

# Study on Indian electronics and consumer durables segment

(AC, refrigerators, washing machines, TVs)

April 2015

**EY**

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“I tell the world,  
**‘Make in India’.**  
Sell anywhere but  
manufacture here.  
We have the skill  
and talent for it”

Prime Minister of India,  
**Mr. Narendra Modi,**  
August 15th, 2014

# Foreword

The domestic consumer electronics and durables sector has witnessed a substantial growth over the last few years. This sector plays an important part in the economy of the country and provides employment to millions of people, more importantly to a large number of women in the country. The Indian TV and consumer durables market has been growing big, primarily driven by imports. However, with the given macroeconomic factors and government impetus with "Make In India", India is well positioned to increase its manufacturing base in the consumer durables. Even the manufacturers on their part are willing to invest in India and increase their manufacturing base in the country to serve domestic markets and also to export in order to gain scale and make Indian operations viable.

The report highlights the opportunities and challenges in this sector and presents some of the policy recommendations to provide boost to this sector. Currently, there is low level of component manufacturing activity in our country which discourages domestic manufacturing of end products; therefore there is a need to create a component industry to cater to the demand of manufacturers. Further, we need to ensure that all necessary government policies and incentives are implemented in letter and spirit. Hence, we would like to work closely with the government and industry for the implementation of these suggestions.



**Som Mittal,**

Chairman, FICCI Electronics & White Goods Manufacturing Committee

# Foreword

The burgeoning consumer electronics market in India presents an attractive opportunity to manufacturers. Most of the global corporations are looking at India as regional hub for manufacturing and sales to cater to not only Indian market, but SAARC and Middle East & African markets as well. Government of India's recent "Make In India" initiative has provided fresh impetus to this sector.

In this report, we seek to provide an insight into India's consumer electronics (TV, ACs, refrigerators, washing machines) market. The report focuses on the domestic market, growth drivers, supply ecosystem and disabilities to local manufacturing.

Ernst & Young has partnered with FICCI to put forward policy recommendations to the government on providing an impetus to this sector's manufacturing segment, in order to drive the government's "Make In India" agenda.

We are immensely grateful to industry leaders who participated in our survey and helped us present a comprehensive perspective of the market.

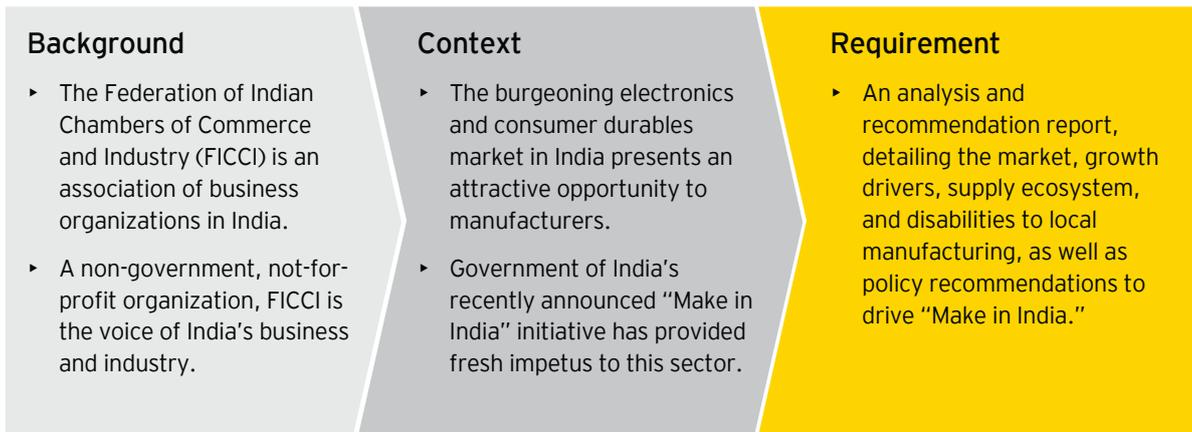


**Milan Sheth,**  
Partner and Technology Industry Leader,  
Ernst & Young Pvt. Ltd., India

# Background, context and scope



# Background and context



## Scope of the study

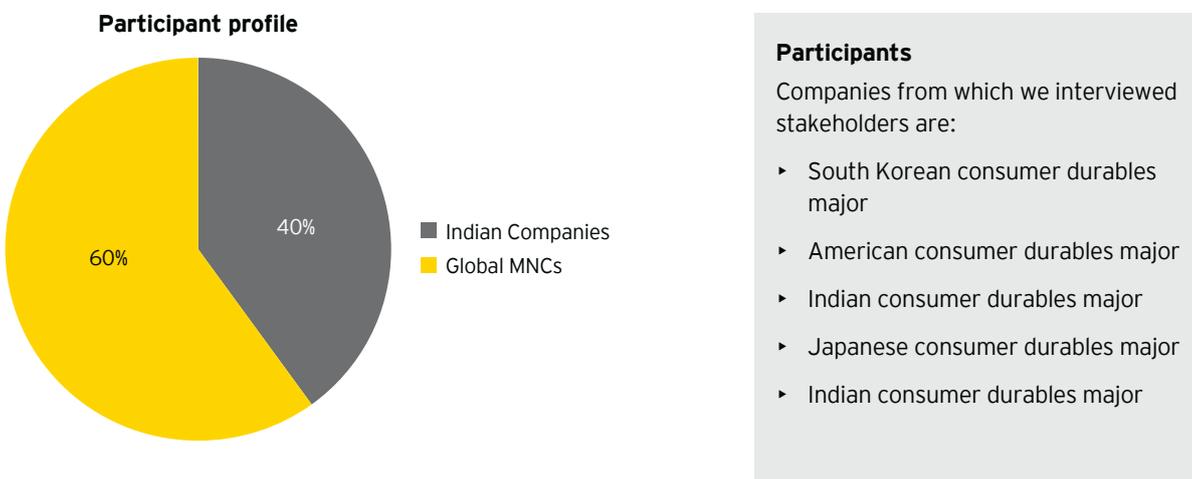
The scope of this pilot study is the domestic air conditioners, refrigerators, washing machines and television segments

Indian market overview	Supply side overview	Policies and disabilities
<ul style="list-style-type: none"> <li>▶ Market size</li> <li>▶ Past growth trends</li> <li>▶ Future growth outlook</li> <li>▶ Locally manufactured volumes</li> <li>▶ Share of exports (from India, of total production)</li> </ul>	<ul style="list-style-type: none"> <li>▶ Key components</li> <li>▶ Major suppliers</li> <li>▶ Unit price for key components</li> </ul>	<ul style="list-style-type: none"> <li>▶ Overview of policy and incentive structures (import, export and manufacturing)</li> <li>▶ Identify disabilities, and evaluate possibility of using India as a manufacturing hub and regional export hub for SAARC and Middle East &amp; Africa</li> </ul>

Note: The information coverage will depend on availability of information in public space and willingness of interview participants to share the details

## Primary interviews coverage

We conducted seven interviews with senior stakeholders across global and Indian companies.

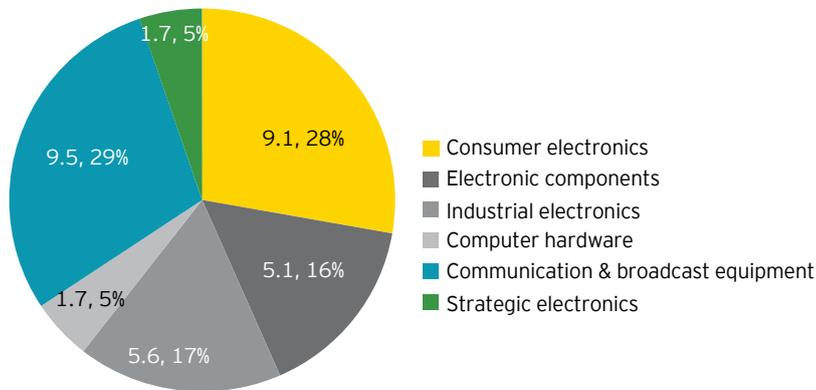


# Executive summary

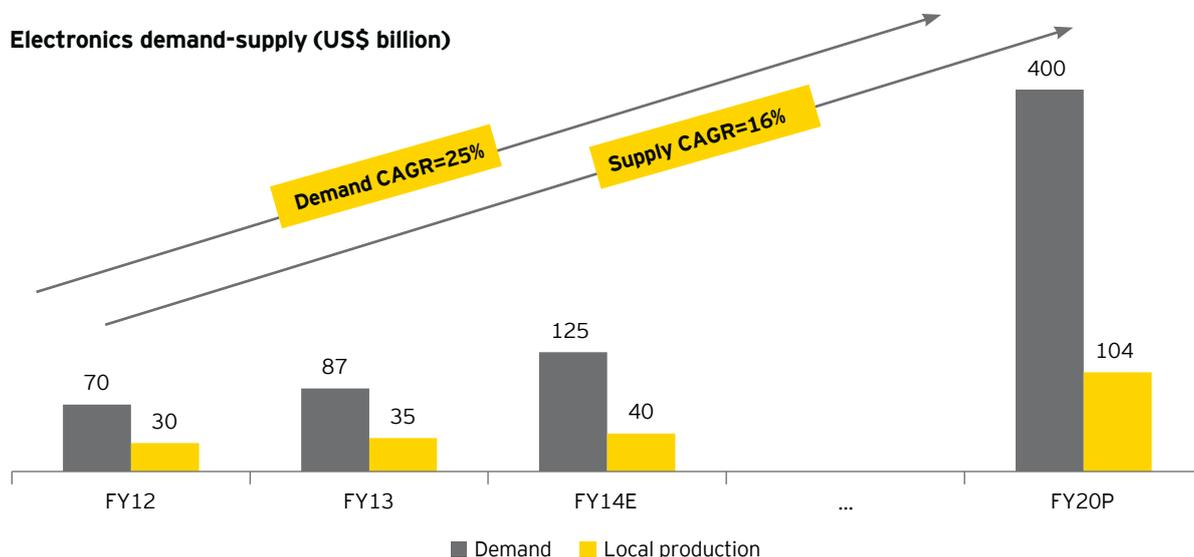


# The Indian consumer electronics segment is large, growing and is primarily driven by imports...

Indian electronics industry revenues by segment FY14 (US\$ billion) 100% = US\$32.7 billion



Electronics demand-supply (US\$ billion)



## Growth drivers for electronics segment

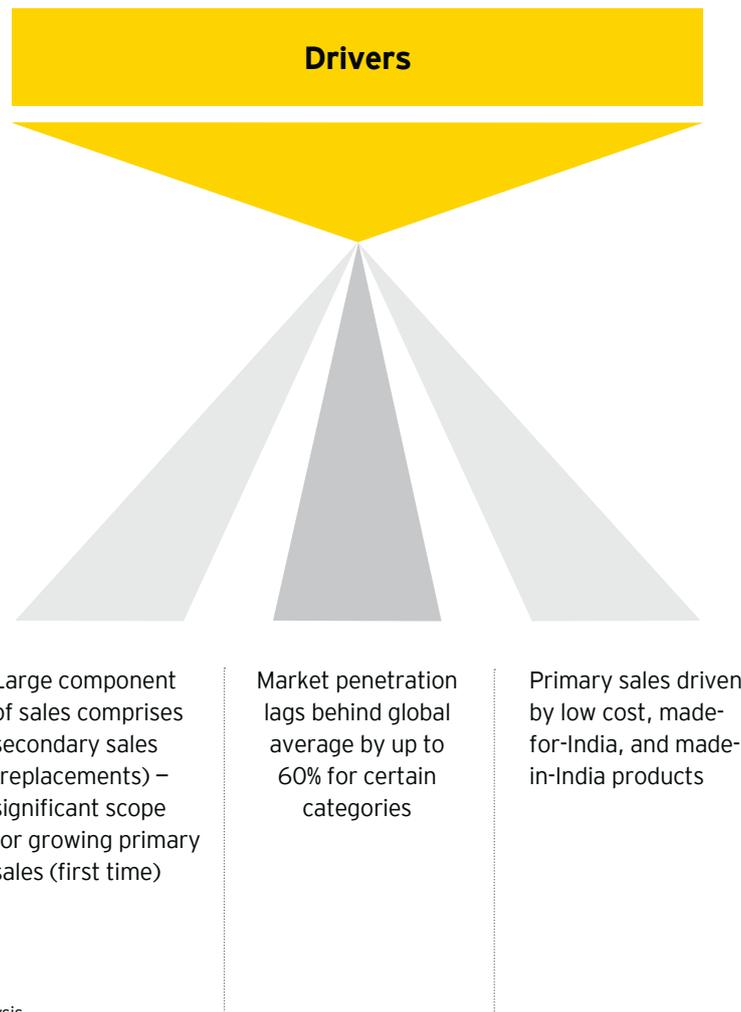
- ▶ Significant local demand
- ▶ Rising manufacturing costs in alternate markets
- ▶ 65% of the current demand for electronic products is met by imports
- ▶ Consumer electronics is expected to be US\$29 billion market by 2020 from ~US\$10 billion currently
- ▶ Consumer electronics exports were projected to be ~INR64 billion in FY13 while the industry achieved INR16 billion. Hence, there is a considerable gap to be met by the industry.

\* Consumer electronics: includes TVs, DVD players, home theatre systems, MP3 players, audio equipment, digital cameras and other household appliances

Source: DeitY reports; MoC reports; Make in India website, <http://makeinindia.com/sector/electronic-systems-design/>, accessed 25 February 2015

# There is a huge opportunity for manufacturing in India, as evidenced by expansions undertaken by majors

<p><b>Growing industry</b></p> <ul style="list-style-type: none"> <li>▶ The demand for flat TVs, refrigerators, washing machines and air conditioners is on a rise with reduced penetration of products vis-a-vis global levels, rising disposable income and urbanization of consumers.</li> <li>▶ Market for white goods and televisions has been growing at close to 14% p.a., and is expected to accelerate to close to 17% in the coming years.</li> </ul>	<p><b>Rising imports to meet demand</b></p> <ul style="list-style-type: none"> <li>▶ There has been a rise in imports from low-cost regions such as China and SE Asia due to various free trade agreements and availability of products at a lower cost as compared to costs incurred in local manufacturing</li> </ul>	<p><b>Production expansion to meet local and export demand</b></p> <ul style="list-style-type: none"> <li>▶ To meet the rising local demand and export demand to neighbouring regions and MEA, companies are planning to expand their local manufacturing in India and make the country an export hub.</li> <li>▶ Major Indian and global consumer durables companies have announced investments of around US\$1.4 billion over the coming years in India.</li> </ul>
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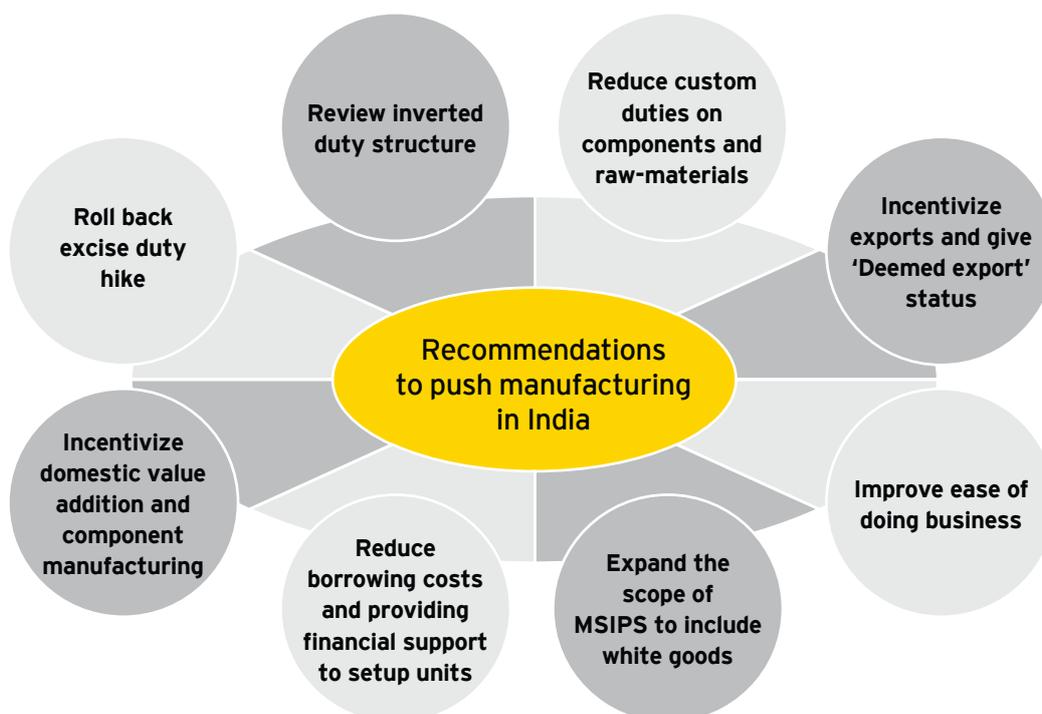


Source: DION report, EY analysis

## However, manufacturers face certain specific challenges

<p><b>1</b></p> <p><b>Inverted duty structure due to FTAs makes Indian manufacturing uncompetitive for white goods such as washing machines, refrigerators and air conditioners.</b></p> <p>Budget 2014 and 2015 announced custom duty reduction on TV panels and parts; and refrigerator compressor parts</p>	<p><b>2</b></p> <p><b>Modified Special Incentive Package Scheme (MSIPS) is currently not applicable to consumer durables such as washing machines, refrigerators and air conditioners.</b></p> <p>These product categories have been included in the Draft MSIPS policy.</p>	<p><b>3</b></p> <p><b>Hiked excise duty</b></p> <p>Effective January 2015, excise duty on consumer durables was rolled back to 12% from 10%</p>	<p><b>4</b></p> <p><b>Insufficient and under-developed local supplier base</b></p>	<p><b>5</b></p> <p><b>High cost of capital and other manufacturing costs due to frequently revised energy efficiency requirements.</b></p>
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India can emerge as the future manufacturing hub for the region, provided there is adequate focus and support from the Government for this sector



# Market for white goods and televisions

Demand overview



# The Indian consumer durables market has traditionally been a “high spend”, priority sector

Consumer durables account for **more than 40% of end consumer spending in India.**

Annual turnover of more than **INR500 billion** and contributes more than **INR150 billion** to revenue of Centre and State governments

**The sector contributes to more than 5.5% of IIP.**

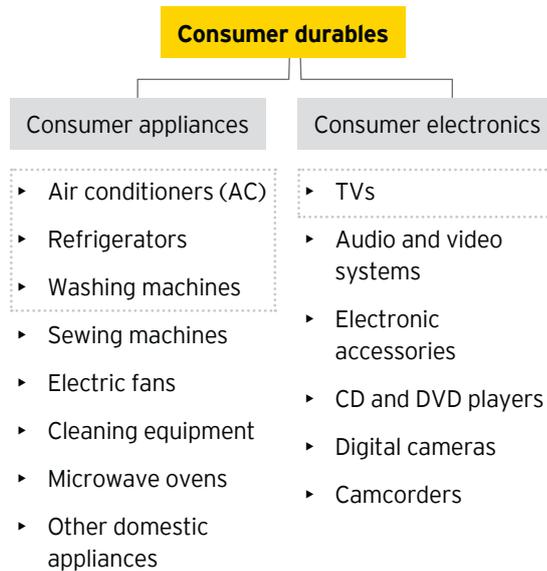
It has been an **employment generator – for every direct job, 3 in-direct jobs are created.**

Import intensive sector and second top contributor to the current account deficit.

**Urban markets account for the majority share (65% of total revenues)** in the consumer durables sector in India...

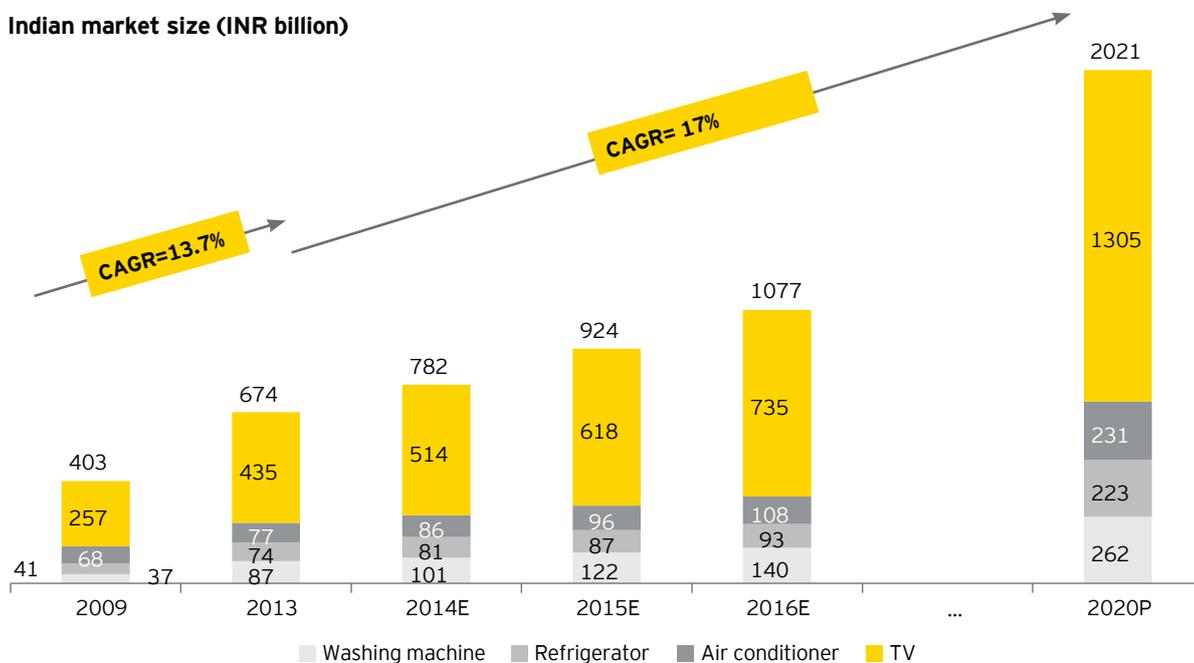
**... however, future spurt growth will come in from the rural markets (69% rural population).**

Source: CEAMA reports, EY analysis



# The market for white goods\* and televisions has been growing, but remains underpenetrated

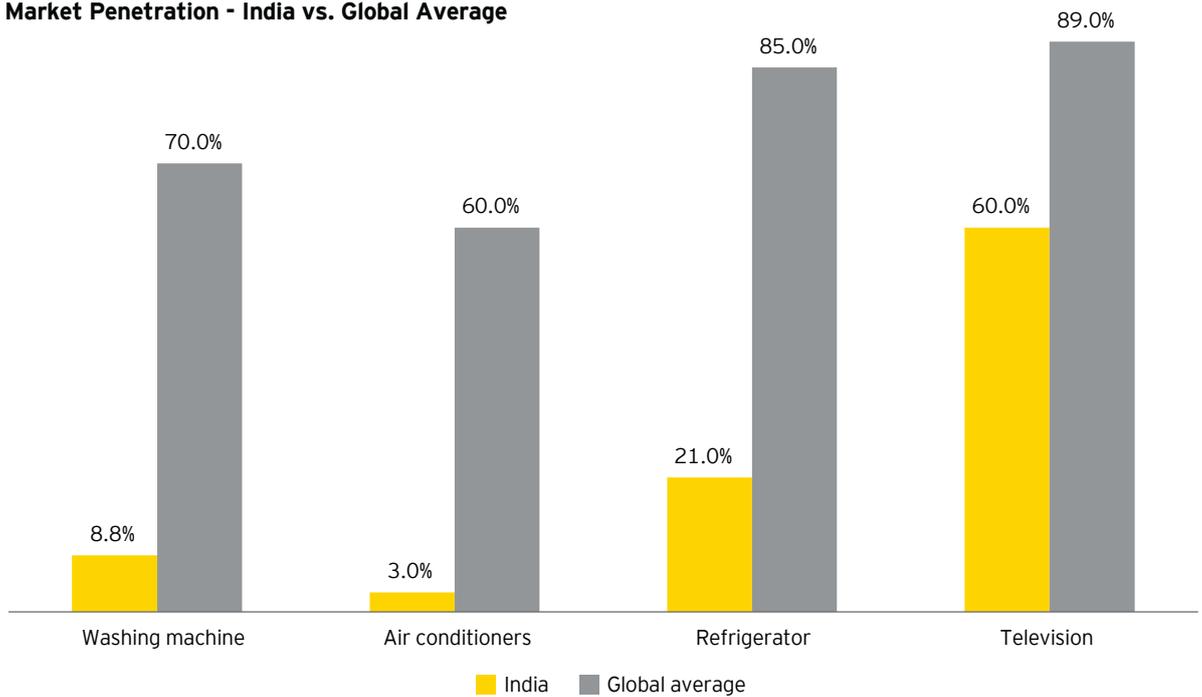
Indian market size (INR billion)



Source: JP Morgan, TechNavio, Spark Capital estimates, EY analysis

\* The document refers to AC, washing machines and refrigerators as white goods

## Market Penetration - India vs. Global Average



Source: JP Morgan estimates, EY analysis

### Drivers of growth:

- ▶ Increasing levels of income, and urbanization
- ▶ Improved affordability of products, with India centric product introductions
- ▶ Product innovation and availability of new variants of products
- ▶ Easy consumer financing as retailers offer attractive financing options
- ▶ Rise in the share of organized retail

### Market penetration:

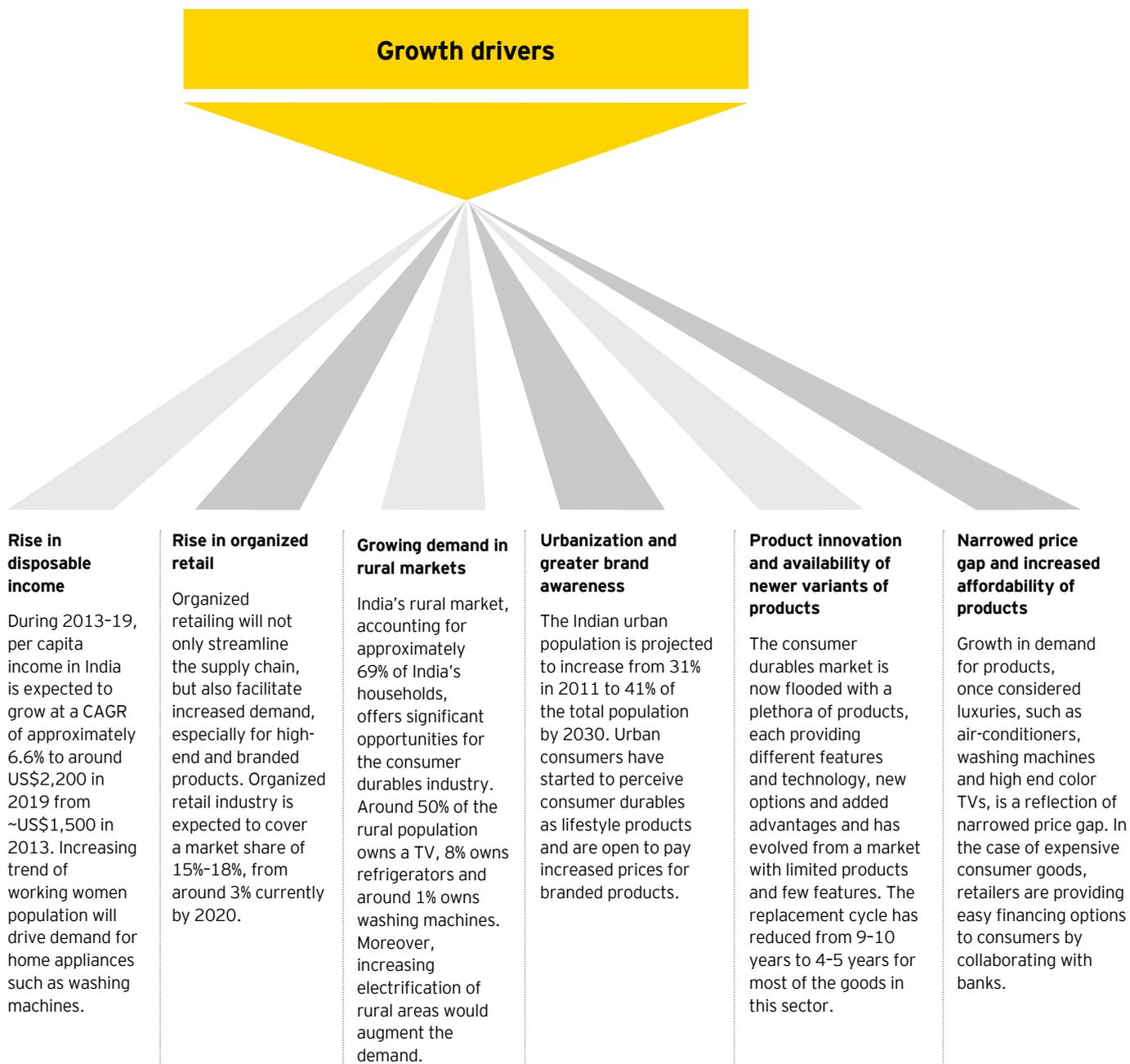
- ▶ India remains an underpenetrated market, with sub-par levels as compared to the global average.
- ▶ Local consumption and market penetration needs to be driven through primary sales (first time purchase), as compared to secondary (replacement) sales, which is predominant in the urban markets.
- ▶ Reduction in the total cost of ownership remains key to growth.

AC includes Room ACs (split and window), TV includes color TV (conventional and flat), Washing machines (semi and automatic, top and front), Refrigerators (Direct cool and frost free)

\*White goods - AC, Refrigerator, Washing Machines

*The Indian market for white goods and televisions is poised for steady growth at ~17% annually, and given the sub-par market penetration levels, presents an attractive opportunity to manufacturers in this space.*

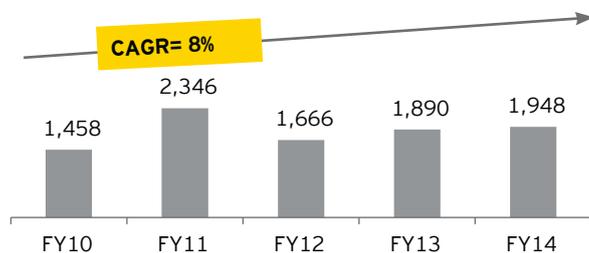
# A multitude of factors drive the local demand and adoption of advanced technology products



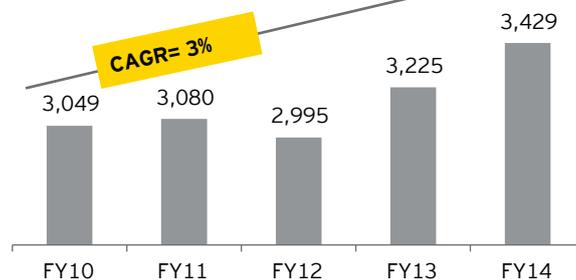
Source: IBEF, EY analysis

With growing demand, domestic production has also been on a rise...

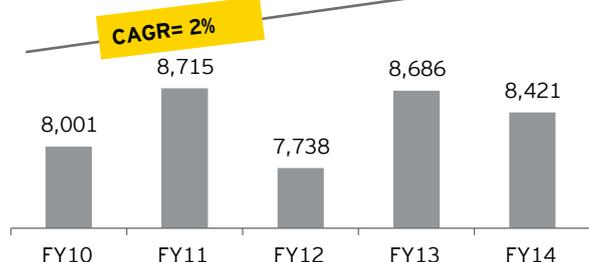
AC production ('000s)



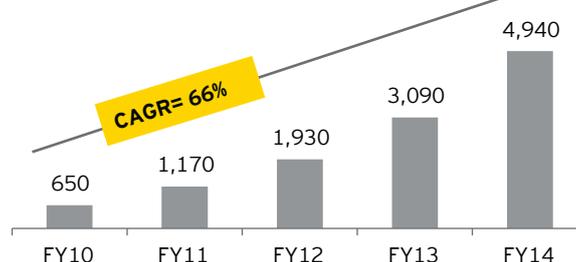
Washing machine production ('000s)



Refrigerator production ('000s)



FPD TV production ('000s)



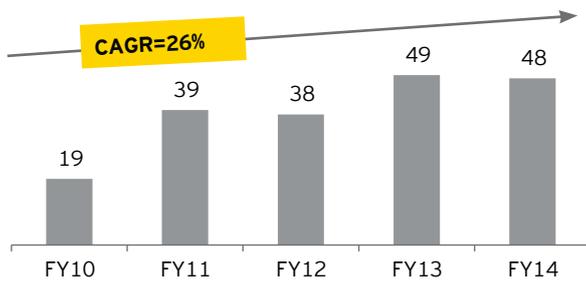
- ▶ Overall, growth in manufacturing over the 5 year period of FY10-FY14 has remained fairly moderate, except for FPD TVs. Manufacturers put their plans on hold for increasing capacity and investments that had been announced in 2008-10 period, due to demand slowdown given the weak macroeconomic conditions.
- ▶ Most manufacturers in India have been running their plants at ~80% capacity, and rely on imports to meet local demand.
- ▶ There has been a significant uptick in local manufacturing of flat panel display (FPD) TVs due to by reduction on custom duties on components and primarily last-mile assembly in the TV manufacturing industry.
- ▶ There is significant increase in localization in refrigerator and washing machines.

Source: CMIE, "Indian ESDM market - Analysis of opportunity and growth plan," January 2014, IESA-Frost&Sullivan report, <http://www.iesaonline.org/downloads/IESA-FS-report-Indian-ESDM-Market.pdf>, accessed on 25 February 2015



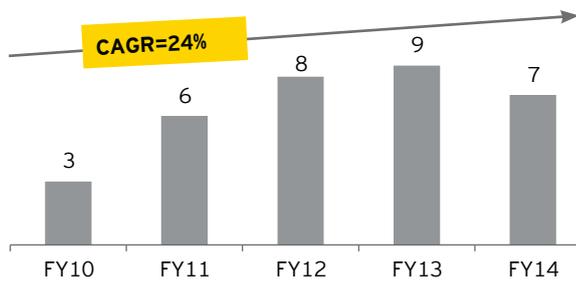
## ... however, imports continue to fuel domestic sales

AC imports (INR billion)



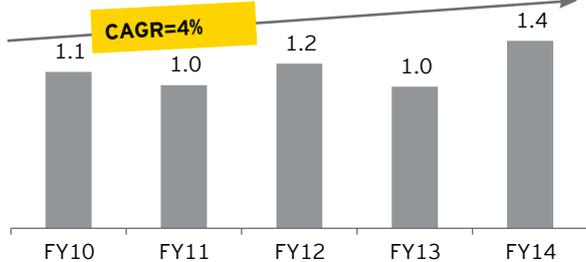
- ▶ ACs continue to be predominantly imported.
- ▶ Critical components such as compressors are primarily imported from China.

Washing machine imports (INR billion)



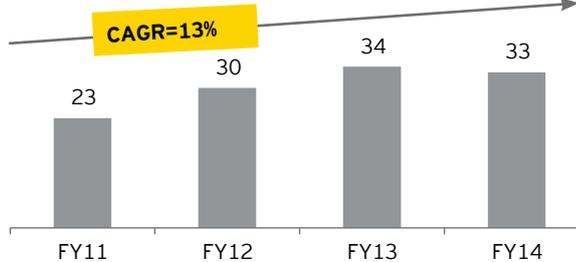
- ▶ Since, majority of the local production is centered around top loading semi-automatic units (close to 70%-75% of market by volume), front loading machines are mainly imported (less than 10% of total market by value).

Refrigerator imports (INR billion)



- ▶ High-end refrigerators are predominantly imported.
- ▶ Critical components such as compressors and painted sheets are primarily imported from China and SE Asia.

TV imports (INR billion)



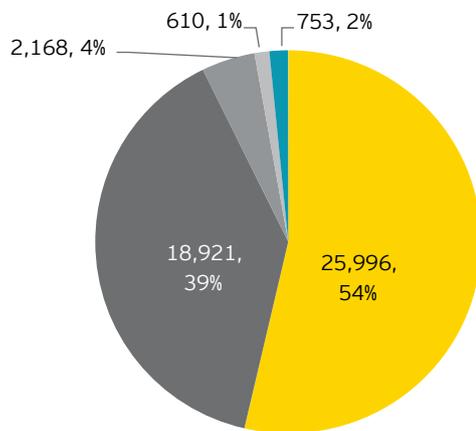
- ▶ There was a marginal decline in TV imports, since the Government reduced custom duties on components to zero and banned duty-free imports of flat-panel television sets.

Source: CMIE, MoC trade statistics



# Majority of imports to India are from China and SE Asia

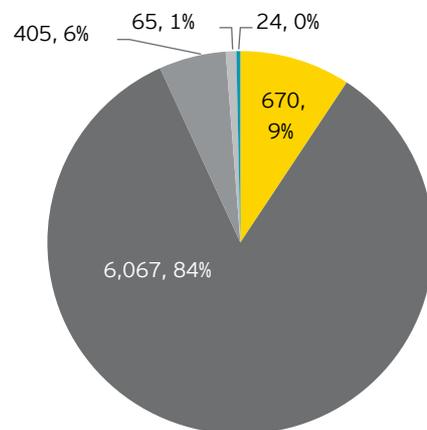
**Air conditioner imports (INR million)**



■ SE Asia ■ China ■ EMEA ■ Americas ■ Others

- ▶ China and SE Asia have large installed capacities for AC production, including a base for component manufacturing.
- ▶ China is also the center for import of compressors (in 10s of millions of units).

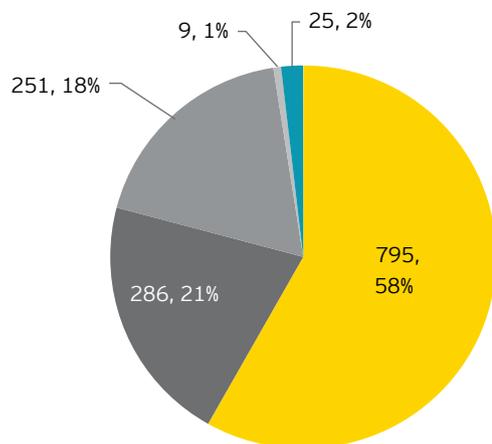
**Washing machines imports (INR million)**



■ SE Asia ■ China ■ EMEA ■ Americas ■ Others

- ▶ Washing machine imports typically consist of high-end washing machines (front loaders), and fully automatic units.

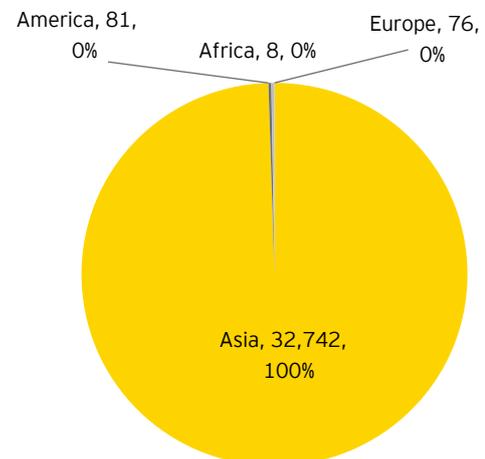
**Refrigerator imports (INR million)**



■ SE Asia ■ China ■ EMEA ■ Americas ■ Others

- ▶ For import of refrigerators, logistics costs make up for a large proportion of the total landed cost.
- ▶ SE Asia is the center for refrigerator manufacturing, and with the FTA, large portion of imports are sourced from here.

**TV imports (INR million)**



■ Asia ■ Europe ■ Africa ■ America

- ▶ China and SE Asia have a virtual monopoly in exporting TVs.
- ▶ India's FTAs with ASEAN countries support import growth.

\* FY14 data; Source: CMIE, MoC trade statistics

# China emerged as the dominant center for production...

*China has long dominated the world as a production base due to a large pool of labor, low wage rates and a substantial supply chain that bring economies of scale*

Labor pool	Business ecosystem	China government incentives
<ul style="list-style-type: none"> <li>Companies moved manufacturing to China, enblock, from their respective parent locations because of its population of around a 1.3 billion people and hourly compensation costs in manufacturing of merely around US\$1.2.</li> </ul>	<ul style="list-style-type: none"> <li>Industrial production relies on networks of suppliers, component manufacturers, distributors, government agencies and customers.</li> <li>The business ecosystem in China has evolved in the last decade and companies take benefits of supply chain efficiencies and economies of scale to keep costs low and margins high.</li> </ul>	<ul style="list-style-type: none"> <li>China, in its Twelfth Five-Year Plan (2011-15), has included several preferential taxes, fiscal and procurement policies designed to develop seven strategic emerging industries (SEIs), which will become the backbone of the country's economy in coming years.</li> <li>Information Technology industry (which includes electronics industry) has been chosen as one of these SEIs.</li> </ul>

Source: Publically available information sources such as OECD, Wiki etc.

# ... but global majors are now looking to diversify to other geographies

*Although China remains the dominant region for offshore manufacturing, several trends are causing companies that are highly cost-sensitive to consider alternative locations such as India, Indonesia, Malaysia, Vietnam and Thailand.*

## Drivers for shift from China:

- ▶ Increase in labor costs and competition for talent availability
- ▶ Other costs such as real estate, electricity, taxes are rising
- ▶ Intellectual property protection remains a risk in China
- ▶ Increased transportation and shipping costs for finished goods
- ▶ Single country sourcing risk
- ▶ Local manufacturing helps in improved inventory management according to domestic demand
- ▶ Strong yen appreciation making products uncompetitive
- ▶ Need for localization of products
- ▶ Shift in local government's focus from exports to increasing local consumption

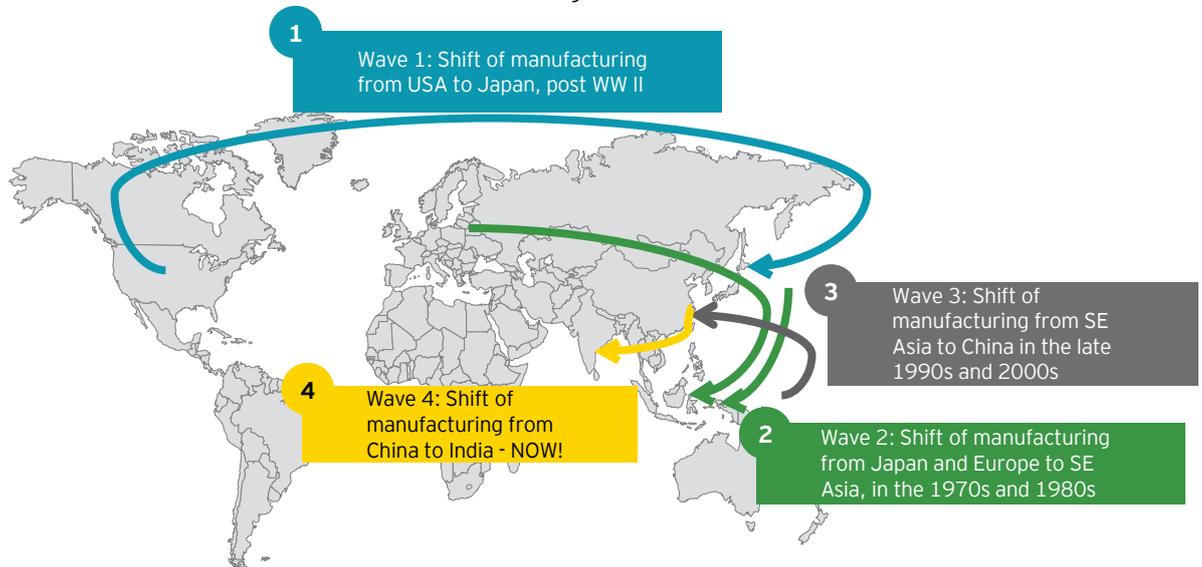
**"Chinese costs are going up. This is a great time to move production from China to India," chairman of Indian consumer durables major, which has shifted air conditioner and washing machine production to India.**

<b>India</b>	<ul style="list-style-type: none"> <li>▶ Low labor costs</li> <li>▶ Large potential consumer market</li> <li>▶ Advanced capabilities in plastics and metal fabrication, and electrical equipment manufacturing</li> </ul>
<b>Indonesia</b>	<ul style="list-style-type: none"> <li>▶ Relatively low operating costs</li> <li>▶ Large labor pool</li> </ul>
<b>Malaysia</b>	<ul style="list-style-type: none"> <li>▶ Comparatively stable political and economic environment</li> </ul>
<b>Thailand</b>	<ul style="list-style-type: none"> <li>▶ Strong transportation and utility infrastructure</li> <li>▶ Strong government support</li> </ul>
<b>Vietnam</b>	<ul style="list-style-type: none"> <li>▶ Low production costs</li> <li>▶ Manufacturing investments</li> </ul>

Source: "Made In India\* - As China begins to lose its competitive advantage, manufacturing starts moving to India," Business Today website, <http://businesstoday.intoday.in/story/india-benefits-china-begins-to-lose-manufacturing-edge/1/203040.html>, accessed 25 February 2015

# Global trends also suggest that India is poised to emerge as a global manufacturing destination

- Locations of manufacturing hubs have definitely shifted over the years – this trend has been consistent across automobile, high-tech and IT sectors.
- The consumer durables sector is also seen following this trend



This sentiment is reflected in the localization drive undertaken by many large companies...

## South Korean consumer durables major

- Almost 90% of products are made locally
- Large number of vendors in North and South India for raw materials; however, due to high end nature of business, large part of components are still imported
- Mix of end-to-end contract manufacturing and component manufacturing

## South Korean consumer durables major

- 90% local manufacturing
- More than 50% of spares produced locally

## Indian consumer durables major

- 75% of refrigerators, 65% of washing machines and 40% of ACs are locally manufactured.

## Chinese consumer durables major

- 60% of products in volume terms will be either procured or manufactured in India
- Works with Indian third-party contract manufacturers
- Imports 50% of its products, including TV panels and water heaters, from countries like China, Thailand and Italy and manufactures the rest in India
- Currently outsources production of ACs and majority of washing machines models to third parties

## European Consumer durables major

- Achieved 30%-40% localization for front load washing machines. Is the only manufacturer of front loading washing machine in India
- Contracts for product development of refrigerators and ACs

## American consumer durables major

- 70% home appliances are internally manufactured (washing machines and refrigerators) and contract manufactured (ACs – indoor units outsourced to third parties in India) and 30% are imported (e.g., AC outdoor units from China plant)
- Window ACs are completely manufactured in India

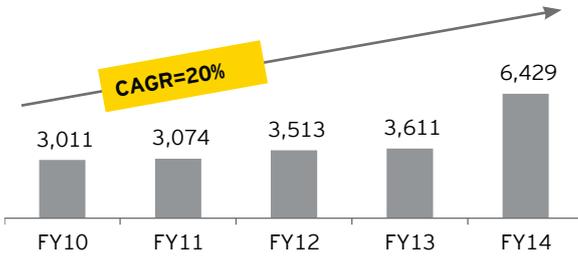
Source: Primary research, EY analysis

Note: % local manufacturing refers to the % of sales in Indian market through finished products which are either assembled or manufactured in India by the company in-house or with contract manufacturers, as against importing finished products. % localization refers to the proportion of components and raw materials being procured locally or manufactured in-house or through 3rd parties in India



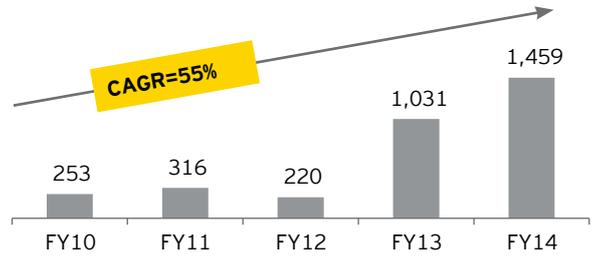
# Of late, exports from India have been on a rise...

**AC exports (INR million)**



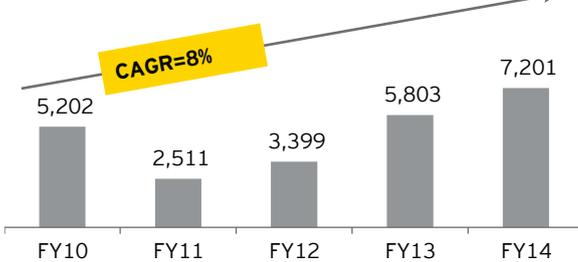
- ▶ Exports of ACs from India have been on the rise, particularly to the MEA

**Washing machine exports (INR million)**



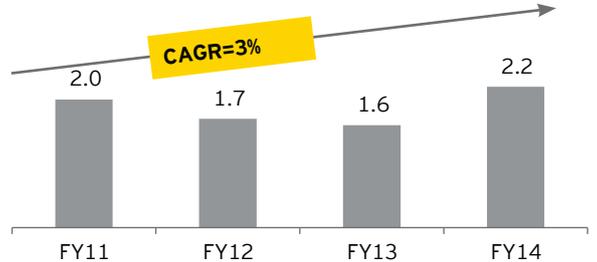
- ▶ Exports of washing machines primarily consists of top loaders and semi-automatic units
- ▶ Primary export market is the SAARC countries and SE Asia

**Refrigerator exports (INR million)**



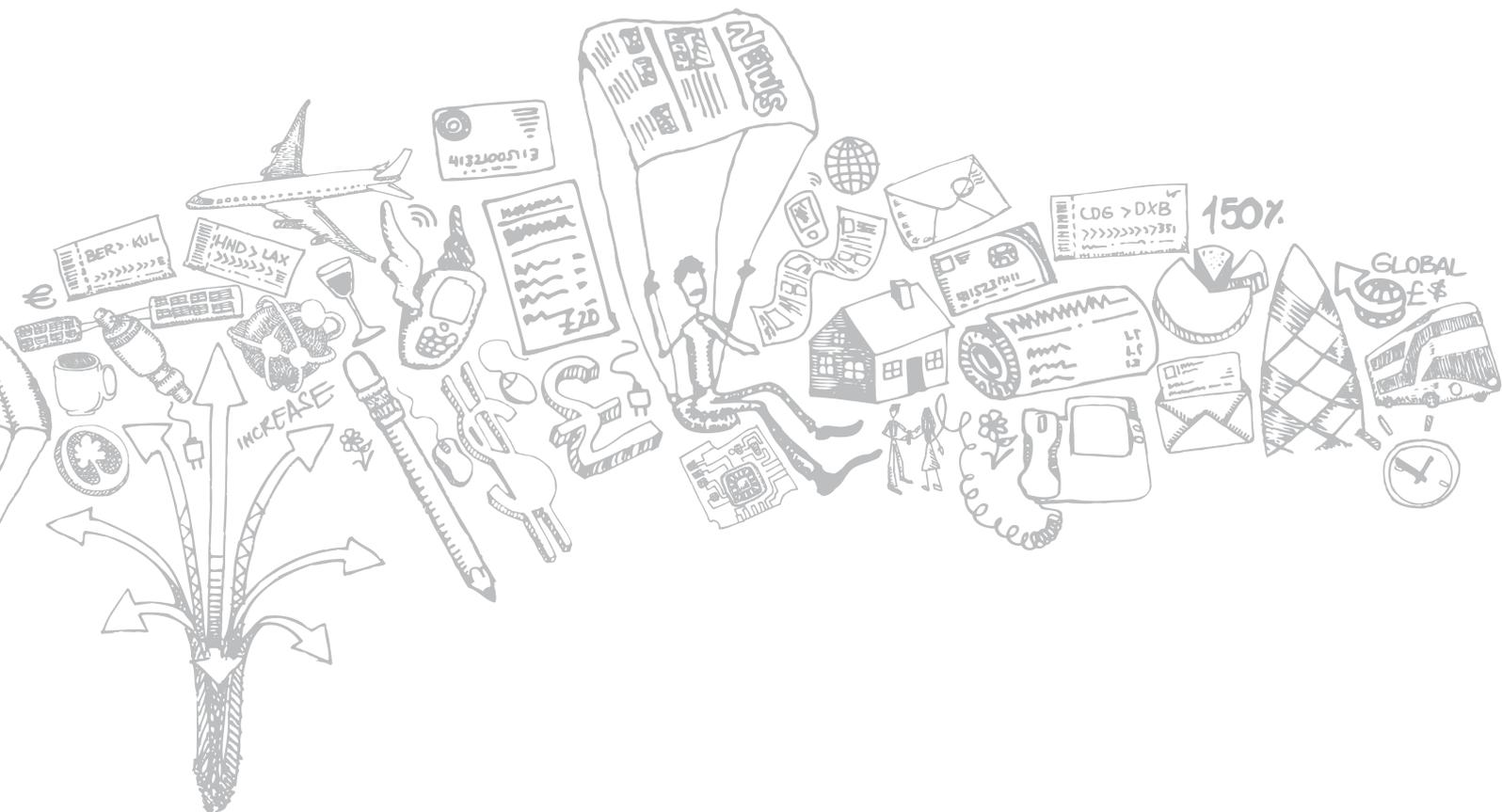
- ▶ Refrigerator exports growth has been in single digits, given the large domestic consumption

**TV exports (INR billion)**



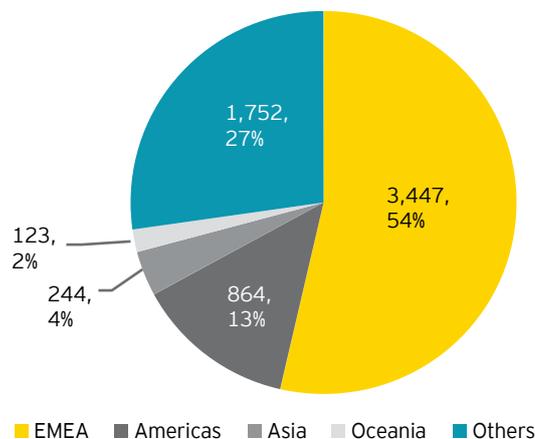
- ▶ Exports from India have not seen much growth, due to the strong demand for TVs in the domestic market

Source: CMIE, MoC trade statistics

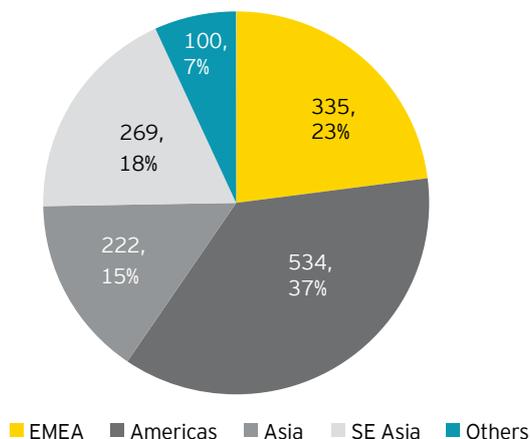


## ... with UAE being a major importer of Indian goods

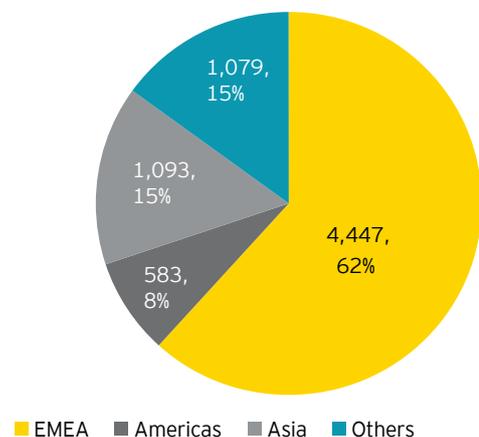
**Air conditioner exports (INR million)**



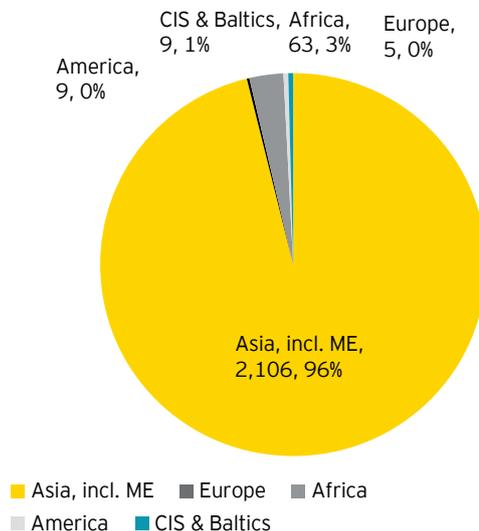
**Washing machines exports (INR million)**



**Refrigerator exports (INR million)**



**TV exports (INR million)**



- ▶ UAE, particularly Dubai is a major import hub for the region
  - ▶ Although most majors have retail presence (through partnerships) in the entire ME region, a significant part of the ME market gets served through Dubai.
  - ▶ Re-export and trading activity is very robust in this region, aided by the Free Zones created in Dubai.
  - ▶ Majority of the African market is served through the re-export route.
- ▶ Indian companies have effectively utilized the Dubai channel to reach to the rest of ME and Africa.

\* FY14 data; Source: CMIE, MoC trade statistics

# Leading players are now looking to build India as a base for exports to MEA and SAARC regions...

## South Korean consumer durables major

- ▶ It plans to use its existing plants in India as export hubs, and penetrate the Asia, Middle East and Africa markets.
- ▶ Around 1%-3% of volumes from India are being exported.
- ▶ Export locations include Nepal, Korea, China, Slovakia, USA, Vietnam, Hungary, Thailand, Malaysia, Sri Lanka, Bangladesh and Middle East.
- ▶ Units from Noida are exported to countries in the Middle East, CIS and SAARC countries.

## South Korean consumer durables major

- ▶ It plans to use existing plants in India as export hubs, and penetrate the Asia, Middle East and Africa markets.
- ▶ In 2013, around 10% of the company's products manufactured in India were exported to 80 countries in the South-East Asia, South Africa, Middle East and South American regions
  - ▶ Aims to increase exports from its Indian operations to around 15% by 2015
- ▶ The company will increase exports of products such as refrigerators, washing machines and LCD/LED TV as well as other categories.

## Indian consumer durables major

- ▶ The company aims to increase its exports to US\$100 million by 2015 from US\$50 million in 2010.
- ▶ Middle-East countries comprise 35%-40% of the company's total exports and Dubai is the export hub for the Middle-East, Africa, Europe and South America. The Group exports ACs to Zambia, Zimbabwe, Nairobi, Nigeria and South Africa.

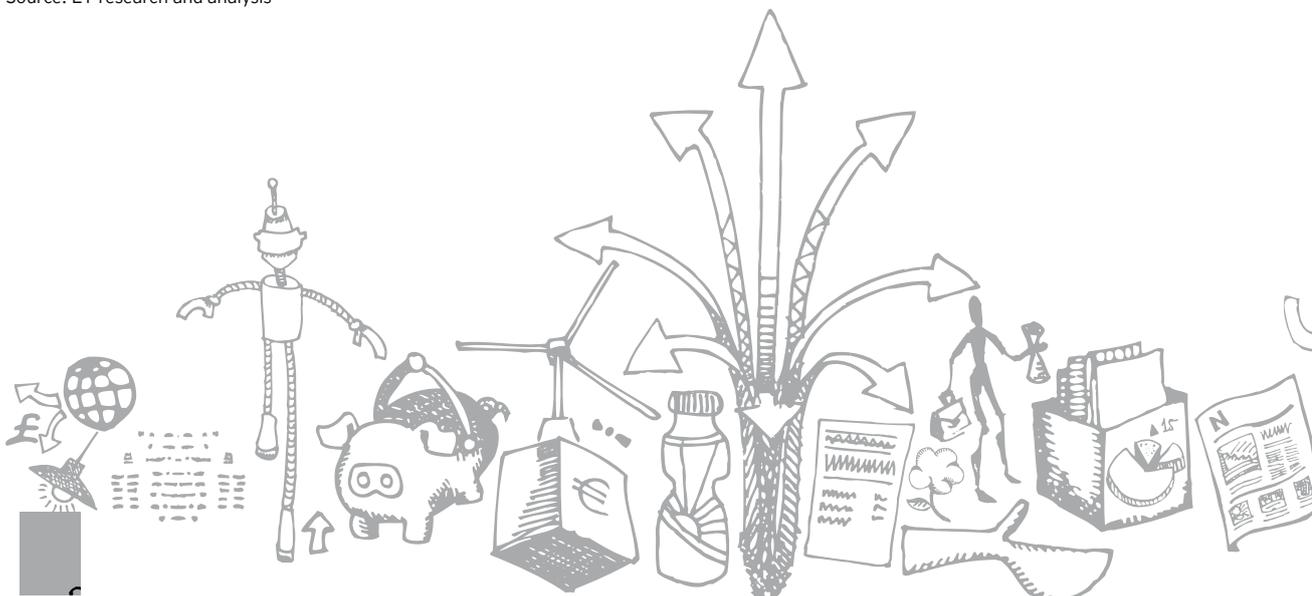
## Chinese consumer durables major

- ▶ Refrigerators and washing machines manufactured in India are exported to Eastern Europe, Middle East and Africa and CIS countries.
- ▶ 25% of the revenue of Indian operations are expected to come from exports by FY15.

## American consumer durables major

- ▶ Exports constitute around 10%-15% of the overall business in India
- ▶ Exports products made in India to Australia, Sri Lanka, Bangladesh, Myanmar, the Philippines, Nepal, the Middle East and Africa and other regions in South Asia and South-east Asia. MEA region is as such covered through Europe base.

Source: EY research and analysis



## ... given the geographical proximity and socio-economic similarities

### Middle East

- ▶ Strong household consumption of Emiratis, expatriate wealth and inflow of tourists are driving increasing consumer expenditure for white goods and televisions
- ▶ Growth in the AC market in the Middle East due to increase in commercial construction and return of private investments
- ▶ Growing consumer awareness on energy conservation, environmental concerns and indoor air quality in the Middle East region
- ▶ Large Indian expat community, with product preferences similar to that of the Indian market

### Africa

- ▶ Rising income levels driving consumption
- ▶ Improved electrical infrastructure, coupled with local climate conditions, is increasing adoption of refrigerators and air conditioners
- ▶ Customer preference for entry-level products, is very similar to that of India's
- ▶ Underpenetrated market, with largely unorganized retail dominated by one-time traders

### SAARC

- ▶ SAARC countries of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka with similar demographics and socio-economic landscape
- ▶ Product preferences very similar to that of India's
- ▶ Major chunk of India's exports in the white goods space is to the SAARC block



# Manufacturing and supply ecosystem

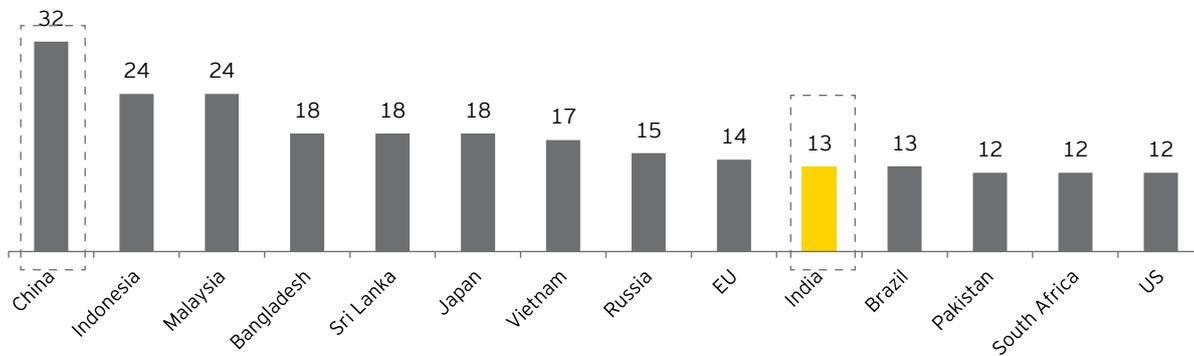
An overview of local set up and the industry voice



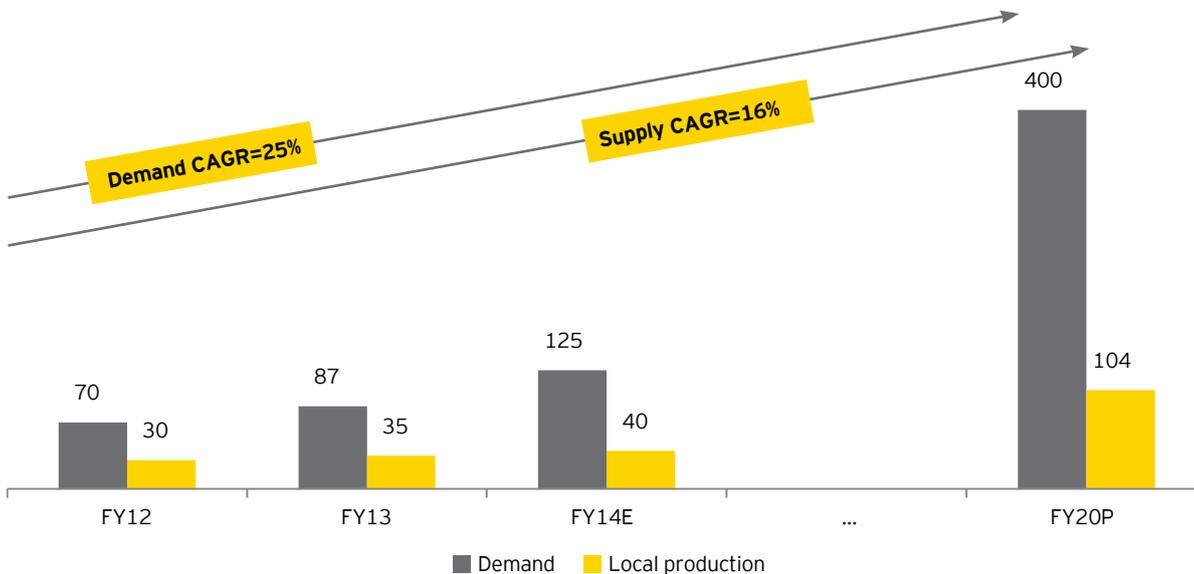
# In the past, India has lagged behind its peers in manufacturing...

India's manufacturing lags that of some of its peers

Share of manufacturing of total GDP (%)



The demand supply gap for electronics is expected to touch US\$ 300 billion by 2020



- ▶ The global electronics industry is at US\$1.8 trillion, of which India consumes around US\$125 billion electronics.
- ▶ This consumption is expected to grow to US\$400 billion by 2020 with the local production of only US\$104 billion given current conditions.
- ▶ Electronics manufacturing industry contributes significantly to most of the developed countries' GDP.
  - ▶ In India it is 1.7%, while it is 15.5% for Taiwan, 15.1% for South Korea and 12.7% for China.
- ▶ There is an immediate and urgent need to boost electronics manufacturing in India.
- ▶ The case for promoting India as a manufacturing destination is also getting stronger with time
  - ▶ Burgeoning local demand
  - ▶ Increasing maturity of the Indian market
  - ▶ Viable export markets of SAARC, the Middle East and Africa

... but given the macroeconomic factors and government impetus with “Make In India,” India is well positioned to increase its manufacturing base

*“India’s biggest strength in the coming years is going to be her demographic dividend. More than 50% of our population is under 25 years and soon, one-fifth of the world’s working age population will be in our country”*

**Mr. Pranab Mukherjee, President of India**



**Second-largest population globally**  
(1.3 billion in 2014) with a median age of 26.7 years

**Real GDP growth** 5.6% in 2014

**0.5 billion labor force**

**English speaking population,**  
with literacy rate of 74.04%

**17%**  
Manufacturing as a % of GDP

**9.4%**  
of population is in manufacturing sector

**US\$0.92**  
Average labor cost per hour in manufacturing

**10%**  
Manufacturing exports as % of GDP

**‘Make In India’ push:**

- ▶ Growing investment in infrastructure
- ▶ Tax incentives and other policies
- ▶ Facilitating ease of doing business in India
- ▶ Streamlining exports/ imports

Source: BMO; EY Doing Business in India 2013-14, Bloomberg BusinessWeek; FICCI report; “Match quantity with quality in higher education: President Pranab Mukherjee,” The Economic Times website, [http://articles.economictimes.indiatimes.com/2013-11-07/news/43776306\\_1\\_president-pranab-mukherjee-mars-mission-higher-education](http://articles.economictimes.indiatimes.com/2013-11-07/news/43776306_1_president-pranab-mukherjee-mars-mission-higher-education), accessed 25 February 2015

# The landscape of OEM/ODM and local component suppliers is still in an emerging state of maturity...

**Successful, growing companies in India have developed a large local manufacturing base and are manufacturing through a mix of local production and assembly.**

- ▶ There is a good base of contract manufacturers and OEMs/ EMS companies.
  - ▶ They implement processes such as plastic injection moulding, sheet metal assembly, PCB assembly and box building assembly in-house, in addition to end-to-end contract manufacturing
- ▶ Most of the EMS and OEMs mainly undertake last-mile assembly, and not much designing (ODM/ R&D) is undertaken in the country.
- ▶ The supplier and contract manufacturer base in India is limited with a majority of high value and critical components being imported.
- ▶ Some of the locally sourced components are: Injections molding parts, Metal castings and stampings, motors (low end), compressors (limited volumes), electrical components (wiring, plugs etc.), packaging material

**According to industry estimates, majority of the parts going into locally manufactured products such as TVs, refrigerators, washing machines and air conditioners come from markets such as China, Japan, Indonesia, Malaysia and Taiwan. Moreover, high-end products in these categories are completely imported from abroad.**

## Components predominantly imported

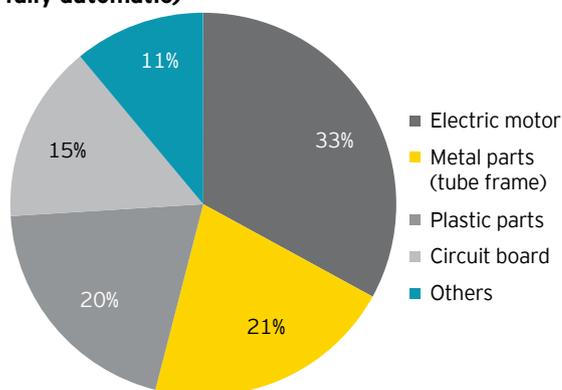
- ▶ High-quality steel finishes for refrigerators
- ▶ Compressors, evaporator coils, condenser coils for AC and refrigerators
- ▶ Chemicals (refrigerants) for ACs and refrigerators
- ▶ Motors for washing machines
- ▶ LCD or LED panel and the chips for TV
- ▶ Semiconductors and electronic components



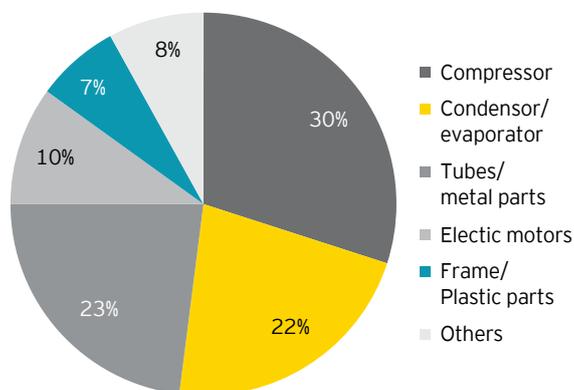
# ... and the average localization level across products is still at around 30%-40%

Break-up of cost, by key components

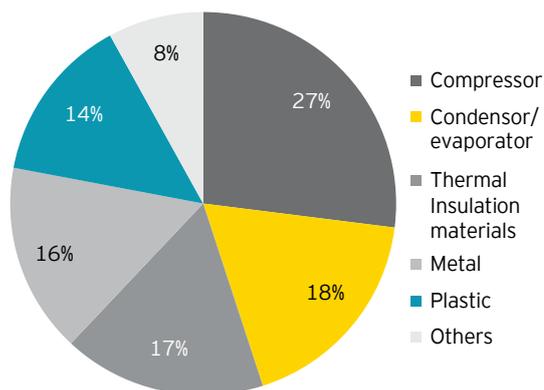
**Washing machine (median range, top loading, fully automatic)**



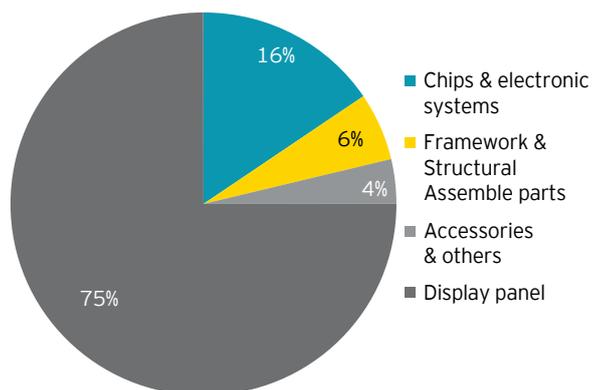
**Air conditioner (1 ton)**



**Refrigerator (median range, 200L, double door, no frost free)**



**Television (32" LCD)**



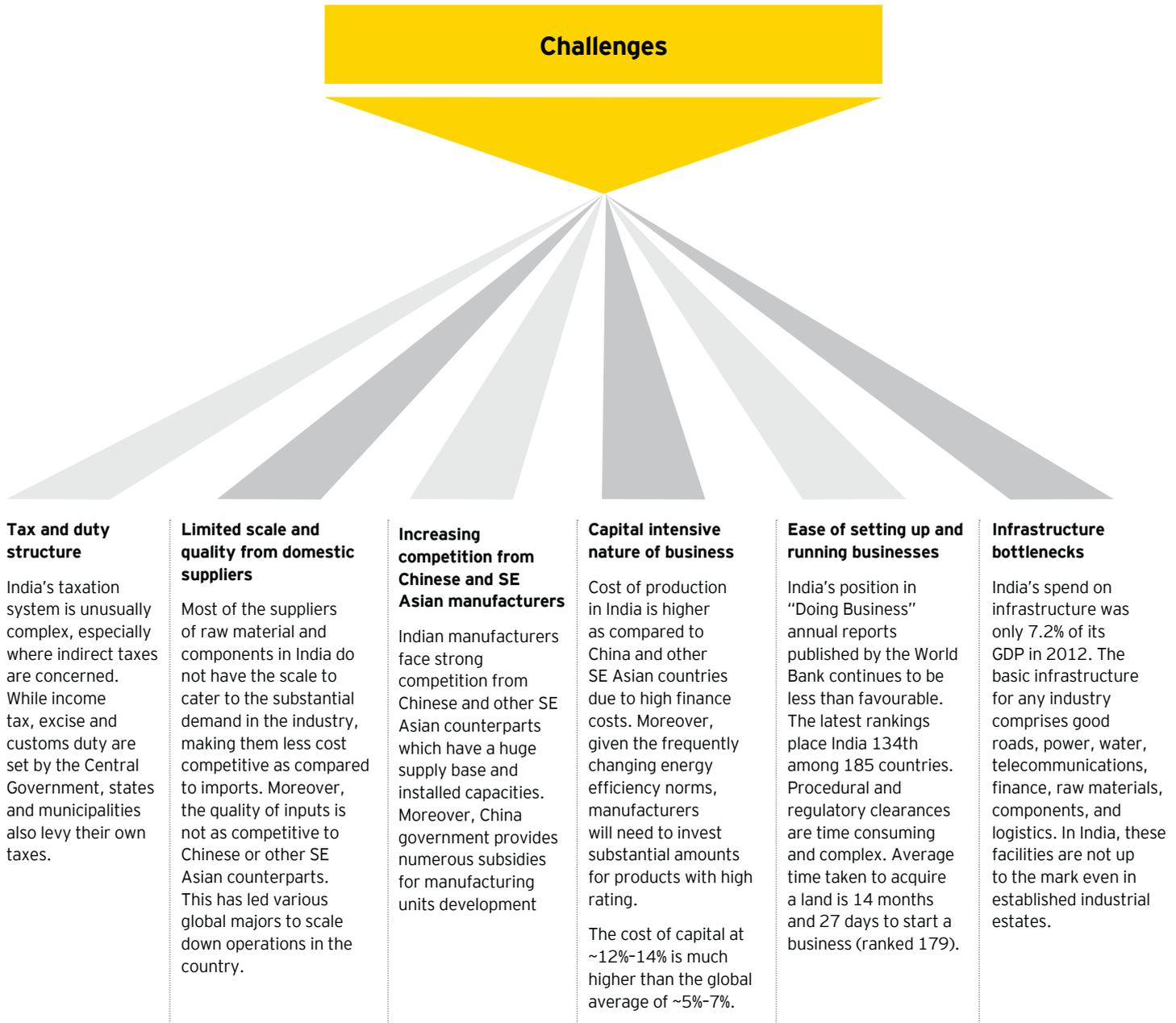
Source: Centrum Research report

Product	% localization	Parts majorly imported
<b>AC</b>	<b>30%-40%</b>	Sheet metal
		Compressor
		Coil
		Motor
		Refrigerant
		Electronic components/ semiconductors
<b>Refrigerator</b>	<b>70%-75%</b>	Sheet metal
		Compressor
		Condenser
		Motor
		Refrigerant
		Electronic components/ semiconductors
<b>Washing machine</b>	<b>60%-70%</b>	Sheet metal
		Motor
		Electronic components/ semiconductors
<b>TV</b>	<b>25%-30%</b>	LCD or LED panel
		Electronic components/ semiconductors

% localization refers to the amount of components and raw materials being procured locally or manufactured in-house or through 3rd parties in India



# There are some impediments to expanding the local manufacturing base ...



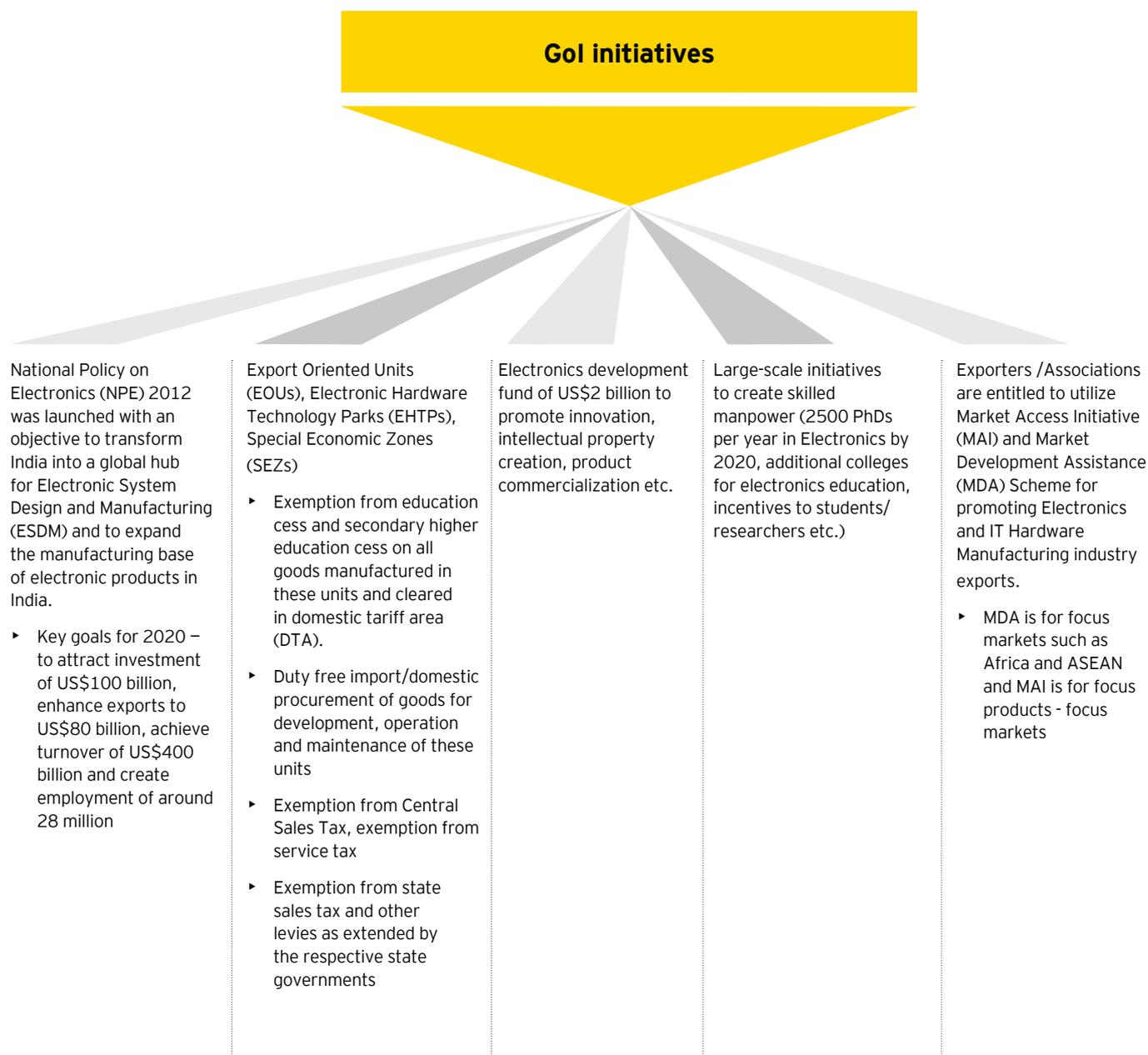
Source: World Bank 2013 Doing Business 2014; "Indian Electronic System Design and Manufacturing (ESDM) Disability Identification Study," January 2014, IESA-EY report, <http://www.iesaonline.org/downloads/IESA-EY-report-Indian-ESDM-Disability-Identification-Study.pdf>, accessed 25 February 2015

## ... which the Government has aimed to address in the past through several schemes and benefits (1/2)

Key schemes/incentives	Benefits
Electronics Manufacturing Clusters	There will be subsidies on the infrastructure cost to set up special electronics manufacturing zones.
Modified Special Incentive Package Scheme (MSIPS)	Government will reimburse certain taxes and duties for 10 years, amounting to 20% (SEZs) to 25% (non-SEZs) of capital investment. However, white goods are not covered in this scheme and are in the draft MSIPS document.
Merchandise Exports from India Scheme (MEIS)	<p>As per Foreign Trade Policy (2015-2020), the Focus Product Scheme, Market Linked Focus Product Scheme and Focus Market Scheme are now under a single MEIS scheme.</p> <p>Export of notified goods (includes AC parts and compressors, refrigerating equipment compressors, fully automatic washing machines and color TV) to notified markets (includes countries in Latin America, Africa, CIS, Eastern Europe and Asia-Oceania block) will be payable as percentage of realized FOB value (in free foreign exchange).</p> <p>Moreover, there will be a provision for higher level of rewards under MEIS scheme for export items with high domestic content and value addition.</p>
Export Promotion Capital Goods (EPCG)	Zero duty EPCG scheme allows import of capital goods for pre-production, production and post-production (including CKD/SKD thereof as well as computer software systems) at zero Customs duty. As per the Foreign Trade Policy 2015-2020, the specific export obligation under EPCG scheme where capital goods are procured from indigenous manufacturers has been reduced to 75% from 90% in order to promote domestic capital goods manufacturing industry.
Favourable climate for foreign direct investment	100% foreign direct investment is allowed in the electronics hardware-manufacturing under the automatic route.
Advance Authorization	Duty free imports of inputs allowed for exports provided minimum 15% value addition is achieved.
Initiatives to reduce imports	<ul style="list-style-type: none"> <li>▶ Education cess and secondary and higher education cess is being levied on imported electronic products</li> <li>▶ End of concessions on excise duties on electronics goods, resulting in countervailing duties going up another 2% and leading to imports getting more expensive.</li> <li>▶ The GoI banned duty-free imports of flat-panel television sets beginning August 2014 and imposed a duty of 36.5%, as a step to boost local manufacturing.</li> </ul>
Investment allowances and deductions	Investment allowance (additional depreciation) at the rate of 15% to electronics manufacturing companies that invest more than INR250 million in plant and machinery. This benefit will be available for three years, i.e., for investments made up to 31 March 2017.
Custom duty reduction	<ul style="list-style-type: none"> <li>▶ LCD and LED TV panels smaller than 19 inches: Basic Customs Duty reduced to zero</li> <li>▶ Colour picture tubes for cathode ray TVs : Basic Customs Duty reduced to zero</li> <li>▶ Specified parts of LCD and LED panels for TVs (including open cell, plate diffuser, film diffuser): Basic Customs Duty exempted on specified parts</li> </ul>

Source: DeitY website, <http://deity.gov.in/>, accessed 25 February 2015

... which the Government has aimed to address in the past through several schemes and benefits (2/2)



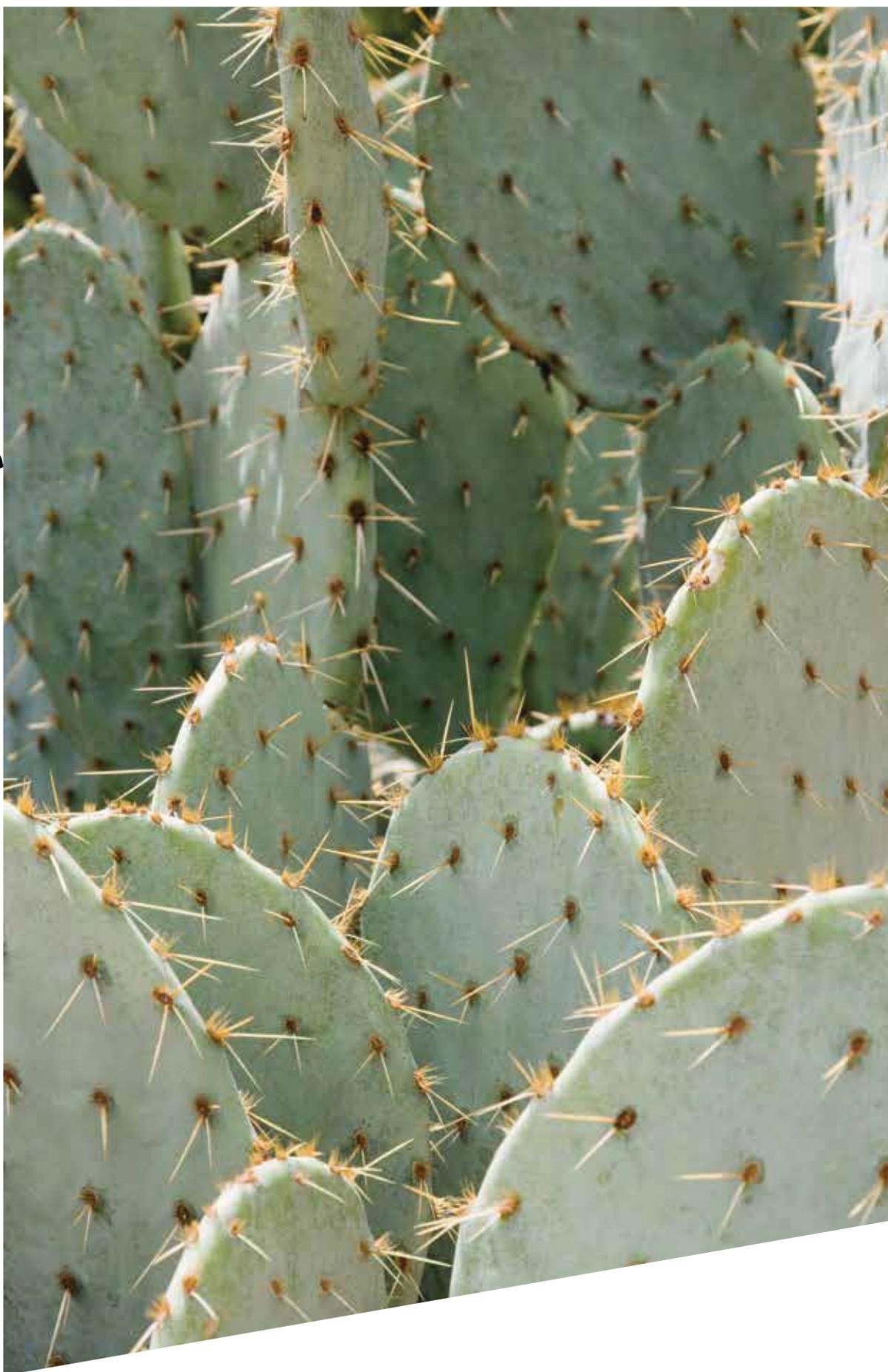
Source: DeitY website, <http://deity.gov.in/>, accessed 25 February 2015

However, the industry sentiment reflects need for further for change and proactive intervention from the Govt.

<p><b>“Energy norms are getting tightened every year which leads to huge investments for manufacturers... Hence government should either provide benefits in terms of excise reduction at customer-end or taxes/ subsidies at manufacturer-end... There needs to be an engagement process between manufacturers and regulatory body”</b></p> <p>South Korean consumer durables company</p>	<p><b>“There is a need to increase domestic consumption so that companies look to increase manufacturing... need to simplify and create uniform tax rules eg. if GST is implemented, then state govts. should not levy additional taxes or octroi)... MSIPS should include home appliances”</b></p> <p>American consumer durables company</p>	<p><b>“We propose a reduction in the excise duty to give an overall boost to the sector. Also, it's crucial that reforms like GST be implemented... We also recommend reduction in the custom duty on OLED modules and import of parts for manufacturing air conditioners, washing machines and refrigerators”</b></p> <p>Japanese consumer durables company</p>
<p><b>“Industry demands export benefits and incentives, for example, China gives subsidies on exports that helps develop base”</b></p> <p>American consumer durables company</p>	<p><b>“Supplier ecosystem needs to be developed by providing incentives to small scale industries”</b></p> <p>Indian consumer durables company</p>	<p><b>“Government needs to benchmark imports and work on removing the grey market for durables.. Duty structure and labour laws need to be reformed”</b></p> <p>South Korean consumer durables company</p>
<p><b>“We also recommend review of existing FTAs, which have not been in favour of the industry overall, and not to sign any new FTAs for the next five years. The government should also accelerate implementation of uniform goods and service tax (GST) which will lower transaction costs... The government needs to provide same incentives to home appliances industry which are available to consumer electronics industry as these products have substantial electronic parts. Therefore, there is an urgent need to promote manufacturing of these products and its inputs within the country.”</b></p> <p>Director, leading Indian manufacturer and marketer of home appliances</p>		

Source: Primary research; “Do not to sign any new FTAs for next 5 years: Anirudh Dhoot,” Business Standard website, [http://www.business-standard.com/content/budget-2014/do-not-to-sign-any-new-ftas-for-next-5-years-anirudh-dhoot-114070200236\\_1.html](http://www.business-standard.com/content/budget-2014/do-not-to-sign-any-new-ftas-for-next-5-years-anirudh-dhoot-114070200236_1.html), accessed 25 February 2015; “Union Budget 2105! What is CEAMA’s wish list?,” IIFL website, [http://www.indiaonline.com/article/news-top-story/union-budget-2105-what-is-ceama-s-wish-list-115021600691\\_1.html](http://www.indiaonline.com/article/news-top-story/union-budget-2105-what-is-ceama-s-wish-list-115021600691_1.html), accessed 25 February 2015

# Disabilities to growing India as a manufacturing hub



# Taxation-related disadvantage

## Unfavorable and Complex Tax Regime

- ▶ India's taxation system is complex, especially where indirect taxes are concerned. While income tax, excise and customs duty are set by the Central Government, states and municipalities also levy their own taxes.
- ▶ At its present structure, the total tax incidence in India stands at around 25%-30%, whereas the corresponding tariffs in other Asian countries are between 7% and 17%.
- ▶ Central sales tax (CST) is applicable when domestic manufacturers procure components from other states, which cannot be set off against Sales Tax (CST/VAT) payable on end products. This increases the cost of procuring components for domestic manufacturers.

## Differential duty structure

- ▶ Due to implementation of FTAs, consumer electronics and home appliances sector is facing inverted duty structure, where the final product is being imported at 0/concessional import duty, whereas inputs attracted around 7.5%-10% duty.
- ▶ Manufacturers of products in the country have to pay non-zero basic customs duty on some imported components, especially for those with dual-use functionality (e.g., fuses, inductors, batteries, certain ICs, etc.).
- ▶ Although there is concessional duty applicable on many raw materials/parts/components used in manufacturing of electronics products, the procedure of availing this concessional duty is sometimes long and complex, and results in stock-outs or increased inventory-carrying costs for domestic manufacturers.

## Excise duty

- ▶ Excise duty on consumer durables was rolled back by 2% effective January 2015, increasing it to 12%

Source: "Opportunities and Challenges in Consumer Electronics & Home Appliances," December 2013, CEAMA-Arthur D Little report, [http://www.adlittle.com/downloads/tx\\_adreports/Consumer\\_appliances\\_report.pdf](http://www.adlittle.com/downloads/tx_adreports/Consumer_appliances_report.pdf), accessed 25 February 2015, "Excise sops for cars, consumer durables to end in the new year," The Financial Express website, <http://www.financialexpress.com/article/economy/excise-sops-for-cars-consumer-durables-to-end-in-the-new-year/24687/>, accessed 25 February 2015

# Disability due to under-developed local supplier base

## Limited local supply base

- ▶ Issues arising from inadequate availability of components are due to low levels of component-manufacturing activity in India and the absence of strong component distribution hubs that can import and trade components in large quantities. Although there is some manufacturing activity in the country, it is limited to a few parts of its component ecosystem
- ▶ 60%-70% of input in major appliances have to be imported due to low supplier base in India.
- ▶ Moreover, the quality and cost of components available in the Indian market is uncompetitive to Chinese and SE Asian markets.

## Manufacturers moving into trading form

- ▶ An inadequate component-related ecosystem also discourages domestic manufacturing of end products in two ways:
- ▶ Individual manufacturers have curtailed import of components for their own use (in relatively small amounts) from different global component-manufacturing locations, since it entails additional effort without any cost advantage vis-à-vis getting end products manufactured in other low-cost manufacturing countries. It tends to encourage trading of end products vis-à-vis manufacturing these in the country by importing required components.
- ▶ The longer supply chain of components results in high inventory-carrying and freight costs.

## Competition from other low-cost countries

- ▶ Indian suppliers face strong competition from Chinese and other SE Asian countries, which have a considerable supply base and installed capacities.
- ▶ Moreover, the Government of China provides numerous subsidies for manufacturing units development.

Source: "Opportunities and Challenges in Consumer Electronics & Home Appliances," December 2013, CEAMA-Arthur D Little report, [http://www.adlittle.com/downloads/tx\\_adreports/Consumer\\_appliances\\_report.pdf](http://www.adlittle.com/downloads/tx_adreports/Consumer_appliances_report.pdf), accessed 25 February 2015

# Disabilities arising due to cost of capital and other costs

## **Cost of Capital**

- ▶ The high cost of working capital and capex-related financing (receivables and payables) due to high interest rates is a major challenge faced by domestic manufacturers, since it increases the overall cost of finance.
- ▶ The cost of capital at ~12%-14% is much higher than the global average of ~5%-7%.

## **Manufacturing costs**

- ▶ Elevated cost of manufacturing (conversion costs) due to inadequate availability/reliability of power (resulting in its high blended cost), high cost of real estate, etc.
- ▶ Given the frequently changing energy efficiency norms, manufacturers need to make significant investments for products with high rating.

## **Other costs**

- ▶ The relatively poor perception of India as an electronics-manufacturing destination worldwide has resulted in high international marketing expenses being incurred by domestic manufacturers.
- ▶ To sustain demand levels, manufacturers have to incur increased interest costs of “zero-interest” schemes to attract customers into buy-now-pay-later schemes.

Source: “Indian Electronic System Design and Manufacturing (ESDM) Disability Identification Study,” January 2014, IESA-EY report, <http://www.iesonline.org/downloads/IESA-EY-report-Indian-ESDM-Disability-Identification-Study.pdf>, accessed 25 February 2015

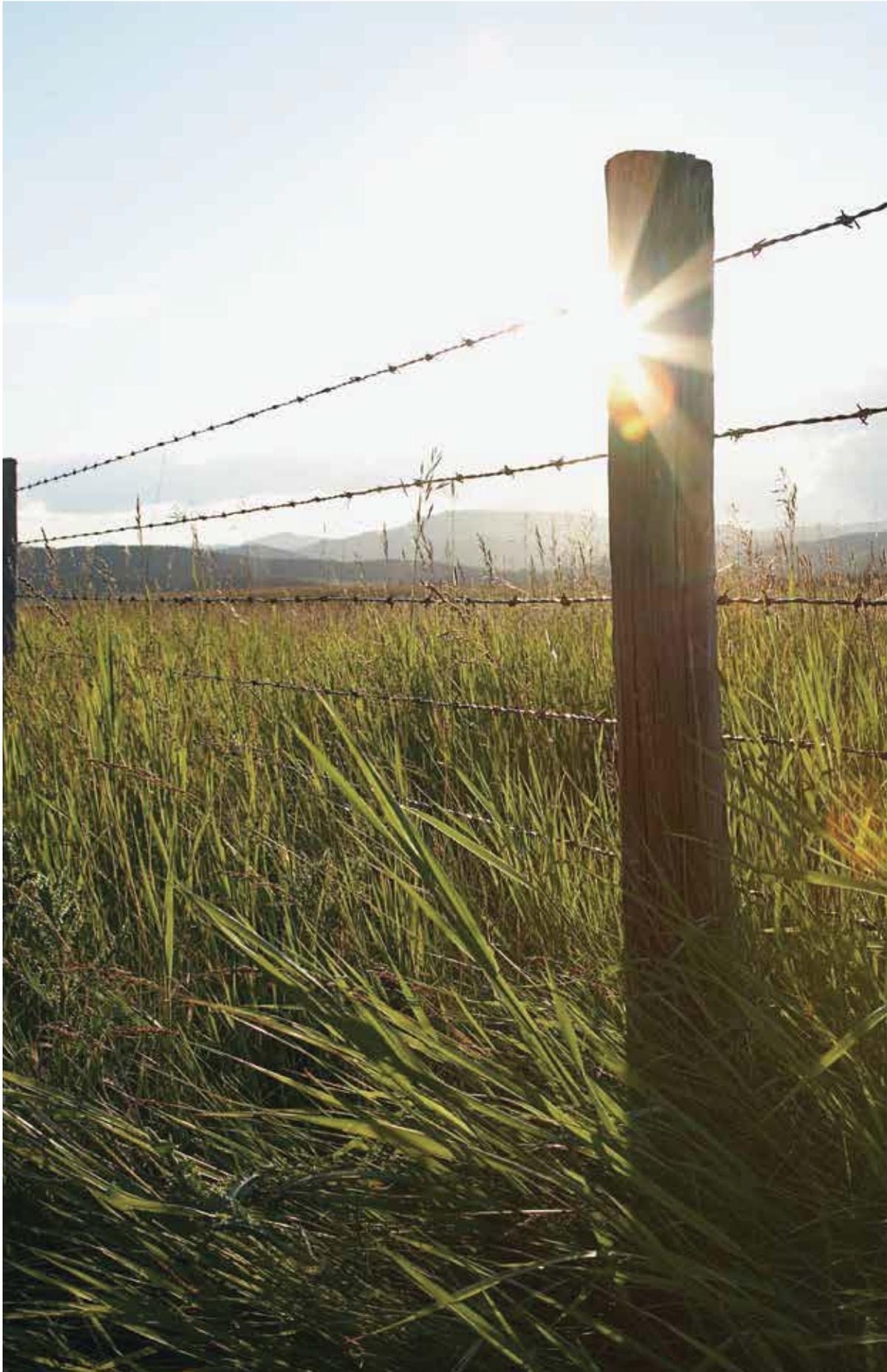
# Disability due to poor infrastructure and relative ease of setting up and running business in India

## **Difficulties in doing business in India**

- ▶ The country’s procedural and regulatory clearances are time consuming and complex
  - ▶ According to industry sources, it takes up to an year to set up a manufacturing plant in the country.
  - ▶ A new production line could take up to six months to become fully operational.
- ▶ Various legislations are to be complied with, e.g., Factories Act, Industrial Employment Act, Contract Labour Act, Minimum Wages Act, Trade Unions Act, etc. Manufacturing units also have to comply with IPR laws and environmental laws.

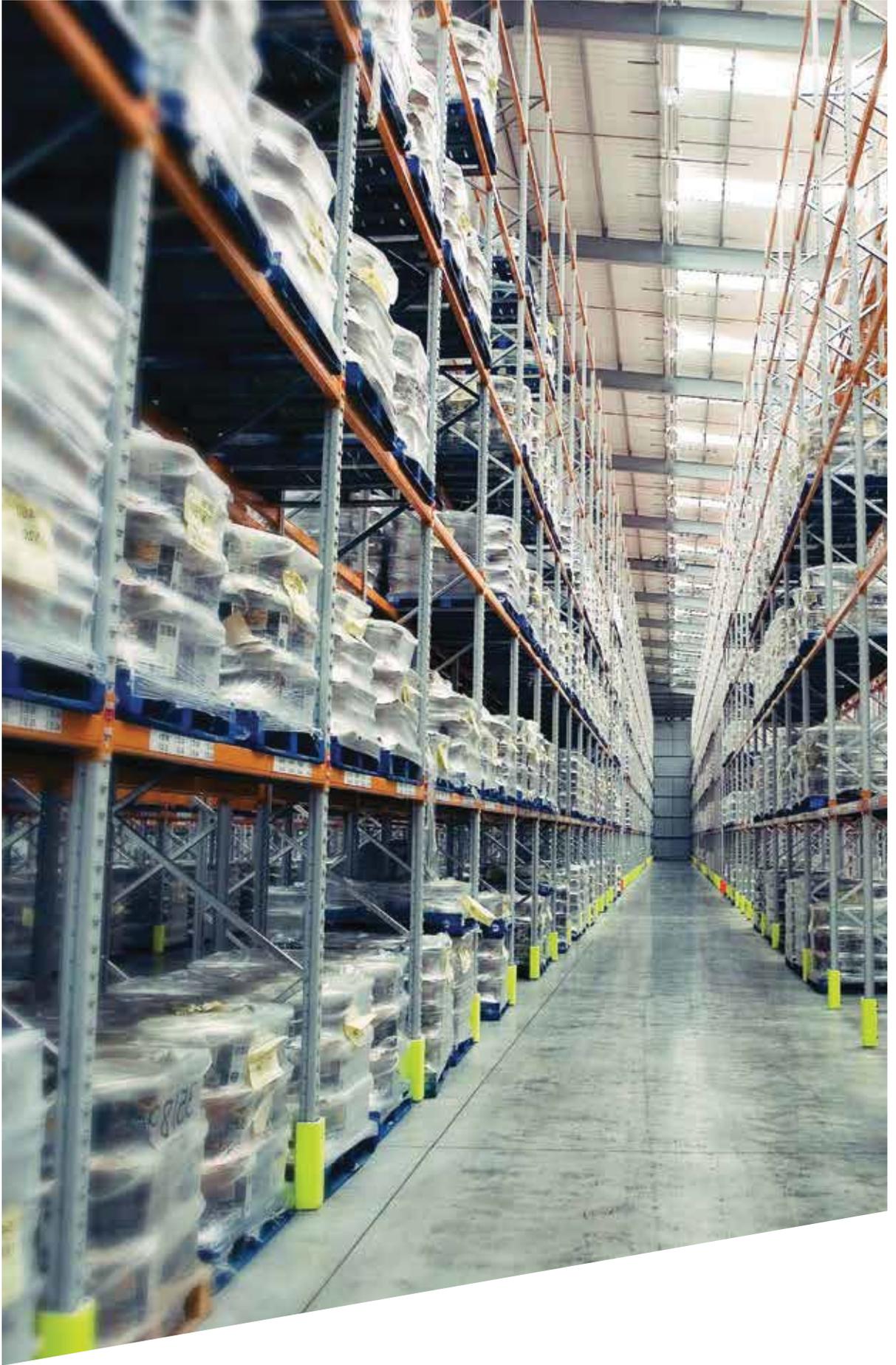
## **Weak infrastructure**

- ▶ The basic infrastructure for any industry comprises good roads, power, water, telecommunications, ports and logistics. In India, availability of these facilities is not up to the mark even in established industrial estates.
- ▶ The lack of proper roads and sales infrastructure results in distribution challenges for consumer durables companies catering to markets in smaller semi-urban cities, rural areas and remote villages.
- ▶ There is port congestion for both exports and imports due to unavailability of containers and long documentation process.



# Recommendations

Highlights of Union Budget 2015-16 and un-met expectations



# Announcements in Union Budget 2015-16 for TV and white goods industry

1	2	3	4	5
Basic Customs Duty (BCD) of back light unit module for use in the manufacture of LCD/LED TV panels reduced to Nil from 10%. BCD for Organic LED (OLED) TV panels also reduced to Nil from 10%.	BCD on C-Block for compressor, over load protector (OLP) and positive thermal co-efficient and crank shaft for compressor for use in the manufacture of refrigerator compressors is proposed to be reduced from 7.5% to 5%.	Goods and Services Tax (GST) for a state-of-the-art indirect tax system is proposed to be implemented by 1 April 2016.	As part of the progress toward GST, it is proposed to subsume the education cess and the secondary and higher education cess in central excise duty. In effect, the general rate of central excise duty of 12.36% and including the cesses is being rounded off to 12.5%.	To facilitate a smooth transition to levy of tax on services by both the Centre and the states, it is proposed to increase the current rate of service tax plus education cesses from 12.36% to a consolidated rate of 14%

## With Budget 2015-16, the Government expresses its intent on making India a manufacturing hub through various initiatives

### Reduction in corporate tax rate

- ▶ Base rate of corporate tax remains unchanged for both domestic and foreign companies.
- ▶ However, it has been proposed to reduce the rate of corporate tax from 30% to 25% over the next four years starting from next year.

### Reduction in tax rate on royalty and fees for technical service

- ▶ The Government has proposed to reduce the rate of income tax on royalty and fees for technical services from 25% to 10% to facilitate technology inflow to small businesses at low costs.

### Enabling ease of doing business in India

- ▶ There is a proposal to set up an e-Biz portal, which will integrate 14 approvals at one source.
- ▶ The Government plans to appoint an Expert Committee to examine the possibility and prepare a draft legislation where the need for multiple prior permissions can be replaced with a pre-existing regulatory mechanism.
- ▶ To further facilitate the ease of doing business, online central excise and service tax registration will be done in two working days. The assessee under these taxes will be allowed to issue digitally signed invoices and maintain electronic records. These measures will cut down considerable paper work and red tape.
- ▶ The time limit for taking CENVAT credit on inputs and input services is being increased from six months to one year as a measure of business facilitation.

### Promoting start-up ecosystem

- ▶ The Government is establishing a mechanism to be known as Self-Employment and Talent Utilisation (SETU).
- ▶ SETU will be a techno-financial, incubation and facilitation program to support all aspects of start-up businesses, and other self-employment activities, particularly in technology-driven areas. INR10 billion are being set aside initially in NITI Aayog for this purpose.

### Fostering R&D and innovation

- ▶ Atal Innovation Mission (AIM) will be an Innovation Promotion Platform involving academics, entrepreneurs, and researchers and draw upon national and international experiences to foster a culture of innovation, R&D and scientific research in India.
- ▶ Initially, a sum of INR1,500 million is being earmarked for this purpose.

## Though the Budget had its positives, expectations from the industry are yet to be met



- ▶ Commitment to introduce GST by 1 April 2016
- ▶ Increase in time limit for availing CENVAT on inputs/input services
- ▶ Uniform excise duty and CVD post absorption of cess
- ▶ Streamlining of procedures and documentation



- ▶ Overall increase in excise duty and service tax rates
- ▶ Increase in non-creditable customs cess by virtue of increased CVD rate
- ▶ Did not include any incentives for manufacturing of ACs and washing machines

## Our recommendations to realize the potential of “Make In India”

The GoI needs to create a healthy business environment with efficient administrative machinery and treat home appliances under the gamut of electronic products and extend the benefits of MSIPS, EMC and other schemes, since there is very high degree of electronics involved

1	2	3	4	5
Build local scale by driving domestic consumption, and promoting exports from India (drive toward lowering total cost of production)	Review and amend taxation regime, duty structures and incentive schemes to (a) make the process simpler (b) increase competitiveness of local manufacturing	Promote and incentivize component manufacturing to improve local supplier ecosystem; attract global OEM and component manufacturers	Improve the ease of doing business in India and attract global investors	Lowering finance costs to improve financial viability of doing business in India

## Recommendations in detail

Area	Recommendation	Responsibility
Stimulating demand	<ul style="list-style-type: none"> <li>▶ <b>Increase the local demand base</b> so that companies look to increase manufacturing, as currently, the companies have adequate facilities to service demand for the next five to six years.                             <ul style="list-style-type: none"> <li>▶ Hence, the Government needs to reduce interest rates and taxes to increase disposable income in the hands of consumers, which is likely to lead to an uptake of discretionary spend on consumer durables.</li> </ul> </li> </ul>	Ministry of Finance
	<ul style="list-style-type: none"> <li>▶ <b>Introduction of 0% finance scheme:</b> Allowing companies to offer such schemes can not only drive the sales of consumer durables even in a weak economy, but also empower consumers looking to buy consumer goods on easy monthly instalments without paying any interest on the loan amount. Almost 30% of overall sales happen through financing schemes, since they help in incentivizing sales.</li> </ul>	RBI

## Recommendations in detail

Area	Recommendation	Responsibility
Trade policy related	<ul style="list-style-type: none"> <li>▶ <b>Increase the demand base by incentivizing exports:</b> Need to develop the export base for creating the push for increasing manufacturing base to meet the new exports demand.                             <ul style="list-style-type: none"> <li>▶ Expanding trade agreements with export attractive regions such as Africa and Bangladesh.</li> </ul> </li> </ul>	Ministry of Commerce
	<ul style="list-style-type: none"> <li>▶ <b>The status of “deemed export” should be granted to products/ components manufactured and sold in India.</b> This will enable the benefits of drawback, advance authorization and refund of output Excise duty paid by manufacturers by availing credit of input taxes paid on components imported and made in the country and paid for in cash for value addition. Domestically manufactured electronic products (DMEP) for the purpose of conferring the status of deemed export on them should be identified by using domestic value addition norms, where the threshold progressively increases over the years.</li> </ul>	DeitY, Ministry of Finance
	<ul style="list-style-type: none"> <li>▶ <b>Expand the scope of MEIS</b> by extending notified products to include AC, refrigerators and semi-automatic washing machines and notified markets to include Middle East.</li> </ul>	Ministry of Finance
Tax and budget related	<ul style="list-style-type: none"> <li>▶ <b>Roll back of excise duty:</b> It needs to be reinstated at 10%, instead of the current 12%, as the industry is still struggling and needs reduced price tag for the consumer so that demand can be revived.</li> <li>▶ <b>CST exemption for any inter-state purchase of components or raw materials</b></li> <li>▶ <b>Excise duty relaxation on manufacturing of higher-rated home appliances</b> to encourage manufacturing of more energy efficient products, at a time when energy standards are undergoing a severe upward revision.</li> <li>▶ <b>Reform inverted duty structure or introduce reduction of customs duty on components for high-import products:</b> <ul style="list-style-type: none"> <li>▶ FPD to 0% to provide a level-playing field to domestic manufacturers as well as importers of FPDs, encourage panel manufacturing in the country and create a competitive environment</li> <li>▶ Pre-printed steel sheets, AC compressors and washing machine motors in order to enhance manufacturing set-ups</li> </ul> </li> <li>▶ <b>Deferred payment of excise duty:</b> <ul style="list-style-type: none"> <li>▶ It should allow deferred payment of excise duty for 7 years to manufacturers (threshold value addition).</li> </ul> </li> </ul>	Ministry of Finance
Expanding the scope of current Government policies	<ul style="list-style-type: none"> <li>▶ <b>Expand the scope of M-SIPS:</b> including white goods into M-SIPS, covering capital as well as operational expenses and extending the applicability period for MSIPS applications from July 2015 to end of 2020.</li> </ul>	DeitY; Ministry of Finance
	<ul style="list-style-type: none"> <li>▶ <b>Expand the scope of preferential market access (PMA)</b> scheme to include TVs and white goods.</li> </ul>	DeitY

## Recommendations in detail

Area	Recommendation	Responsibility
<b>Enabling supply ecosystem</b>	<ul style="list-style-type: none"> <li>▶ <b>Incentivize and support local component manufacturing and domestic value addition.</b> For example, priority sector treatment to component manufacturing and providing privileges and sops like duty benefits and tax exemptions.</li> <li>▶ Setup duty-free component trading and warehousing zone (component FTWZ) to facilitate ease of raw material supply</li> <li>▶ Encourage top global OEM and Component makers to manufacture in India               <ul style="list-style-type: none"> <li>▶ Announce policy measures to attract top global suppliers of key components like compressors, motors and LCD panels</li> <li>▶ Develop a safe harbour policy and advance pricing agreements (APA) to reduce transfer pricing disputes</li> </ul> </li> </ul>	Ministry of Finance  DeitY, Department of Commerce  DeitY, Department of Commerce, Ministry of Finance
<b>Ease of doing business</b>	<ul style="list-style-type: none"> <li>▶ Enable self-certification for custom clearances of zero duty components and inputs</li> <li>▶ Setup empowered National Electronics Commission</li> </ul>	Ministry of Finance
<b>Lowering finance costs</b>	<ul style="list-style-type: none"> <li>▶ <b>Interest subvention:</b> Interest subvention of 2%-5% of the interest rate should be provided on interest paid on working capital. The extent of subvention provided should increase with growth in domestic value addition. This would help offset high finance cost.</li> <li>▶ <b>Reduce borrowing interest rates</b> in order to reduce high financing costs so that small manufacturers can thrive.</li> </ul>	Ministry of Finance

With the “Make in India” initiative, India has the potential to emerge as the manufacturing destination of the future

- ▶ Given the right support and thrust from the Government, India can look at adding significant value to products manufactured locally.
- ▶ Indian brands have the potential to become leading global brands.
- ▶ With the right impetus, the consumer durables sector can repeat the success of Indian IT companies

<b>2020 target for electronics</b>	<b>Turnover of US\$400 billion in electronics</b>	<b>Target exports of US\$80 billion</b>	<b>Employment generation for 28 million people</b>
<b>Potential value addition across products of up to 80%</b>		<b>By 2025, India is expected to go up from the twelfth to the fifth-largest position in the consumer durables market in the world.</b>	

Source: NPE 2012, IBEF

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