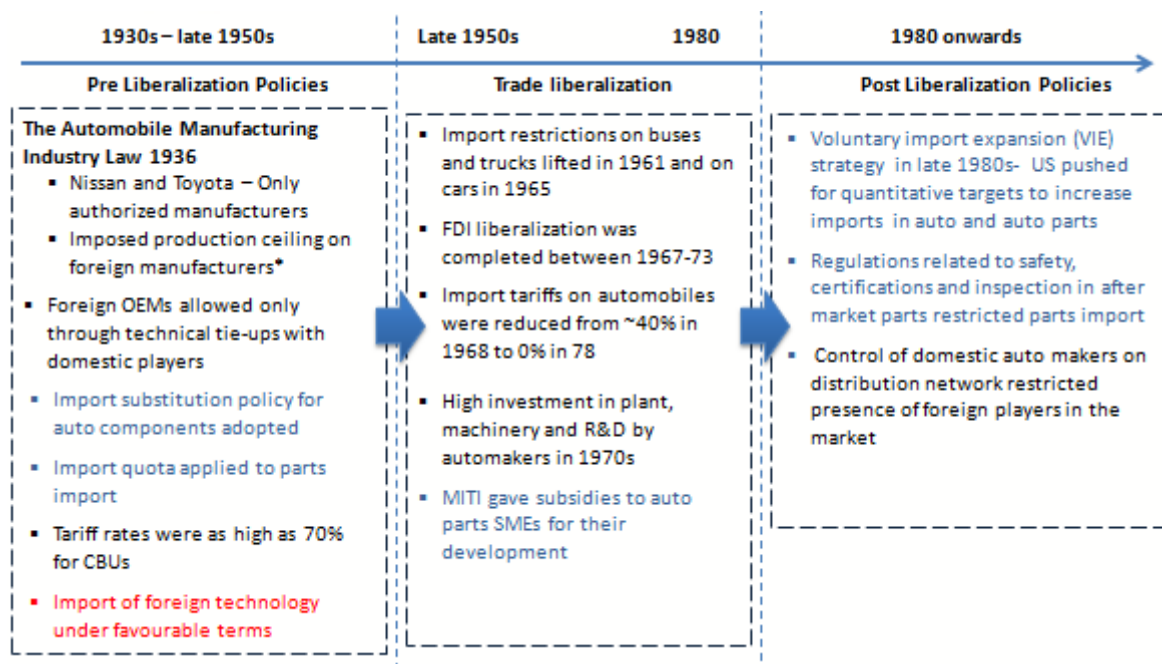
<sup>8</sup>Source: Evolution of Industrial Policy and Green Growth in Korea by Sanghoon Ahn, Korean Development Institute

**Post-liberalization:** In the post-liberalization period, the policies employed by South Korea have mainly focussed on non-tariff measures. In 2011, Korea made it mandatory for replacement parts to adhere to Korean Motor Vehicle Safety Standards (KMVSS). It further increased the taxes and duties on the component prices of imported cars as well as the after sale services taxes on these cars making imported parts less competitive with respect to locally manufactured parts. The American Chamber of Commerce in a 2014 report stated that South Korea also imposed burdensome parts self-certification, registration and marking requirements to protect domestic manufacturers and discourage use of imported auto parts<sup>9</sup>. All these measures continue to protect the domestic players from foreign competition.

### 4.1.2. JAPAN

Japanese automotive industry is the third largest in the world having a total production of 9.3 million vehicles in 2015. Automotive industry contributes to ~89% of total manufacturing output of Japan and is a prominent contributor to its economy. The key policies and regulations around the auto and auto component industry of Japan are indicated in the following exhibit.

Exhibit 80: Evolution of Trade policies in Japan



Source: Secondary research, iMaCS analysis

**Pre-liberalization Era:** The Japanese automotive industry began in early 1900s with focus on producing trucks and buses for the military. In 1918, the government passed the *“Military Vehicle Subsidy Law”* which provided manufacturing, purchasing and maintenance subsidies to local

<sup>9</sup>Based on 2014 report of USA Chamber of Commerce

manufacturers and buyers of qualified vehicles (buses and trucks) who fulfilled certain investment related and local content criteria. This was done mainly to promote local manufacturing of auto and auto components. By mid 1920s leading foreign players like Ford and General Motors had entered Japanese market and established themselves as major suppliers capturing ~90% of the domestic market by 1934. The large volume of auto components that these companies imported threatened Japan with chronic trade deficit and also posed a serious threat to the domestic industry. To promote local manufacturers, the government enacted ***“The Automobile Manufacturing Enterprise Law”*** in 1936 which allowed the Government to issue licenses to Toyota and Nissan (both established in 1930s) to produce vehicles and also to impose an upper ceiling of 12,360 and 9,470 units on the production of vehicles by Ford and General Motors respectively.<sup>10</sup> This forced Ford and General Motors to terminate their operations in Japan. Toyota and Nissan quickly acquired the existing dealer networks set up by the US companies to build their own distribution system.<sup>11</sup>

Post World War II Japanese automobile makers who were mainly into manufacturing of automobiles for the military struggled to get permission from occupation forces to obtain raw materials and parts and hence the responsibility of promoting the industry was given to Ministry of International Trade and Industry (MITI). MITI came up with the very first 5-year plan to promote the auto industry in 1948, which entailed the use of imported technology and financial assistance from Reconstruction Finance Bank to help get raw materials, electricity and labour. In December 1948, Japanese government was instructed to implement economic stabilization policies collectively known as Dodge Line policies which were mainly aimed at keeping inflation under control by reducing money supply. The introduction of these policies created a shortage of funds in the industry leading to lower production and high unemployment. It was followed by a series of business failures constituting what is called ‘Dodge Line Recession’. The Korean war of 1950 came as a relief for the struggling industry as it got fresh orders for automobiles from US-led UN forces in South Korea.

Post recovery, many new policies were implemented to protect and support the industry. One of the key measures was to introduce ***“Basic Policy for the Introduction of Foreign Investment into Japan’s Passenger Car Industry”*** which stated that repatriation of earnings from investment in production would be guaranteed only if it would contribute to the development of the domestic industry and it barred repatriation of earnings from investment in marketing activities. Ministry of International Trade and Industry (MITI) also stated that foreign firms could enter domestic market through technical tie-ups with domestic firms under certain specified provisions only. Access to foreign

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<sup>10</sup> Source: Infant Industry Policy: A Case of Japanese Automobile Industry Before 1945

<sup>11</sup> Source: Japanese Industrial Policy: The Post-war Record and the Case of Supercomputers

technology was preferred over Foreign Direct Investment (FDI) and imports. Technology acquisition of automobile industry was also seen as a source of development of supporting machinery and auto parts industry and the imports of foreign technology was allowed under favorable terms. In 1956, the **Law on Extraordinary Measures for the Promotion of Machine Industry** was legislated in which auto component industry was listed as one of the 17 specified industries. To improve the efficiency and promote technological progress of these select industries, financial assistance and rationalization programs were implemented. MITI tried to merge the auto parts industry into small group of large and specialized firms with an aim to make them more competitive with respect to foreign firms. This had a reasonable success as the concentration of market share increased, cost of production reduced and prices of auto parts reduced by almost 30%.<sup>12</sup>

**Liberalization:** The policy initiatives taken by Japanese government till early 1960s helped develop the domestic automotive industry which became competitive as compared to industry in Europe and USA. Trade liberalization started from early 1960s when the Japanese government lifted import restrictions on buses and trucks in 1961 and on cars in 1965. The delay in lifting restrictions on cars was due to small volume of domestically manufactured cars and lack of price competitiveness as compared to foreign players. Subsequently import tariffs on automobiles were also reduced from ~40% in 1968 to 0% in 1978. Japan also liberalized its foreign investment policies from mid 1960s but the liberalization was under certain stringent conditions and required government approval.

**Post-liberalization:** In response to stronger pressure to liberalize its markets by WTO, Japan reduced import tariffs on auto parts in 1980s. During this period Japan also significantly improved its standardization and certification systems<sup>13</sup> ensuring conformity of imported vehicle and auto parts to its systems, thereby limiting imports. By mid-1980s, Japan had a major export market in the USA and it was getting pressurised by USA to either open its markets to US imports or face sanctions and restrictions on Japanese auto exports to USA. Therefore Japanese government through its **“International Cooperation program”** implemented **Voluntary Import Expansion (VIE)** strategy in mid 1980s wherein purchase of auto parts from US firms was promoted. The purchase of US based auto parts in Japan increased from US\$ 2.5 billion in 1986 to US\$ 7.1 billion in 1990 which further increased to around US\$ 19 billion in 1994.<sup>8</sup> Post 1990s Japan has liberalized its tariffs for auto parts and

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<sup>12</sup>Source: A comparative study on the industrial policy in Japan and South Korea – Chan Wai Keung, Timothy

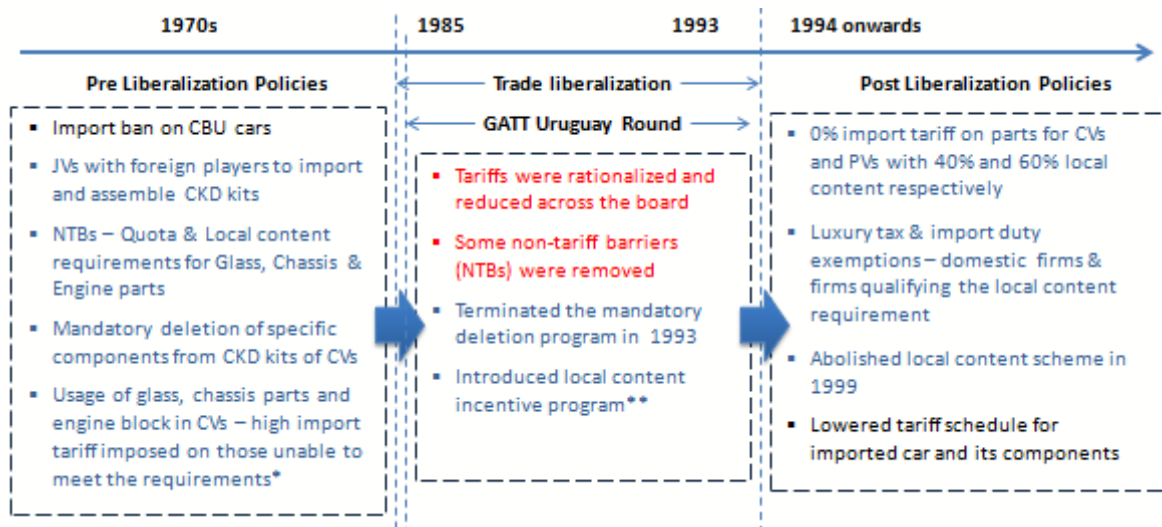
<sup>13</sup>Source: Trade conflicts between Japan and the US over market access: the case of automobiles and automotive parts

has shifted its policy measures towards protecting the domestic market through various non-tariff measures. Some of the pertinent Non-Tariff Barriers (NTBs) employed by Japan include certification and regulatory norms especially related to safety, noise and emission which restrict imports of aftermarket automobiles and auto parts. It also restricted the geographical penetration of foreign players from controlling distribution networks by restricting the number of distributor for foreign firms to one in an area of 500 km, thereby providing an upper hand to Japanese manufacturers.

### 4.1.3. INDONESIA

Indonesia is a key automobile and auto component manufacturer in the ASEAN region with total production of vehicles of ~1 million units in 2015 growing at 9.4% CAGR during 2010 to 2015. The domestic auto industry is also a significant contributor to the manufacturing sector output. The key policies and regulations around the auto and auto component industry are indicated in the following exhibit.

**Exhibit 81: Evolution of Trade policies in Indonesia**



Source: Secondary research, IMaCS analysis

**Pre-liberalization Era:** Indonesia has the longest history of automobile manufacturing in South East Asia. Indonesian automotive industry began when General Motors (GM) began assembly in 1927. Post independence in 1949, the development policy through industrialization had its impact on automotive industry and the General Motors plant was nationalized and merged with state owned Gaya Motors which resulted in General Motors to withdraw completely in 1954. The Indonesian automotive industry started its growth track only in late 1960s when the Government of Indonesia established it as one of the key sectors for development of import substitution industry. During 1970-80 import of vehicles as Completely Built Units (CBU) were



banned and foreign players were restricted from direct assembly and distribution of automobiles in Indonesia. They were allowed to enter the domestic market through joint ventures and in assembly of CKD parts. The joint ventures focussed on encouraging technology transfer to the domestic industry. High import tariff, high local content requirements and import quotas were also imposed to protect the domestic industry. . The high local content requirements were to encourage the growth of domestic auto component industry. In 1976 the government introduced a **“Mandatory Deletion Programme (MDP)”** for commercial vehicles with an aim to replace imported components by locally manufactured components. Initially low value items like glass, paint, tyres and batteries were targeted under the MDP, but later on higher value-added components including engines, transmissions, brakes, and axles were added to it by 1984.<sup>14</sup> The manufacturers who could not fulfil these requirements were penalised and the import tariffs were raised to 100%. However, these local content restrictions failed to have the desired impact as domestic auto component industry was characterised by manufacturing of low technology parts mainly consisting car lamps and tires.

**Liberalization Era:** In early 1990s Indonesia started liberalizing its automotive industry by eliminating the import tariff on CBU vehicles and reducing the tariff on imported components based on local content value. In 1993 the MDP was eliminated and a new incentive based localization plan was implemented which gave tariff reductions on imported parts based on the level of local content achieved by the manufacturer. This program was not restricted to any particular type of component and was more market oriented. A deregulation package was introduced in 1995 which offered zero percent import tariff on imported parts with local content of 40% or more for commercial vehicles and 60% or more for passenger vehicles. This package also allowed foreign investment into the industry as a part of Indonesia’s commitment under AFTA (ASEAN Free Trade Agreement). In 1996 the Indonesian Government announced the **“National Car Program”** under which Timor Putra National (TPN) was designated as sole producer of National Car. It had three year exemption to import duty and luxury taxes if it could use 100% national capital, use an original brand and attain 60% local content value at the end of three years. Subsequently to acquire foreign technology a joint venture between TPN, Kia Motors and Indauda (local player) was reached and Kia-Timor Motors (KTM) was launched. KTM also used Timor brand of cars used by TPN. The government

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<sup>14</sup> Source: Dawn of Industrialisation? the Indonesian Automotive Industry

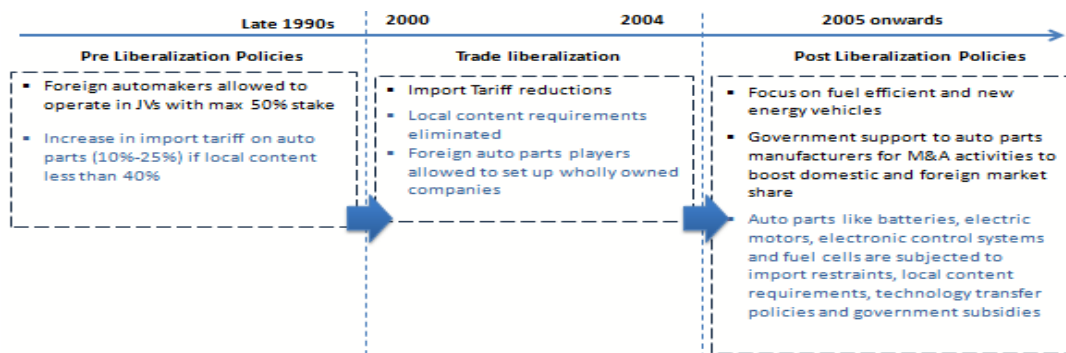
also allowed KTM to import CBU vehicles under Timor brand for a year, exporting workers and auto parts to Kia Motors in Korea.

**Post-liberalization Era:** The Asian crisis of 1997 along with a case brought by EU, Japan and USA to the dispute settlement panel of WTO against the local content scheme and the national car programme in 1998 led to further liberalization of the industry. In 1999, Indonesia abolished the localization programme and also requested Timor Putra National (TPN) to repay the exempted import tariff and luxury taxes which led to bankruptcy of TPN in 2001. Indonesia also came up with a new import tariff policy for automobiles based on engine types and sizes and weight of vehicles in 1999. The local content level fell as a result of these developments. In order to increase the local content in the vehicles the government came up with a new system in 2006 through which it allowed imports of Incompletely Knocked Down (IKD) parts which basically targeted the sub components which were not locally manufactured and allowed sub-assemblies and sub components to be imported at lower tariff than CKD parts. This enabled transfer of knowledge and know-how through foreign investment into domestic assembly technologies through equipment and tools. In 2013 the Indonesian Government came up with **“Low Cost Green Car (LCGC)”** program which focused on small, affordable, ecological cars and aims at development of local content manufacturing for small cars. It also has rolled out **“Low Emission Carbon Project”** which targeted manufacturing of electric vehicles (EVs), hybrid vehicles (HVs) and alternate fuel cars. This project aimed at attracting foreign investments and building technology in EVs, HVs and alternate fuel cars.

#### 4.1.4. CHINA

China is the largest vehicle manufacturer in the world since 2009 with annual production of 24 million units in 2015, higher than the vehicle production of USA and Japan combined. The key policies and regulations around the auto and auto component industry are as follows:

**Exhibit 82: Evolution of Trade policies in China**



Source: Secondary research, iMaCS analysis

**Pre-liberalization Era:** The initial phase of Chinese automotive industry was characterized by limited State Owned Enterprise (SOE) production with prohibitions on foreign investment and functioning of private enterprises. The Chinese automotive industry began under the Japanese occupation in 1931 in Manchuria. Post occupation Chinese automotive industry lacked expertise to grow and it had to reach out to Soviet Union in 1950 for design of commercial vehicles and all-terrain vehicles. The Chinese government established the First Auto Works a state owned enterprise to produce trucks from the Soviet designs. In 1958, First Auto Works also started to produce cars but could not reach significant scale. In 1960, Second Auto Works was also established in central China. The initial development of the automotive industry was restricted to serving Government needs or taxi fleets in big cities. Since it was illegal to own a personal vehicle till 1984, there was no demand for mass manufactured vehicles in China. This coupled with low purchasing power of Chinese household restricted the growth of the domestic industry. In 1978, the industry shifted gears from being an import oriented industry to having partnerships with foreign manufacturers. In 1980s the first Joint Venture (JV) was setup with America Motor Corps to form the Beijing Jeep Company. Volkswagen of Germany and PSA Peugeot – Citroen of France also established JVs in China. The government restricted the ownership of foreign auto manufacturer to 50% in the JV. The JVs were also incentivised and mandated to source local made parts. The local content requirement of 40% was set for the manufacturers to get import tariff reductions and failure to meet the requirement attracted an additional duty of 10% to 25%. The idea behind formation of JVs was to export the vehicles produced to fund the import of technology needed to advance the industry. The Chinese planners envisioned that the JV assembled cars would lead to rapid localization of parts. This was resisted by foreign manufacturers who insisted on importing parts as the local parts were not of desired quality. The lack of adequate technology also led to lower exports.

**Liberalization Era:** Liberalization of Chinese automotive industry began with its accession to WTO in 2001. In 2004, China introduced policy that significantly reduced import tariffs on vehicles and eliminated local content requirements. The policy aimed at reducing import tariffs on cars to a maximum of 25% and to 10% on an average for commercial vehicles by 2006. China maintained its limit for foreign ownership in vehicle manufacturing to 50% but allowed 100% foreign ownership of auto parts manufacturing entities. Chinese government also pushed for private manufacturing thereby developing non-state players in the market. As a result the volume of vehicular production increased substantially lowering the prices in the market. Local private players also improved the auto parts industry.

**Post-liberalization Era:** In post-liberalisation era following to the recession of 2008, the industry faced new set of challenges and the government had to bring out the **“Automotive Readjustment and Revitalization Plan”** where the focus shifted towards development and production of New Energy Vehicles (NEV) with special impetus on hybrid vehicles, alternate fuel vehicles and fuel cell vehicles. Chinese government planned to establish special development funds, improve supportive tax policies, and encourage the provision of increased credit support for companies in NEV sector. Investment related to manufacturing of engines and other key parts, R&D in key technologies, batteries and electric motors for new energy vehicles were encouraged under this policy. The Chinese government has also provided subsidies to NEV makers to encourage development of electric vehicles industry. The total amount of green vehicle subsidies given by China in 2015 amounted to USD 4.5 billion.<sup>15</sup>

The government also supported parts and component manufacturers to engage in mergers and acquisitions in order to expand their market share in domestic as well as export markets. In recent policy discussions Chinese policy makers have hinted at developing a new set of standards which will make it harder for foreign players to compete in domestic market.<sup>16</sup> According to a report by US Ministry of Commerce on auto parts industry, auto parts like batteries, electric motors, electronic control systems and fuel cells are still being protected by the Chinese government by employing measures which include import restrictions, local content rules, technology transfer policies, export requirements and export subsidies.<sup>17</sup> The Chinese government gave export subsidies to auto component manufacturers under the **“National Auto and Auto Parts Export Base”** program to help in development of domestic auto parts industry.

Moreover Chinese government has also given coal, electricity and raw material (steel and glass) subsidies to domestic auto component makers in order to facilitate low cost manufacturing in order to compete with foreign competitors in global market.

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<sup>15</sup> Source: <http://in.reuters.com/article/china-autos-electric-idINKBN14JOMN>

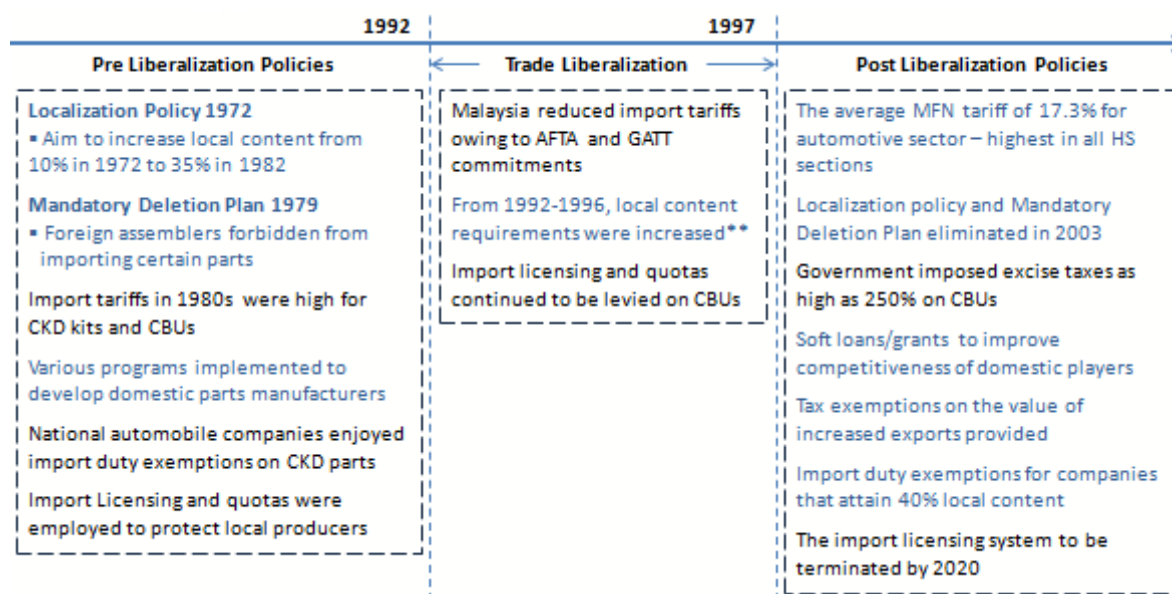
<sup>16</sup> Source: “Engines of Change: China’s Rise and the Chinese Auto Industry” & “China’s automobile industry: development, policies”

<sup>17</sup> Source: 2016 Top Markets Report Automotive Parts Country Case Study – China

### 4.1.5. MALAYSIA

Malaysian automotive industry produced around a million vehicles in 2015 and is dominated by national vehicle manufacturers. The industry contributes to 2.4% of Malaysian GDP and has been considered a major industry for the development of the native population. The key policies and regulations around the auto and auto component industry are indicated in the following exhibit.

**Exhibit 83: Evolution of Trade policies in Malaysia**



Source: Secondary research, iMaCS analysis

**Pre-liberalization Era:** The development of Malaysian automotive industry began in 1960s when the government devised a policy to promote an integrated automobile industry in order to strengthen a rapidly growing industrial base. In 1963, the Ministry of Trade and Industry (MTI) established an interdepartmental body to oversee the automotive industry, the Motor Vehicle Assembly Committee (MVAC), whose functions included import regulation, promotion of local contents, and control of the number of assemblers, makes and models. To encourage local assembly, the import of CBU vehicles was discouraged by imposing high import tariffs ranging from 30% to 80% on CBU vehicles and from 10% to 20% on CKD parts and auto parts.<sup>18</sup> Licenses were given to foreign vehicle manufacturers for assembly units and foreign parts manufacturers to setup component manufacturing units. The first such foreign manufacturer to setup a unit was Volvo owned Swedish Motor Assemblies in 1967 and in the next three years six more such licenses for assembly plants were approved. The resultant automotive

<sup>18</sup> Source: Thailand in global automobile networks

industry was fragmented and consisted of various vehicle assembly firms with limited capacity, low local content and substandard quality. In order to improve the local content in the vehicles and also develop the local auto parts industry, the government announced a **“Localization plan”** in 1972 which aimed at improving the local content in vehicles from 10% in 1972 to 35% in 1982.<sup>12</sup> However with concerns over the parameters used in determining the local content and in the interest of ASEAN regional cooperation the plan was initially delayed and then shelved.<sup>19</sup> In 1979, the MVAC revived the local content policy with the **“Mandatory Deletion Program (MDP)”** which forbade import of certain parts in the CKD package, which were to be produced locally then based on inputs from local parts manufacturers. However these measures had limited success and the local content in vehicles reached only 20% by early 1980s, mainly because the locally manufactured parts remained costly due to low economies of scale.

In 1980, Heavy Industries Corporation of Malaysia (HICOM) was formed by the government to act as an apex body to implement the heavy industry project for development of manufacturing sector. In 1983, HICOM entered into a Joint Venture with Mitsubishi Motor Corporation forming Perusahaan Otomobil Nasional (Proton) under the national car program. Subsequently to protect Proton the import tariffs were hiked. The tariffs ranged between 40% - 80% for CKD kits and auto parts; and between 80% - 150% for CBU vehicles. Proton was also given import tariff exemptions on CKD kits and various internal tax exemptions. Moreover, import licensing and quota were used to restrict CBU import. In 1988 under **“Proton Components Scheme”** and later under **“Vendor development program”** in 1993, Proton made efforts to develop the domestic parts manufacturers. It assisted in market and technical development for selected parts manufacturers, while government financial institutions provided financial assistance. In 1993 Perodua (Perusahaan Otomobil Kedua Sdn. Bhd.) was established as the second national car company for manufacturing small cars which also enjoyed all the benefits given to Proton.

**Trade Liberalization Era:** The process of liberalization in Malaysian economy began post AFTA (1992) and WTO (1995) commitments. Malaysia reduced import tariffs applicable to AFTA countries on 8764 tariff lines from 5% to 0%. The average MFN tariff was also reduced from 15.2% in 1993 to 8.1% in 1997.<sup>20</sup> The automotive industry however remained an anomaly to these commitments and the national car makers remained protected from international

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<sup>19</sup> Source: ‘Ancillary Firm Development in the Malaysian Motor Vehicle Industry’ from The Motor Vehicle Industry in Asia: A Study of Ancillary Firm Development

<sup>20</sup> Source: Malaysia Trade policy review 1997 – WTO

competition. In 1992 the government introduced an additional requirement to meet the local content ratio and it was raised successively from 20% in 1992 to 60% for cars and 45% for commercial vehicles in 1997.

**Post-Liberalization:** The pressure to open up the domestic automotive market for internal competition under AFTA and WTO commitments grew significantly. The government under its AFTA commitments had to abolish the local content policy and mandatory deletion plan in 2003. The Malaysian government reduced import tariffs for AFTA nations on the tariff lines pertaining to the automotive industry in 2008 which were subsequently eliminated by 2010. The **“National Automotive Policy (NAP)”** of 2006 which was reviewed in 2009 and then in 2014 continued to protect the national car makers. The key offerings of the National Automotive Policy for 2014 was to provide channelized efforts towards developing Malaysia as the regional hub for the emerging Energy Efficient Vehicles (EEVs) by 2020 and promoting domestic capacity building, exports promotion and increasing value added activities occurring in Malaysia. For this Malaysia is offering

- a. easy issue of new licences for manufacturing of EEV vehicles, customised incentives for strategic investments in EEVs;
- b. import tax and excise duty exemptions on import of CKD units of electric vehicles;
- c. soft loans up to RMB 130 million for development of infrastructure for EEV, EVs and hybrid vehicles;
- d. With focus to drive exports, Malaysia is focussing on expanding markets through bilateral ties with Japan, India, Pakistan, Australia, New Zealand and Chile.
- e. Provision of soft loans up to RMB 126 million for establishing Distributor Infrastructure Networks in target markets.
- f. Provision of soft loans for technological upgradation of tooling for tool, dies and mould manufacturers as well as spare part manufacturers with an aim to increase the operational efficiency of the industry.

As part of the NAP policy, Malaysia is also developing road maps for Malaysian Automotive Technology Road map (MATR) along with Supply chain road maps, Human capital development road map and re-manufacturing road map. Malaysia is also implementing more standards for safety regulation, voluntary vehicle inspection programme and has recently implemented the global 3R standard (Reduce, Reuse and Recycle) in 2015 in line with the EU which introduced the same through its EC 3R directive.

The recent policy changes witnessed a rise in Non-Tariff barriers to protect the domestic industry. This policy gave financial stimulus in the form of soft loans and concessional grants from the Automotive Development Fund (ADF) and Industrial Adjustment Fund (IAF) to auto parts and component manufacturers to improve their competitiveness and to enhance their contribution to the automotive industry. The Vehicle Type Approval (VTA) process was introduced to restrict the import and sale of “sub-standard” vehicles and parts in 2009. Tax exemptions on statutory income for both vehicle and parts manufacturers in the automotive industry was enhanced in 2010 from 10% to 30% of the value of increased exports provided the vehicles and parts/components attain at least 30% value added; and from 15% to 50% of the value of increased exports provided that the goods attain at least 50% value added.<sup>21</sup>

#### 4.1.6. TURKEY

Turkish automotive industry is the 15<sup>th</sup> largest automotive industry in the world producing over 1.3 million units in 2015. It grew at ~10% CAGR for the period 2002-2015. The industry has become a centre of excellence for commercial vehicles and is the number one producer of Light Commercial Vehicles (LCV) in Europe. The industry has close to 1,100 component manufacturers supporting the vehicle manufacturers.<sup>22</sup> The key policies and regulations around the auto and auto component industry are indicated in the following exhibit.



*Source: Secondary research, IMACS analysis*

**Pre-liberalisation Era:** The automotive industry in Turkey began developing in mid 1950s as a vehicle assembly industry. Türk Otomotiv Endüstrileri A.ş. was one of the first indigenous vehicle manufacturers established in 1955, started assembling military trucks and later trucks by International Harvester under license. A number of foreign vehicle manufacturers entered

<sup>21</sup> Source: Malaysia Trade policy review 2014 – WTO

<sup>22</sup> Source: Invest in Turkey – Automotive sector (<http://www.invest.gov.tr/en-us/sectors/Pages/Automotive.aspx>)



the market through joint ventures and licensing agreements till late 1960s. Ford, Renault and British Motor Corporation were some of the foreign manufacturers who entered the market. Ford Otosan founded in 1959 was one of the first JVs to assemble Ford models in the country. Domestic automobile production was promoted under the first **“Five Year Development Plan (FYDP)”** of the period 1963-1967. It was aimed at developing an industry which would cater to the domestic demand and export of vehicles and parts was not allowed. Under the plan import substitution policy was adopted to develop automobile manufacturing with minimal focus on the development of parts and component manufacturing, technological capabilities or achieving economies of scale. To reduce dependence on imported parts the government issued the **“Assembly Industry Order”** in 1964, aimed at increasing the domestic manufacturing of auto parts. However, the order although focused on increasing domestic manufacturing it did not specify any requirement for the automotive industry to source the parts locally. It also mandated vehicle manufacturers to increase the domestic content over time. Owing to this order Tofas (with Fiat SpA) in 1968 and Oyak-Renault in 1969 were formed with the condition that they would achieve 85% local content in fifth year of production. The initial period of development of the industry was characterized by limited component producers which stimulated the vehicle assemblers to provide technical and financial base to build their supplier base. Some of the parts were also manufactured in house by the vehicle producers.

**Liberalization Era:** The oil price increase in late 1979 led to a serious balance of payment problem which along with a political chaos put end to the import substitution policy in 1980. Turkey liberalized its trade policies in 1980 under its economic reform and stabilization program with an aim to develop an export oriented competitive domestic automotive industry. Export incentives were given to domestic players in the form of export tax rebates, preferential credit, foreign exchange allocations and duty-free access to imports. After 1984, the quantitative restrictions and import tariff were reduced with import duty on cars being reduced from 72% - 150% in 1989 to 39% in 1993. The number of foreign investments coming in to the automotive sector also increased from 13 in 1980 to 99 in 1995.<sup>23</sup> The export oriented restructuring and growth of the automotive industry was curtailed by the Economic crisis of 1994. Post the crisis, following the Customs Union (CU) agreement with the European Union in 1995 a new restructuring activity started in the automotive industry which came into effect in 1996.

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<sup>23</sup> Source: Globalization efforts of Turkish Car industry

**Post-liberalization Era:** The Custom Union agreement forced the automakers and auto parts manufacturers to integrate with the global automotive supply chain. It also put an end to the protections enjoyed by domestic players and forced them to make investments in new facilities and R&D. The Custom Union agreement enforced better quality standards for the industry and led to doubling of investments in the industry during 1996 to 2000. The government was required to change its policies related to anti-dumping duties, technical standards and other policy measures while retaining the ban on used vehicles and parts. While the Custom Union has led to growth and restructuring of the automotive industry, the complicated tax structure consisting of various indirect taxes has made the domestic market less attractive. To protect its domestic manufacturing, Turkey has levied a Special Consumption Tax (SCT) on motor vehicles ranging from 1% to 145% depending upon the vehicle type and size. It also imposes import licensing for certain motor vehicles and trailers since 2014. Although not legally required, the domestic vehicle producers have maintained a high localization rate of 50% - 80%. A new incentive program for the automotive sector has been announced which has targeted 4 million units of vehicle production and 3 million units of export by 2023. It also has envisaged to reduce dependence of the industry on imported parts and to increase R&D activity. The policies measures entailed in this program include investment support and tax reductions for new technology products.

#### 4.1.7. UNITED STATES OF AMERICA (U.S.A)

United States is the second largest automobile manufacturer in the world producing over 12 million vehicles in 2015. In 2015, US exported approximately 2.6 million vehicles valued at US\$ 65 billion with an additional export of around US\$ 81 billion in auto parts. The different policy and regulatory measures enacted by USA to facilitate and promote auto and auto component industry have been discussed in the following pointers.

**Pre-liberalization Era:** The first tariff law in the US was passed by the United States Congress in 1789 and tariffs were the largest source of revenue till 1913. In 1930 the “Smoot-Hawley” law came into effect and tariffs of over twenty thousand items were increased to protect the domestic industry including the automotive industry. This has been the highest general tariff ever employed by the US.

**Liberalization Era:** In 1934 The Reciprocal Trade Agreement lowered the tariffs and encouraged the use of MFN status for trading partners under bilateral trade agreements. Post World War II the tariffs were further reduced and the US with started advocating for removal of barriers to trade and reduce protectionist policies.

**Post-liberalization Era:** In the post liberalization era the US has maintained lower tariffs on import of automotive goods but it has resorted to the use of Non-Tariff Barriers (NTBs) to restrict trade. The Automobile Labelling Act encouraged localization and made it mandatory to label the percentage of US and Canadian parts used in manufacturing of the vehicle. The restrictions by US were mainly to address higher efficiency and economy rates. Various standards were developed and penalties and taxes put in place to promote it like the Corporate Average Fuel Economy (CAFE) standards that levy a penalty on manufacturers if a fleet of vehicles fail to achieve the desired economy rate and the Gas Guzzler tax which is levied on the sale of vehicles in USA as per its fuel consumption. The key policies are enumerated in the following exhibit.

##### Exhibit 85: Post-liberalization Trade policies in USA

<p>Automobile labelling act – mandatory labelling of % of US and Canadian parts used to manufacture the vehicle</p> <p>EU origin is not recognised by US customs – e.g. Tyres from EU are not recognised</p> <p>Taxes on sale of cars namely Corporate Average Fuel Economy (CAFE) payment and Gas Guzzler Tax</p>
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Source: Secondary research, IMaCS analysis

#### 4.1.8. GERMANY

German automotive industry is the fourth largest industry in the world which produced over 6 million units in 2015. The industry is also one of the largest in the country and employing close to 8 hundred thousand workers and contributing 20% to manufacturing output of the country. The different policy and regulatory measures enacted by USA to facilitate and promote auto and auto component industry have been discussed in the following pointers.

**Post-liberalization:** Germany has been one of the major advocates of free trade and has always employed comparatively liberalized trade policies in both pre and post world war periods. Germany has reduced tariffs on import of automotive products and tariffs employed on auto parts constitute 2% - 5% of total cost of import. Non Trade Barriers (NTBs) like automotive regulatory standards are employed to restrict imports and promote domestic industry. Automotive regulatory standards impose additional cost in order to conform to these standards. This further requires that any foreign player has to provide a guarantee of providing adequate supply of imported parts while entering the market. Reluctance of distributors to take new products from foreign players unless a guarantee of significant investment for making of the imported part is given from the manufacturer creates a barrier. Adherence to strict EU emission norms further restricts entry of new players.

##### Exhibit 86: Post-liberalization Trade policies in Germany

Automotive regulatory standards is the major NTB faced by exporters to Germany  
 Tariffs of 2% - 5% are major cost drivers for parts suppliers  
 Reluctance of distributors to take new products unless investment guarantee from foreign players  
 Adherence to strict EU emission norms complicate procedures restricting domestic market access

Source: Secondary research, IMaCS analysis

## 4.2. REVIEW OF NON TARIFF BARRIERS (NTBs)

The advent of globalization and liberalization post WTO formation has had significant implications in global trade policies as detailed in previous section. The policy shift from tariff measures to non-tariff measures has been a significant change affecting the international trade across countries. With low or zero tariff barriers, most of the countries have resolved to exploring and developing stringent non-tariff measures to restrict import of substandard quality and promote domestic manufacturing. The following section provides insights into the various non-tariff measures employed by key auto and auto part manufacturing countries and markets.

### 4.2.1. NON TARIFF BARRIERS (NTBs) – an introduction

Non-tariff barriers are a form of restrictive trade measures other than tariff barriers, like quotas, levies, embargoes, sanctions, certifications, restrictive standards, etc. which aim at either restricting import of substandard foreign manufactured products or focus on promoting and protecting local manufacturing with measures like local content requirement, discriminatory taxation, etc. Most of the importing countries employ NTBs as strategic tools in to make import of products difficult and/or costly in order to restrict access to domestic market thereby maintaining the competitiveness of the domestic players and also restrict the import of sub-standard and cheap imports. The NTBs may take form of Import Quotas, Import Licenses, Technical barriers to trade or any other such policy measure impeding trade. The different types of Non trade barriers are detailed in the following section.

### 4.2.2. Types of NTBs

The common classifications for the NTBs employed in internal trade are:

1. **Technical barriers to trade:** Measures referring to technical regulations and standards, procedures for assessment of conformity. Examples of TBT are certifications, packaging and labelling requirements, re-test of shipments for conformity etc.
2. **Import Licensing, Quotas and Prohibitions:** Measures aimed at restricting the quantity of goods imported. Non-automatic licensing, fixing quotas, or import prohibitions are some examples of this type of measure
3. **Discriminatory Taxes and additional cost measures:** Additional taxes or cost levied on imported good by the government to support domestic price of the good produced by local manufacturers and thereby rendering cost competitiveness of the exporting party ineffective.

4. **Local content requirements:** Conditions that make it mandatory to incorporate a minimum level of product from the importing country or that make it mandatory to perform certain operations in the importing country
5. **Intellectual Property Rights measures:** Measures related to intellectual property rights related to trade covering patents, trademarks, design copy rights etc. refer to IPR restrictions.
6. **Procedural complications/Documentation:** Measures aimed at restricting trade by having complex procedures and onerous documentation thereby creating unnecessary delays for the exporting party.
7. **Distribution and Post Sales Service restrictions:** Measures restricting distribution of imported product by maintaining restrictions regarding market penetration, geographical limitations or incentivizing distributors to sell local products. Restricting post sales services of imported product by government to favour local manufacturers.
8. **Technology Transfer measures:** Technology Transfer measures force the exporting party to transfer technology to the importing party to have access to the local market.
9. **Subsidies and Government Support:** Financial support provided by government or public bodies. Loans, Grant, price support etc. are some examples of such measures.
10. **Contingent Trade Protective Measure:** Measures such as Anti-dumping duty (ADD), Countervailing duty (CVD) etc. implemented to counteract the adverse effects of imports and unfair trade practices contingent upon fulfilment of certain procedural and substantive requirements.

Some of the NTBs related to Intellectual Property Rights (IPR), standards and certification requirements are legitimate and cannot be negotiated whereas local content requirements, import quota and licensing can be negotiated and eliminated for better movement of international trade.

### 4.2.3. NTBs employed by major automotive manufacturing countries

This section details the different Non-tariff barriers being used by the select major automotive and auto parts manufacturing countries. These NTBs have been clubbed together into the major heads of NTBs explained in the previous section. The following exhibit represents the distribution of NTBs across major markets.

Exhibit 87: NTBs across major automotive manufacturing countries

Country/Region	Standards & Certifications (TBT)	Discriminatory Taxes & Additional Cost	Distribution and Post Sales Service restrictions	Import Licensing, Quotas & Prohibitions	Procedural complications & Documentation	Contingent Trade Protective Measures	Subsidies & Government Support	Local Content Requirements	Intellectual Property Rights	Technology Transfer
EU	Green	Green	Green	White	Green	Green	White	White	Green	White
USA	Green	Green	Green	White	Green	Green	White	White	Green	White
China	Green	White	White	White	White	White	Green	White	White	Green
Brazil	White	Green	White	White	White	White	White	White	White	Green
Thailand	White	White	White	Green	White	White	White	Green	White	White
Indonesia	Green	White	White	White	White	White	White	Green	White	White
Japan	Green	Green	Green	White	White	White	White	White	White	White
South Korea	Green	Green	Green	White	White	White	White	White	White	White
Malaysia	White	White	White	Green	White	White	Green	White	White	White
Turkey	White	Green	White	White	White	Green	White	White	White	White

Source: Secondary research, iMaCS analysis

An overview of the NTBs across countries as indicated in Exhibit 87, indicate that the Technical Barriers to Trade (TBT), Discriminatory Taxes and Additional Cost and Distribution and Post Sales Service restrictions have been used more frequently used NTBs to impede free trade. Out of the countries analysed technical barriers to trade and Discriminatory Taxes and Additional Cost measures was used by six countries, followed by Distribution and Post Sales Service restrictions which has been employed across five countries.

Country wise overview of NTBs is explained as follows:

### 4.2.4. South Korea

#### 1. Technical barrier to Trade (TBT)

In 2011, Korea promulgated the Korean Motor Vehicle Safety Standards (KMVSS) which established self-certification of imported replacement parts as a safety requirement, thereby putting in place a technical barrier. South Korea imposed burdensome parts certification, registration and marking

requirements and the number of parts required to be certified will increase.<sup>24</sup> A status report by Korea Automobile Testing and Research Institute have further discussed in detail regarding the certification requirements. The report has highlighted that the automotive safety management system was expanded to auto parts and components with more and more parts being added every year. There is provisional plan of adding auto parts to the certification system. This is expected to ensure that high quality imports only enter the South Korean market and inhibits exports from countries that do not meet the set standards. In addition, the procedure, cost and time involved in getting the certifications and ensuring compliance to the standards may discourage some of the global manufacturers from exporting to South Korea.

**Exhibit 88: Items for certification of auto parts**<sup>25</sup>

Year	Items
2012	Brake hose, safety belt, lighting system (3 items including asymmetry headlight), reflex reflector, rear safety valve
2013	Brake lining, passenger car wheel, pressure tire, window, lighting system (14 items including fog lights), reflex system (4 items including rear reflecting plate)
2014	Connector, recapped tire, hydraulic brake fluid, lighting system (parking light), lighting source (2 items including filament lamps)
2015	Children protection equipment, spare tire, lighting system (3 items including daytime running lights), reflex systems (reflecting strip)

Source: Secondary research, IMaCS analysis

## 2. Distribution and Post Sales Service Restriction

South Korea has limited establishment of dealer network and garages as well as higher after sale service fees for imported parts and imported cars as indicated in United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) report on “Technical Barriers to Trade: Evidence from the Republic of Korea’s Automotive Sector” highlighting that repair costs have been reported higher for imported cars due to the fact that foreign players have less established network of dealers and garages. Secondary reports have also suggested presence of higher price for imported replacement parts and higher after sales service fees.<sup>26</sup>

## 3. Discriminatory Taxes

<sup>24</sup> Source: American Chamber of Commerce report 2014 & 2016 Top Markets Report Automotive Parts Country Case Study – Korea

<sup>25</sup> Source: Korean government status report: The first automotive policy master plan (2012-2016)

<sup>26</sup> Source: Technical Barriers to Trade: Evidence from the Republic of Korea’s Automotive Sector by UNESCAP



South Korea imposes complex taxation on imported vehicles constituted by eleven different taxes, which increased the effective tax by ~12% as compared to locally assembled and manufactured cars, as indicated in the UNESCAP report.

#### 4.2.5. Indonesia

##### 1. Technical Barriers to Trade (TBT)

- a) Indonesia has implemented automotive standards and certifications to restrict import of sub quality parts and products called the **Indonesian National Standards (SNI)**. SNI certifications are required for vehicle components such as braking systems, windscreen, rear view mirror, tyres etc. These certifications have not been harmonized with any international certification and thus may lead to restriction on foreign part manufacturers supplying to Indonesia. The system of certification and testing has been proved lengthy and costly which further has added unnecessary burden on foreign players.<sup>27</sup>
- b) The Ministry of Trade (MoT) through its regulation has made it mandatory for manufacturers (both domestic and foreign) of vehicles and replacement parts being directly sold in Indonesia to carry a label in Indonesian language. The importers have to submit a sample of the label to the MoT and get a declaration allowing the same. The label should contain information related to safety, security and health of the consumers and the details of the importers or the manufacturers. In case of non-compliance of the regulation the import of such items would be prohibited.<sup>28</sup> This may be difficult for foreign manufacturers who would have to engage a local party for procuring labels and spend both time and resources to get the approval on the labels, thus making imports cumbersome.

##### 2. Local Content requirement

In 2014, Indonesian Ministry of Industries issued regulations introducing local content requirements on motor vehicles. The regulation stipulated that "*the motor vehicle industry, as defined in article 2 letters c, d and e [motor vehicles with at least four wheels, motor vehicles for private use and motorcycles with 2 or 3 wheels] is required to empower the Motor Vehicle Components Industry within the country while conducting the production process*". The processes to be conducted within Indonesia are specified as follows:

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<sup>27</sup> Source: EU-Indonesia business dialogue 2013 - Recommendations for Increased Trade and Investment between Indonesia and the European Union

<sup>28</sup> Source: <http://blog.ssek.com/index.php/2014/08/which-goods-require-indonesian-language-labels-and-what-is-the-penalty-for-failing-to-comply/>

1. welding
2. painting
3. assembling of the motorised vehicles and
4. quality control

This regulation makes it mandatory for vehicle manufacturers to perform certain activities within Indonesia, thereby forcing the exporter to have a tie-up with a local auto parts manufacturer to increase the local content in vehicles. The manufacturers could import CKD or IKD kits or parts based on recommendation letter given by Ministry of Industries. Further the process of verification of the local content and extracting the letter of recommendation from Ministry of Industries for importing may take time and limit imports. The regulation also prevents foreign manufacturers who do not have the required tie ups from exporting to Indonesia.

#### 4.2.6. Malaysia

##### 1. Import licensing, quotas and prohibitions

- a) In 2013, Malaysia introduced import licensing criteria through its Customs Prohibition Order. This order provided the list of goods to be subjected to import licenses issued by the Director General, Customs and had several vehicles and auto parts listed in it. The auto parts and sub-assemblies mentioned in the order were chassis fitted with engine, body of various motor vehicles, used brakes for vehicles etc.<sup>29</sup>
- b) A Vehicle Type Approval (VTA) process has been put in place in 2009 that restricts the import and sale of “sub-standard” vehicles and parts since 2009.<sup>21</sup>
- c) Import of used parts and components has been prohibited in line with the “**National Automotive Policy 2009**”.<sup>21</sup>

##### 2. Subsidies and Government support

The “**National Automotive Policy**” of 2006 which was reviewed in 2009 gave financial stimulus in the form of soft loans and concessional grants from the Automotive Development Fund (ADF) and Industrial Adjustment Fund (IAF) to auto parts and component manufacturers to improve their competitiveness and to enhance their contribution to the automotive industry.<sup>21</sup> This artificially attempts to increase the competitiveness of the local products as compared to the imported products, thereby reducing the imports.

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<sup>29</sup> Source: <http://www.globaltradealert.org/measure/malaysia-introduction-import-license-requirements-large-number-goods>

## 4.2.7. China

### 1. Technical Barriers to Trade (TBT)

- a) China has made it obligatory for auto components and parts to carry CCC (Chinese Compulsory Certification) mark. CCC mark is made mandatory for parts like dashboards, console, and parts of engine compartment, safety glasses for vehicles, seat belts, Motorcycle engines, Horns, Retro reflectors, Retro-reflective vehicle markings, Brake hoses, Rear-view mirrors, Interior trimming materials, Door lock and door retention components, Fuel tanks, Seat and Seat Headrests, Odometers and Vehicle/Motorcycle external lighting and signalling products (headlamp, turn-signal, position lamp, stop lamp, clearance lamp, fog lamp, reversing lamp, parking lamp, side marker lamp, lighting equipment for license plate).<sup>30</sup> These certification
- b) Motor vehicles imported into China are subjected to more than one homologation/type approval process by different, uncoordinated regulators. Also each automotive product and component that has been type-approved must be re-tested in Chinese laboratories, imposing a further burden on importers.<sup>31</sup>

### 2. Intellectual Property Rights measures

The Chinese government has been pressuring foreign automakers to develop local brands jointly designed with local Chinese manufacturers to boost indigenous innovation. However the foreign automakers have alleged that this move is aimed towards forced technology transfer to local manufacturers. The government has been also forcing foreign players to share core technology related to electric and hybrid cars in exchange of green-energy subsidies.<sup>32</sup>

### 3. Subsidies and Government Support

China has been restricting export of rare earths and minerals which serve as raw materials for the manufacturing of auto parts, ensuring easy availability of raw materials to local players at a reasonable cost. This has made manufacturing of auto parts difficult for foreign players which in turn have limited their presence in Chinese domestic market. Moreover Chinese government has been providing unfair subsidies to its parts exporters in order to expand their foreign market presence.<sup>32</sup> The government has been providing various forms of export-contingent Subsidies and Government Support through a program establishing "export bases" for the automobile and automobile-parts industries in China.

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<sup>30</sup> Source: <http://www.china-certification.com/en/list-of-ccc-mandatory-products>

<sup>31</sup> Source: The EU automotive sector in a globalised market, December 2012

<sup>32</sup> Source: China's Auto Sector Development and Policies: Issues and Implications

#### 4.2.8. Japan

##### 1. Technical Barriers to Trade (TBT)

Japan has one of the most stringent standards for the automotive sector. A set of safety, noise and emission regulations have made compliance difficult for importers. Also the complex, costly and onerous certification procedure has restricted foreign players to access the domestic market.

##### 2. Distribution and Post Sales Service Restriction

Japan imposes zoning restrictions on the distribution network for foreign players, limiting the number of dealerships within vicinity thereby preventing the foreign players from increasing the penetration into the market. Also the consumer preferences shaped by decades of government policies directed at promoting the national car companies have made imported parts and vehicles less attractive. As a result most of the Japanese dealers are less inclined to carry foreign automobiles.

#### 4.2.9. Turkey

##### 1. Contingent Trade Protective measures

Turkish authorities have imposed an anti-dumping duty on imports of compression ignition internal combustion piston engines classified under HS code 84089041 under 15 KW, originating from India and China since November 2013. The rate of the duty imposed on imports originating in China ranges from 152.48% to 165.18% of the CIF value, depending on the exporting company. The rate of the duty imposed on imports originating in India ranges from 5.71% to 14.38% of the CIF value, depending on the exporting company.<sup>33</sup>

##### 2. Import licensing, quotas and prohibitions

Import of vehicles and trailers in Turkey have been licensed and require approval from Ministry of Science and Technology. Import of second hand vehicles has also been restricted for environmental reasons except for personal use.<sup>34</sup>

##### 3. Investment promotion measures

The automotive sector strategy as released by Government in 2011 has set "enhancement of sustainable global competitive strength of the automotive sector and its transformation into an industry that utilizes advanced technology and generates high value-added" as its prime

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<sup>33</sup> Source: <http://www.globaltradealert.org/measure/turkey-definitive-antidumping-duty-imports-certain-piston-engines-china-and-india>

<sup>34</sup> Turkey Trade Policy Review, 2014 – WTO

objective. Under this strategy the Government has given various tax, land allocation and interest payments incentives on investments made in the automotive sector.<sup>34</sup> This provides a significant boost to competitiveness of local manufacturers when compared to imports, thereby helps in curbing imports of auto and auto components.

#### 4.2.10. United States of America

##### 1. Technical Barriers to Trade (TBT) and Local Content requirements

It has been contested by various trade resources and global agencies that the American Automobile Labelling act promotes the use of US or Canadian parts for small cars, restricting the market for Indian and Asian small cars. The act requires vehicle manufacturers to carry labels on their cars, specifying the percentage of US or Canadian parts used; the country of assembly and country of origin of the engine and transmission. This has made the manufactures comply with the "made in USA" standard, thus discouraging imports of small cars and auto parts from Asian countries.<sup>35</sup>

##### 2. Import licensing, quotas and prohibitions

Under the Federal Acquisition Regulations System auto parts using specialty metal are prohibited from being imported in US if the process of melting or the process of manufacturing the part has not been carried in US or any other qualifying country or region. This restriction significantly impedes imports of auto parts having specialty metals from India; China and ASEAN countries which do not fall in the qualifying country list, despite being competitive with respect to US manufactured auto parts.<sup>36</sup>

##### 3. Procedural complications/Documentation

Most of the States in United States of America (USA) have enacted their own administrative procedures which govern development and adoption of technical regulations and conformity assessment procedures by the state agencies. This forces a foreign manufacturer to have customised offerings for each of the states that it targets, making the manufacturing less economical and thereby reducing the competitiveness of the product. This has restricted market access for foreign manufacturers as the structural barrier thus created would impact the process of harmonisation of products.<sup>35</sup>

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<sup>35</sup> Source: Review of Trade Policies of India's Major Trading Partners

<sup>36</sup> Source: Defence Federal Acquisition Regulation Supplement

#### **4. Discriminatory Taxes and additional cost**

Auto and auto part exporters have reported that a number of additional customs impediments, such as import user fees and excessive invoicing requirements which have resulted in additional costs similar to tariffs. The most significant user fee that has been levied is the Merchandise Processing Fee (MPF), which has been levied on all imported merchandise except for products from the least developed countries.<sup>35</sup> This makes the imported product less competitive and hence acts a non-tariff barrier to trade.

#### **5. Intellectual Property Rights (IPR)**

The US has identified “Automotive Parts” as one of the most vulnerable sectors impacted by counterfeit products exported from developing countries in Asia. Various products have been held during customs check quoting IPR violation. With low focus on IPR protection laws in most developing countries, the exported product often gets held or rejected creating a barrier for foreign manufacturing countries having sub-optimal IPR protection laws.<sup>37</sup>

### **4.2.11. European Union**

#### **1. Technical Barriers to Trade (TBT)**

- a) According to the new set of rules under GSP (Generalized Systems of Preferences) the exporters to EU have to self-certify the origin of content and any error in the procedure could lead to rejection of products and blacklisting. Earlier the rules under GSP allowed exporters to get their products to be certified by accredited agencies. Given the rule change and the low margin for error, it poses as a serious threat for foreign exporters of auto parts who may not have the required clarity for self certification and for new organisations trying to enter into the European market.<sup>38</sup>
- b) The EU has implemented strict safety and emission norms which are difficult to meet and requires new technologies. As a result, imports of auto parts from developing countries face the challenge of being either non-complaint or less competitive due to high cost of compliance. Moreover there is lack of homogenization within EU members regarding certain regulations which further restrict exports, as foreign exporters are forced to develop specific products targeting different members which make production less economical.

#### **2. Discriminatory Taxes and additional cost**

The EU through its legislation in 2012 has suspended certain tariff lines pertaining to the automotive industry from the preference list of GSP for imports from India. This would increase the duty rates

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<sup>37</sup> Source: <https://www.export.gov/apex/article2?id=India-Protection-of-Property-Rights>

<sup>38</sup> Source: <http://www.thehindubusinessline.com/economy/policy/exporters-risk-being-blacklisted-when-new-eu-rule-kicks-in/article8377790.ece>

on these products and would reduce the cost competitiveness of Indian exporters in EU. The move has been made to push India to take a flexible position in the India-EU Free Trade Agreement negotiation, especially on the auto sector.<sup>39</sup>

### 3. Intellectual Property Rights (IPR)

Stringent IP rules are being pushed forward by the auto lobby in EU to be included in EU-India FTA. This would impact certain high-technology items, where India has been aspiring to be an export base, since technology transfer would be impacted.

#### 4.2.12. Thailand

##### 1. Import licensing, quotas and prohibitions

Thailand has imposed import prohibitions and licensing on the import of used parts and vehicles. Import of used car bodies and motorcycle frame, used engines and accessories, re-treaded or used pneumatic tyres of rubber for cars, motorcycles and bicycles, and waste, parings and scrap of rubber of cars, buses/trucks, motorcycles and bicycles has been prohibited. Quantitative import restrictions in the form of non-automatic licensing remain in place on certain used diesel engines (331-1,100cc).<sup>40</sup>

##### 2. Investment promotion and tax incentives

- a) **Eco Car program 2007:** The Board of Investment Thailand offered a 6-8 year corporate income tax exemption and duty-free importation of machinery for Eco-Car projects with a minimum investment value of Thai Baht 5 billion. Vehicles made under this policy were required to have fuel economy of at least 20km/litre and to meet specified emission and safety standards. Certain parts were to be produced locally, although imported raw material was permitted. Ministry of Finance offered a reduced excise tax of 17% on cars with petrol-powered engines smaller than 1,300 cc and diesel-powered engines below 1,400 cc (equivalent to a US\$1,000 reduction in the retail price). The requirements for fuel consumption, emission, and safety standards were made stricter under the Phase II of the program and the corporate income tax exemption was given for 6 years.<sup>40</sup> This step although aimed at promoting local manufacturing of environment friendly cars, provides significant benefit to local players, thereby making import of such automobiles and auto parts less lucrative.
- b) **Investment Promotion Policy 2015:** On 27 October 2015, the Board of Investment of Thailand announced additional incentives for certain projects, thereby amending its Investment

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<sup>39</sup> Source: <http://www.thehindubusinessline.com/economy/eepc-indias-motor-vehicle-exports-to-eu-to-be-hit-from-january/article5417980.ece>

<sup>40</sup> Source: Thailand Trade Policy review 2014 - WTO

Promotion Policy that had been announced on December 2014. Additional incentives in terms of Corporate Income Tax exemptions of 3-5 year duration were provided to investments in manufacturing of the certain vehicle parts such as for fuel systems, transmission systems, engine systems, safety systems, suspension systems, steering systems, cooling systems, exhaust systems, air conditioning systems, ultimate tensile strength steel and ball bearing for vehicles. New manufacturing projects for these parts, and all other vehicle parts, were already eligible for incentives in the form of import duty exemption on machinery and on raw/essential parts & materials for manufacturing export products (for 1 year).<sup>41</sup>

#### 4.2.13. Brazil

##### 1. Technical Barriers to Trade (TBT)

National Institute of Metrology, Quality and Technology (INMETRO) responsible for establishing and implementing national policies on quality and meteorology issued a regulation in 2011 requiring auto components for the aftermarket sales in Brazil to carry the conformity seal of SBAC (Brazilian Conformity Evaluation System) which includes INMETRO mark and SGS conformity seal, accredited by CGCRE (the accreditation division of INMETRO). Since 2013, this regulation has been extended to newly produced and imported auto parts for assembly as well.<sup>42</sup>

##### 2. Import licensing, quotas and prohibitions

Since 2011, Brazil has maintained a system of automatic and non-automatic licenses for import of vehicles and auto parts. All requests for such licenses are processed through SISCOMEX (Sistema Integrado de Comércio Exterior) which is the Integrated Foreign Trade System of Brazil. The processing time for such a request is 60 days while the license is valid for 90 days only.

##### 3. Investment Promotion, Local content and IP rights

In 2013 Brazil introduced the INOVAR AUTO program which offered incentives in terms of 30% exemption on Industrial production tax (IPT) to vehicle manufacturers and importers who would carry certain stages of production activity in Brazil and agreed to invest in two out of three of the following:

- a) Investment in R&D

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<sup>41</sup> Source: <http://www.globaltradealert.org/measure/thailand-incentives-investments-vehicle-parts-manufacturing-and-rubber-industrial-zones>

<sup>42</sup> Source: <http://www.sgs.com/en/transportation/automotive/manufacturing/audits-and-certification/inmetro-auto-parts-certification>



- b) Investment in engineering, industrial technology and supplier capacitating
- c) Investment in Vehicle Labelling scheme<sup>43</sup>

#### **4. Subsidies and Government Support**

The Brazilian Government has provided various financial incentives to automotive manufacturers and exporters for the development of their production capacity improve their technology and modernize their facilities. In January 2015, Brazilian Development Bank (BNDES) announced to finance Fiat Automóveis with an investment of 649.9 million real (USD 217.05 million). Also in a similar move BNDES announced a grant of 37.1 million real (USD 10 million) to A FPT Power train Technologies do Brasil – Indústria e Comércio de Motores Ltda, a subsidiary of FCA Fiat Chrysler Automóveis Brasil Ltda. These moves are aimed at improving the quality of the engines and vehicles domestically produced.<sup>44</sup> While these incentives and low cost financing have helped the local industry to improve on quality, they have also helped them in increasing competitiveness making imports less lucrative.

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<sup>43</sup> Source: <http://www.globaltradealert.org/measure/brazil-local-production-related-tax-exemption-applicable-automobile-products>

<sup>44</sup> Source: <http://www.globaltradealert.org/measure/brazil-bndes-finances-fiat-autom%C3%B3veis-usd-21705-million>, <http://www.globaltradealert.org/measure/brazil-bndes-grants-fiat-usd-10-million-engine-production-site>

### 4.3. REVIEW OF RULES OF ORIGIN (ROO)

WTO has defined Rules of Origin as “the criteria needed to determine the national source of a product.” ROO is used to decide and implement measures and instruments of trade policy such as anti-dumping duties and other safeguard measures; to determine whether imported products shall receive most-favoured-nation (MFN) treatment or preferential treatment; for the purpose of trade statistics; for the application of labelling and marking requirements; and for government procurement.

This section reviews various ROO requirements under different FTAs/PTAs of major auto manufacturing countries or regions. The assessment illustrates various ROO requirements and modalities being used by various regions/countries while negotiating trade agreements and also benchmarks these with respect to the ROO criteria that India has set and negotiated in its FTAs with different regions/ countries. The following sections within this chapter provides brief of different key definitions and criteria that are commonly used while framing ROO in section 5.3.1 and then reviews region/ nation wise ROOs in section 5.3.2.

#### 4.3.1. Rules of Origin – some definitions

##### **Wholly obtained or produced goods**

Wholly obtained goods are defined as product traded does not contain any foreign (not originating content from the trading regions/countries) parts, components or raw materials. Some examples of wholly obtained or produced goods are mineral goods, vegetable goods, live animals etc.

##### **Not wholly obtained or produced goods**

Goods that incorporate some foreign parts, components or raw materials fall under the category of Not wholly obtained or produced goods. To qualify as an originating good for preferential treatment they need to satisfy certain conditions. The most common conditions used in such cases include a **change in tariff classification** between the raw material used and the finished product; or a **regional value content** requirement; or both.

##### **De Minimis Criteria**

This criterion provides an additional possibility for a good to be qualified as an originating good that could not meet the criteria of change in tariff classification. For such goods the non-originating parts, components or raw materials, should not exceed a certain percentage (not more than 10%) of the total value.

### Accumulation

This criterion allows regions/countries which are part of a trade agreement to share production and jointly comply with the relevant rules of originating goods. There are mainly two types of accumulation criterion namely:

- a) **Bilateral Accumulation:** Under this criterion, two countries having a bilateral trade agreement can fulfil the rule of qualifying content by sharing production or value adding process between them.
- b) **Diagonal Accumulation:** This works in similar fashion as bilateral accumulation but operates between more than two countries provided they have trade agreements between each other. Hence, here if a country X and Y have a trade agreement, then the products manufactured in a third country that has a trade agreement with either X or Y will also qualify as originating content.

### 4.3.2. Rules of Origin criteria under trade agreements of regions/ countries

The section assesses the requirements of rules of Origin (ROO) for 11 major auto and auto parts manufacturing countries reviewing the ROO requirements across 38 different trade agreements signed by these select 11 countries. A summary of the assessment is indicated in the following exhibit. The details of the different trade agreements and their ROO requirements have been explained subsequently.

**Exhibit 89: Rules of Origin – A comparison**

SL. No.	Regions/ Countries	Originating content requirement	HS code description change required	Bilateral Accumulation
1	India	35% for ASEAN, Japan, S. Korea & Malaysia 40% for Chile, Thailand, Singapore, SAFTA & MERCOSUR	6 digit level - ASEAN, Japan, S. Korea & Malaysia 4 digit level – Thailand, Singapore, SAFTA & MERCOSUR	All the Trade Agreements
2	ASEAN	40%	at 4 digit level for Japan & S. Korea	Japan, S. Korea, China
3	Indonesia	40%	At 6 digit level	Japan
4	Japan	40% - Vietnam 40% to 65% - Mexico 30% to 45% - Chile	At 4 & 6 digit levels	ASEAN, Indonesia, Malaysia, Thailand, Mexico
5	South Korea	35% for USA 40% for ASEAN, Japan, China	4 digit level for most auto parts	China, USA, EU, Vietnam

SL. No.	Regions/ Countries	Originating content requirement	HS code description change required	Bilateral Accumulation
6	Malaysia	40% - Japan	6 digit levels	Japan - Bilateral Turkey - Diagonal
7	Thailand	40%	6 digit levels	Japan
8	Turkey	Yes	At 6 digit levels	EU - Diagonal
9	China	40% to 60%	At 4 & 6 digit levels	Chile, Australia, Singapore, Switzerland
10	USA	50% - NAFTA 30% - Singapore for auto parts	6 digit and 4 digit level for certain auto parts (8407 & 08)	Bilateral with NAFTA
11	EU	40%	4 digit	Diagonal

Source: Secondary research, iMaCS analysis, review of trade agreements based on individual country's *Mo Commerce or Mo Trade*

The ROOs across more than 40 trade agreements signed by 11 different countries/ regions have been assessed to arrive at a comparative of the rules of origin negotiated by different countries in their respective trade agreements. The same has been summarised in the previous exhibit. Country wise assessment of each of the 11 countries/ regions with respect to the ROOs in their respective selected trade agreements has been indicated as follows:

## 1. Indian Trade Agreements

The following eight key trade agreements have been reviewed:

- a) India – ASEAN FTA
- b) India – Japan CEPA (Comprehensive Economic Partnership Agreement)
- c) India – S. Korea CEPA (Comprehensive Economic Partnership Agreement)
- d) India – MERCOSUR PTA
- e) India – Thailand EHS (Early Harvest Scheme)
- f) India – Malaysia CECA (Comprehensive Economic Co-operation Agreement)
- g) India – Singapore CECA (Comprehensive Economic Co-operation Agreement)
- h) India – Chile PTA
- i) SAFTA (Agreement on South Asian Free Trade Area)

The criteria which would determine the originating status for '*Not wholly obtained or produced goods*' in all the trade agreements had a combination of both local content criterion and a change in tariff classification. The criteria specified for India – ASEAN FTA, India – Japan CEPA, India – S. Korea CEPA and India – Malaysia CECA is a Change in Tariff Classification (CTC) at 6 digit HS code level or CTS (Change in Tariff Sub-heading) along with a minimum local content criterion or Qualifying Value Content (QVC) of 35%. Whereas in SAFTA, India – Thailand EHS, India – Singapore CECA and India – MERCOSUR PTA the criteria specified a change in tariff classification at 4 digit level HS code or CTH (Change in Tariff Heading) along with a QVC of 40%. India – Chile PTA has a minimum local content criterion of 40% along with the condition that the final processes have been performed within the territory of exporting party. All the trade agreements analyzed indicated a *Bilateral Accumulation* criterion being specified.

De Minimis criteria have been used in India – S. Korea CEPA and in India – Malaysia CECA. The De Minimis criteria for India – S. Korea CEPA has set a permissible cap of 10% of Free-On-Board (FOB) of non-originating content for HS code chapters 1 to 50 and a permissible cap of 7% of FOB non originating content for HS code chapters 50 to 63. The De Minimis criteria for India – Malaysia CECA has set a permissible cap of 10% of FOB non originating content for all HS code chapters except chapters 1 to 14 and chapters 50 to 63. For chapters 50 to 63 the De Minimis criteria have put a permissible cap of 8% of FOB for non-originating content.

## 2. ASEAN trade agreements

The following trade agreements were analyzed for ASEAN region:

- a) ASEAN FTA (AFTA)
- b) ASEAN – Japan CEPA
- c) ASEAN – China CECA
- d) ASEAN – S. Korea CECA

The criteria for originating status of ‘Not wholly obtained or produced goods’ for the above mentioned trade agreements have varied across trade agreements. In case of the ASEAN FTA a specified minimum local content criterion of 40% has to be met for the product to be qualified as origination. In addition to this, locally-procured materials produced by established licensed manufacturers, in compliance with domestic regulations will be deemed to have fulfilled the origin requirement whereas locally-procured materials from other sources will be subjected to an origin test for the purpose of origin determination. Moreover subject to the minimum local content criterion, products worked on and processed, for which the value of non-originating (non-ASEAN) and undetermined origin content has not exceeded 60% of the First on Board (FOB) value of the product, would be considered as originating given that the final production processes were carried with the ASEAN member states. The ASEAN – China CECA specified a local content criterion of 40% along with the condition that the final manufacturing processes were carried within ASEAN territory. The ASEAN – Japan CEPA and the ASEAN – S. Korea CECA both specified a minimum local content criterion of 40% or a change in tariff classification at 4 digit HS code level. All the above mentioned trade agreements specified a *Bilateral Accumulation* criterion.

Both ASEAN – Japan CEPA and ASEAN – S. Korea CECA had De Minimis criteria specified under Rules of Origin. De Minimis criteria for ASEAN – Japan CEPA had three different sub-criteria which are as follows:

- a) For product belonging to chapters 16, 19, 20, 22, 23, 28 through 49, and 64 through 97 the total non-originating materials should not exceed 10% of FOB value
- b) For good under chapters 18 and 21 the value of non-originating materials should not exceed 10% or 7% of FOB value depending upon the product specific rules for these chapters

- c) For good belonging to chapters 50 through 63, the value of non-originating materials should not exceed 10% of the total weight of the good

The De Minimis criterion for ASEAN – S. Korea CECA has set the value of non-originating content to a permissible cap of 10% of FOB for goods belonging to chapters other than 50 through 63 and to a permissible cap of 10% of total product weight for goods belonging to chapters 50 through 63.

### 3. Chinese trade agreements

The following trade agreements were analyzed for China:

- a) China – Chile FTA
- b) China – Australia FTA
- c) China – Singapore FTA
- d) China – Switzerland FTA

The criteria for originating status for ‘Not wholly produced or obtained goods’ as specified in China – Chile FTA required the goods to fulfil minimum local content criterion of 40% except for the goods mentioned in product specific rules. The minimum local content criterion for auto parts under the product specific rules has been specified as 50%. The China – Australia FTA specified the criteria for originating status for ‘Not wholly produced or obtained goods’ in the product specific rules. The criteria for auto parts have varied and have a change in tariff classification at 4 or 6 digit HS code level. Only tariff sub heading 7307 required a Change in Chapter (CC) to satisfy the CTC criterion. Also the minimum local content criterion has varied between 40%, 50% and 60% and has been mentioned as an alternative criterion in product specific rules. The originating status criteria for China – Singapore FTA vary according to the product specific rules or the products have to satisfy the minimum local content criterion of 40%. The auto parts featuring in product specific rules have the criterion of change in tariff classification at 6 digit level. The criteria for China – Switzerland FTA on the other hand have a minimum local content requirement which varies from 40% to 60%. No CTC requirement has been specified. All the FTAs discussed above have considered *Bilateral Accumulation* criterion in their Rules of Origin.

The De Minimis criteria for China – Australia, China – Singapore and China – Switzerland have specified the value of non-originating content to a permissible cap of 10% of FOB value while for China – Chile FTA the permissible cap has been set at 8% of FOB value.

#### 4. Japanese trade agreements

The following trade agreements were analyzed for Japan:

- a) Japan – Singapore Economic Partnership Agreement (EPA)
- b) Japan – Chile EPA
- c) Japan – Mexico FTA
- d) Japan – Viet Nam FTA
- e) Japan – Australia FTA

The criteria that confirms the originating status of 'Not wholly produced or obtained goods' for Japan – Singapore EPA is a change in tariff classification at 4 digit HS code level or a minimum local content criterion varying from 40% to 60% or a combination of both as per the product specific rules. The criteria for Japan – Chile EPA as specified is a change in tariff classification at 4 digit or 6 digit HS code level or a minimum local content criterion varying from 30% to 45% depending upon the product specific rules. The Japan – Mexico FTA has mentioned a criteria contingent on the product specific rules and have to satisfy a change in tariff classification at 4 digits or 6 digit level HS code or a combination of CTC along with a minimum local content varying from 50% to 65%. The criteria for Japan – Viet Nam FTA as specified requires a minimum local content of 40% given the last operations are done within the two parties or a CTC at 4 digit level HS code. As far as Japan – Australia is concerned the criteria specified requires a minimum local content of 40% or a change in tariff classification at 2 digit or 4 digit or 6 digit level HS code. The CTC criterion for auto parts has been mentioned at 4 digit or 6 digit level HS code. All the trade agreements discussed above have applied *Bilateral Accumulation* criteria. The De Minimis criteria for all the above trade agreements have specified an upper permissible limit of 10% of FOB value.



## 5. South Korean trade agreements

The following trade agreements were analyzed for South Korea:

- a) South Korea – EU FTA
- b) South Korea – US FTA
- c) South Korea – China FTA
- d) South Korea – Viet Nam FTA
- e) South Korea – Turkey FTA

The criteria for deciding the originating status of 'Not wholly produced or obtained goods' in Korea – EU FTA were based on the product specific rules which for auto parts mentioned a change in tariff classification at 4 digit level or a local minimum criterion of 50% ex-works price and a combination of both in some cases. The Korea – US FTA also has a similar condition where the goods have to satisfy a local minimum criterion as per the product specific rules or the goods satisfy a change in tariff classification as per the product specific rules. The auto parts has a criterion of CTC at 4 digit HS code level or a minimum local content varying from 35% to 55%. The Korea – China FTA specified a local minimum content of 40%, 50% or 60% or a CTC at 2 digit or 4 digit or 6 digit level HS code depending upon the Product specific rules. The Korea – Viet Nam FTA has a CTC requirement at 4 digit level HS code or a minimum local criterion of 40% to 45%. The Korea – Turkey FTA has a CTC requirement at 4 digit HS code level or a minimum local content criterion of 50% of ex-works price. Moreover all the trade agreements discussed specified a *Bilateral Accumulation*. The Korea USA FTA has a De Minimis criteria which requires non originating content in good not satisfying product specific rules to vary between 7% to 10% ex-works price whereas for the rest of the FTA the criteria requires a 10% FOB value.

## 6. Thailand's trade agreements

The following trade agreements were analyzed for Thailand:

- a) Thailand – Chile FTA
- b) Thailand – Japan FTA
- c) Thailand - Australia FTA

The criteria for originating status for Thailand – Chile FTA were based on the product specific rules. The auto parts were subjected to either a change in tariff classification at 4 digits or 6 digit level HS code or a minimum local content of 40%. The Thailand – Japan FTA specified criteria based on product specific rules which for auto parts have either a CTC at 6 digit level or minimum local content of 40%. The Thailand – Australia FTA has similar criteria for auto parts dependent on product specific rules which specified a CTC at 4 digits or 6 digit level with certain tariff lines requiring an additional requirement of minimum local content of 40%. All the trade agreements discussed above have *Bilateral Accumulation* criteria. Thailand – Chile and Thailand – Australia FTAs have De Minimis criteria which specified that the permissible cap on non-originating content for the goods which do not satisfy product specific rules was 10% FOB value of the good.

## 7. Malaysian trade agreements

The following trade agreements of Malaysia have been analyzed:

- a) Malaysia – Turkey FTA
- b) Malaysia – Japan FTA

The originating status for 'Not wholly produced or obtained goods' for Malaysia – Turkey FTA was determined by the criteria specified in product specific rules, which for auto parts in some cases, required a CTC at 4 digit level or a minimum local content of 40% and in some cases required only a minimum local content criterion of 40%. The Malaysia – Japan FTA has a CTC requirement at 6 digit level or a local minimum content requirement of 40%. Both the FTAs discussed have considered a *Bilateral Accumulation* criterion except for the HS code chapters 25 through 97 in Malaysia – Turkey FTA for which *Diagonal Accumulation* criterion has been considered.

## 8. Indonesian trade agreements

The following trade agreements were analyzed for Indonesia:

- a) Indonesia - Japan FTA
- b) D8 PTA (Developing 8)

The originating status for 'Not wholly produced or obtained goods' for Indonesia – Japan FTA has been determined by the criteria which specified a CTC at 6 digit HS code level or a minimum local content criterion of 40%. In case of D8 PTA the criterion was to meet a minimum local content of 40% to qualify. Both the trade agreements have *Bilateral Accumulation* criteria.

## 9. USA trade agreements

The following trade agreements were analyzed for USA:

- a) North American FTA (NAFTA)
- b) USA – Singapore FTA

The originating status for 'Not wholly produced or obtained goods' for NAFTA has been determined by the criteria which specified a CTC at 6 digit level HS code from any other heading (4 digit level) or from the same heading but with an additional minimum local content of 50%. The USA – Singapore FTA had similar criteria of CTC at 4 digits or 6 digit levels or a minimum local criterion varying from 30% to 45%. *Bilateral Accumulation* was specified under both the trade agreements.

## 10. EU trade agreements

The EU – Mexico FTA was analyzed and the criterion for determining originating status has been specified as a CTC at 4 digit HS code level or a minimum local content of 40%. *Bilateral Accumulation* was specified under this agreement. Also the De Minimis criteria mentioned was a permissible cap of 10% of ex-works price for non-originating content not satisfying the product specific rules except for textile and clothing tariff lines.

## 11. Turkey trade agreements

The Turkey – EFTA was analyzed and the criterion for determining originating status was a minimum local content of 60%. A *Diagonal Accumulation* was specified under this agreement. Also the De Minimis criteria mentioned was a permissible cap of 10% of ex-works price for non-originating content not satisfying the product specific rules except for textile and clothing tariff lines.

## 5. COMPETITIVE ASSESSMENT WITH RESPECT TO GLOBAL PEERS

### 5.1. COMPETITIVENESS ACROSS SEGMENTS AND FACTORS OF PRODUCTION

India is a major producer and exporter of auto components on the global map with higher or matching competitiveness in component manufacturing with respect to other global leaders. Segment wise competitiveness for electrical, engines, equipment, and suspension and transmission segments across the key manufacturing countries of Thailand, Indonesia, China, Russia and Brazil is detailed as follows:

1. **Thailand**– India has a competitive edge ranging from 12% to 23% when it comes to manufacturing of auto components except for suspensions manufacturing, where our competitive advantage is ~8.5% with respect to Thailand. However, when it comes to the key macro factors affecting competitiveness, Thailand has a competitive edge in terms of cheaper power cost which is almost half of that in India and lower import duties, VAT and corporate tax rates. On the other hand India gains from its lower labour cost and logistics cost.
2. **Indonesia** – India has a competitive edge ranging from 5% to 12% when it comes to manufacturing of auto components except for suspensions (2.9%) and transmission (4.6%) with respect to Indonesia. India has higher competitiveness in manufacturing of engine parts (11.4%) and auto equipment (10.7%). An assessment of macro factors indicate that India has a competitive edge in terms of cheaper labour cost, lower lending costs, cheaper logistic costs and lower import duties as compared to Indonesia. Indonesia gains competitiveness w.r.t India through lower VAT and corporate tax rates and as well as low power cost.
3. **China** – China matches competitiveness when it comes to manufacturing of auto components with India, having an upper hand of 0% to 3% in equipment (2.5%), electrical (2.1%) and engine parts (0.9%) and China having a higher competitiveness in suspension (0.1%) and transmission (1.2%) over India. While China has an upper hand with lower corporate tax rate, lending rate and power cost, India enjoys higher competitiveness with cheaper labour and logistic costs and lower import duties and VAT rate.
4. **Russia** – India has a significant competitive edge in auto component manufacturing with competitiveness ranging from 17% to 32% across the five key segments. It also enjoys an advantage with lower labour cost, logistic cost and lower import duties. On the other hand,

Russia has significantly lower power costs, lending cost and provides a lower tax rate to corporate.

5. **Brazil** - India has a significant competitive edge ranging from 17% to 27%. Across the five key segments. India also enjoys an advantage with lower labour cost, logistic cost and lower import duties with comparable power cost and VAT rates. However, Brazil enjoys the benefit of being in close vicinity to the US market.

The cost competitiveness of India’s auto component industry with these countries is indicated in the following exhibits.

**Exhibit 90: India's cost competitiveness in vehicle manufacturing**

	Thailand	Indonesia	China	Russia	Brazil
Passenger vehicles	- 1.3%	-5.0%	-3.6%	10.4%	4.2%
Two wheelers	7.2%	0.7%	-1.5%	19.4%	9.1%
Commercial vehicles	4.0%	2.5%	-2.5%	15.7%	6.3%

Source: IMaCS analysis

The following exhibit indicates India’s cost competitiveness across different factors of production in respect to auto component manufacturing and trade.

**Exhibit 91: India's cost competitiveness across different auto component segments**

	Thailand	Indonesia	China	Russia	Brazil
Electricals	15.1%	7.5%	2.1%	24.7%	21.0%
Engines	23.3%	11.4%	0.9%	31.1%	27.1%
Equipment	20.9%	10.7%	2.5%	30.2%	26.4%
Suspension	8.5%	2.9%	-0.1%	17.6%	15.7%
Transmission	12.2%	4.6%	- 1.2%	19.3%	17.8%

Source: IMaCS analysis

The following exhibit indicates India’s cost competitiveness across different factors of production in respect to auto component manufacturing and trade.

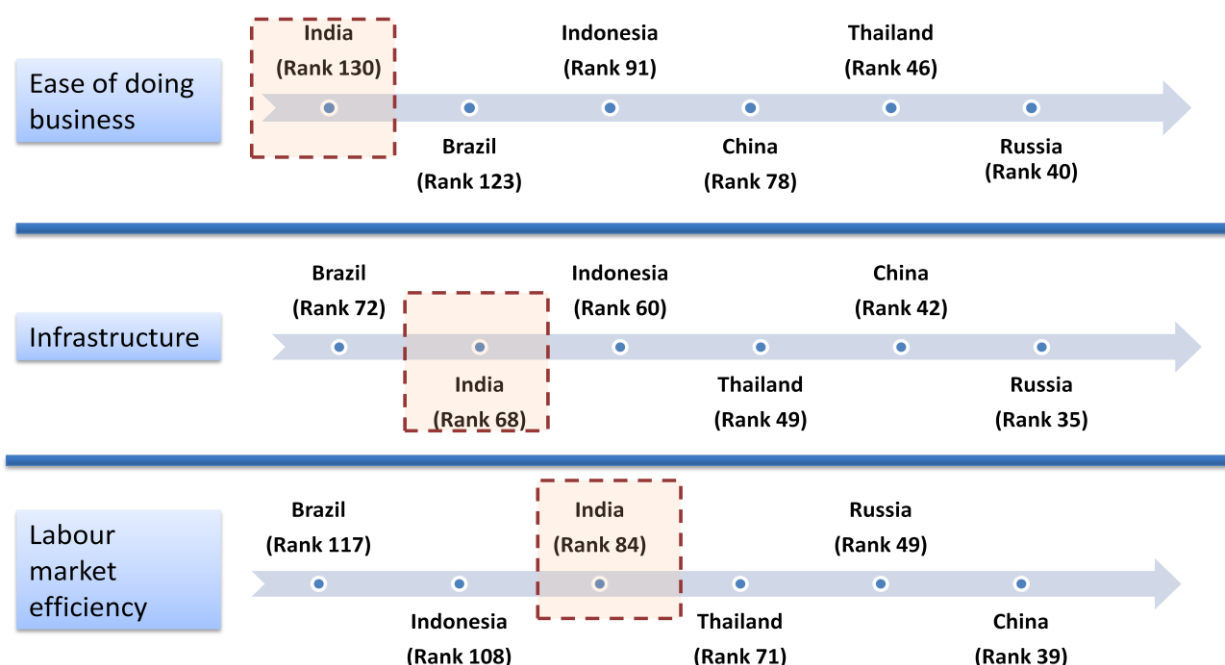
Exhibit 92: India's cost competitiveness across various factors of production

Parameters	UOM	India	Thailand	Indonesia	China	Russia	Brazil
Import duty on key components	%	14%	15%	20%	25%	5%	18%
VAT	%	15%	7%	10%	17%	18%	17%
Average Power cost*	(Rs./KWH)	11.12	5.54	5.97	4.39	3.23	10.51
Average logistics cost*	(Rs./'000km)	2.10	3.75	5.75	4.25	3.75	4.00
Weighted average labour cost*	USD/p.a.	9,848	16,266	13,512	23,421	26,710	39,352
Average lending rate <sup>#</sup>	%	10%	7%	13%	6%	11%	32%
Corporate tax rate	%	33%	20%	25%	25%	24%	25%

Source: iMaCS analysis

In addition to these, a review of India's global standing with respect to these countries as per the Global competitiveness report of 2016-17 indicate that India fares slightly below these key competing countries across the aspects of Infrastructure availability (rank 68) and labour market efficiency (rank – 84) and poorly when it comes to ease of doing business (rank 130). A comparative of the ranking of all these countries is indicated in the following exhibit.

Exhibit 93: India' ranking w.r.t competing countries - 2016-17



Source: Global Competitiveness report 2016-17

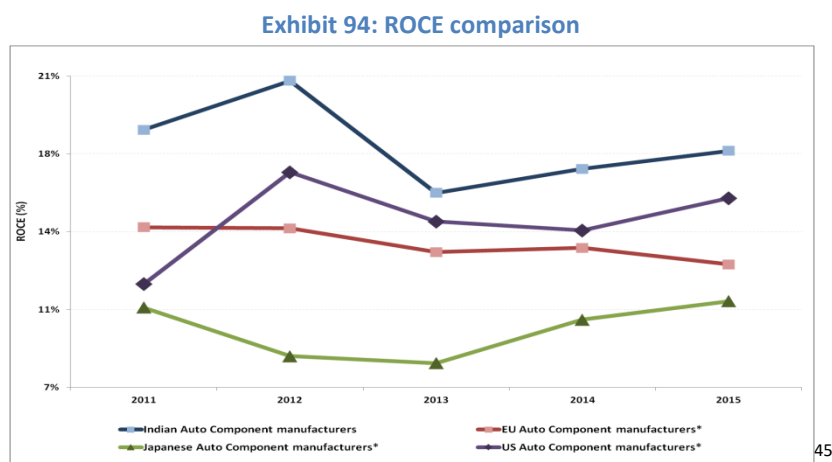
## 5.2. FINANCIAL PERFORMANCE BENCHMARKING

The section focuses on comparative assessment of performance by analysing the key financial ratios - Return on Capital Employed (ROCE) and EBITDA margin of Indian auto parts manufacturers and with respect to major auto parts manufacturers present in EU, USA and Japan respectively to gauge the returns of Indian manufacturers with those in developed countries to identify the competitive advantage between the two. For the assessment 34 leading Indian auto component manufacturers present in India and operating across all major auto component segments have been considered and major auto component manufacturing players of EU, US and Japan have been considered. The financial ratios analysed have been detailed as follows:

- 1. Return on Capital Employed (ROCE)** - Return on Capital Employed is a ratio which determines the efficiency and profitability of a firm with which its capital has been utilized and is calculated as  $ROCE = \text{Earnings Before Interest and Tax (EBIT)} / \text{Capital Employed}$ , where Capital Employed is calculated as  $\text{Total Assets} - \text{Current Liabilities}$ . A higher ROCE is beneficial as it indicates efficient use of a firm's capital.
- 2. EBITDA Margin** - EBITDA (Earnings before Interest, Tax, Depreciation and Amortization) Margin is a ratio which measures the operating profitability of a firm as percentage of total revenue. EBITDA Margin is calculated as  $EBITDA \text{ Margin} = \text{EBITDA} / \text{Total Revenue}$

### *ROCE Comparison between Indian and European, US and Japanese counterparts*

The return on capital employed of Indian auto component industry across segments has been compared to that of US, European and Japanese auto component industry, as indicated in Exhibit 94



Source: VCCEdge, secondary research, iMaCS analysis

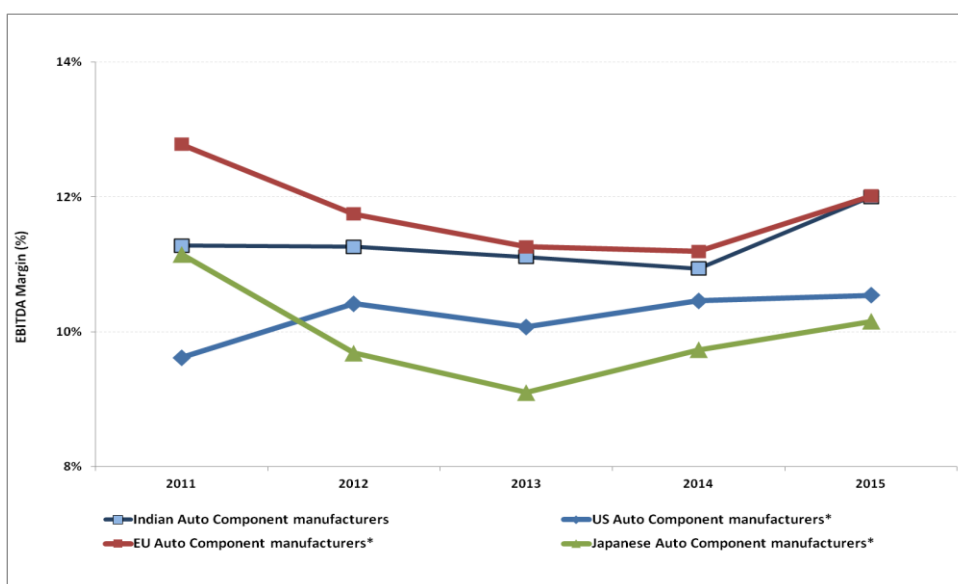
<sup>45</sup> \* - The industry average value of ROCE for US, EU and Japanese auto component manufacturers represented in the graph is indicative and has been calculated considering 10 players from each region or country respectively

It can be witnessed in Exhibit 94 that the ROCE of Indian auto component manufacturers has been better than its European, US and Japanese counterparts for the period 2011-2015. This indicates that on an average the Indian auto component manufacturers have higher profitability and better efficiency while utilizing their employed capital than their European, US and Japanese competitors.

**EBITDA margin Comparison between Indian and European, US and Japanese counterparts**

The comparison of EBITDA Margin of Indian auto component manufacturers with European, US and Japanese auto component manufacturers is shown in the following exhibit.

**Exhibit 95: EBITDA comparison**



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It can be witnessed from Exhibit 82 that EBITDA margin of Indian auto component manufacturers is slightly lower than their European counterparts while it has been higher than their US and Japanese counterparts for the period 2011 – 2015. This indicates that only European auto component manufacturers have higher operating profitability than Indian manufacturers whereas US and Japanese auto component manufacturers work at lower operating margins

<sup>46</sup> \* - The industry average value of EBITDA Margin for US, EU and Japanese auto component manufacturers represented in the graph is indicative and has been calculated considering 10 players from each region or country respectively



## 6. POTENTIAL UPCOMING TRADE AGREEMENTS

In this chapter the upcoming global trade agreements have been analysed with respect to their key offerings, the member countries, probable impact on trade of auto component of India with these member countries and the current stage of trade negotiations. The following trade agreements have been analysed:

1. Trans-Atlantic Trade and Investment Partnership (T-TIP)
2. Trans Pacific Partnership (TPP)
3. Regional Cooperation and Economic partnership (RCEP)
4. India – EU Free Trade Agreement (India- EU FTA)

### 6.1. TRANS ATLANTIC TRADE AND INVESTMENT PARTNERSHIP (T-TIP):

The Transatlantic Trade and Investment Partnership (T-TIP) is the proposed trade agreement between the European Union (EU) and the United States of America (USA). The T-TIP is intended to be an ambitious and comprehensive trade agreement that significantly expands trade and investment between the United States and the EU, increases economic growth, jobs, and international competitiveness, and addresses global issues of common concern. Its main three broad areas are market access, specific regulation, and broader rules and principles and modes of cooperation. Reducing non-tariff barriers is expected to be a key part of trans-Atlantic trade liberalization. Some of the key focus sectors for T-TIP are food and agricultural products, chemicals, cosmetics, textiles, automobile & auto parts and medical devices. T-TIP is expected to boost EU exports to the US in goods and services by up to USD 196 billion (€187 bn) while US exports to EU are expected to grow by USD 167 billion (€159 bn)<sup>47</sup>. The trade agreement is also expected to benefit both EU and US exports to the rest of the world by an increase of over USD 35 bn (€33 bn) and USD 84 bn (€80 bn) respectively.

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<sup>47</sup> Source: study by the Centre of Economic Policy Research (2013),

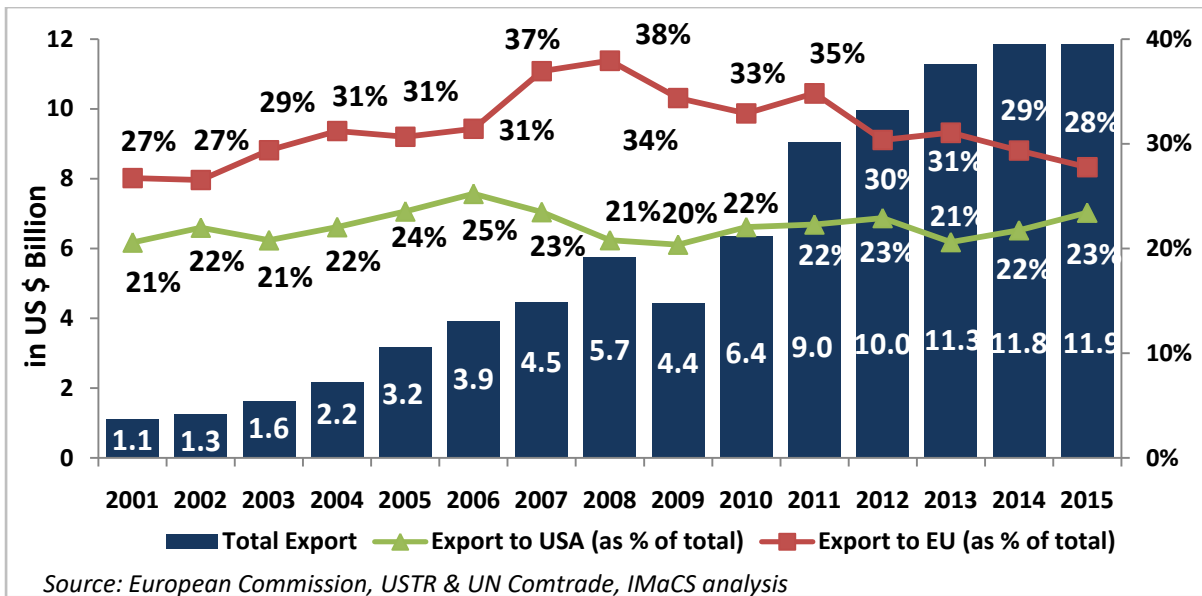


The T-TIP negotiations were started in July 2013 and the parties have had 15 rounds of discussion. Since then negotiators from both sides have gathered for 15 rounds of discussions, with the latest round taking place in New York in October 2016. Although the discussion led to agreements on some key sectors like pharmaceuticals, no major breakthrough could be achieved during the discussions. With the changing focus of US against global FTAs and towards retaining manufacturing jobs in US, there is still a lot that needs to be finalised before a consensus on T-TIP can be achieved.

The United States and European Union together constitute around 22% of global trade of auto components valued at USD 461 billion, out of which USD 46 billion is the intra EU-US auto component trade accounting for 7% of the total trade between these two regions. . EU exports auto components worth USD 33 billion to US while importing USD 13 billion worth of auto components from US, leading to a net trade surplus of USD 20 billion for EU. T-TIP is expected to provide a tariff benefit ranging from 1.7% to 7% to EU auto and auto part manufacturers while exporting to US. In addition, with synchronising of standards and regulatory requirements, the demand for auto parts from OEMs and auto makers in both the continents is expected to witness a boost leading to increased intra continental trade.

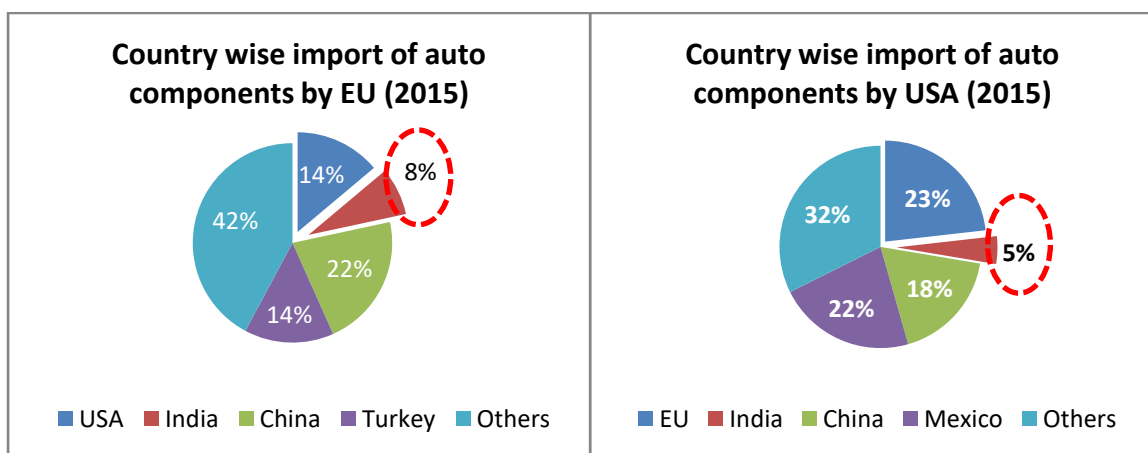
Both EU and US remain critical export markets for India accounting for 51% of India's auto component exports at USD 6.1 billion, with EU accounting for 28% and US 23% of the total auto component exports from India. The movement of auto component exports to US and EU is indicated in the following exhibit. Given the high share of EU and US in India's auto component exports, even a shift in sourcing strategy can have significant impact for Indian exporters.

Exhibit 96: India's export of auto component to the world with share of US and EU



Out of the total import of auto components in EU, US accounted for 14% while India accounted for only 8%. Similarly in case of US, EU was the largest exporter with 23% share and India accounted for only 5% of auto component imports. The following exhibit represents the country wise share of auto component imports coming into EU and US for 2015. Reviewing the segment wise exports, Misc. automobile parts, Engine parts and particles of Iron and Steel (870899, 840899, 732690, 841349, 731815) constitutes close to 40% of India's export to US and EU. These are also major traded items between US-EU.

Exhibit 97: Country wise share in imports of auto components by EU and US



### 6.1.1. Current Stage of trade negotiations-

While negotiations have been ongoing for quite some time with the latest one held in January 2017, the countries have not been able to reach a reasonable consensus. In addition to it, with United Kingdom

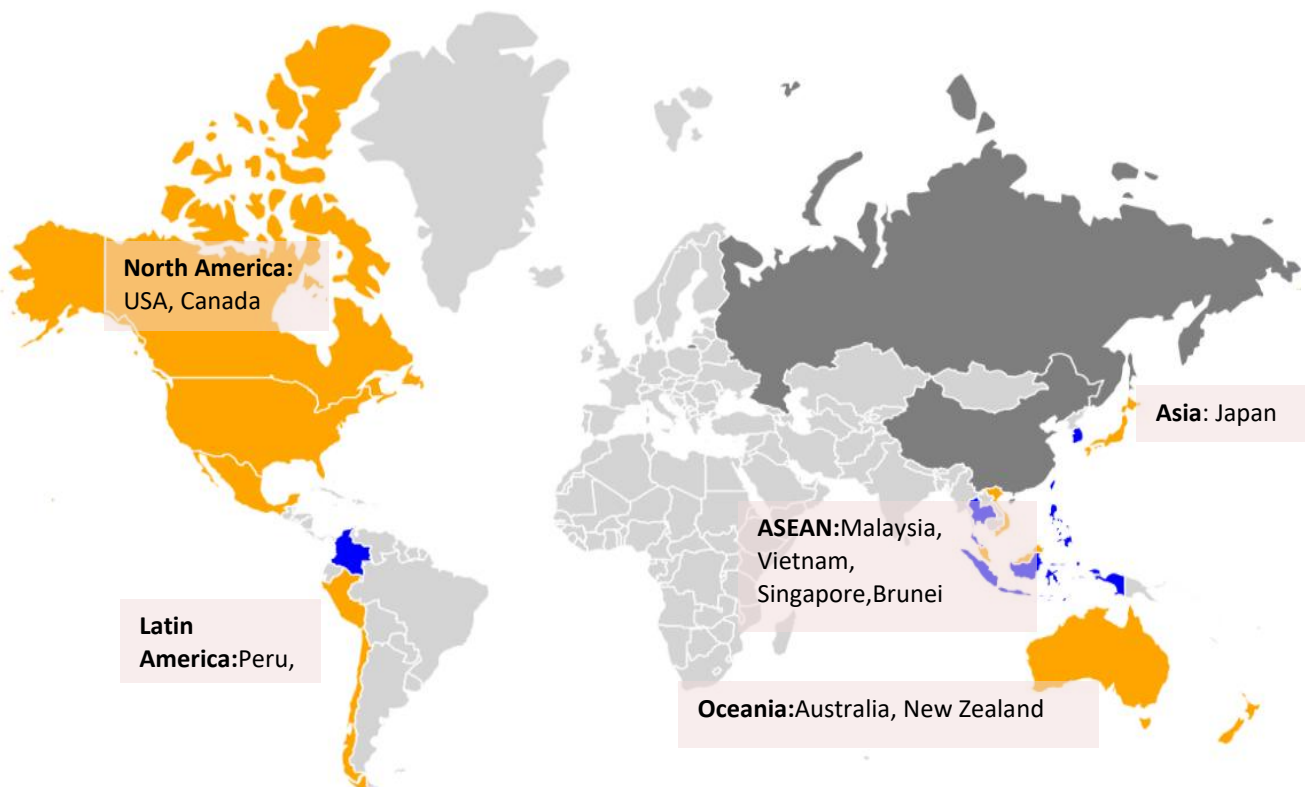
exiting the EU in 2016 and the new administration of US reviewing the benefits that US would gain from T-TIP, the future of the agreement looks unclear and it is increasingly difficult to predict how this trade agreement would be framed in the coming years and what prospects it would generate for Indian exports going into these countries.

Thus, with T-TIP coming into play there is a possibility that exports from India to US and EU might get substituted by EU and US respectively. On the positive side of it there is also a possibility, that with newer opportunities for exporting to US and EU and vice versa, India's export of intermediate auto components to these countries might get enhanced so as to cater to the increasing trade of auto component amongst US and EU. Also with T-TIP pushing for homologous standards across both continents, the opportunity of exporting similar products to both these markets increases for Indian players.

## 6.2. TRANS PACIFIC PARTNERSHIP (TPP):

The Trans-Pacific Partnership (TPP) or the Trans Pacific Partnership Agreement (TPPA) is a trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam signed after seven years of negotiations in February 2016. TPP was aimed at easing the flow of goods, services and investments amongst the member countries, and to strengthen the rules around labour standards, environmental compliances, originating criteria and intellectual property rights. The agreement aimed at reducing tariffs across 18,000 tariff lines including key industries auto, machinery, information technology and consumer goods, chemicals and agricultural products over period of 25 to 30 years.

The TPP began as an expansion of the Trans-Pacific Strategic Economic Partnership Agreement (TPSEP) commonly known as the Pacific 4 (P4) as it was originally signed by four member countries - Brunei, Chile, New Zealand and Singapore in 2005. In 2008 fresh negotiations were started for inclusion of additional countries for a broader agreement bringing the total number of



countries participating in the negotiations to 12. The agreement was to be ratified by the member countries and after ratification by at least half of the member countries it was expected to come in effect. However in January 2017, the United States the largest market and a key member of the agreement withdrew from TPP. Till date the agreement has been ratified by only Japan leading to doubts regarding what would become of the TPP and how effective it would be easing the market

movement of goods and investments. Additionally at the time of drafting and signing Colombia, South Korea and other ASEAN nations had also expressed interest in joining TPP.

The original TPP countries represented a combined market of nearly 800 million people and a gross domestic product (GDP) of USD 28.5 trillion out of which US accounted for ~60% of GDP at USD 16.77 trillion. Original TPP nations constituted around 13% of global trade of auto components of approximately USD 271 billion, out of which Intra-TPP trade constituted a significant share as majority of exports went to the US market. Therefore with the withdrawal of US from TPP, the potential benefit that the Asian countries were envisaging in terms of easier access to the US market suffered a significant blow.

In 2015, total auto component trade of TPP countries was USD 685 billion out of which about USD 414 billion was Intra-TPP trade. NAFTA countries contributed to 86% of this intra TPP trade of auto components valued at USD 316 billion with US contributing to 46% at USD 191 bn. The following exhibit indicates the contribution of major regions/ countries in the Intra TPP trade.

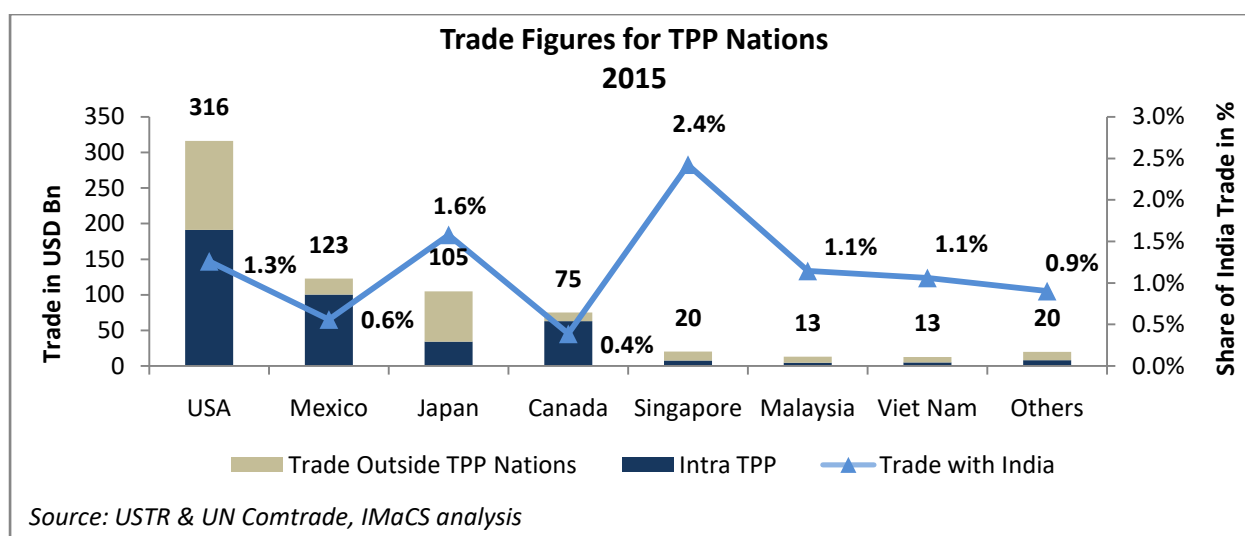
**Exhibit 98: Share of different regions in Intra TPP trade**

Sl. No.	Region/ Country	Share in Intra TPP trade	Actual traded value
1	US	46%	~ USD 191 billion
2	NAFTA region excluding US	40%	~ USD 125 billion
3	Japan and ASEAN	12%	~ USD 50 billion
4	Oceania	1%	~ USD 4 billion
5	Latin America	1%	~ USD 4 billion

Source: IMaCS analysis, secondary research

Share of India's trade with all TPP partner countries is around 1.1% of total auto component trade of TPP countries and it is close to \$ 8 bn. India's auto export to TPP nations was \$4.6 billion in 2015 with modest growth of 8.8% (2012-2015) while USD 3 billion worth of auto parts were imported from TPP partner countries which grew by 10% in the same period. Among TPP nations US is the major destination for Indian auto component export. In 2015, about USD 3 billion of auto parts were exported to US, which accounted for more than 65% of total auto component exports to TPP nations from India.

**Exhibit 99: Total Auto Component Trade of Trans Pacific nations in 2015**



Realization of TPP will further aid intra-TPP trade with countries like Vietnam, Mexico, Malaysia benefitting from tariff reduction in addition to advantages in terms of proximity to markets and traditional sourcing value chains. Outside TPP nations, EU and China are major sources for import of auto parts into TPP nations. Thus, there may be new supply chain will develop by EU and China. Since, the Regional Content Value (RCV) for TPP remains low (proposed at 35%), it allows for countries like Japan to export automobiles to NAFTA countries while continuing to source auto parts from cheaper destinations like Viet Nam, Thailand, China. India might lose due to new supply chains through Japan & Malaysia to TPP partner countries. Post TPP, significant benefits will get to competing countries like Vietnam, Malaysia & Japan. Major auto parts that could be affected are indicated as follows.

**Exhibit 100: Key auto component exports from India to TPP nations (Including US)**

Major export items to TPP from India (2015)			
Item (HS Code)	Segment	Share in India's export to TPP	Share in total imports of TPP
870899	Other vehicle parts	7.5%	6.8%
870850	Drive-axles	6.8%	2.8%
870830	Brakes and parts	6.2%	2.3%
840999	Engine Parts	5.6%	1.8%
841391	Pumps & Parts	4.9%	1.5%
848310	Transmission shafts (incl. cam shafts and crank shafts)	4.0%	1.2%

Source: UN comtrade, DGFT, IMAcS analysis

### 6.2.1. Current Stage of trade negotiations-

Post withdrawal of US from TPP in 2016, the other 11 member partner in a recent meeting held in Toronto decided to revive the pact without US while Japan along with New Zealand to take the leadership role for US free-TPP. While Japan is pushing for a new agreement that it hopes could be finalized, in the best-case scenario, at the end of 2017 on the sidelines of the Asia-Pacific Economic Cooperation meetings in Vietnam, there is a view among some of the members that substantive sections of the agreement needs to be re-drafted in light of withdrawal of US from the agreement.



### 6.3. REGIONAL CO-OPERATION AND ECONOMIC PARTNERSHIP (RCEP):

Regional Co-operation and Economic Partnership (RCEP) is proposed Free Trade Agreement between the ten members of ASEAN (Association of South East Asian Nations) Countries and their six FTA Partners - Australia, China, India, Japan, New Zealand and South Korea aimed at achieving a comprehensive, and mutually beneficial economic partnership agreement among these countries. RCEP will cover trade in goods and services, investments, economic and technical cooperation, intellectual property rights, competition, dispute settlement and other issues related to foreign trade, rules of origin and non-tariff barriers.

The RCEP negotiations started in May 2013 and since then 15 rounds of negotiations have been completed with the last round held at Tianjin, China in October 2016.

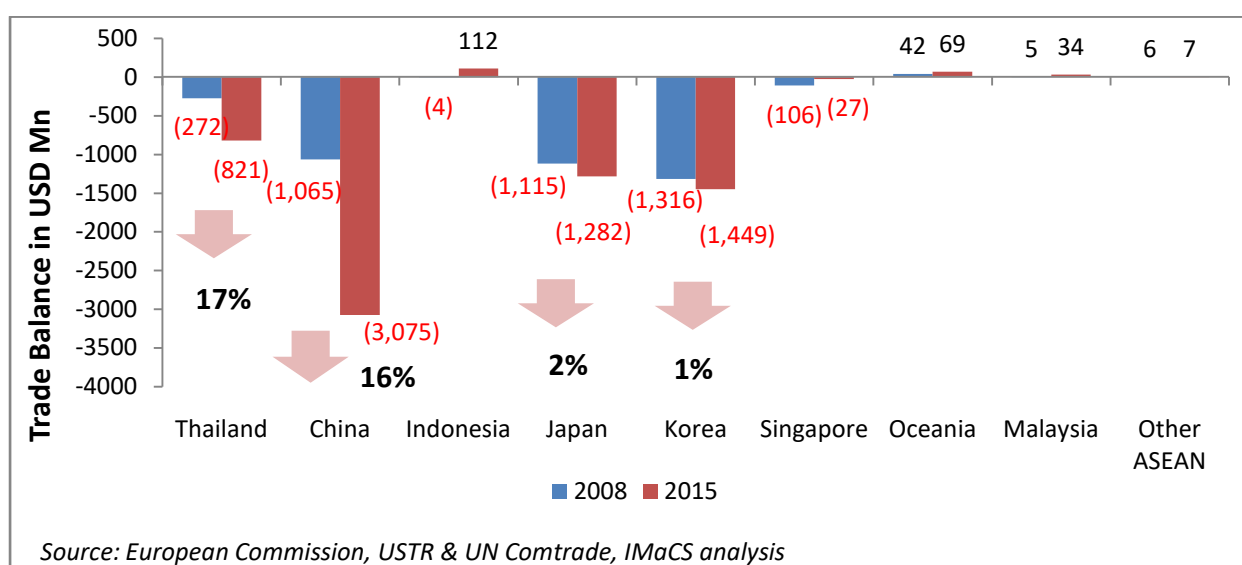
RCEP will create a large integrated market and also replacing the current numerous Free Trade Agreements between Countries with overarching RCEP which would have simplified trade rules and



helps to create the production bases in the RCEP area. Country groups such as India-China, India-Australia and New Zealand or China-Japan do not have any existing FTA relationship with each other and hence there is scope for exchanging deeper tariff slashing. By adopting common Rules of Origin (ROO) will make movement of goods easier in the RCEP area. Post RCEP, Intra ASEAN trade may come down. RCEP would cover more than 3.4 billion people or 45% of the world's population with a combined GDP of about USD 21.3 trillion.

India is eyeing opening of its software services exports to the member countries through RCEP. Within the RCEP member countries, India exported auto parts worth USD 1.8 billion in 2015 clocking the growth of 15.3% CAGR during 2008 to 2015. The auto parts import was worth USD 8.3 billion in 2015 growing at 9.1% CAGR during 2008 to 2015. China, Japan, South Korea along with Thailand & Indonesia are major trade partners for auto components for India. A matter of concern is that India currently has a trade deficit with China, Thailand, South Korea, Japan and Singapore with the trade deficit with Thailand & China growing at 17% and 16% respectively during 2008 to 2015, as indicated in the following exhibit.

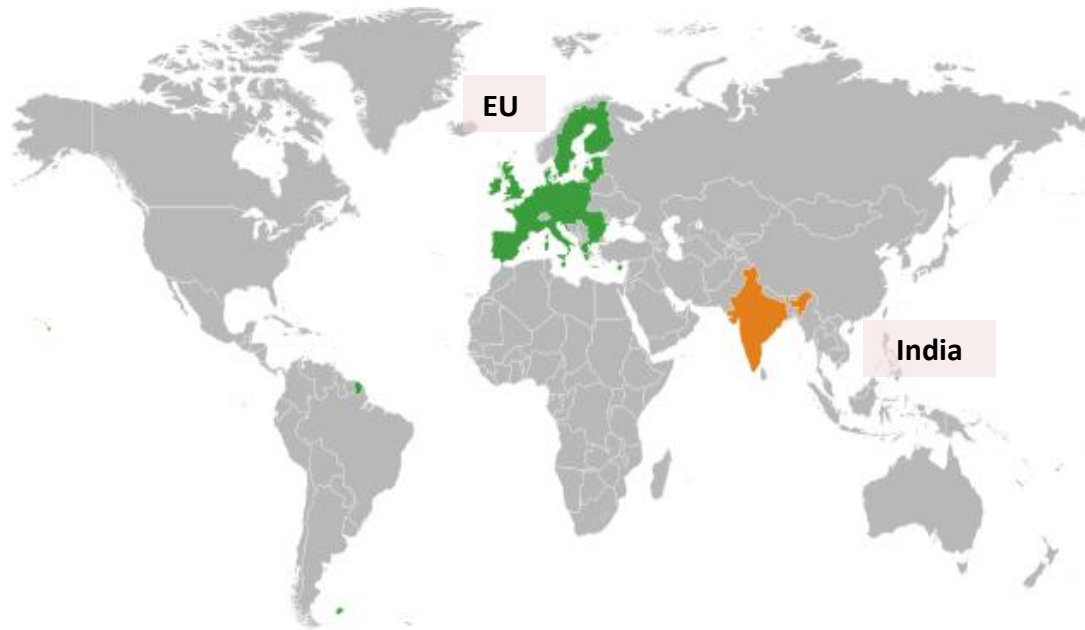
**Exhibit 101: India' net trade flow to key RCEP countries**



Through RCEP, India would attract new investment decision in machinery, textiles, processed food, electric component, automotive & leather products and several other key sectors. RCEP is also expected to provide a significant boost to Indian software services export to the RCEP countries. Through RCEP, India would also get better access to about USD 11.7 billion auto parts export market of Australia and New Zealand. However, given the existing and growing trade deficit that India has with most of the Asian countries including China, who are a key part of the RCEP, there is vulnerability where RCEP may lead to opening of Indian markets to Chinese auto component manufactures which is the biggest threat for domestic auto component industry, with reduction of tariff barriers. The trade deficit with other Asian countries of Japan, South Korea and Thailand may also increase on account of RCEP. Additionally, through RCEP, India may emerge as an attractive investment destination for Chinese companies, which would again be a significant inhibitor for development of local SMEs and entrepreneurs.

#### 6.4. INDIA – EU FTA:

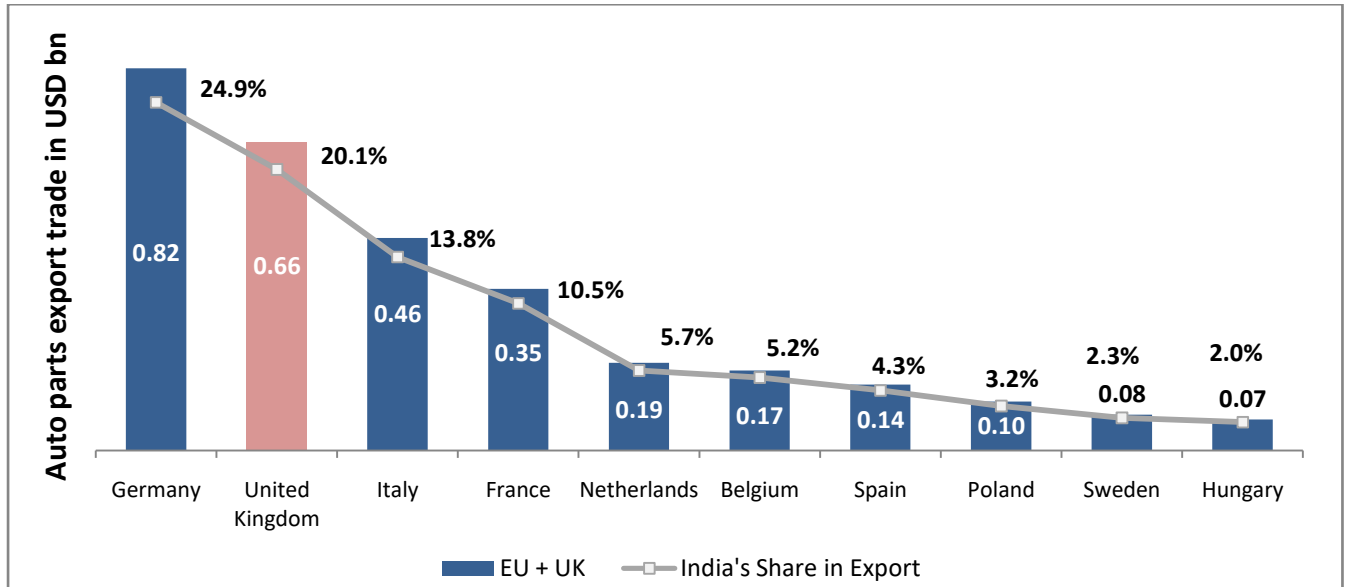
India-EU FTA, launched as Broad-based Trade and Investment Agreement (BTIA) in 2007, is free trade agreement between India and European Union which is currently under negotiation. The Proposed India-EU FTA is the most ambitious bilateral pact as it covers higher levels of commitments in trade in industrial goods and agricultural products, services and investment



liberalisation, intellectual property rights and government procurement. It has undergone 16 rounds of negotiation discussions on several contentious and crucial issues like Intellectual property rights, duty cuts in spirits and auto and auto parts, textiles and a liberal visa regime. The main demand of EU is to drastically cut tariffs or eliminate duties on automobiles, wines and spirits, and dairy products, while India is asking for data security status and easier temporary movement of skilled professionals through a liberal visa regime. The India-EU FTA would cover 1.7 billion people which almost 20% of the world population. India and European Union (EU) together account for 11% of total global trade of auto components valued at USD 232 bn. EU is the second largest export destination after US for Indian auto component industry. India's total trade with EU in 2015 was USD 86 billion, out of which about 8% (USD 7.8 billion) trade is of auto components. India's auto component export to EU was USD 3.3 billion in 2015 while import from EU was USD 4.5 billion in 2015. EU enjoys a trade surplus of about USD 1.2 billion in auto component trade with India. India's exports to EU witnessed a growth of CAGR of 5.7% during 2012 to 2015, indicating that EU is growing market for India. Germany, Italy, France and Netherland are major export destinations along with U.K. accounting for ~75% of total export of auto components to EU. Transmission & Steering

parts, engine parts and electrical parts are major auto parts trade with EU. The following exhibit indicates the country wise export of auto components to EU for 2015.

**Exhibit 102: Country wise export of auto components to EU**



Source: DGFT, UN comtrade, IMaCS analysis

For auto and auto components, India currently enjoys GSP rates for most products. With the EU-India FTA in place, this might get replaced by MFN rates which may increase India's competitiveness by 1.7% to 4.5% across products. Additionally through this trade agreement, owing to the presence of homologous standards for auto components in EU & US and the ongoing T-TIP negotiations, India might also be able to indirectly target auto component exports to US auto manufacturers. However, at the same time, opening of Indian markets to the auto makers of Europe by reduction of duties across both auto and auto components, may pose a significant threat to Indian auto and auto component manufacturers mainly on two accounts. Firstly, the import of European automotive on account of reduction in duties on CBU vehicles would increase leading to stiffer competition in domestic market which would ultimately affect the auto component manufacturers. Secondly it may happen that many of the European auto manufacturers who have setup manufacturing in India would prefer importing auto components from their home countries over procuring the same from local Indian manufacturers. The FTA might also induce an inverted duty structure, wherein the raw materials being procured from other regions, would be charged at a higher tariff as compared to import of finished auto parts from Europe making the domestic manufacturers less competent. Another key risk is that emerging auto component technologies where India is yet to make a mark might end up in the positive list, leading to higher imports to which the domestic industry might not be able to compete.

## 7. KEY FINDINGS

Key findings from the study based on an assessment of trade agreements and their impact on auto component exports from India are summarised as follows:

- 1. Growth in India's auto component exports** – India's Auto Component export was worth USD 10.8 billion (Rs. 71 thousand crore) in 2015-2016 accounting for 28% of the industry's turnover. It witnessed a growth of CAGR 11% during 2010-2016. Considerably above average growth in exports was observed in regions of Asia (15% CAGR), ASEAN (19% CAGR) and MERCOSUR (19% CAGR), where India has signed trade agreements. However, these regions account for only 18% of the overall auto component exports from India, with majority of exports going to EU (35% by value) and North America (25% by value), where India is yet to have a trade agreement. It was witnessed that despite recessionary economic conditions across the globe, Indian auto component trade has performed above average and witnessed a double digit growth rate.
- 2. Auto component trade with specific regions/ countries where India has trade agreement-** India continues to export significant part of its auto components to North America and European Union, with which it at present does not have any trade agreements. However regions/countries like Japan, South Korea, Thailand, ASEAN region, Chile and MERCOSUR region that have trade agreements with India also command a fair share in auto India's component trade. Analysing the trade trends, it is observed that India has high double digit export growth rate with the countries/regions having trade agreements and import growth from these locations is either in single digit or has remained stagnant over the last six years. However, given the higher base of imports as compared to exports the growth in absolute terms of imports is higher as a result of which, the trade deficit has remained significant in the case of Japan, S. Korea, Thailand and ASEAN. For MERCOSUR and Chile, India enjoys trade surplus in auto component trade. While trade surplus for Chile is growing, it is a relatively small market mostly limited to aftermarket sales, and in the MERCOSUR region, Brazil is the largest market accounting for around 85% of the demand where exports from India has declined. Overall it is observed that trade agreements have been to a certain extent beneficial for India's auto component exports barring South Korea and Thailand. However, the large volume of imports coming into India still overshadows exports and India continues to remain a trade deficit nation in auto components.
- 3. India's Competitiveness with respect to global peers** – India is competitive in auto component industry compared to some of the key competing countries of Asia and EU in

most of the product segments except for a few segments like suspension and transmission parts specifically with respect to China. While India fares well when it comes to the technological readiness, availability of raw material and skilled labour force at low cost, it loses out on the macro aspects of power cost and corporate tax rates which are significantly higher than other competing nations. This is further accentuated by the challenges related to ease of doing business and infrastructure availability.

Analysing the financial performance of Indian auto component industry vis-à-vis Germany and USA, it is observed that the average Return on capital Employed (ROCE) and the Operating Margins of listed Indian auto component companies were better than or at par with its German peers, significantly better than US based manufacturers, and competitive with that of Japanese manufacturers. This assessment corroborates that India is competitive with respect to global players in auto component sector.

## 8. THE WAY FORWARD ...

The findings of the study indicate that the trade agreements have been partially beneficial in promoting exports of auto components from India. However, there also have been cases where imports have grown at faster pace than exports after signing of trade agreement specifically with respect to Thailand and Republic of Korea (South Korea). It is imperative for India to continually monitor and reassess the performance of the trade agreements so as to translate the learning into future negotiations on trade agreements covering auto components. The other challenge for the industry is to hit targets set under the Automotive Mission Plan 2026, which aims for a 4.5 times growth in exports during the period 2016 to 2026. This target translates into a need for increased efforts by the auto component industry to grow at a CAGR of 19% between 2016 and 2026 in comparison to its previous CAGR of 11% over the past six years. While industry, on its part, is making all out efforts to be technology ready and meet the requirements of stringent regulations, a strong policy push and facilitation of exports is required from the Government to support the achievement of this ambitious target of exports. Keeping these in mind, the following interventions have been suggested to promote exports through new trade agreements, as well as, effectively extracting maximum benefits from existing and upcoming trade agreements. The suggested interventions have been bucketed under two groups - those that have to be implemented by Government of India along with ACMA and those which are to be implemented by ACMA and the industry.

### A. Interventions suggested for Government of India in coordination with ACMA -

1. Increased market access to automotive markets to achieve Automotive Mission Plan 2026 targets
2. Formulate tariff line specific strategy based on competitiveness, technology access and export potential of India when negotiating trade agreements
3. Negotiating stringent Rules of Origin criteria including PSRs so as to prevent import of sub-standard parts
4. Promoting local manufacturing of components with emerging technologies
  - a. Identify specific components for e.g. electronics, ABS, Safety (airbags etc.), etc.
  - b. Promote setup of local manufacturing capacity and regular monitoring of investments in these areas
5. Procedural and Operational recommendations – Ensuring uniformity across HS code descriptions at 8 digit level with partner countries

## B. Interventions suggested for ACMA

1. Creating awareness amongst industry regarding the Trade Agreements, procedures, documentation filing
2. Creating helpdesk and information window about export opportunities in new geographies

### 8.1. Suggested Interventions for Government of India in coordination with ACMA

#### 8.1.1. Increasing market access through trade agreements to aid in achieving Automotive Mission Plan 2026 targets

To increase market access through trade agreements the following is recommended –

1. **Expansion of PTA with MERCOSUR and inclusion of additional tariff lines** – The Preferential Trade Agreement with MERCOSUR is up for discussions and renewal. It is important that India re-negotiates this trade agreement with focus on expanding the number of tariff lines opened to India so as to include the tariff lines specific to auto component trade. This would be a key opportunity for Indian players to capitalise on the expanding Latin American market and make its presence felt in the Brazilian market which commands a significant share of the Latin American market. In addition, India has re-negotiated its PTA with Chile expanding tariff lines from 296 that was earlier offered to India to 1798 new tariff lines with a tariff reduction ranging from 30% to 100%.
2. **Focus on identifying and negotiating trade agreements with new and upcoming automotive manufacturing locations and markets like South Africa, Iran, Brazil, etc.** – While the markets of Europe and North America would continue to be strong prospects for Indian auto component suppliers, the markets of Brazil, South Africa, Iran and Egypt are fast growing markets and provide potential market opportunities for Indian auto component exporters. India should evaluate negotiating bilateral trade agreements with these nations so as to enjoy an early mover advantage when it comes to opening of tariff lines and making its presence felt in these markets. These markets would also be the gateway for expanding presence in the Southern part of Africa, Middle East and Latin America.



### 8.1.2. Formulate tariff line specific strategy based on competitiveness, technology access and export potential while negotiating trade agreements

It is important for India to have a tariff line specific strategy while negotiating trade agreements. It needs to focus on promoting trade and exports where India has significant competitive advantage and at the same time encourage domestic industry in areas of emerging technologies that have significant potential. Such a tariff line strategy should be formulated considering the following aspects –

1. **Manufacturing cost competitiveness** – The strategy should complement India's capability by on focusing on relaxing tariffs across products where India has high competitiveness, where domestic players would be able to maintain their market share and at the same time capitalize of the opportunity of larger market access by increasing export presence. This needs to be complemented with appropriate restrictions to prevent dumping and import of sub-standard products.
2. **Access to Emerging Technologies** – The strategy should complement promoting transfer of new and emerging technologies into India. It should also provide support to domestic industry operating in these emerging areas to develop the necessary capability and competitiveness. This is important as emerging technologies like automated manual transmission/ Auto Gear Shift (AMT/AGS), safety features like ABS, mechatronic technologies related to environmental compliance and efficiency like turbo chargers, fuel injection pumps, and the like would constitute significant value addition in manufacturing of cars in the future and hence domestic manufacturing in these emerging products needs to be promoted so as to provide a pivotal status to Indian auto component industry in the global arena in near future.
3. **Potential for exports** - The strategy should focus on the future potential of exports that the trade agreement opens for Indian auto component manufacturers' and at the same time factor in the readiness of the industry to meet the potential challenge of imports that the trade agreement brings in. India should focus on liberally negotiating trade agreements with emerging and growing automotive markets with focus to tap into the potential of exports, keeping in mind the strategies adopted by other leading auto component manufacturing nations that are also targeting similar markets.
4. **Impact of Global Value Chains:** Government will need to consider the aspects related to global value chains where countries are aligned to such strategies adopted by vehicle

manufacturers. This is further accentuated by cultural aspects of doing business by OEMs, where preferences are given to particular type of component manufacturers based on their country of origin or their existing relationships with these OEMs. It is necessary for Government of India to consider this aspect as part of the Feasibility Study it undertakes prior to negotiations.

### **8.1.3. Negotiating Rules of Origin (ROO) criteria and elimination of non-tariff barriers with trading partners**

With the new millennia and the increasing requirement of WTO compliance, most of the countries have shifted policies towards compliance of standards and stringent rules of origin (ROO) than competing on plain tariff barriers. On similar lines, it is recommended that India should also take note of the various NTBs that it is facing currently and also assess if the Rules of origins that are currently executed in its trade agreements complements India's manufacturing capabilities. India should negotiate on NTBs and ROO with different countries and accordingly structure its trade agreements so as to command a position of strength and is able to increase exports in spite of presence of NTBs and stringent ROO. The following aspects should be considered while negotiating NTBs in trade agreements –

1. India has developed several standards for auto components under Automotive Industry Standards (AIS) as well as Bureau of Indian Standards (BIS), which needs to be aggressively promoted and enforced ensuring that imports are compliant to these.
2. India should also develop standards for auto-components which that are vulnerable to import of sub-standard parts.
3. India should promote third party research and certification agencies for ensuring adherence to standards; the NATRIP project of Government of India should be fully leveraged for this purpose.
4. India should focus on implementing IPR protection measures to prevent import of sub-standard components

Along with strengthening the Non-tariff measures, India should also devise its Rules of Origin (ROO) strategy with an aim to retain the benefits and competitiveness of key component categories. In the past India has adopted a combination of value added and originating content in most of its trade agreements. Typically the value added content has been defined as a Change in the Tariff Sub-Heading Level (CTSH) i.e. change in HS code at 6-digit level and originating content to the extent of 35%. Given that the domestic industry has made significant progress

both in terms of technology as well as scale and keeping in mind the strategies adopted by competing nations in their trade agreements, it is necessary for India too to move to a higher threshold. The key aspects regarding ROOs that are recommended are –

- **Originating Content:** Traditionally India's threshold for defining originating content has been at 35% with most other countries having an originating content requirement of 40% or higher. Given the fact that India's auto component industry has established itself well, India can negotiate for a higher originating content requirement ranging between 40% and 50%.
- **Value Addition:** As regards the value addition criteria, child parts should be on a Change in Tariff Heading (CTH – 4 digit HSN code change) basis and sub-assemblies/assemblies should be on a Change in Tariff sub-heading (CTSH – 6 digit HSN code change) basis
- **Combination:** India should ideally seek a combination of both Originating Content and Value addition rules with bilateral accumulation
- When negotiating Regional Trade Agreements (e.g. RCEP) the preference shall be for CTH/CTSH in comparison to regional value content
- Methodology for determining value addition should be on a "Build-up" method

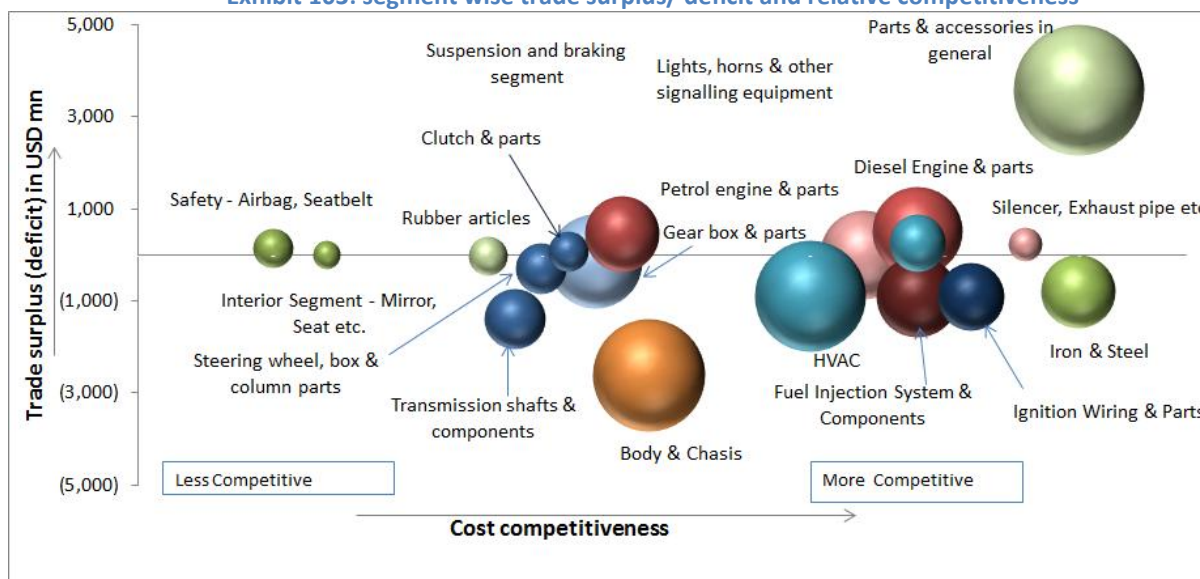
#### 8.1.4. Promoting local manufacturing of components with emerging technologies

A key factor for ensuring future growth and sustainability of India's auto component industry and exports is to keep the industry technologically up-to-date and relevant to the changing requirements of the industry. This requires significant efforts towards market intelligence, identifying new products and ensuring adequate access to technology. Also, timely development of such a strategy and promotion of emerging technologies is important so that India maintains and builds on its position in the global auto component market.

Such a strategy would necessitate a trade-off between opening tariff lines where India has higher cost competitiveness and scale versus guarding segments where India has lower competitiveness and scale. A mapping of India's auto component trade vis-à-vis cost competitiveness based on various component segments is indicated in exhibit 103. The X axis indicates the position of the component segment based on cost competitiveness from low to high as we move from left to right, while the Y axis indicates the current trade surplus or deficit that the segment has. The quantum of trade (exports in case of a trade surplus product and imports in case of trade deficit product) is indicated by the size of the bubble representing the segment. The exhibit indicates

that the product segments that are on the top right are the ones where India has higher cost competitiveness and also has a trade surplus.

**Exhibit 103: segment wise trade surplus/ deficit and relative competitiveness**



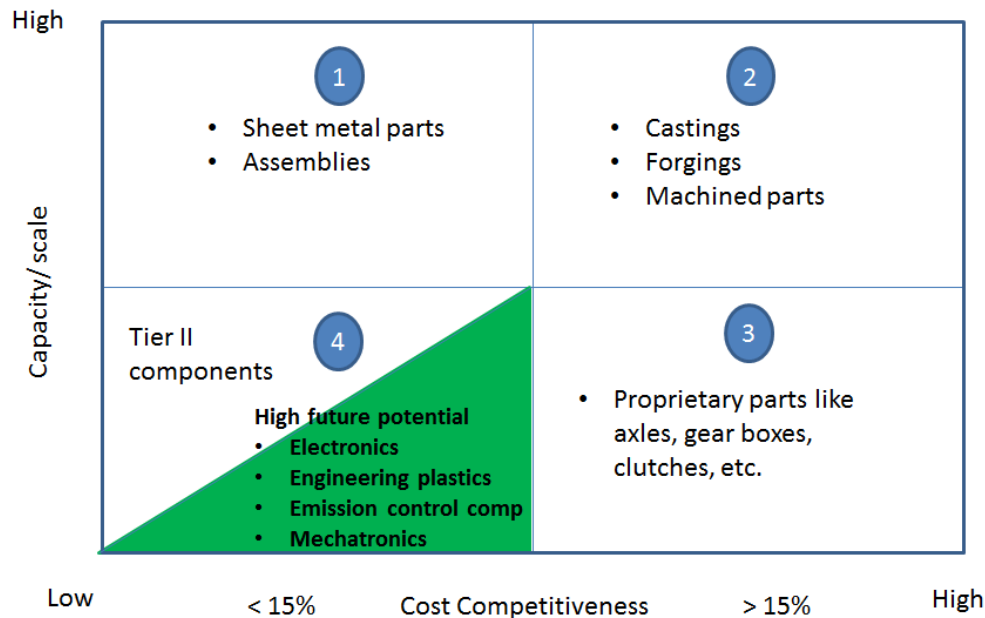
Note: Out of the 125 HS codes, the leading ones accounting for more than 75% of trade have been considered  
 The trade data is taken as average for 2013, 2014 and 2015 based on UN comtrade  
 The bubble size represents exports for segments which have a trade surplus and imports for segments that have a trade deficit

The mapping shows product wise cost competitiveness and trade scenario. This demonstrates that India has relatively lower cost competitiveness in emerging technologies and products that are currently changing to meet the stringent regulatory norms of emission and safety. India has higher cost competitiveness in traditional component segments. Further given the changes in regulations, there is significant domestic market potential for safety parts like airbags; braking systems; steering systems; fuel injection parts; transmission/ gearbox parts; electronic and mechatronic components and several others where India’s current trade position could quickly change into high trade deficit if free/preferential market access is provided under trade agreements.

Considering this assessment and the findings of the report it is recommended that India negotiate its upcoming trade agreements in a manner that promotes domestic manufacturing and capability building in emerging and existing sectors where the industry has lower scale and competitiveness while minimizing import dependency. A trade-off between the production capacity and the cost competitiveness of the product segment should be considered to identify products and product segments that need to be encouraged for domestic manufacturing and the ones which India could open to imports while negotiating trade agreements. The following exhibit (exhibit 104) provides the recommendations that India should consider before lowering of tariffs. However, the parts/segments highlighted in this matrix are indicative and specific HSN Codes will need to be

discussed between the Government and ACMA and finalised depending on the country/region against which the trade agreement is being negotiated.

**Exhibit 104: Capacity vs. cost competitiveness Matrix**



Source: IMaCS analysis

Note: The component categories highlighted in this matrix are only indicative and not exhaustive

The above indicated matrix has been detailed as follows:

- 1. Quadrant numbered 1 – High scale and Low competitiveness**– This quadrant includes components where we have low competitiveness but high manufacturing capacity. This segment requires support for technology upgradation so as to enable it improve its global competitiveness. A premature opening of these component segments to imports could significantly jeopardize domestic manufacturing and result in large scale job losses. Therefore, components/segments in this quadrant should be accorded higher tariff and non-tariff protection.
- 2. Quadrant numbered 2 – High scale and High competitiveness**–The second quadrant represents components where India has high competitiveness and large scale setup. This quadrant includes metal and machine parts, etc., where we have both the scale and the skill to compete on both Indian and global turfs. These product segments are where Indian manufacturers are competitive and its strengths could be leveraged when negotiating for greater market access for exports.

3. **Quadrant numbered 3 – Low scale and High competitiveness**– This quadrant includes components where we have a high competitiveness but limited scale of operation. Therefore, adequate caution needs to be exercised while negotiating opening market access for such components and segments. Industry should leverage the competitive advantage and focus on building higher scale to tap this opportunity.
4. **Quadrant numbered 4– Low on scale and low on competitiveness –low value add and routine components- White zone** - The upper half of the 1<sup>st</sup> quadrant (white zone) indicates auto-components that have limited future potential and where India has low scale and relatively lower competitiveness with respect to global players. These should be the focus for trade negotiations and be the first to be opened to imports as it would be extremely difficult to build scale and competitiveness in these components.
5. **Quadrant numbered 4 – Low on scale and low on competitiveness- High potential emerging components- Green Zone** - Within the 1st quadrant, the lower green zone indicates components that are emerging and are expected to have high potential in the future. These components are expected to command a high market value and share in the future and may provide a position of strength to the domestic auto component manufacturing encompassing segments. A tentative list of product segments that are currently emerging and are expected to command a high potential market and which would be strategic for the auto component industry in the coming future and therefore should be encouraged and promoted for local manufacturing is –
  - a) Electric Vehicle/Hybrid technology components;
  - b) Turbochargers, EGR, SCR Valves etc.
  - c) Safety components viz., ABS, air bags, etc.
  - d) Mechatronic components related to CVT etc.
  - e) Engineering plastics and composites
  - f) Auto –electronics like Reverse Parking Guides, telematics, etc.

Indigenous manufacturing and R&D for such product segments should be encouraged through appropriate policies and schemes so that Indian auto component industry develops competitiveness and scale to emerge as a crucial player in the global and domestic auto value chain.

### 8.1.5. Increasing the benefit provided under MEIS

In order to promote export of auto components, the incentive offered under the Merchandise Exports Incentive Scheme (MEIS) of the Government of India may be increased from the current level of 2% to upto 5% so as to make up for the factors affecting

competitiveness of the auto component exporters vis-à-vis competing global players. Higher incentive should be targeted towards regions where the cost of freight is significantly higher for example, shipments to Latin America.

### 8.1.6. Address procedural and operational anomalies

Procedural and operational aspects as highlighted below need to be streamlined so that the exporters can benefit from various Trade agreements that have already been signed by India.

1. **Ensuring uniform HS code description across all Govt. Departments** - It was indicated during the course of the assignment that the HS code description for different products vary across different Government departments of customs and taxation departments which makes it necessary for the exporter to provide additional clarifications and documentation in this regards, to gain benefit of the preferential tariffs. There is an imminent need to push for synchronization of these descriptions and their understanding so that it is less taxing and less time consuming for an exporter to provide required documents for enjoying the benefit of the preferential rates.
2. **Paperless processing of export documents** - In order to promote exports and significantly reduce time, Indian government should focus on implementing paperless and automated processing of exports documents. This would significantly reduce the time and inconvenience related to export documentation and would provide a competitive edge to Indian exporters. Such initiatives could include development of a trade information management system wherein various export related documents can be either fed into the system or shared through emails. The setup would require a structured system for extracting information, digitalizing it as well as storage and database management systems.
3. **Enforcement of appropriate documentation to check spurious part imports-** In order to ensure that spurious parts are not imported, it is necessary to mandate that ROO certificate is accompanied by relevant test certificates and also the Conformity of Production (COP) certificate for safety critical parts.
4. **Trade facilitation officer** - It is suggested that the Government should have a trade facilitation officer in key export destinations, who would provide the necessary market intelligence and support in export tie-ups to Indian players targeting to export to those locations.

## 8.2. Recommendations for ACMA and the Industry

### 8.2.1. Creating awareness regarding the Trade Agreements, procedures, documentation, filing-

ACMA, auto-component exporters and the Government need to take up the task of creating awareness through conducting various training programmes, seminars, workshops, wherein the personnel incharge of exports in member companies can be informed regarding the preferential rates and tariffs applicable, procedures for claiming the same and the documentation requirement for the same. This would help the industry members to claim the preferential tariff benefits thereby making its exports competitive.

### 8.2.2. Setting up helpdesk and information window for export opportunities in new geographies -

ACMA in consultation with the industry to set up a helpdesk cum information window at its zonal offices to create awareness related to new export opportunities and resolving export related issues. This helpdesk would provide information regarding new potential export destinations across geographies and to act as a trade facilitation centre. Key prospects in these countries, business contacts, persons of Indian origin, the details of embassy and trade support facilitation from India and also collect issues faced by the exporters while exporting to these new geographies in terms of tax barriers, NTBs, licensing, etc. which may then be highlighted to the Government of India. The helpdesk can also keep track of the trade across the auto component industry so that quick measures and information can be easily made available to ensure appropriate guidance to the industry and the Government in formulating policies. The initiative would help spread awareness regarding new and upcoming trade agreements and new markets thereby encouraging exports.



## Annexures to the Report:

### Annexure A – List of Stakeholder interactions

Interaction with select few leading auto component manufacturers through individual face to face discussions is as listed below:

Sl. No.	Company Name	Location
1	Wheels India	Chennai
2	Lucas TVS	Chennai
3	Anand Group of Companies	NCR & Pune
4	Rico Industries	NCR
5	Ranauq Automotive Components Ltd.	Noida
6	Maini Precision Products Pvt. Ltd.	Bangalore
7	Continental Automotive Components (India) Pvt. Ltd.	Bangalore
8	Jamna Auto Industries Ltd.	Delhi

## Annexure B – A note on different types of Trade agreements

**1. Free Trade Agreement (FTA):** A free trade agreement is a treaty between two or more countries to establish a free trade area where commerce in goods and services can be conducted across their common borders, without tariffs or hindrances but (in contrast to a common market) capital or labour may not move freely. Member countries usually impose a uniform tariff (called common external tariff) on trade with non-member countries. Through FTAs countries try to negotiate the various terms of tariff reduction across products, resolving non-tariff measures and set up rules of origin that can be mutually beneficial to both the countries.

**2. Preferential Trade Agreement (PTA):** In a PTA, two or more partners agree to reduce tariffs on agreed number of tariff lines. The list of products on which the partners agree to reduce duty is called positive list. However, in general PTAs may not cover substantially all trade. The Key difference an FTA and a PTA is that while in a PTA there is a positive list of products on which duty is to be reduced; in an FTA there is a negative list on which duty is not reduced or eliminated. Thus, compared to a PTA, FTAs are generally more ambitious in coverage of tariff lines (products) on which duty is to be reduced.

**3. Comprehensive Economic Cooperation Agreement (CECA) and Comprehensive Economic Partnership Agreement (CEPA):** These terms describe agreements which consist of an integrated package on goods, services and investment along with other areas including IPR, competition etc. The main difference between CECA and CEPA is that CECA involves only tariff elimination/reduction in phased manner on listed/all items except the negative list and tariff rate quota, whereas CEPA in addition covers the trade in services and investment and other areas of economic partnership. So, CEPA is much broader and more complicated compared to CECA.

**4. Custom Union:** In a Customs union, partner countries may decide to trade at zero duty among themselves, however they maintain common tariffs against rest of the world.

**5. Common Market:** Integration provided by a Common market is one step deeper than that by a Customs Union. A common market is a Customs Union with provisions to facilitate free movements of labour and capital, harmonize technical standards across members etc.

**6. Economic Union:** Economic Union is a Common Market extended through further harmonization of fiscal/monetary policies and shared executive, judicial & legislative institutions.

**7. Early Harvest Scheme/Programme (EHS):** Early harvest scheme is a precursor to a free trade agreement (FTA) between two trading partners. This is to help the two trading countries to identify certain products for tariff liberalisation pending the conclusion of FTA negotiation. It is primarily a confidence building measure. The EHS has been used as a mechanism to build greater confidence amongst trading partners to prepare them for even bigger economic engagement.







## About ACMA

The Automotive Component Manufacturers Association of India (ACMA) is the apex body representing the interest of the Indian Auto Component Industry. Its membership of over 780 manufacturers contributes more than eighty five per cent of the auto component industry's turnover in the organised sector. ACMA is an ISO 9001:2008 Certified Association.

ACMA's charter is to develop a globally competitive Indian Auto Component Industry and strengthen its role in national economic development as also promote business through international alliances.

The Auto Component industry in India, with a strong positive multiplier effect, is one of key drivers of India's economic growth. The well-developed Indian auto component industry manufactures a wide variety of products including engine parts, drive transmission and steering parts, body and chassis, suspension and braking parts, equipment and electrical parts, besides others. ACMA's active involvement in trade promotion, technology up-gradation, quality enhancement and collection and dissemination of information has made it a vital catalyst for the component industry's development in India. Its other activities include participation in international trade fairs, sending trade delegations overseas and bringing out publications on various subjects related to the automotive industry.

ACMA is represented on a number of panels, committees and councils of the Government of India through which it helps in the formulation of policies pertaining to the Indian automotive industry.

For exchange of information and especially for co-operation in trade matters, ACMA has signed Memoranda of Understanding with its counterparts in Brazil, Canada, Egypt, France, Germany, Hungary, Iran, Italy, Japan, Malaysia, Nigeria, Pakistan, Russia, South Africa, South Korea, Spain, Sri-Lanka, Sweden, Thailand, Taiwan, Tunisia, Turkey, UK, USA and Uzbekistan.

Further information and data on the Indian automotive industry is available on the ACMA Website: [www.acma.in](http://www.acma.in)

## About IMaCS

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**Automotive Component Manufacturers  
Association of India**

**Head Office -**

6<sup>th</sup> floor, Capital Court,  
Olof Palme Marg, Munirka  
New Delhi - 110 067  
Tel. : +91 2616 0315  
[www.acma.in](http://www.acma.in)  
Email : [acma@acma.in](mailto:acma@acma.in)

**ICRA Management Consulting Services Ltd.  
(IMaCS)**

**Corporate Office -**

Logix Park  
1<sup>st</sup> floor, A4&5, Sec-16,  
NOIDA, UP  
Tel. : +91 120 4515 800  
[www.imacs.in](http://www.imacs.in)  
Email : [enquiry@imacs.in](mailto:enquiry@imacs.in)

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