

Nag, Biswajit

**Working Paper**

## Assessing the future of trade in the automobile sector between India and Pakistan: Implications of abolishing the negative list

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# **Working Paper 284**

## **Assessing the Future of Trade in the Automobile Sector between India and Pakistan:**

### **Implications of Abolishing the Negative List**

**Biswajit Nag**

**September 2014**



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## Abstract

This paper makes an attempt to understand the implications of trade normalisation between India and Pakistan on the automobile sector. Currently, a majority of auto components are in Pakistan's negative list. Based on both quantitative and qualitative analysis, the paper concludes that India will compete mostly with South-East Asian countries in the Pakistani market, Indian exports will substitute imports from Japan, Thailand and China, and Indian products may not have a significant impact on Pakistan's domestic automobile industry. Besides, opening up trade can create an opportunity for the development of cross border production networks in this sector. This has the potential to provide a major price benefit to Pakistani consumers who will gain substantially from the introduction of new and better models. The paper also identifies the products on which the impact of removal of the negative list is expected to be minimal. In these products, either Pakistan is a small importer from the world or India is not a large exporter to the world, or both. In many other products, Pakistan has been experiencing declining import growth or their share in total import is less than one per cent. The threat perception in these products seems to be relatively low. The analysis of India's Revealed Comparative Advantage (RCA) index for automobile products also reflects that India is yet to become competitive in a large number of automobile products and hence, Pakistan does not have an immediate threat in such products. However, there are critical components and vehicle parts in which Pakistan is already a large importer and India will compete with other Asian players in these segments.

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**Keywords:** *India-Pakistan, automobile trade, trade normalization, MFN, negative list*

**Authors Email:** *biswajit@iift.ac.in*

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# **Assessing the Future of Trade in the Automobile Sector between India and Pakistan: Implications of Abolishing the Negative List**

Biswajit Nag

## **1. Introduction<sup>1</sup>**

### *1.1 A Brief Chronology of India Pakistan Trade*

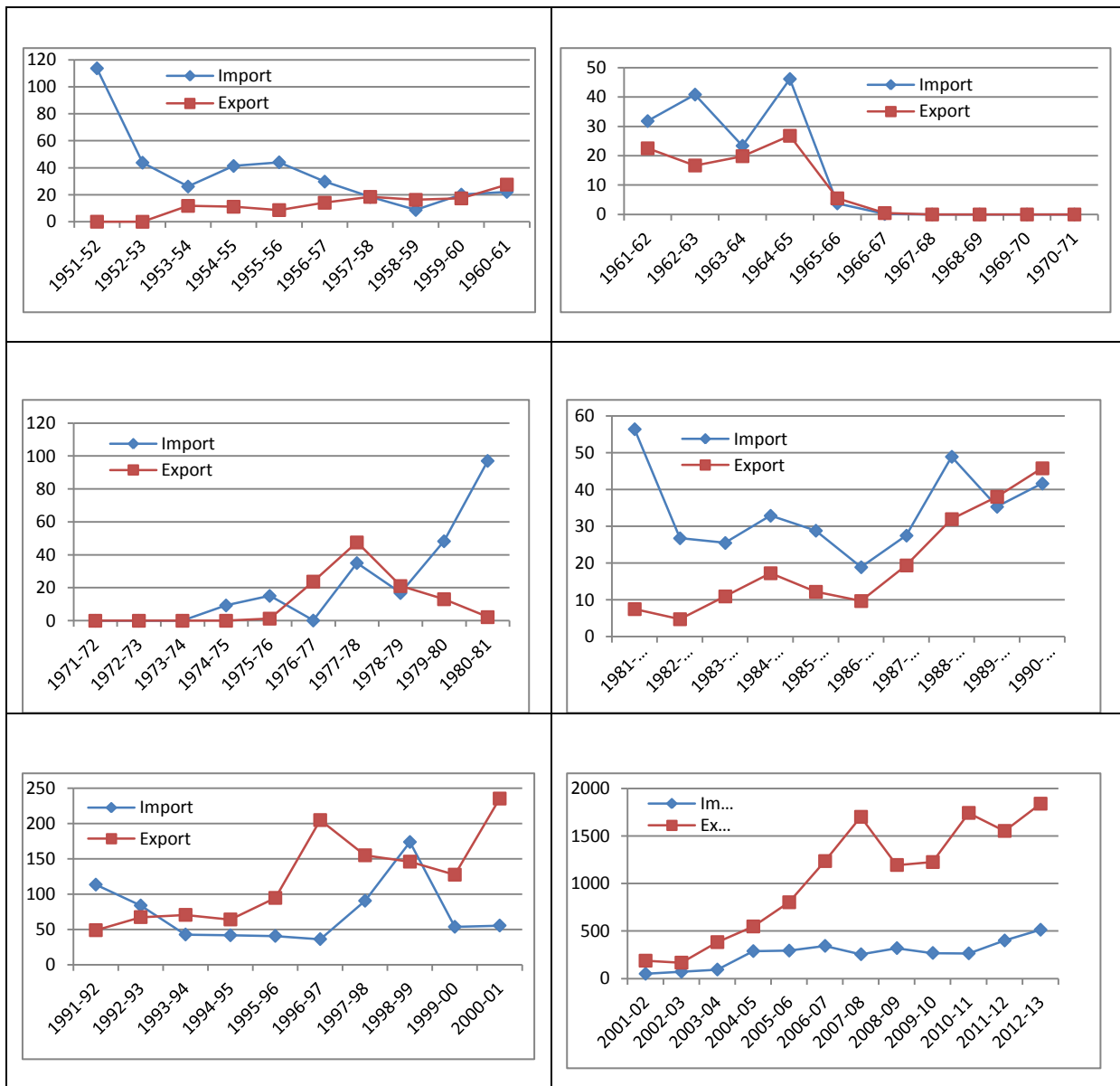
Pakistan is in the process of offering the most favoured nation (MFN) status to India and this is expected to open a new trade regime between the two neighbours. Since 1947, trade between the two countries has gone down and it came to a halt for almost a decade following the war in 1965. In 1974, a protocol was signed between two countries for restoration of commercial relations. This was followed by a trade agreement in 1975. Trade resumed on a list of mutually agreed items following this agreement. Both the countries joined the WTO in 1995 and India accorded the MFN status to Pakistan in 1996. However, Pakistan initially allowed import from India on the basis of a 'positive list', which specified the products that were eligible to be exported from India to Pakistan. The number of products in the list has increased over the years. Until 2011, Pakistan allowed only 1,946 items to be imported from India. In November 2011, Pakistan decided to accord MFN status to India and in March 2012, it shifted to a 'negative list', which comprises of items that are prohibited from being imported by Pakistan from India. Currently, Pakistan's negative list has 1,209 items.

Immediately after independence, Pakistan had a trade surplus with India. During 1960-61, total trade was around US\$50 Million but due to armed conflict, it reached near zero in 1966-67. Trade remained suspended until 1974-75. Following the 1975 agreement, trade resumed for three years. This agreement was never renewed. In the 1980s, India's exports to Pakistan started showing a slow rising trend and in some years, the balance of trade was in favour of India. The trade balance remained in favour of India during the 1990s with a few exceptions. India's exports to Pakistan jumped significantly in 1996-97 and again in 2000-01. The steady rise in India's exports is visible after 2000. As Pakistan has been shifting products to 'positive list' gradually, India's exports responded accordingly. However, India's import from Pakistan remained at a very low level throughout the last decade. Since 2011-12, total trade between these two countries crossed the US\$2 billion mark and in 2012-13, it touched US\$2.4 billion. Pakistan's exports increased by 28 per cent and for India the increase is of 19 per cent in 2012-13. Figure 1 below provides the decade wise growth in trade between India and Pakistan.

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<sup>1</sup> This paper has been written as part of research studies conducted under the project "Strengthening Research and Promoting Multi-level Dialogue for Trade Normalization between India and Pakistan" led by Dr. Nisha Taneja. The author is thankful to Dr. Nisha Taneja, Dr. Sanjib Pohit, Dr. Meenu Tiwari, Dr. Sanjay Kathuria and Dr. Saikat Sinha Roy for comments.

**Figure 1: Decade wise India’s Export and Import to/from Pakistan (US\$ Million)**



**Source:** Data taken from Table 1: Pakistan India Trade, from the article ‘MFN Status and Trade Between Pakistan and India’ published by Pakistan Institute of Legislative Development and Transparency (PILDAT), 2012; and India Trades, CMIE Database

### 1.2 Objective of the Study

Trade data shows that there has been some trade in the automobile sector in the past. This is perhaps because the positive list approach was sometimes difficult to administer as there were ambiguities regarding the classification of certain items. Currently, at the HS 8-digit level, there are 385 automotive components and accessories that are on Pakistan’s negative list of 1209 products. There has been a significant growth in the Pakistani automotive market in recent times and with the opening up of the market, India’s export to Pakistan in the automobile sector is also expected to grow. Pakistan has also gained a comparative advantage in some components and they are interested in exporting these to India. The news of the

opening up of the automobile sector in Pakistan has generated a debate on whether it would be good for the local industry and economy as a whole. Studies indicate that imports from India will mostly replace expensive components imported from other countries and larger imports will lead to higher tax revenues to Pakistani government. Nonetheless, the fear of job loss and negative impact on local suppliers in Pakistani automobile sector is widespread. The current study looks at the possibility of trade between India and Pakistan in the automotive sector with a focus on its possible impact on Pakistan's local automotive industry.

### ***1.3 Organisation of the study and Methodology Used***

The study is structured as follows. Section 2 discusses in brief the evolution and current status of the automobile industry in Pakistan, focusing on the growth of production, impact of policy change, degree of localisation etc. The import structure of Pakistan's automobile industry is analysed in section 3. Opportunities for bilateral trade between India and Pakistan are the main focus area of Section 4. In this section, views of individual auto makers and industry associations in Pakistan regarding the removal of 'negative list' have been taken into consideration. Issues such as non-tariff barriers, environmental issues, along with investment opportunities have also been included in this section. India's advantage in Pakistan through the SAFTA route in the post-MFN period is also examined through automobile product tariff data analysis. In Section 5, automobile products are divided into some groups based on Pakistan's sensitivity to their imports. Products are identified on which the impact of the removal of the negative list is expected to be minimal. The concluding section summarises the main findings of the study and provides policy recommendations for future growth.

## **2. Pakistan's Automobile Industry at a Glance:**

### ***2.1 Growth in Industry and Production***

The automobile industry in Pakistan took a giant leap forward when General Motors, USA, started assembly operations and established National Motors Limited, a public limited company in 1950. The company assembled passenger cars as well as commercial vehicles, which carried the General Motors brand names. The first vehicle was a Bedford truck assembled in Pakistan in 1950. Subsequently buses, light trucks and cars were assembled in the same plant.

Until the 1990s, the industry was highly regulated with very little competition. However, since 1990, the industry was de-regularised. After deregulation, major Japanese manufacturers entered in the market and brought in some competition in this sector. Assemblers of HINO trucks, Mazda trucks, Toyota (1993) and Honda (1994) in particular, entered once deregulation was introduced. The assembly of Daihatsu and Hyundai cars (1999) and various brands of light commercial vehicles (LCVs) and range of mini-trucks began in the early 2000s. A regular car industry started in the country in 1983, when Suzuki began to assemble the FX 800 cc to target the middle-income group. Suzuki introduced Khyber 1000 cc and Margalla 1300 cc in 1992 to strengthen its customer base. Since its inception, Suzuki has enjoyed the position of a market leader in the car and LCV segments.



In 1993, Indus Motor (Toyota), and in the succeeding year (1994) Honda Atlas commenced their operations in Pakistan as the main competitors to Suzuki in the high price segment of the market (i.e. 1300 cc - 2000cc range). In the commercial vehicles segment, Hino Pak started assembling operations in 1986 and is the market leader in the segment with a market share of 65 per cent at present. Today, there are 32 assemblers including multinationals with equity participation (Toyota, Honda, Suzuki, Hino, Nissan, Hyundai/ Kia) engaged in manufacturing/assembling of different automobiles under the approved 'deletion programme'<sup>2</sup> of the Ministry of Industries and Production, Government of Pakistan. There are also more than 50 assemblers/manufacturers of motorcycles and three wheelers.

The car industry of Pakistan saw a major boom during 2006-07 when sales volume touched 180,834 units. However, since then, sales volumes have fallen. During 2012-13, total car sales were around 120,332. In 2007, the total contribution of the auto industry to GDP was 2.8 per cent and to manufacturing was 16 per cent. Vehicles' manufacturers directly employ over 192,000 people with a total investment of over US\$1.5 billion.<sup>3</sup>

The industry's development history can be roughly divided into the following four phases:<sup>4</sup>

1. Nascent period (1949 – 1971);
2. Nationalisation period (1972 – 1982);
3. Partnership with the private sector (1983 – 1990);
4. Post-privatisation (1991 to present).

As of August 2010, over 100 manufacturers are estimated to be engaged in production of motor vehicles (including passenger cars, buses, trucks, two wheelers, rickshaws, and tractors) in the country. Also there are close to 500 component manufacturers in the country.

Demand driven production was very high in 2007-08. However, production started dwindling in almost all segments of the automobile sector since then with some exceptions. Table 1 below shows the production trend and the compound average growth rate (CAGR). The CAGR for 2007-08 data has been omitted as we consider it an outlier. Healthy growth is visible in the small and big car (above 1300 cc) segment. In the case of commercial vehicles, Pakistan has witnessed a drop in production with a CAGR of -10.39 per cent. Among the various segments, two and three wheelers have posted robust growth. There are a large number of domestic producers and technology is mostly localised now due to Deletion policy pursued during 1985 to early 2006. Out of the production of 8 lakh units of bikes and three wheelers, almost 6 lakh is by Honda. Other major players in this segment are DYL, Suzuki, Habib, Hero etc. In the case of passenger vehicles, Suzuki had more than 58 per cent of the market share in 2011, followed by Toyota (29 per cent) and Honda (8.2 Per cent). Toyota Corolla, produced by Indus Motor, a local Toyota subsidiary, is the largest selling car and has

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<sup>2</sup>This refers to Pakistan's localization policy which was pursued from 1980s till early 2006. For more detailed discussion refer to Section 2.2

<sup>3</sup> Source: Economic Pakistan <http://economicpakistan.wordpress.com/2008/02/08/automobile-industry/>

<sup>4</sup>Japan International Co-operation Agency (JICA); (2011): Project for Automobile Industry Development Policy in the Islamic Republic of Pakistan: Main Report

a market share of nearly half of the over 1300 cc segment. Suzuki has the largest share in the smaller engine and mini-car segments.

**Table 1: Production of Automobile in Pakistan**

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	CAGR 08/09- 12/13
1300 and Above cc	50310	39478	60360	62111	66299	60223	11.14
1000 cc	48495	16149	23330	25287	28888	12785	-5.67
800 cc & Below 1000cc	65905	28681	37957	46574	59068	47324	13.34
<b>Total cars</b>	164710	84308	121647	133972	154255	120332	9.30
Trucks	4993	3135	3425	2901	2597	1923	-11.50
Buses	1146	657	628	490	568	522	-5.59
<b>Total trucks &amp; buses</b>	6139	3792	4053	3391	3165	2445	-10.39
LCVs, vans & jeeps (4x4)	1590	932	1172	883	451	1475	12.16
Pick ups	21354	16158	15768	19142	20929	14517	-2.64
Farm tractors	53256	59968	71607	70770	48120	50859	-4.04
Motorcycles & three-wheelers*	641031	493592	736861	838665	828576	819556	13.51

\* It is important to note that many motorcycle producers are not members of PAMA and this table does not include them. Considering the data provided by Association of Pakistan's Motorcycle Assemblers (APMA), the total production is 1,636,721 in 2011-12 and 1,634,803 in 2012-13.

*Source:* PAMA Website

At present, Japanese automakers operating in Pakistan purchase 40-70 per cent of parts and components for passenger cars from local sources, 43-65 per cent for buses and trucks, and 85-92 per cent for motorcycles. The very high local-content levels for motorcycles reflect the fact that original equipment manufacturers (OEM)/assemblers make most parts internally. In the case of passenger vehicles, almost 70 per cent of the components are locally sourced. However, the general perception is that less than 50 per cent of locally made parts satisfy the quality requirements demanded by OEM assemblers. Hence, at the outset, there is a large demand for quality auto components in Pakistan.

## **2.2 Changing Automobile Policy and its Impact on Industry**

Pakistan's automobile policy has evolved around the policy of localisation. Since 1980s, the country has been pursuing a useful local content scheme, which has done some good to the technological base of the automotive sector and improved its design and development capabilities. The methodology adopted is that the manufacturers are offered tariff incentives for progressive local manufacturing of automobiles and other engineering goods. Several production activities were identified for this purpose. In this case, the importer or assembler needs to have suitable in-house facilities or have a commercial relationship with another component manufacturer who has in-house production facilities. The policy of gradual

localisation was guided by Engineering Development Board. These companies were allowed to import specific components with a discount. The policy of local content requirement, which Pakistan pursued during 1985-2005, was commonly referred to as 'Deletion programme'. This programme worked on the basis of industry specific deletion programmes (ISDPs) and product specific deletion programmes (PSDP). All local manufacturers were given permission for local assembly of Japanese cars with the explicit understanding that the manufacturers will steadily reach a certain 'deletion level', thus increasing the local content of automobile parts and giving up the concessional tariffs being availed by them under their specific 'deletion programmes'. Under these programmes, annual deletion targets for each model of vehicle would be set by giving a choice to the assembler to choose components from a basket carrying fixed indices based on their individual values. The Engineering Development Board (EDB) would conduct the technical audits annually to determine the achievement or shortfall in meeting deletion targets. In the case of a shortfall, assemblers would be penalised by imposing the full rate of duty on the value of components that were not indigenised in that period on the completely built unit (CBU)<sup>5</sup>. In 2006, Pakistan shifted to a tariff-based system (TBS) bringing an end to the Deletion Programme. As per the notification SRO 656(I)/2006, activities under Annex-A have been made open. These activities were controlled under the Deletion Programme earlier. Table 2 below provides a snapshot of the kind of activities that have been put under Annex A. Tariff rates for components required for Annex A have always been high compared to others to encourage local production of components. Through SRO 693(I)/2006, tariffs were revised. The shifting to tariff based system did not matter much to the assemblers but posed challenges to the vendors who were more comfortable with the previous system and were pushed to improve the quality, supply systems, shop floor efficiencies and marketing. This is because while importers could import many components paying higher duties, component manufacturers found it difficult to modernise their plants to compete with imported components under the new environment

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<sup>5</sup> MirzaM. Shahrukh and Irfan AnjumManarvi (2011): Analysis of Technological advancements in Pakistani Automobile Car Industry; published in Global Journal of Research in Engineering Volume 11 (3, Version 1.0 April)

**Table 2: Activities under Annex A for Localisation**

Vehicle Type	Minimum Production activity under ‘Annex A’ Following Deletion Programme
Cars and LCVs	Body welding shop, Body Paint shop, Vehicle Final Assembly (Trim line, Chassis line and Final Line with multiple stations), Performance testing facility, Inspection equipment, storage
HCVs	Main Chassis Frame Assembly and/or Riveting line, Axle Assembly, Welding Shop, Paint Shop, Vehicle Final Assembly (Trim line, Chassis line and Final Line with multiple stations), Performance testing facility, Inspection equipment, storage
Tractors	Engine Assembly, Paint Shop for Sheet Metal and Chassis, Vehicle Final Assembly, Performance testing facility, Inspection tools/equipment, storage, Test rigs for Endurance testing for safety, Availability of drawings of components,
Motorcycles and Motorcycles Rickshaws	Frame Welding Shop, Body Paint Shop, Engine Assembly and Testing, Frame Assembly Fixtures, Final Assembly Tools, Final Inspection and Storage
Stroke Auto rickshaws	Frame Welding Shop, Body Paint Shop, Engine Assembly and Testing, Final Assembly, Final Inspection Tools, and Storage

*Note:* For details of Annex A activities refer to SRO 656(I)/2006, Govt. of Pakistan

It needs to be noted that under the earlier strategy, the rate of localization was significant, especially for tractors and motorcycles. Table 3 provides the localization position during the early 2000s. According to information from Pakistan Association of Automotive Parts and Accessories Manufacturers (PAAPAM), localization had been to the extent of almost 95 per cent in the case of tractors and 90-92 per cent in the case of motorcycles. But in the case of cars, localization is still less than 70 per cent. This implies that in post-2006 period, assemblers continued to use local components manufactured by local SMEs in a relatively inefficient manner, especially for passenger vehicles.

**Table 3: Level of Localization in Pak Automobile Industries**

Automobile	Percentage
Cars	68
Tractors	85
Motorcycles	82
LCVs	43
Buses/Trucks	50

*Source:* Development of the Automotive Sector in Selected countries in ESCAP region, UNESCAP (2002)

None of the local manufacturers have achieved the deletion level undertaken by them under their respective programmes. Therefore, the local car industry has not become as efficient as it should have. Local vendors of automobile parts have also suffered in the process. Influential automobile manufacturers have been enjoying concessional tariffs on imported automobile parts under their deletion programmes by manipulating extensions in the time schedules of such programmes. The only locally-assembled car which has achieved a

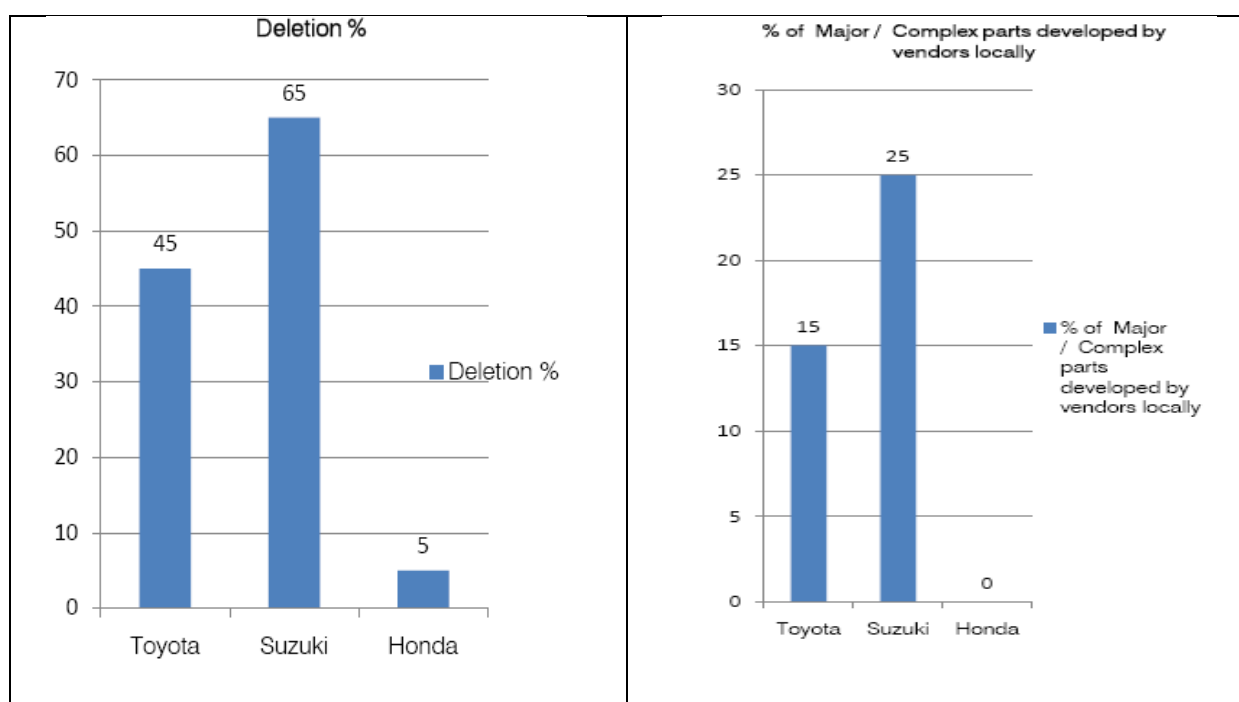
significantly high local content under its deletion programme is Suzuki Mehran<sup>6</sup>. In the passenger car segment, Suzuki, with the highest market share, has reached 65 per cent of the targets under the deletion programme and they produce almost 25 per cent of complex components. Suzuki Motors Japan supports the technology transfer directly to local vendors through parts, drawings and process sheets. In absence of good infrastructure and manufacturing facility at the SME level, Suzuki has not been very successful in providing technological assistance to local companies. Along with this, the absence of adequate quality control standards and lack of competition among vendors have resulted in the deteriorating quality of final products. Due to non-availability of expensive quality control equipment, many of the precision safety components are imported. Regular training at all levels is being imparted locally in the factory areas in Karachi as well as at dealerships throughout Pakistan. Manufacturing knowhow is transferred directly to local vendors according to their qualification and skills, whereas assembly and operational knowhow is transferred to Pak Suzuki Motor Company. On the contrary, Indus Motors, producing Toyota cars, has reached a 45 per cent deletion level. Toyota is unable to transfer adequate technology due to lack of local capacity and skills. Only 15 per cent of critical components are manufactured by Toyota or by its vendors in Pakistan. Honda Motor Company Japan gets only 5 per cent parts manufactured locally, partly because the localization policy has not been enforced strictly and partly because of Honda's reluctance to transferring design and manufacturing knowhow to local vendor industry. Honda is of the opinion that non-availability of R&D facilities in the automobile industry, and the lack of highly-skilled manpower and well developed infrastructure are the main hindrances to the development of indigenous component sector. Figure 2 below provides a snapshot of achievement of deletion level under the deletion programme and the production of complex components by major assemblers in Pakistan

The above discussion indicates that the 'deletion programme' has proved inadequate to promote localization of the component industry. The automobile industry is very dynamic. Consumer choice, comfort and safety, design, IT-driven accessories, etc. are driving the industry. Government needs to encourage the development of R&D centres, schools for advanced learning of auto technology, and the development of quality control instruments, which create an enabling environment for the component industry to grow. Apart from this, competition among component manufacturers is important to drive local innovation. It seems Pakistan has achieved some level of localization but it lacks the capability to move to the next level of value addition. Major local vendors (See Table 4) are still supplying basic components and OEMs are still significantly dependant on foreign players for critical components. As a result, the number of models available in the Pakistani market has been limited.

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<sup>6</sup>'Local Auto Industry: Foreign Competition', by Zaheer Ahmed; published in Dawn.com dated February 8, 2012, <http://www.dawn.com/news/739064/local-auto-industry-foreign-competition>

**Figure 2: Deletion and Production of Complex components by Major Assemblers in Pakistan**



*Source:* M. Shahrukh Mirza and Irfan Anjum Manarvi (2011)

**Table 4: Major Vendors associated with Automobile Parts Manufacturing in Pakistan**

Name of Vendor	Products of Vendor	Manufacturing Since (year)	Vehicles using these products
Allied Engineering Works	Shock Absorbers -150 (Gabriel) Shock Absorbers -160 (Gabriel)	1990 1996	Toyota Corolla, Suzuki Mehran Suzuki Alto, Suzuki Bolan
Agri Auto Industry	Shock Absorbers Strut Assembly Steering gear box	1988 1995 2005	Toyota Corolla, Suzuki Alto Daihatsu Cuore, Suzuki Liane Suzuki Alto, Suzuki Bolan
Alsons auto parts (pvt.) Ltd	Cooling Fans Brake Assembly	1992 1992	Toyota Corolla, Daihatsu Cuore Suzuki Vehicles (All type)
Atlas Engineering	Radiators, Fly Wheel assembly Disc Brake, Brake Drum Piston Sleeves	1967 1982 1996	Toyota Corolla, Daihatsu Cuore Suzuki Van/Pick up
Atlas Battery Company	Dry Cell Batteries Range (12V 6 AH to 12V 200 AH)	1969	Vehicles (All types)
Baluchistan Wheels limited	Wheel rims Range (12 inch to 30 inch)	1980	Vehicles (All types)
General tyres	Tyre size Diameter (12 inch to 30 inch)	1964	Vehicles (All types)
Infinity Engineering	Spur gear for transmission Transmission shafts, Connecting rod.	1994 1994	Toyota Corolla, Daihatsu Cuore Suzuki Vehicles
Mecas Engineering (pvt.) limited	Brake Disc, Drum Axle Hub Mounting Bracket	1987 2000	Toyota Corolla, Daihatsu Cuore Suzuki Vehicles
Rastgar Engineering	Steering Knuckle	1994	Toyota Corolla, Daihatsu Cuore

*Source:* Mirza M. Shahrukh and Irfan Anjum Manarvi (2011)

### **3. Import Structure of Automotive Products in Pakistan**

The automotive industry consists of vehicles and its components. Components spread over different industrial segments. These include plastic and rubber products, components made from glass, steel, etc. Apart from this, there are critical components such as engines, gearbox, brakes, body-parts, computerised or digital components. As a result, the HS codes to describe the trade pattern includes different HS chapters (40, 85, 87, etc). The HS codes of some components also depend on the size of the vehicle and engine capacity. In this study, we have considered the list prepared by ACMA and Pakistan's negative list for data analysis. As international data is available at the 6-digit level, we have converted the 8-digit level data to 6-digit level for analysis. There are 167 automobile items at the 6-digit level, which have been considered for the data analysis in this section.

#### ***3.1 Import of vehicles and major parts thereof***

Pakistan has experienced a phenomenal increase in the import of passenger cars over the last 4 years. Part of it has been due to the relaxation on the import of used vehicles. The Import of commercial vehicles, especially trucks, increased dramatically in 2009-10 and then almost doubled in 2010-11. However, it dropped significantly in 2011-12. Increased economic activity and the need to transport goods have created the demand for trucks and lorries. The import of motorcycles increased slowly in the mid-2000s as the production of domestic motorcycles surged. However, a jump in imports is visible in the last couple of years. Pakistan reported strong domestic growth of motor rickshaws along with high import growth during 2009-10.

It has been mentioned earlier that domestic production peaked in 2006-07 and declined thereafter. On the other hand, the number of cars imported has kept increasing. Pakistan's average production of cars is around 120,000 against its installed capacity of 240,000. A large number of SMEs supply parts and components. The shortfall in production vis-à-vis installed capacity has affected the entire supply chain, particularly component SMEs that supply parts and components, which are at the lower end of the supply chain. The increase in vehicle imports has hurt them further. As a result of this, the major dilemma is about the consumer choice (higher imports with lower price) vs. need for protection to domestic producers.

Pakistan's import policy allows import of both new and used vehicles. New vehicles can be imported freely by any one, under the generally applicable import procedures and requirements, on payment of applicable duty and taxes. Used vehicles, on the other hand, can only be imported by Pakistani nationals under three schemes, namely the transfer of residence scheme, the gift scheme, and the personal baggage scheme. These schemes are often used by commercial interests to import used vehicles for sale in the local market and are a cause of concern to local producers. Producers have also protested the increasing incidence of smuggling through Pakistan's border with Afghanistan.

Pakistan's total import in the automotive sector in 2012 was roughly around US\$ 2.49 billion, of which the import value of various vehicles (mostly in completely knocked down (CKD) form) was US\$ 1.27 billion. Tables 5 and 6 provide more detailed information.

The products listed in Table 5 constitute almost 96 per cent of vehicle imports in Pakistan. The Table shows Pakistan's import structure. Small cars and cars with engine capacity between 1000 and 1500 cc account for the largest chunk of imports. Mini vans and other vehicles with more than 1500 cc are also major imports. The 5-year CAGR is also high in these categories. Other segments where high growth is visible are diesel powered buses and trucks, road tractors and special purpose vehicles. The growth of these segments is directly related to the economic health of the country.

**Table 5: Value of Pakistan's Import of Vehicles (Major Products under HS 87)**

HS Code	Description	Import Value (US\$ 000) in 2012	Share in Total vehicle Import (%)	5 year CAGR (%)
870120	Road tractors for semi-trailers	14628.79	1.15	17.68
870190	Wheeled tractors nes	37982.68	2.98	7.69
870210	Diesel powered buses with a seating more than 10	51620.60	4.05	18.41
870290	Other Buses (CNG, LPG, others)	39132.50	3.07	4.46
870321	Cars (not exceeding 1000 cc)	290441.32	22.80	10.19
870322	Cars (more than 1000 cc, not exceeding 1500 cc)	400407.05	31.43	28.40
870323	Automobiles (more than 1500 cc, not exceeding	151281.91	11.87	26.01
870324	Automobiles (exceeding 3000 cc)	30587.57	2.40	20.56
870421	Diesel powered trucks with a GVW not exceeding 5	79106.34	6.21	12.37
870422	Diesel powered trucks with a GVW more than 5 tons but not exceeding 20 tons	28803.44	2.26	0.98
870423	Diesel powered trucks with a GVW exceeding 20	24881.95	1.95	26.27
870431	Gas powered trucks with a GVW not exceeding 5	35407.78	2.78	49.22
870590	Special purpose motor vehicles nes	39975.57	3.14	31.91
	<b>Total Import of Vehicles</b>	<b>1274081.41</b>		

\* Total import consists import of other vehicles also and hence is not the sum of listed products

*Source:* Calculated from COMTRADE database available from WITS

### 3.2 Import of Components

Table 6 shows the major auto components that Pakistan imports. These products consist of around 81 per cent of total component import in Pakistan in 2012. Metal scrap, engines and its parts, body parts, parts of air conditioning tools, bearings, gears and its components, etc., are the main auto parts imported. The import growth of some of these products is also very high. In last 3 years, the average import growth of parts of spark-ignition internal combustion piston engines have been more than 112 per cent followed by air filters for internal combustion engines (67 per cent), body parts (61 per cent), air conditioning machinery (36 per cent), bearing housings and plain shaft bearings (31 per cent), etc. It is important to note that all these are critical components. High imports of these parts and accessories indicate that the Japanese, who are the main players in Pakistan, are still dependent on imported



components. Japanese manufacturers have difficulty transferring technology to local players in Pakistan because of lack of infrastructure, capability, absence of precision machinery and R&D facilities.

**Table 6: Value of Pakistan's Import of Major Auto Parts and Accessories**

(Value in US\$ Thousand)

HS Code	Description	Import in 2012	CAGR % (2009-12)	Share (%in Total Import of Components)
401699	Other Articles of vulcanised rubber	16040.3	8.00	1.31
720449	Other ferrous waste and scrap	321055.8	9.11	26.26
731815	Other screws and bolts, whether or not with their nuts or washers of iron or steel	14398.5	10.30	1.18
760200	Aluminium waste and scrap	46430.6	5.19	3.80
840991	Parts of spark-ignition internal combustion piston engines	89438.0	112.18	7.32
840999	Parts of compression-ignition internal combustion piston engines	64148.7	14.64	5.25
841330	Fuel, lubricating or cooling medium pumps	15910.6	-25.46	1.30
841391	Parts of pumps for liquids	21941.2	11.80	1.79
841590	Parts of air conditioning machines	37580.9	36.04	3.07
842131	Intake air filters for internal combustion engines	19330.6	67.66	1.58
848180	Other valves and other appliances for pipes, tanks, vats or the like	60408.0	-24.19	4.94
848310	Transmission shafts (including camshafts and crankshafts) and cranks	21503.1	-1.45	1.76
848330	Bearing housings; plain shaft bearings	19712.9	31.08	1.61
848340	Gears and gearing; ball screws; gear boxes and other speed changers	17286.8	5.76	1.41
853710	Bases for electric control or the distribution, not exceeding 1,000v	18675.0	-19.62	1.53
870829	Other parts and accessories of bodies for the motor vehicles	74695.0	61.12	6.11
870880	Suspension shock absorbers	14701.7	8.15	1.20
870899	Other parts and accessories of vehicles	60022.5	1.66	4.91
871419	Other parts and accessories of motorbikes	39152.8	-6.77	3.20
903289	Other automatic regulating or controlling instruments & apparatus	16568.5	-4.85	1.36
<b>Total Import of parts and accessories including machinery*</b>		<b>1222591.16</b>		

\* Total import consists of other components also and hence is not the sum of listed products

*Source:* Calculated from COMTRADE database available from WITS

### 3.3 Import sources

Japan, China and the Republic of Korea are the primary countries from which Pakistan imports its vehicles. Table 7 below provides Pakistan's country wise imports of selected vehicles, mostly in CKD form. In 2012, the import value from these three countries has been over US\$900 million.

In the case of components, Pakistan mainly imports from Japan, China, Thailand, the Republic of Korea and Indonesia. In 2012, these countries accounted for almost 63 per cent of Pakistan's total import of auto components or close to US\$ 776 million. The remaining imports were from other parts of the world, including the European Union. It is important to note that Japanese companies prefer to import components from their trusted vendors in Thailand. Sometimes, Thai subsidiaries of Japanese companies play an active role in exporting components (such as body parts and accessories, air conditioning machinery, etc) to Pakistan (see Table 8). However, as Table 8 indicates, there are a number of components and parts that the major players are willing to import from sources other than their trusted partners. These include products such as metal scrap, engine parts, air filters, transmission equipment, bearing and gear parts. It is in these products that India could corner a large part of the market if it were granted MFN status.'

**Table 7: Major Sources of Pakistan's Import of Vehicles in 2012**

(US\$ Thousand)

HS Code	Description	China	Japan	Korea Rep
870120	Road tractors for semi-trailers	4518.78	9353.58	<i>579.23</i>
870190	Wheeled tractors nes	1871.23	3845.39	<i>3397.13</i>
870210	Diesel powered buses with a seating more than 10	15430.36	31269.11	4423.65
870290	Other Buses (CNG, LPG, others)	27900.03	6525.14	2483.28
870321	Cars (not exceeding 1000 cc)	5315.38	276130.68	51.94
870322	Cars (more than 1000 cc, not exceeding 1500 cc)	293.37	304961.22	135.65
870323	Automobiles (more than 1500 cc, not exceeding 3000 cc)	454.44	76401.73	83.65
870324	Automobiles (exceeding 3000 cc)	249.91	17622.13	494.91
870421	Diesel powered trucks with a GVW not exceeding 5 tons	797.52	19303.04	<i>17.49</i>
870422	Diesel powered trucks with a GVW more than 5 tons but not exceeding 20 tons	4824.96	19588.19	<i>32.14</i>
870423	Diesel powered trucks with a GVW exceeding 20 tons	2286.56	20746.64	<i>982.07</i>
870431	Gas powered trucks with a GVW not exceeding 5 tons	167.61	34738.33	<i>3562.77</i>
870590	Special purpose motor vehicles nes	2331.31	7657.41	3.25

**Note:** Some Import values (in italics) from Korea are for the year 2011

**Source:** Calculated from COMTRADE database available from WITS

**Table 8: Major Sources of Pakistan's Import of Auto Components in 2012**

(US\$ Thousand)

HS Code	Description	China	Indonesia	Japan	Korea Rep	Thailand	RoW	Share of RoW (%)
401699	Other articles of vulcanised rubber	4132.92	30.42	4038.20	41.03	309.99	7487.74	46.68
720449	Other ferrous waste and scrap	144.14	10.28	1174.29	912.99	290.36	<b>318523.70</b>	99.21
731815	Other screws and bolts	<b>3972.40</b>	68.83	902.78	122.21	2132.58	<b>7199.69</b>	50.00
760200	Aluminium waste and scrap	18.52		14.84	125.46	2.22	<b>46269.56</b>	99.65
840991	Parts of spark-ignition internal combustion piston engines	<b>13108.48</b>	79.51	<b>61894.67</b>	31.34	6444.58	7879.46	8.81
840999	Parts of compression-ignition internal combustion piston engines	<b>17785.62</b>	78.04	4078.35	457.72	14.34	<b>41734.64</b>	65.06
841330	Fuel, lubricating or cooling medium pumps	1930.60	0.94	368.42	26.08	126.83	<b>13457.72</b>	84.58
841391	Parts of pumps for liquids	2793.68	3.89	1032.46	197.92	10.32	<b>17902.94</b>	81.60
841590	Parts of air conditioning machines	<b>23360.45</b>	301.22	3216.88	8.52	<b>9590.05</b>	1103.75	2.94
842131	Intake air filters for internal combustion engines	1285.18	70.37	621.76	69.67	290.45	<b>16993.20</b>	87.91
848180	Other valves and other appliances for pipes, tanks,	8147.96	417.63	3778.52	1104.07	848.08	<b>46111.76</b>	76.33
848310	Transmission shafts (including camshafts and crankshafts)	<b>8767.07</b>	0.81	716.80	78.48	46.70	<b>11893.25</b>	55.31
848330	Bearing housings; plain shaft bearings	1898.86	63.20	1495.16	184.76	56.88	<b>16014.04</b>	81.24
848340	Gears and gearing; ball screws; gear boxes	5667.37	0.22	852.02	226.20	96.29	<b>10444.70</b>	60.42
853710	Bases for electric control or the distribution, not exceeding 1,000v	5400.04	0.33	3090.73	65.56	14.18	10104.18	54.11
870829	Other parts and accessories of bodies for the motor vehicles	1513.07	638.50	11947.22	68.92	<b>48403.92</b>	12123.36	16.23
870880	Suspension shock absorbers	430.43	1.47	9002.45	24.64	3959.91	1282.80	8.73
870899	Other parts and accessories of vehicles	4542.86	542.59	17153.22	2459.20	<b>13424.71</b>	<b>21899.92</b>	36.49
871419	Other Parts and accessories of motorbikes	23686.99	682.42	8952.71		4132.15	1698.54	4.34
903289	Other automatic regulating or controlling instruments	2153.67	3.49	2080.51	1333.81	59.09	10937.93	66.02

**Note:** Bold ones having higher share in that category.

**Source:** Calculated from COMTRADE database available from WITS

## 4. Opportunities and Challenges in Bilateral Trade in Automobiles between India and Pakistan

### 4.1 Trends in Bilateral Trade

The existing level of trade in automobiles and components between India and Pakistan is negligible as most items fall either under the negative list which is not allowed to be imported (in the case of Pakistan) or they fall in the sensitive list (in India's case). There have been exports of a limited number of components from India to Pakistan due to problems in administering the positive list (Table 9). Pakistan's exports also have also been low. Following Indian data source, its imports from Pakistan under HS 87 have been around US\$1.43 million in 2011-12. However, this was an exceptional year; India's imports from Pakistan have ranged from a high of US\$ 1 million in 2008-09 to a low of US\$ 0.09 million in 2009-10. Parts and accessories under HS 8708 are the major importable products under HS 87. In the case of exports, India was able to sell components of commercial vehicles and some chassis fitted with engines during 2006-07.

**Table 9: India-Pakistan Bilateral trade under HS code 87 (Vehicles and Parts thereof)**

Value in US\$ Million

HS Code	Commodity Name	India's Exports to Pakistan				India's Imports from Pakistan			
		2006 /07	2009 /10	2010 /11	2011 /12	2006 /07	2009 /10	2010 /11	2011 /12
87	Vehicles and parts and accessories thereof.	2.59	0.23	0.32	0.12	0.39	0.09	0.43	1.43
8701	Tractors (other than tractors under heading 8709)	0.01				0.06			
8702	Motor vehicles for the transport of 10 or more persons	1.36							
8703	Cars	0.06	0.01	0.02	0.02				0.23
8706	Chassis fitted with engines,	0.51							
8708	Parts and accessories of the motor vehicles	0.28	0.16	0.05	0.05	0.32	0.09	0.43	1.16
8709	Works trucks, used in factories, warehouses and docks	0		0.01	0.01				0
8711	Motorcycles (including mopeds)	0			0			0	
8712	Bicycles and other cycles	0.13		0.1	0.02		0		
8713	Carriages for disabled persons,			0.02					
8714	Parts and accessories of vehicles of headings 8711 to 8713	0.24	0.06	0.13				0.01	0
8715	Baby carriages and parts thereof							0	
8716	Trailers and semi-trailers; parts thereof							0	0.03

**Note:** 0 value indicates trade with of low value. If there was no trade the cell has been left blank.

**Source:** India Trades, CMIE

## **4.2 Industry Views from Pakistan**

While it is widely believed within both government and industry that India's exports to Pakistan will increase once non-discriminatory market access is granted, it is difficult to estimate potential exports because of the lack of data pertaining to the past. However, this paper makes an attempt to assess the potential through an analysis of the source of Pakistan's imports discussed in the previous section and through discussions with Pakistani manufacturers who provided their inputs either through personal meetings with the author or through a focus group discussion (FGD). Representatives of PAMA and PAAPAM also participated in the meeting and provided their views.<sup>7</sup>

Pakistan's auto industry in general is apprehensive of normalising trade between India and Pakistan. They fear that Indian automakers will overwhelm the Pakistani market because of the size of the Indian automotive industry that allows it to exploit scale economies. They also feel that Pakistani manufacturers will not be able to access the Indian market because of non-tariff barriers (NTBs). In fact, many participants during FGD showed their uneasiness about pollution and other standards (especially for motorcycles) in India. After initial opposition to the very idea of liberalised trade with India, car assemblers of Pakistan have now pushed for a middle path. At present, they appear inclined to import parts in a completely knocked down (CKD) form, but oppose imports of completely built units (CBUs).

### **4.2.1 Market Entry and Automobile Value Chain**

Currently, the Pakistani automotive industry is divided into two groups –one favouring imports from India and others opposing. Suzuki, which has a large production base and enjoys scale economies in India, is naturally interested in exporting to Pakistan. Over the years, Suzuki's trusted suppliers in India have achieved some level of productive efficiency through competition and innovation. Importing major car parts from India will help reduce the cost of production of cars. Pakistan imports car parts from Thailand and Japan that can be easily imported from neighbouring India owing to its proximity with the country. Production costs in India are substantially lower due to low labour and material costs. By changing the source of automobile components from Japan and Thailand to India, Pakistan stands to gain substantially in terms of foreign exchange savings. It is important to note that the cost of importing from Japan almost doubled over the past five years because of the depreciation of the Pakistani rupee against Japanese yen. Besides, since India is a big market, Suzuki takes into consideration local market preferences to develop India-oriented models. As culture and preference in Pakistan is almost the same as in India, imports from India can allow Suzuki to introduce models in Pakistan without much R&D. Suzuki is also interested in transferring technology to Pakistan and work towards promoting joint ventures between Indian and Pakistani vendors for component and parts manufacturing. Pak Suzuki discontinued production of its Suzuki Alto model in Pakistan from July 1, 2012, when the Pakistani government made compliance with Euro II emission standards mandatory for all car producers in the country. The company not only wants to import Alto engines from India but

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<sup>7</sup> Focus Group Discussion was conducted at Karachi on 27<sup>th</sup> Nov. 2013

also launch new models, especially in the small engine category (including pick-up vans) with the help of cheaper Indian components. In other words, Suzuki is interested in extending its value chain, combining India and Pakistan into a single market with some sourcing facilities in each country.

The biggest stumbling block for increasing exports of vehicles from Pakistan to India is the difference in pollution standards in the two countries. India has introduced superior standards (Bharat IV/Euro IV)<sup>8</sup> while vehicles produced in Pakistan have Euro II/Pak II standards. To export to India, Pakistani manufacturers will have to upgrade their vehicles to meet emission norms in India. India has agreed to accept emission and quality certificates issued by Pakistan Standards and Quality Control Authority (PSQCA), provided the norms match the Bharat IV norms.

Unlike Suzuki, which has been pushing for liberalisation of trade in the automotive sector, Toyota does not support or oppose liberalisation. Toyota is dependent on Japan significantly for engines and other critical components. It also imports from Thailand, Indonesia and others. After the implementation of the India-Thailand FTA, Toyota teamed up with Kirloskar to set up a joint venture to produce transmission equipment, engines, axles and shafts. Hence, it is important for Indus to develop close relations with its counterpart in India. It is reported that Indus has requested Toyota Headquarters<sup>9</sup> to support its affiliates in India and Pakistan equally because some car components of Toyota cars are cheap in Pakistan and some are cheap in India. So, both of Toyota affiliates will grow if they collaborate with each other. For example, Toyota is now producing critical components of cars such as Etios, Innova, and Fortuner in India which is expectedly less costly than those from Japan. Table 7 and 8 above describe that CKD components and engines for bigger cars (more than 1000 cc) are mostly imported from Japan and Thailand. Import of these components from India will reduce the import cost significantly without in any way affecting domestic players in Pakistan as these imports will merely substitute for imports from Japan and Thailand. From the Pakistani side, Indus is interested in exporting products such as special type of sheet metals, chemicals for paints, etc., to India.

#### **4.2.2 Environmental Norms in India**

Atlas Honda, one of Pakistan's major motorcycle producers, opposes trade liberalisation in the automotive sector. The level of localization in motorcycles has reached more than 90 per cent and opening up the sector to India directly invites intense competition. India is a potential exporter of engine parts. Atlas Honda feels that the import of bikes and components from India would seriously affect the local industry. Besides, the company, which is seeking to export to India, has serious reservations about the emission standards for motorcycles in

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<sup>8</sup> In 2010, as part of auto fuel policy, Bharat Standard (BS) IV has been introduced to 13 cities and it is expected that 50 cities will be covered by 2015. Other cities are currently having BS III norms. Hence, it is clear, that eventually India will move to BS IV and all imported cars and components must comply with that.

<sup>9</sup> <http://tribune.com.pk/story/579956/trade-competition-pakistans-auto-industry-determined-to-find-middle-ground-with-indian-counterparts/>, accessed on 10<sup>th</sup> Jan 2014

India (see Box 1).<sup>10</sup> India's two-wheeler emission norms are unique and cannot be compared with European standards. It follows a joint emission level corresponding to hydrocarbons and nitrogen oxides (HC and NOx). Also, it follows the India Drive Cycle (IDC), following driving norms in India, not the Worldwide Harmonised Motorcycle emission Test Cycle (WMTC), which is followed in developed economies. Atlas considers this a major NTB from the Indian side. It is important to note that India recently made testing under WMTC optional and has already announced that it would be mandatory in couple of year's time.

In the Pakistani motorcycle sector as a whole, there are close to 100 manufacturers; among these are many Chinese assemblers who import components from China. Atlas Honda has already proven itself in the intensely competitive Pakistan market and has acquired a market share of 47 per cent. Normalization of trade between India and Pakistan can provide an opportunity to Indian manufacturers to set up plants (if CBU import is not allowed) and compete with the large number of Chinese manufacturers and with Atlas Honda. This will definitely help consumers to get wider choice.

### **Box 1: Emission Norms for Two and Three Wheelers in India**

Two and three-wheelers in India accounted for almost 80 percent of all new vehicle sales in the 2009-2010 fiscal year. The regulated pollutants for these vehicles in India are hydrocarbons, carbon monoxide and nitrogen oxides (HC, CO, & NOx,) with extra particulate matter (PM) regulations for diesel powered three-wheelers. Gasoline is the most common fuel for these types of vehicles, although some three-wheelers, particularly commercial ones, run on CNG or diesel. India introduced its first two and three-wheeler emissions standards in 1991, with limits for CO and HC. Since then, other pollutants have been brought under regulation and emission limits have been tightened. In the case of two and three-wheelers, India does not follow the European model.

As emission standards were tightened, two-stroke motorcycles all but disappeared from the market. However, two-strokes do continue to be produced for some mopeds (50 cc or smaller engines), which are a small part of the market, as well as for three-wheelers (mainly auto-rickshaws). Even as standards for two and three-wheelers are tightened over time, these remain more polluting than four-wheeled vehicles on a per kilometre basis, particularly for PM. India has a joint HC+NOx emission standard for two and three-wheelers. This often leads to a situation in which two and three-wheeler engines run fuel lean, lowering HC emissions but increasing NOx emissions.

While Europe uses WMTC (Worldwide harmonised Motorcycle emission test cycle) test cycles, India has traditionally used the India Drive Cycle (IDC), which is said to more closely represent Indian driving norms. The differences in these test cycles mean measurements of pollutant emissions vary, making it difficult to compare Indian and European emission standards. India recently made testing under the WMTC optional for two-wheelers. It is expected to become mandatory for the next stage of two-wheeler emission standards after 2015.

<http://transportpolicy.net/index.php?title=India: Motorcycles: Emissions> accessed on 15<sup>th</sup> March 2014

<sup>10</sup> <http://tribune.com.pk/story/641199/assurances-needed-opening-road-for-india-may-hit-our-motorcycle-industry/> Article published in Dec 4, 2013. Accessed on 10<sup>th</sup> Jan 2014

### **4.2.3 Other NTBs and Possibilities of Joint Ventures**

During the discussion with Pakistani players, a few other important points have emerged. Pakistan is in favour of foreign direct investment (FDI) in heavy commercial vehicles (HCV) sector and Indian companies such as Tata and Mahindra may look for opportunities. Several Pakistani respondents mooted the idea of an auto park near the border for the smooth development and functioning of production networks. Tractor manufacturers in Pakistan such as Millat Tractors are interested to export to India. However, more studies are required to understand the nature of non-tariff barriers (NTBs) imposed on tractor imports in India as apprehension of NTBs (emission and homologation related) affecting tractor export is widely present. Pakistani manufacturers are also concerned about the layers of centre and state taxes levied in India. It is important to note that none of these are country specific barriers and hence, both countries need to find practical solutions to resolve such issues. In an earlier study, Husain (2012) also highlighted the concern of Pakistani businessmen about the NTBs imposed by India.

### **4.2.4 India's Advantage through the SAFTA route**

Pakistan is also concerned about India's ability to enter the Pakistani market with a lower tariff under the South Asian Free Trade Agreement (SAFTA) once non-discriminatory market access is given to India. It is argued that the average duty on these products under SAFTA is around 5 per cent only and given NDMA, India will be able to enter the Pakistani market at rates much lower than the MFN rate and jeopardise the domestic auto industry, which is dominated by SMEs. Table 10 below provides the frequency distribution of the MFN rates on all auto products under negative list. Almost 66 per cent of the products attract duty of between 30 per cent and 35 per cent and hence, the apprehension that India will use the SAFTA route seems to be genuine. The question is whether India has truly received any advantage under SAFTA. We have juxtaposed the SAFTA duties vis-à-vis MFN duties and noticed that only 14 per cent of the products (54 in number) attract a duty of 5 per cent under the SAFTA scheme, which India can take advantage of. All other products are still under the SAFTA 'sensitive list', for which domestic producers in Pakistan enjoy protection against competition from Indian exporters.

Let us now examine the products in which India has an advantage. For example, under HS 87 there are 10 products (vide Table 11) in which India can have easy market access in a post-MFN scenario. These products are cash carrying vehicles, carriages for disabled persons, saddles, engine components for motorcycles, etc. Under HS 90, various meters for measuring temperatures, revolution etc., are there in the list in which India will be able to enter Pakistani market with 5 per cent tariff. The profile of these products clearly depicts that either they are specialized in nature for which demand is less or they are non-critical components in which Pakistan already has a comparative advantage. Pakistan will face competition from India only in case of engine components of motorcycles. Hence, the fear that India will wipe out the domestic industries is not true.



**Table 10: Frequency Distribution of MFN rates of the Auto Products under the Negative List**

MFN Duty (%)	Frequency
<b>0-15</b>	7.8
<b>15-25</b>	4.9
<b>25-30</b>	6.5
<b>30-35</b>	65.9
<b>35-50</b>	3.4
<b>50-75</b>	8.1
<b>75-100</b>	3.4

*Source:* Calculated from Pakistan's custom duty

**Table 11: HS code wise Number of Common Products under India-Pak Negative list and SAFTA Normal Track list**

	No of Products
HS 40	7
HS 48	3
HS 68	2
HS 72	2
HS 73	3
HS 76	1
HS 82	3
HS 83	3
HS 84	4
HS 87	10
HS 90	7
HS91	4
HS 94	3
HS96	2

*Source:* Calculated from Pakistan's SAFTA notification (SAARC 2/4-A/2012) and Negative List

## **5. Identification of Products with respect to Pakistan's Import Sensitivity in Post-MFN period**

It is important to understand the concerns of the Pakistan automobile industry. An attempt has been made in this section to divide auto products into sub-groups based on the value of Pakistan's imports of these goods in 2012, the growth rate of Pakistani imports of the products from the rest of the world, the value of India's exports to the world and its growth rate. India's Revealed Comparative Advantage (RCA)<sup>11</sup> for these products is also considered

<sup>11</sup> Revealed comparative advantage indices (RCA) use trade pattern to identify sectors in which an economy has a comparative advantage by comparing that country's trade profile with the world average. The RCA index is defined as the ratio of two shares. The numerator is the share of a country's total exports of the commodity of interest in its total exports. The denominator is share of world exports of the same commodity in total world exports.

The mathematical definition of RCA is given as

$$\frac{\sum_{isd} X_{isd} / \sum_{id} X_{id}}{\sum_{wd} X_{iwd} / \sum_{wd} X_{wd}}$$

for analysis. Table 12 and Appendix Table A provide the details. A total of 167 HS6-digit products are divided into 8 categories, including one category for which there is no import data for Pakistan in 2012. These groupings will help industry to develop strategies for those products in which perceived competition after the removal of ‘negative list’ will go up. Industrialists in Pakistan will also be able to gauge India’s competitive advantage in those products from the change of RCAs between 2007 and 2012.

It needs to be noted that there is no threat from imports in the case of around 74 out of 167 products. These are the products in which either Pakistan’s import from the world is not much or India is a small exporter or both. In some cases, India’s export growth is also low and its RCA value is less than 1, indicating India’s comparative disadvantage. Products in five groups: A, B, C, D and E1, fall in this category. We have also included 6 products from group H in this category. In 16 products under category E2, there will be moderate competition. In some products (not all) under Group F (52) and G (25), India has a higher RCA implying a competitive advantage. These products are mainly from the group of rubber products, mechanical and electrical components and vehicle parts. So, clearly, in a large number of products, either Pakistan does not face an immediate import threat or India’s competitive advantage is not significant.

**Table 12: Pakistan’s Import Threat and India’s Competitive Advantage in Automobile Products under Negative List**

Groups	Characteristics	Suggestion	No of Products
A	Pakistan’s current import is low (less than USD 100, 000) and India’s export to world is also low	These products don’t face any immediate import threat	10
B	Pakistan’s current import is low (less than USD 100,000) and India’s export to world is more than USD 1 million	As Pakistan’s import demand is low and many of them have experienced negative growth rate, opening up of these products will not create any new risk. Only in two products India has RCA>1	11
C	India’s export to the world is less than Pakistan’s import	India is an insignificant exporter to have an effect in Pakistan. India has RCA >1 only in 3 products.	24
D	Pakistan’s current import is moderate (more than USD100, 000 but less than USD 1 million) and India’s export to the world is also low (less than USD 1 million)	India’s export is low in this segment and may not increase much even when Pakistan opens up.	7
E	Pakistan’s current import is moderate (more than USD 100, 000 but less than USD1 million) and India’s export to world is more than USD1 million	For some products, India’s export growth is not much and hence relatively low impact on Pakistan’s import (E1). India has RCA>1 only in two products Rest may have some impact once MFN status is given (E2). India has a high RCA in some rubber components and engine parts.	16+16=32

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Where *s* is the country of interest, *d* and *w* are the setoff all countries in the world, *i* is the sector of interest, *x* is the commodity export flow and *X* is the total export flow. The numerator is the share of good *i* in the exports of country *s*, while the denominator is the share of good *i* in the exports of the world. For details see Mikic & Gilbert (2009) and UNCTAD (2012).

Groups	Characteristics	Suggestion	No of Products
F	Pakistan is a moderately large importer (less than USD 10 million) and India is also a major exporter	Opening up will provide a choice to Pakistani importers and it will intensify competition. Pakistan needs to develop a strategy through more investment and other trade defence tools. Further study is required. India has an advantage. In some metal products and vehicle parts.	52
G	Pakistan is a very large importer and India is a large exporter	There are several critical products and vehicle parts in this segment. In many cases, assemblers have a tie up with OEMs and they cannot reduce imports from them. In a post-MFN situation, India will substitute other countries as source for some products but in others Pakistan will continue to import from earlier sources.	25
H	There is no data for Pakistan's import in 2012	Following past data, it can be said that Pakistan is not a large importer of these products and there is no immediate threat.	6

## 6. Summary and Recommendations

Bilateral trade between India and Pakistan has had a chequered history. Both the countries joined the WTO in 1995 and India accorded MFN status to Pakistan in 1996. By contrast, Pakistan allowed import from India on the basis of a 'positive list'. In November 2011, Pakistan decided to accord MFN status to India and in March 2012, it initiated the first step by shifting to a 'negative list' that listed products whose import from India was banned. Currently, Pakistan's negative list comprises of 1,209 items. It is important to note that India's automotive industry is unable to export because a large number of automotive components (385 under HS8-digit or 167 under the HS6-digit code) are still under Pakistan's negative list. There has been significant growth in the Pakistani automotive market in the recent past. With the normalization of trade, there is scope for increasing exports from India to Pakistan. Pakistan has gained comparative advantage in some components too and they are interested in exporting to India. Currently, there is an apprehension that the Pakistani automobile sector will be hard hit in case automobile products move out of the 'negative list'.

This paper highlighted the fact that once India is granted NDMA/MFN status, Indian automotive products will mostly compete with other players such as Thailand, Japan, China etc., and not directly with domestic suppliers. Pakistan will be able to substitute costly components currently imported from other countries by relatively cheaper accessories from India, enabling it to reduce the consumer price for these products. Higher affordability by consumer will force competitors to introduce new models in the market. Lower price will unleash demand and hence manufacturing activity will increase, leading to the growth of the industry in general. The Pakistani government is also expected to gain through higher custom and excise revenue as lower vehicles price will drive the final demand up. This will open the gate for joint ventures between the manufacturers from the two countries. Besides, the two countries would also benefit from collaborations. This can increase their exports to Middle East, Central Asia and Africa.

India and Pakistan could also consider jointly setting up an auto park near the border for the smooth functioning of production networks in the automobile sector.

However, future expectations are mostly based on economic logic, not supported by data. Similarly, the apprehension of the negative impact on Pakistani automobile sector is also a visualization based on industry experience. The lack of past bilateral trade data has fuelled this confusion. As there was minimal trade in the automobile sector in the past, it is difficult to develop a sector level detailed simulation for projection. The communication gap among manufacturers in the two countries has also heightened fears. Hence, we require more interaction among auto sector players from both sides to discuss the possible way out and develop a future plan for collaboration and market development.

This paper has also made an attempt to group the automobile products into categories considering the import sensitivity as highlighted by Pakistani industry. It is noted that in a large number of products, India does not have a competitive edge, and in many products it is not a large exporter either. Hence, the mere removal of negative list may not be enough to stimulate Indian export of automotive products to Pakistan.

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## Appendix

**Table A: Pakistan's Import from the World and India's export to the World of Automobile Items in the Negative List in 2012**

Value in US\$ Thousand, CAGR of last three years and Share (%) of total import of these products in 2012

Groups	HS Code	Pakistan's Import from World			India's Export to World				
		Import	CAGR	Share 2012	Export	CAGR	Share 2012	RCA 2012	RCA 2007
A	840731	18.23	187.08	0.001	38.4	35.73	0	0.01	0.15
	910610	23.58	-5.41	0.001	67.98	-37.1	0	0.08	0.08
	401036	92.7	24.71	0.004	127.88	-37.45	0.001	2.35	0.07
	701400	71.54	7.24	0.003	139.87	25.49	0.001	0.11	0.08
	910400	2.11	-80.76	0	284.06	-15.99	0.002	0	1
	871000	67.05		0.003	296.88	-89.66	0.002	0	0.08
	871190	1.33	-14.29	0	409.19	-24.31	0.002	0.07	0.22
	870710	68.07	47.78	0.003	559.74	-17.81	0.003	0.22	0.01
	870110	0.52	92.22	0	642.22	-39.52	0.004	2.07	0.26
B	870895	18.96	90.55	0.001	721.77	1805.42	0.004	0.09	0.03
	870432	37.51		0.002	1030.96	-34.23	0.01	0	0.01
	871110	44.25	1.38	0.002	1558.49	-82.34	0.01	0.01	0.17
	400819	73.95	-38.2	0.003	2142.87	70.69	0.01	1.9	0.89
	830230	87.91	107.09	0.004	3863.98	-22.88	0.02	1.23	0.88
	871492	94.19	-55.99	0.004	11337.02	33.15	0.07	0.51	0.39
	940120	58.59	-16.11	0.002	12435.56	129.83	0.07	0.73	0.13
	870892	54.78	-71.24	0.002	16053.42	80.18	0.1	0.2	0.34
	871496	53.63	-24.79	0.002	18402.3	52.26	0.11	0.65	0.96
	871494	27.72	-43.13	0.001	19956.53	78.23	0.12	0.38	0.33
C	870490	51.53	13.78	0.002	36520.6	123.2	0.22	0	0.01
	871491	13.48	-74.9	0.001	40149.64	79.73	0.24	0.48	0.18
	871390	188.19	85.44	0.01	111.52	25.88	0	0	0.27
	401035	197.35	27.26	0.01	59.68	33.77	0	0.11	0.02
	871150	222.59	105.76	0.01	94.49	58.14	0	0	0
	871500	330.47	-17.02	0.01	131.08	-78.89	0	0	0.01
	852721	370.6	-11.98	0.01	34.33	26.95	0	0.23	0
	840733	461.93	448.68	0.02	291.73	-87.56	0	2.01	0
	871610	592.91	688.18	0.02	139.53	-21.09	0	0	0.01
	853910	863.78	-16.86	0.03	240.21	-43.2	0	0.09	0.33
	871639	1034.03	-4.41	0.04	1013.4	27.77	0.01	0.01	0
	720410	1188.21	10.45	0.05	878.98	58.81	0.01	1.48	0.95
	871631	1317.68	47.9	0.05	387.34	8.92	0	0.01	0.15
	871680	1848.91	62.11	0.07	618.54	-12.64	0	0.06	0.09
	840732	4315.28	10.11	0.17	66.8	28.81	0	0.03	0.08
	870510	8048.12	2.24	0.32	2167.74	138.04	0.01	0	0.15
	870333	13873.29	137.26	0.56	12054.14	36.25	0.07	0.01	0.04
	870120	14628.79	2.98	0.59	14512.36	-16.19	0.09	0.01	0.02
	842131	19330.62	67.66	0.77	7621.77	56.29	0.05	0.78	0.15
	870324	30587.57	83.92	1.23	4504.98	1.79	0.03	0	0
870431	35407.78	91.53	1.42	101.23	46.61	0	0	0.01	
870290	39132.5	129.87	1.57	19015.86	40.58	0.11	1.15	0.32	
870590	39975.57	-26.54	1.6	30637.67	77.69	0.18	0.05	0	
760200	46430.6	5.19	1.86	8240.12	120.79	0.05	0.01	0.02	
870829	74694.98	61.12	2.99	53074.31	55.37	0.32	0.28	0.12	
720449	321055.8	9.11	12.86	490.98	-17	0	0.04	0	
Groups	HS Code	Import	CAGR	Share 2012	Export	CAGR	Share 2012	RCA 2012	RCA 2007
D	841520	269.81	5.09	0.01	300.9	24.53	0	0.08	0.08
	731519	185.33	21.23	0.01	396.05	-28.04	0	2.49	1.73
	870310	302.33	62.66	0.01	412.31	-67.43	0	1.15	0.32
	401034	128.14	-15.48	0.01	494.86	22.63	0	0.18	2.17
	401033	136.25	-3.48	0.01	610.99	6.65	0	0.14	0.29

Groups	HS Code	Pakistan's Import from World			India's Export to World				
		Import	CAGR	Share 2012	Export	CAGR	Share 2012	RCA 2012	RCA 2007
E1	961380	274.33	6.35	0.01	725.24	7.62	0	0.26	0.08
	853230	606.46	-54.4	0.02	819.75	-66.36	0	0.28	0.4
	681320	857.56	25	0.03	7314.75	-31.1	0.04	0.8	1.81
	870331	508.58	9.04	0.02	39177.55	-30.7	0.23	0.1	0.21
	851180	483.4	-1.7	0.02	2975.41	-15.26	0.02	0.47	0.32
	400829	628.21	51.51	0.03	17675.64	-6.55	0.11	1.81	1.15
	831000	192.78	37.5	0.01	4373.87	-0.47	0.03	0.87	1.02
	871130	131.22	170.64	0.01	27509.81	2.51	0.16	1.1	0.66
	850710	197.74	-32.53	0.01	35558.56	7.99	0.21	0.02	0.24
	902910	138	-0.02	0.01	1899.65	9.2	0.01	0.41	0.15
	732010	520.22	-32.17	0.02	33234.94	12.3	0.2	0.4	1.39
	871495	283.44	7.89	0.01	4853.33	17.6	0.03	0.06	0.27
	871420	761.95	1798.5	0.03	15743.09	20.96	0.09	0.01	1.2
	400931	787.09	38.47	0.03	14141.19	22.94	0.08	0.84	0.6
	830120	454.4	-1.66	0.02	17337.47	23.99	0.1	0.43	0.16
	401290	339.95	132.65	0.01	31505.05	24.46	0.19	0.81	1.14
842549	152.41	-66.05	0.01	4958.25	26.5	0.03	0.57	0.26	
851230	878.67	4.84	0.04	19940.89	33.13	0.12	0.76	3.36	
E2	851240	281.69	-30.12	0.01	7998.17	41.53	0.05	0.4	0.1
	870840	439.34	-33.39	0.02	201847.2	42.93	1.21	0.69	0.32
	871493	451.46	2.08	0.02	25993.3	44.42	0.16	0.88	1.63
	902920	446.83	-4.48	0.02	10133.47	45.3	0.06	0.46	0.23
	700910	509.61	-9.78	0.02	14814.6	46.35	0.09	0.21	0.18
	871140	372.67	53.02	0.01	3733.39	48.93	0.02	0.02	0.02
	731822	942.1	-14.24	0.04	34246.84	54.1	0.2	0.9	1.29
	851140	891.3	-56.23	0.04	104293.2	56.09	0.62	1.83	1.98
	852729	365.07	-10.21	0.01	2235.08	98.47	0.01	0.16	0.03
	854590	392.83	-18.25	0.02	11308.19	108.79	0.07	0.18	9.12
	870821	745.52	-14.02	0.03	5233.6	140.51	0.03	1.33	0.07
	400941	640.41	2.15	0.03	4082.25	146.92	0.02	1.06	0.53
	400921	508.88	4.53	0.02	36500.72	172.58	0.22	1.66	1.93
	871640	680.28	182.68	0.03	4187.85	175.07	0.03	0.71	0.01
	820600	436.86	76.81	0.02	7940.43	194.02	0.05	0.27	0.35
	870790	754.33	53.9	0.03	22446.38	230.85	0.13	0.05	0.01
<b>Groups</b>	<b>HS Code</b>	<b>Import</b>	<b>CAGR</b>	<b>Share 2012</b>	<b>Export</b>	<b>CAGR</b>	<b>Share 2012</b>	<b>RCA 2012</b>	<b>RCA 2007</b>
F	870810	1009.96	24.25	0.04	204417.4	30.38	1.22	0.25	0.31
	700721	1174.98	39.36	0.05	7044.95	4.04	0.04	0.03	0.27
	870893	1261.53	-9.65	0.05	23880.95	24.64	0.14	0.58	0.42
	871310	1328.5	46.67	0.05	12671.34	74.77	0.08	0.01	0.74
	400811	1358.23	93.79	0.05	7835.75	10.54	0.05	0.33	0.38
	840734	1442.27	685.03	0.06	27178.8	68.39	0.16	0.4	0.07
	851290	1535.45	147.74	0.06	9365.55	25.09	0.06	0.16	0.19
	854430	1564.81	7.44	0.06	113832.6	101.64	0.68	0.16	0.3
	851120	1568.73	51.31	0.06	11322.63	102.81	0.07	0.36	0.85
	681381	1675.59	31.77	0.07	43339.04	-9.45	0.26	4.66	2.64
	401039	1728.44	-2.51	0.07	26343.31	168.3	0.16	1.52	1.05
	830210	1782.42	52.79	0.07	63201.96	28.22	0.38	0.66	0.77
	848350	1911.11	39.3	0.08	48507.57	76.19	0.29	0.95	0.47
	730791	2104.63	-20.62	0.08	216688.1	95.37	1.3	11.6	6.55
	903033	2139.59	1.1	0.09	9185.6	4.28	0.05	0.23	0.33
	870891	2180.98	-9.45	0.09	38059.91	11.01	0.23	1.25	0.86
	400911	2185.25	57.17	0.09	3569.87	6.98	0.02	0.28	0.43
	870540	2405.26	-14.6	0.1	2685.46	72.43	0.02	0.09	0
	870830	2472.47	-9.65	0.1	115780	49.79	0.69	1.77	0.77
	851130	2567.09	13.46	0.1	10100.31	97.08	0.06	0.3	0.46
	401032	2579.1	81.5	0.1	7186.48	29.41	0.04	0.7	1.35
	401031	2626.59	8.86	0.11	4804.14	8.49	0.03	0.16	0.66
	870870	2731.11	3.36	0.11	96585.73	95.84	0.58	0.56	0.58
	853921	2740.32	30.16	0.11	17609.52	-33.68	0.11	0.2	1.27
851190	2813.68	93.37	0.11	41004.89	10.3	0.25	0.54	1.45	
732090	3016.39	8.28	0.12	19842.64	0.12	0.12	1.19	0.51	



Groups	HS Code	Pakistan's Import from World			India's Export to World				
		Import	CAGR	Share 2012	Export	CAGR	Share 2012	RCA 2012	RCA 2007
	848390	3033.57	15.37	0.12	91498.49	40.41	0.55	2.05	1.8
	840820	3551.2	-8.16	0.14	72207.87	196.9	0.43	0.16	0.11
	853929	3585.5	11.2	0.14	23496.66	132.49	0.14	0.25	0.27
	871200	3595.14	111.58	0.14	45135.85	36.74	0.27	0.01	0.08
	848420	3686.24	1.2	0.15	13809.27	25.78	0.08	0.47	0.46
	851150	4010.54	214.89	0.16	32828.77	129.59	0.2	0.35	0.87
	842123	4026.11	19.21	0.16	32597.38	83.61	0.19	0.58	0.39
	842890	4065.07	-49.23	0.16	18195.16	73.44	0.11	0.24	0.05
	840790	4210.18	122.57	0.17	35978.66	56.71	0.22	1.11	0.48
	482110	4253.25	-26.08	0.17	16244.63	8.1	0.1	0.07	0.13
	570320	4616.79	-11.62	0.18	16421.75	7.88	0.1	0.32	0.2
	870894	4698.51	3.85	0.19	25223.1	50.85	0.15	1.04	0.82
	870332	4850.78	-30.36	0.19	19345.73	-13.72	0.12	0.37	0.02
	871499	4949.18	82.1	0.2	85166.29	27.46	0.51	0.34	0.59
	731511	5011.03	6.89	0.2	5700.98	-33.32	0.03	0.91	2.37
	400821	5150.38	19.76	0.21	52081.1	27.67	0.31	3.75	1.97
	870850	5365.93	87.51	0.21	129504.4	114.5	0.77	1.95	0.93
	848790	5504.41	-16.03	0.22	138866.4	37.24	0.83	0.61	0.65
	848360	5796.88	18.41	0.23	47348.95	23.53	0.28	0.95	0.82
	570330	6070.64	31.86	0.24	58982.96	104.94	0.35	4.14	1.28
	940190	6739.9	30.23	0.27	23806.48	204.98	0.14	0.29	0.12
	870410	7005.06	-11.49	0.28	710987.9	129.44	4.25	0.56	0.44
	853650	8059.98	2.06	0.32	94054.42	41.58	0.56	0.34	0.31
	848410	8323.07	3.87	0.33	41549.63	12.26	0.25	1.34	1.61
	870390	8348.64	5.49	0.33	30381.57	81.22	0.18	0.03	0.46
	854442	8576.88	55.43	0.34	45252.67	67.43	0.27	0.11	0.34
Groups	HS Code	Import	CAGR	Share 2012	Export	CAGR	Share 2012	RCA 2012	RCA 2007
	851220	10843.06	-3.48	0.43	47921.12	15.73	0.29	0.39	0.21
	731815	14398.48	10.3	0.58	254430.6	77.02	1.52	1.04	1.32
	870880	14701.7	8.15	0.59	76491.4	124.79	0.46	0.84	0.63
	841330	15910.58	-25.46	0.64	80636.64	28.74	0.48	0.8	1.25
	401699	16040.3	8	0.64	184552	65.77	1.1	1.01	1.33
	903289	16568.5	-4.85	0.66	62744.62	44.84	0.38	0.37	0.23
	848340	17286.8	5.76	0.69	89392.74	46.7	0.53	1.28	0.57
	853710	18675.02	-19.62	0.75	179487.8	28.84	1.07	0.36	0.41
	848330	19712.89	31.08	0.79	32429.94	46.77	0.19	0.76	2
	848310	21503.11	-1.45	0.86	178753.8	54.73	1.07	2.18	2.1
	841391	21941.22	11.8	0.88	194289.5	27.54	1.16	1.53	1.2
	870423	24881.95	63.06	1	65527.56	210.59	0.39	0.53	0.15
	870422	28803.44	-10.56	1.15	175330.2	76.79	1.05	0.11	0.06
	841590	37580.87	36.04	1.51	48596.8	26.48	0.29	0.13	0.15
	870190	37982.68	-29.88	1.52	784811	75.89	4.69	5.04	1.94
	871419	39152.81	-6.77	1.57	125442.1	22.58	0.75	0.69	1.12
	870899	60022.49	1.66	2.4	2528274	84.4	15.12	0.74	0.66
	848180	60408.01	-24.19	2.42	683958.2	36.27	4.09	0.8	1.06
	840999	64148.71	14.64	2.57	483309.4	18.18	2.89	2.04	1.43
	870421	79106.34	51.25	3.17	325633	174.51	1.95	0.34	0.18
	871120	81309.45	32.31	3.26	1284825	65.8	7.68	3.15	1.8
	840991	89438.05	112.18	3.58	223782.8	35.22	1.34	0.67	0.54
	870323	151281.9	54.24	6.06	363143.3	207.28	2.17	0	0.02
	870321	290441.3	59.8	11.63	1135018	21.32	6.79	3.94	2.57
	870322	400407.1	40.27	16.04	2634205	14.78	15.75	1.61	1.03
	871411			0	1186.3	111.69	0.01	0	0.27
	870130			0	4423.8	-34.49	0.03	0.01	0.02
	902580			0	4924.64	103.92	0.03	0.23	0.39
	871620			0	4995.2	35.76	0.03	0.2	0.01
	871690			0	23136.01	44.69	0.14	0.32	0.34
	870600			0	247389.1	67.9	1.48	6.82	1.68

Source: Calculated from the data available in COMTRADE, WITS



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