



# The India-U.S. dynamic – better together

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# Foreword

Over the last three years, India-U.S. bilateral relations have business and commerce at its centre along with increasing convergence on regional and global priorities. The cooperation is broad-based and multi-sectoral, extending to critical areas of infrastructure, defence, aviation, clean energy and education. The Strategic & Commercial Dialogue, established in 2015, exemplifies this reality.

The vast presence of U.S. companies operating in India and the increasing footprint of Indian companies in the U.S. underscores the role of the private sector in anchoring business between the two nations. The next wave of growth must come from small and medium enterprises, be it in digital; renewables; cybersecurity; robotics; artificial intelligence or other areas where both countries have unique propositions to offer the world.

India is at the cusp of an unprecedented transformation powered by factors ranging from rapid urbanization to increasing consumption driven by India's young population. Thus there has not been a better time to reimagine the relationship between the largest economy in the world and the fastest growing large economy.

KPMG in India is proud to collaborate with AMCHAM India as its knowledge partner and share an industry perspective on India's economy, the India-U.S. dynamic and highlight some of the key industry related challenges faced by U.S. companies operating in India.

I look forward to our working together to contribute in shaping the economic partnership of the century.



Arun M. Kumar  
Chairman and CEO,  
KPMG in India

The economic partnership has been the driver of the India-U.S. relationship. While U.S. companies have been operating in India since 1902, the partnership came to fruition in the 1990s with the opening up of the Indian economy. Currently, more than 1,000 American companies synergize their core competencies to enhance their global businesses. The comprehensive government to government engagement created the first India-U.S. Strategic and Commercial Dialogue in 2015. The industry participation across the spectrum of aerospace, defense, civil aviation, infrastructure, energy, education, agriculture, etc. created the framework for significant growth in the partnership.

India is emerging as the fastest growing economy, third in purchasing power parity. With the government's emphasis on technology and innovation, digitization, manufacturing, smart cities and infrastructure, energy, agriculture and food processing, there is tremendous potential for enhancing the economic partnership. Both countries face the common challenges of terrorism and cyber security in digital economies, hence the sharing of technologies and innovations are vital to strengthening the bilateral relationship.

AMCHAM India, and KPMG in India as its knowledge partner, have highlighted the overview of the India-U.S. economic partnership and some of the key issues and concerns of U.S. companies in India.

We look forward to identifying additional issues to be raised at the appropriate government platforms in both countries.



Ranjana Khanna  
Director General CEO,  
AMCHAM India

# Overview of the Indian economy and the U.S. dynamic





# India-a nation on the move



Home to 1.3 billion people<sup>1</sup>, India boasts of the second-largest consumer base globally, and is forecasted to become the youngest country in the world by 2020<sup>2</sup>. Outpacing China as the fastest growing large developing economy, India has witnessed a growth of over 7 per cent, while global growth has remained sluggish<sup>3</sup>. Comprehensive fiscal, monetary and international policies along with the implementation of several domestic reforms have strengthened the Indian economy significantly.

The country's resilience to global economic and political fluctuations is sustained by several development initiatives, structural reforms and regulatory changes that the Indian government has introduced. To achieve holistic growth, the government has launched several flagship programmes focussing on manufacturing, digitisation, infrastructure, etc. These programmes have led to increase in public and private investments in housing, rural and urban transformation, and infrastructure, which would in turn address the challenges of rising urbanisation.

In a bid to leverage its demographic dividend, the government has been focussing on education and skill development of its young workforce, along with providing institutional flexibility for additional job creation. Its efforts to encourage an entrepreneurial ecosystem, which leverages the human capital of the country, is aimed at achieving heightened growth for different industries.

Recent reforms, such as the Goods and Services Tax, the bankruptcy code, the abolition of the Foreign Investment Promotion Board (FIPB) and the measures to deal with bad loans of the public sector banks, are vital to sustain and enhance the growth that India has witnessed in the last few years.<sup>4</sup>

As the country's growth continues to drive consumption, there is an increasing focus on structural changes with respect to technology adoption, financial inclusion and digital connectivity to improve India's global competitiveness.

Five key themes are expected to drive the India story in the next decade: urbanisation, consumerism, digitisation, infrastructure development and the start-up boom.

The Indian economy is expected to continue on its current high growth trajectory, supported by strong macro-economic fundamentals. India's efforts towards achieving holistic progress across its social and economic fronts is poised to improve employment rates, production efficiency and social equality. Several initiatives and reforms that have been introduced by the government strive to balance fiscal prudence with economic growth, strengthening India's position in the global landscape. As a new global growth engine, the fiscal and regulatory measures adopted by the Indian economy are likely to subsequently lead to strong global economic growth.





## Urbanisation<sup>45</sup>

Every **sixth** person getting urbanised globally is an **Indian**

India to add **300 million** urban residents by **2050**



## Digitisation<sup>89</sup>

**730 million internet users** in India by **2020**

India's **digital economy** to reach **USD 1 trillion** in the **next 5-7 years**



## Start-up boom<sup>11,12</sup>

India to **double** its **start-up base** by 2020

**~300,000 jobs** to be created by start-ups by 2020



## Consumerism<sup>6,7</sup>

India's **median age** by **2025: 30**

**23%** of global middle class is likely to be Indian by 2030



## Infrastructure<sup>10</sup>

**USD 388 billion** to be spent on **construction** during **2016–20**

**USD 1 trillion required** until **2030** to upgrade **urban infrastructure**

Sources: <sup>45</sup>"Building and Construction", KPMG, accessed on 2 June 2017; <sup>89</sup>India projected to add 300 million urban residents by 2050: UN report", The Economic Times, 19 May 2016; <sup>6</sup>"Invest in India budget 2017", KPMG in India website, accessed June 2017; <sup>7</sup>"Outwardly modern, Indian youths' views reflect a troubling inclination towards intolerance", Counterview, 8 April 2017; <sup>11</sup>"India's Internet users to double to 730 million by 2020 leaving US far behind", The Economic Times, 17 August 2016; <sup>12</sup>"India's digital economy to touch 600L or in next five-seven years: IT minister", India TV News, 24 May 2017; <sup>10</sup>"Urban India Real Estate", KPMG, accessed on 2 June 2017; <sup>11</sup>"India now ranks third globally in number of incubators, accelerators: report", VC Circle, 6 May 2017; <sup>12</sup>"India likely to double its start-up base by 2020", Business Standard, 26 October 2016;

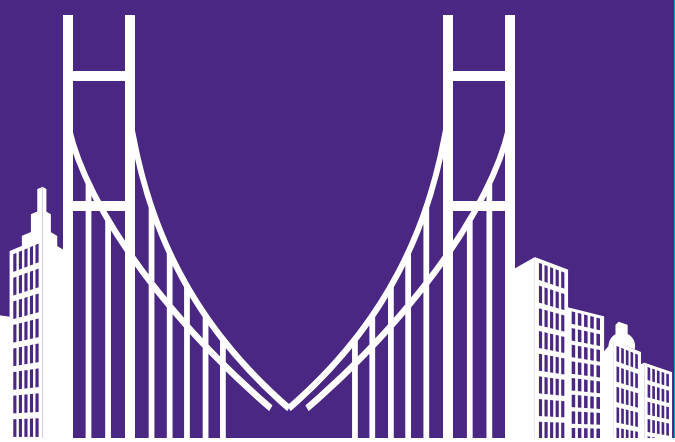
1. "Invest in India budget 2017", KPMG in India website, accessed June 2017

2. "India's demographic dividend", Thomson Reuters website, 07 July 2016

3. "Provisional Estimates of Annual National Income, 2016-17 And Quarterly Estimates of Gross Domestic Product, 2016-17", PIB, 31 May 2017

4. "Ease of doing business ranking: Narendra Modi govt firms up 295-pt reforms agenda for states", Financial Express, 23 January 2017

# The evolving India-U.S. dynamic



The India - U.S. relationship over the years has evolved on the basis of common ambition, values and interests. To the sceptics, though this partnership may not have appeared so destined three decades ago, in the backdrop of the Cold War and little commercial or cultural interaction, the trajectory of the effort made by the two nations in recent times to align with each other's interest has been simply remarkable. High powered government to government exchanges, growing prominence of the Indian American diaspora in both economic and government decision making and increasing strategic convergence on issues that matter have provided a sustained momentum to this bilateral cooperation. One can safely assume that this relationship can be characterized as the defining partnership of the 21<sup>st</sup> century.

Both countries have forged a strong economic and strategic partnership in key sectors such as aerospace and defence, banking, financial services and insurance, chemicals, dedicated freight corridors, energy and infrastructure. Today, U.S. companies recognize and value the potential of India's market, on the back of the rising middle class, talented workforce, and growing preference of Indian youth for foreign products. They are equally encouraged by the slew of economic and regulatory reforms implemented by the present government to create a level playing field for foreign investors and domestic companies. While U.S. MNCs' have shown their keenness to invest in India, there is an expectation for 'on the ground' implementation of the transformational reforms in order to streamline the ease of doing business in India. Effort towards simplifying India's tax structure, permitting process, land regulations, labour laws, streamlining FDI rules will certainly help unlock new investments opportunities for India and foster greater collaboration with U.S. companies.

As we look ahead, with Asia touted to be the growth driver of the world in the coming years, India will be one of the fastest growing large economies contributing to this growth. Transformative economic programmes such as Make in India, Digital India, SMART cities, Start-up India, Stand-up India have opened up a massive market for U.S. companies to do and grow business in India. At the same time, it has created opportunity for India to benefit from greater trade and investment thereby leading to employment and growth. The growing interest between both the nations in negotiating bilateral trade and investment relationship through a possible Bilateral Investment Treaty (BIT) is expected to open up new lines of investment thereby creating a win-win scenario for both the nations.

In summary, both India and U.S. have the character, capacity and competence to put in place the necessary policy framework and forge greater economic partnership to lay the groundwork for both broadening and deepening the strategic ties.

# India-U.S. bilateral relationship in a box<sup>1,2,3,4</sup>



Cumulative two way  
trade in 2016

**USD 115  
billion**

**5x** in 15 years



**India's  
largest**

trading partner accounting

for **16%** of India's  
total exports in  
2016



**3rd largest**

source of FDI for India



**500**

U.S. companies in India

and around **200**  
Indian companies  
in the U.S.



**133,000**

Indian students in U.S.  
contributing

**~USD 3.6 billion**

to U.S. economy  
in 2015



**1 in 12** Silicon

Valley **start-ups**  
founded by **Indian  
origin** entrepreneurs

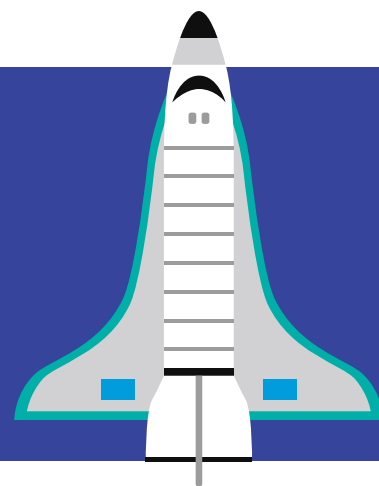
Sources: <sup>1</sup>India-U.S. trade and investment, Embassy of India, Washington D.C., accessed on 08 June 2017; <sup>2</sup>Top 10 countries with largest share of FDI inflows into India, Business Today, July 2016, accessed on 08 June 2017; <sup>3</sup>133,000 Indian students contribute \$3.6 billion to US economy, Economic Times, November 2015, accessed on 08 June, 2017; <sup>4</sup>Success of Indians in the U.S. showcases importance of education, accessed 08 June, 2017

# Sector outlook and challenges





# Aerospace and Defence

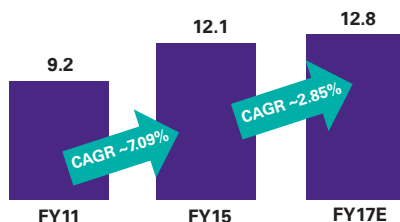


## Sector overview<sup>1,2</sup>



**2.3%** contribution to GDP  
**800,000** people employed  
**Fifth** in the world for military expenditure as of 2017

Market size of defence equipment in India (in USD billion)<sup>14</sup>

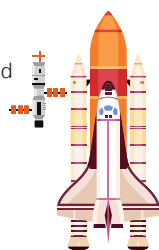


Defence expenditure

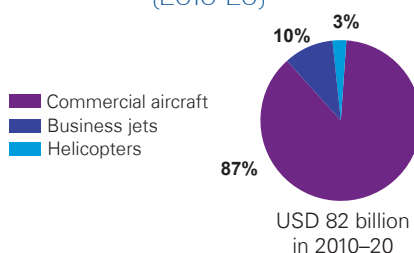


The Indian defence budget grew at a CAGR of 7.1 per cent during the period FY12–16 due to modernisation of equipment, military expansion and 'One Rank One Pension' scheme

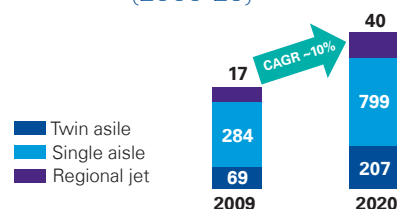
**9** Defence public sector undertakings<sup>3</sup> (DPSUs) and  
**41** Ordnance factories account for **50%** of domestic defence market share



Civil Aerospace market, % (2010–20)<sup>12</sup>



Commercial aircraft fleet growth (2009–20)<sup>12</sup>



## The India–U.S. dynamic

### Logistics Exchange Memorandum of Agreement, 2016<sup>4</sup>

It can help both the countries to access each other's designated military facilities for several logistics support during ports calls, military training, disaster relief operations, humanitarian operations, etc.<sup>5</sup>

### Reinvigorating defence manufacturing ecosystem through strategic partnership

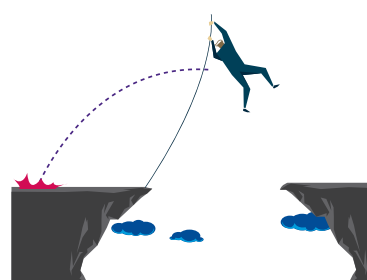
A strategic partnership is likely to lead to greater collaborations with U.S. defence original equipment manufacturers (OEMs) to cover manufacturing, transfer of technology (ToT), assistance in training skilled human resources and other support

Several Indian OEMs are seeking U.S. based supply partners to leverage their superior technology<sup>6</sup>



## Opportunities<sup>3,4,5</sup>

- **Regional connectivity:** Plan to double the number of airports in the next five years provides huge public private partnership (PPP) opportunity for U.S. companies
- **Emergence of private players:** New private players in this sector are keen on manufacturing in India with the help of partners in mature market like U.S.
- **Ease of doing business and liberalised FDI norms:** The 'Make in India' initiative and liberalised FDI norms are fostering business prospects. Recently, the government allowed FDI of up to 100 per cent in the defence sector under the automatic route
- **Modernisation of armed forces:** Likely to lead to the purchase of weapons by India and also result in collaboration between Indian and foreign players
- **Strategic Partnership Model:** This model is likely to lead to collaborations and help develop a defence industrial base in India
- **Special Economic Zones:** Several states in India have started offering tax concessions in the aerospace clusters or SEZs. U.S. companies could potentially take advantage of such SEZs to avail tax benefits and other concessions
- **Increase in demand:** There could be rise in demand for capital equipment such as aircraft and allied products



## Challenges<sup>3,4,5,11,15</sup>

- **Outdated infrastructure:** Infrastructure, that could support streamlined manufacturing in India, needs to be upgraded
- **Safety and security concerns:** It is challenging to manage Indian aviation's exponential growth due to the lack of global benchmarks in safety standards
- **Challenge of multiple stakeholders:** The engagements between state governments, airport operators and airlines need to be seamless for a healthier flow of communication and easier business
- **Talent gap:** There is a need to bridge the talent gap in India in order to attract foreign investors into the country
- **Offset Policy:** Mandatory offset requirement of 30 per cent for defence procurement with foreign players and the flexibility given to OEMs to modify partners is an impediment to U.S. players<sup>13</sup>
- **Defence Partnership Policy:** Although this policy boosts local manufacturing, there could be challenges related to order size and timely payment.



Sources: <sup>1</sup>"Achieving Self-Reliance and Promoting Exports", EXIM Bank, March 2016; <sup>2</sup>"Trends in world military expenditure, 2016", Sipri Factsheet, April 2017; <sup>3</sup>"Achievement Report June 2014-September 2016", Department of Defence Production, April 2017; <sup>4</sup>"India-US Defence Cooperation", Institute for Defence Studies and Analyses, 2 September 2016; <sup>5</sup>"India-US defence ties closest ever: US defence secretary", The Times of India, 4 December 2016; <sup>6</sup>"India-Defence", Export.gov, 8 August 2016; The Deccan Chronicle, 15 February 2017; <sup>11</sup>KPMG in India Analysis; <sup>12</sup>"Aerospace and Defence manufacturing policy", Government of Andhra Pradesh, accessed on 2 June 2017; <sup>13</sup>"Defence", Make in India, accessed on 2 June 2017; <sup>15</sup>Indian defence manufacturers cautiously optimistic on defence partnership policy", The Hindu Business Line, 26 May 2017

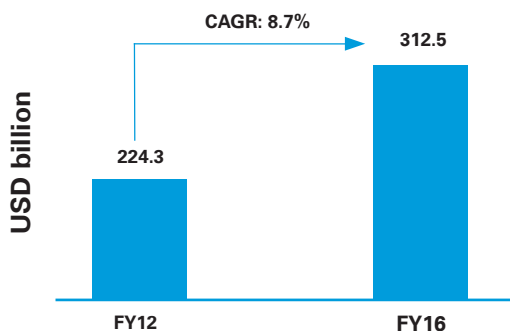
Note: <sup>14</sup>All currency conversion are at USD1 = INR66.97

# Agriculture and Food Processing

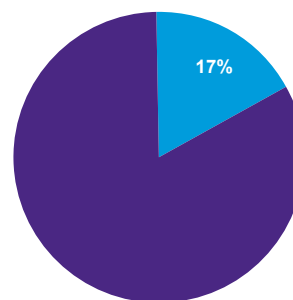


## Sector overview<sup>1,2</sup>

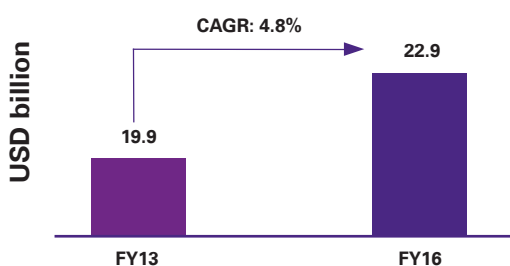
### Agriculture Gross Value Added (GVA)



### Agriculture as a percentage of India's GVA



### Size of the food processing industry (FPI)



### Employment

**54%**  
of population is engaged in  
agriculture (Census 2011)



**11.7%**  
FPI share of employment in  
all registered factories  
in FY14



## The India-U.S. dynamic<sup>3</sup>



Large scale programmes initiated  
between USAID and Government  
of India to improve food and  
nutritional security

**Feed the Future India  
Triangular Training  
Program**

**Agriculture Innovation  
Partnership Program**

### Increasing technological collaboration around:

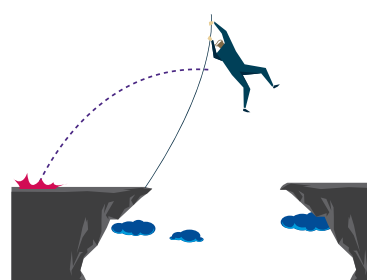
- Soil Management
- Satellite farming
- Crop Yield Predictions
- Remote Sensing
- Soil quality assays





## Opportunities

- **FDI liberalisation:** In June 2016, the Indian government allowed 100 per cent FDI for trading of processed food products, manufactured or produced in India, including the e-commerce route. The FDI relaxation provides an opportunity for U.S. companies to enter India through opening up of food retail outlets/online platforms<sup>4</sup>
- **Modern technologies:** India plans to operationalise 42 mega food parks by 2018, with an aim to enhance the country's food processing capacity. The initiative presents several opportunities for the U.S. firms to offer modern food processing equipment and technology to India<sup>5</sup>
- **Organic food:** In 2016, the organic food market stood at USD 500 million, which is expected to grow to USD 1.5 billion by 2020. The U.S. firms could leverage their expertise to tap this high potential market<sup>6</sup>
- **Research and development:** The U.S. firms could collaborate with Indian public and private players to offer technical expertise in areas such as crop, weather and pest management, disease forecasting, biotechnology and climate-smart agriculture. In addition, they can facilitate capacity enhancement and provide high-quality food ingredients and industrial inputs<sup>5</sup>
- **Increasing use of ICT in farming:** In line with the Indian government's initiative of creating Village Knowledge Center (VKC) and Resource centers (VRC), there exists massive opportunities for U.S. agri-tech companies to support the state governments in introducing advance technologies in farming
- **Digital India:** There is expected to be a lot of opportunities for companies to participate in the areas of communication, marketing, knowledge sharing, farm digital tools, etc.
- **E-marketing platform:** While the platform allows farmers to sell their produce anywhere in the country by connecting directly with the buyer, it has the potential to open up opportunities for integrators and other produce handling companies to procure on the e-platform directly from farmers



## Challenges

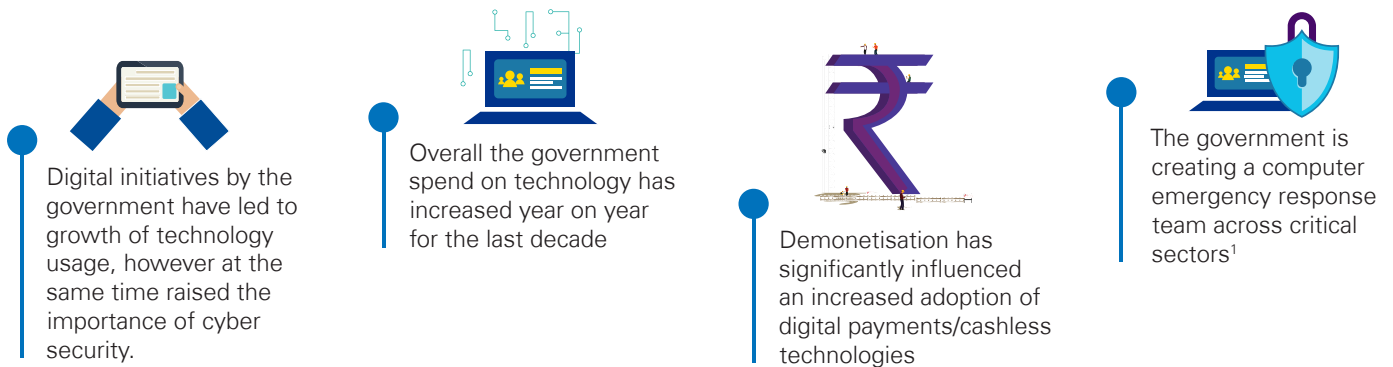
- **Lack of clarity on biotech crops:** Several American companies have made large-scale investments in the biotech sector. However, there is a lack of clarity in terms of commercialisation of biotech crops, such as GM mustard. Additionally, there are challenges in obtaining NOCs from state governments for conducting trials of biotech crops
- **Regulations on inventory holding:** The central and state governments, under the Essential Commodities Act 1955 have imposed stock limits on various food commodities. This is creating hindrances for the American firms planning to establish their presence in India<sup>7</sup>
- **Protectionist import policies:** In a bid to attain self-sufficiency, India has adopted several restraining policies, such as high agricultural tariffs, custom duty on demurrage charges on crude edible oils and sanitary and phytosanitary (SPS) measures restricting entry of specific U.S. products, which act as an impediment for the growth of free trade between the countries<sup>8</sup>
- **Rigid duty payment process:** As per the Budget 2017–18 announcement, the import duty for all cargos has to be paid on the same day when the Bill of Entry (BE) is assessed. Non-compliance will attract interest charges accountable from the same day thereby moving from the earlier rule where a relaxation of two working days was allowed
- **Agriculture IP issues:** In May 2016, agriculture IP issues were brought into mainstream IP, under the national IP policy. However, despite being IP intensive, these issues are kept within the purview of the Ministry of Agriculture, and not DIPP. Similar to copyright issues, agriculture IP issues should be brought under the ambit of DIPP
- **Ease of doing business:** Extend support for U.S. companies in FPI through ease of doing business as they are engaged in taking farm produce to the market. The government should help drive a change in the narrative for U.S. companies from being producers of processed foods to transformers of agriculture to agri business.

Sources: <sup>1</sup>"Annual Report 2016-17", Department of Agriculture, Cooperation & Farmers Welfare, accessed on 29 May 2017; <sup>2</sup>"Annual Report 2016-17", Ministry of Food Processing Industries, Government of India, accessed on 29 May 2017; <sup>3</sup>"U.S.-India Bilateral Trade and Investment", Office of the United States Trade Representative, accessed on 30th May 2017; <sup>4</sup>"India pitches for FDI in food-processing industry", The Hindu, 04 May 2017; <sup>5</sup>"India's growing food processing sector offers real opportunities", Governance Today, 13 June 2016; <sup>6</sup>"India's organic food market to treble in four years", Business Standard, 18 May 2016; <sup>7</sup>"Controls imposed under the Essential Commodities, Act, 1955", PMINDIA website, 22 September 2016; <sup>8</sup>"India Agricultural Trade: Expanding Export Opportunities Amid Persistent Limitations", United States Department of Agriculture, accessed on 30 May 2017

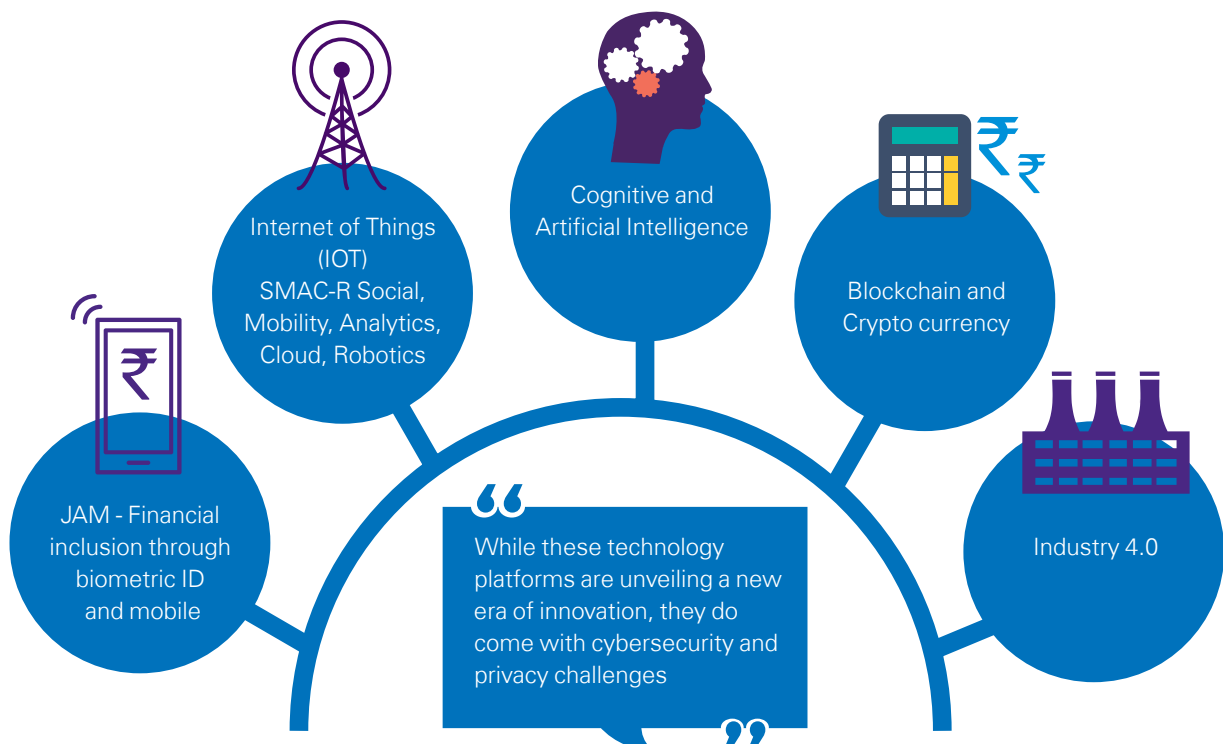
# Cybersecurity



## Overview



There is significant adoption of emerging technologies across the country, including



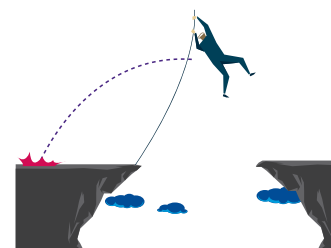
## Government initiatives<sup>1,3,4</sup>

The Act amended in 2008 especially with respect to cybercrime	IT Act	National cybersecurity policy	Announced in 2013
National Association of Software and Services Companies (NASSCOM) and Data Security Council of India had launched the Cyber Security Task Force (CSTF) to make India the hub for cyber security related research, training and products	NASSCOM CSTF	Cybersecurity chief for India	Dr. Gulshan Rai appointed as India's first National Cyber Security Coordinator under the Prime Minister's Office (PMO) w.e.f. 1st April 2015
Botnet Cleaning and Malware Analysis Centre, part of the Govt's Digital India initiative to inculcate cyber hygiene	Cyber Swachhta Kendra	National critical Information Infrastructure Protection centre	Established statutory body under IT Act in 2014



### Opportunities

- Cyber security is a priority for the present government both locally and internationally, hence massive opportunities for U.S. companies to partner with central and state governments
- Operationalising framework for the India-U.S. Cyber Relationship<sup>2</sup>
- Cybersecurity can be the lynchpin for strengthening bilateral defence cooperation
- Rapid adoption of emerging changes in technologies in India present opportunities for innovative products and services.



### Challenges

- Budgetary allocation for cybersecurity in India not in line with the policy priorities
- India lacks a comprehensive privacy legislation
- National security concerns could result in preferential market access in favour of Indian companies and to the detriment of the U.S. companies. The same concerns inhibit optimal provisioning of cloud computing hindered by artificial restraints on cross border data flow.
- Shortage of world class certified cyber security professionals
- Additional burden on foreign companies by mandating local testing.

Sources: <sup>1</sup>Indian Government initiatives to tackle cybersecurity issues, Ministry of Communication & Information Technology accessed on 04 June 2017; <sup>2</sup>Framework for the U.S.-India Cyber relationship, U.S. Embassy & Consulates in India accessed on 04 June 2017

# Energy and Natural Resources

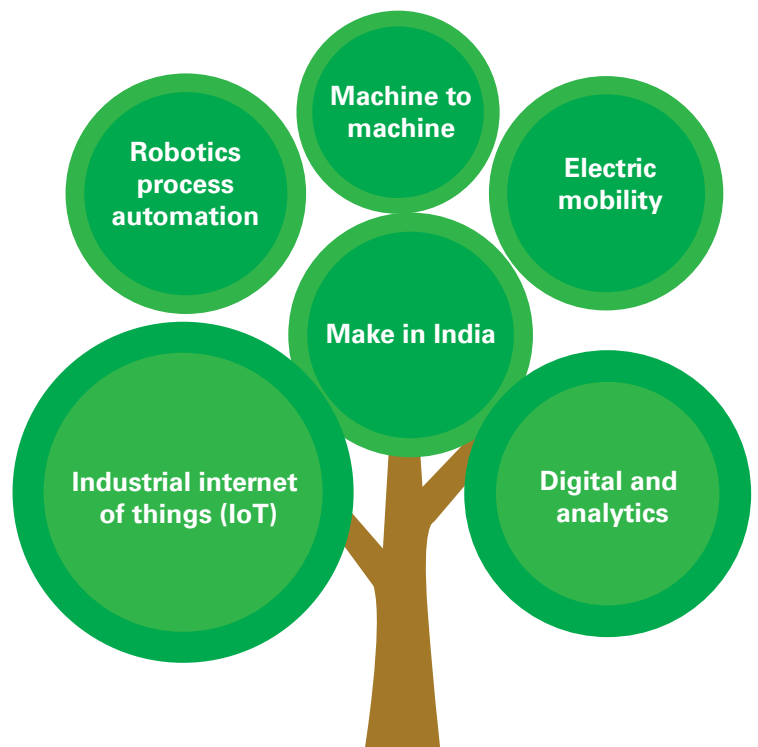
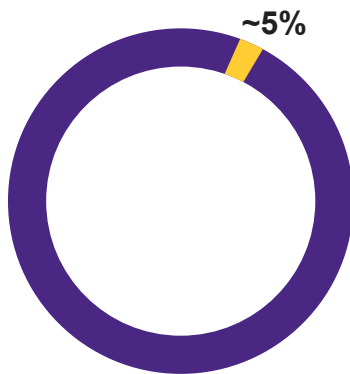


## Sector overview<sup>1,2</sup>

### Key 'mega' developments expected to impact India's consumption and functioning of ENR industry

Mining and quarrying contributed **2.2%**

Electricity, gas and water supply was **2.5%** to country's GDP



## The India–U.S. dynamic

**USD 2.7 billion**  
of trade in crude oil and coal in FY16<sup>3</sup>

### U.S.–India Energy Dialogue

was launched in 2005 to increase trade and investment in the energy sector<sup>4</sup>

### Partnership to Advance Clean Energy (PACE)

Under PACE, launched in 2009, the Joint Clean Energy Research and Development Center (JCERDC) was established with a total joint committed funding of USD 50 million<sup>4</sup>

In 2011, a **20 year** sales agreement was signed for import of **3.5 million tonnes (MT)** per year of Liquefied Natural Gas (LNG) from the U.S. While in another deal signed in March 2017, the U.S. would supply **0.8MT** of LNG<sup>5</sup>

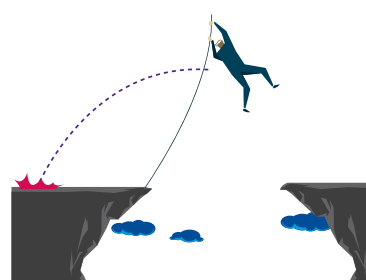
### Civil Nuclear Agreement

was signed in 2008, under which an American company will build six reactors<sup>5</sup>



## Opportunities

- **Growing energy demand:** India's primary energy consumption is expected to reach 1,603 million tonnes of oil equivalent by 2035 — i.e., an increase of 2.3 times compared with that of 2015<sup>7</sup>. Given these projections, the shale gas boom in the U.S. is a great way to fuel India's increasing energy demand
- **Power for all:** Increasing focus on providing electricity to all and diversifying India's energy mix provides fast-growing and profitable opportunities. India's target of generating 175GW of renewable energy<sup>8</sup> has opened avenues for the U.S. companies in solar panel, turbine and tower manufacturing, as well as Engineering, Procurement and Construction (EPC)
- **Digital enablement:** Digitisation is one of the most potent tools for driving accountability and efficiency in utilities. Global utilities have evolved to become more smart and agile and India is rapidly adopting Data Analytics, IoT and other technological advancements to respond to consumer needs
- **LPG in every home:** The government's plan of increasing the rural penetration of LPG could widen the demand-supply gap. Given the rising demand, India would need to broaden its supply base and increase the port's capacity for LPG import
- **Bharat Stage VI emission standards:** India plans to adopt BS-VI emission norms by 2020<sup>9</sup>, provides an opportunity for the U.S. companies to support Indian refiners in upgrading the refineries to comply with the upcoming emission norms
- **Shale gas extraction:** India has 96 trillion cubic feet of recoverable shale gas<sup>10</sup>. The U.S. companies with their technological expertise could help India with shale gas extraction
- **Energy storage:** Increase in renewable energy generation and the challenge of frequent power outages in India provides a significant opportunity for electrical energy storage. This could also play a pivotal role in the integration of renewable energy sources to the electrical grid
- **Smart grid:** With the government's focus on modernising the country and curbing the losses due to electricity theft, India is expected to invest USD 45 billion in smart grid infrastructure in the next 10 years<sup>11</sup>, creating a huge market for smart products such as smart meters, appliances, etc.



## Challenges

- **Payment delays by discoms:** India's renewable energy programme has attracted a number of foreign investors. However, delay in payments by discoms to power producers could adversely impact investor sentiments
- **Shortfall of transmission infrastructure:** Shortage of gas transmission infrastructure is restricting the flow of gas to the demand centres, thereby leading to low utilisation of the existing gas storage infrastructure, such as LNG terminals
- **Removal of LNG subsidy<sup>12</sup>:** Demand for LNG is expected to take a hit as the government has scrapped subsidies on gas sold to power producers. Increase in LNG prices would make it difficult for gas-based projects to compete with plants using cheaper coal
- **Relatively high corporate tax:** India has one of the highest corporate tax rates when compared to developing nations such as China, and developed countries such as U.K., Germany, Singapore, etc.<sup>13</sup>, thereby adversely impacting the ease of doing business in the country
- **Regulatory strengthening:** Aspects such as the frequency and adequacy of tariff revisions, financial and operating autonomy of regulators, selection process etc. need to be looked at. Strengthening the regulatory processes for better prudence also remains a critical priority. Better methodologies and processes for examination of capex, demand forecasting and power purchase planning are much needed by regulatory authorities
- **Cyber-attacks:** The cyber landscape is constantly changing and growing beyond the IT cyber threats that organisational security departments have become familiar with. This new threat can directly compromise critical production assets and Industrial Control Systems (ICS).

Sources: <sup>1</sup>Eight Core Industries, Office of Economic Adviser, Government of India, accessed on 5 June 2017; <sup>2</sup>Key economic indicators, Office of Economic Adviser, Government of India, April 2017; KPMG in India Analysis; <sup>4</sup>India US relation, Ministry of External Affairs, Government of India, accessed on 5 June 2017; <sup>5</sup>Westinghouse Officially Bankrupt. What Now For Andhra's 6 Nuclear Reactors?, NDTV, 29 March 2017; <sup>6</sup>India's GAIL signs 1st time-swap deal for U.S. LNG with Gunvor, Reuters, 03 Mar 2017; <sup>7</sup>BP Energy Outlook - India, BP, June 2016; <sup>8</sup>Report of the expert group on 175 GW RE by 2022, Niti Aayog, 31 December 2016; <sup>9</sup>Bharat Stage-VI in 3 years: Race over speedbumps, Indian express, 27 February 2017; <sup>10</sup>ONGC Plans to Drill 17 Exploration Wells in India's Shale Oil, Gas Blocks, Rig Zone, 26 April 2016; <sup>11</sup>India to Invest \$44.9 Billion in Smart Grid Infrastructure, T&D World, 01 March 2017; <sup>12</sup>India LNG demand to dip on phase out of subsidy for power sector, Hindustan Times, 05 April 2017

# Financial Services

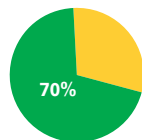


## Sector overview<sup>1,2,3,4,5,6,7,8,9</sup>



India's banking sector has the potential to be the **fifth** largest banking industry in the world by **2020** and **third** largest by **2025**

Market share of public sector banks

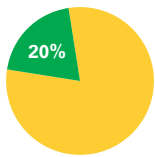


Banking sector credit: **USD1.2 trillion**

Indian banking sector credit grew at 5.1 per cent and 10.7 per cent, respectively, in FY17 and FY16

Over **280 million** new bank accounts under Prime Minister Jan Dhan Yojana

The recent financial inclusion schemes has resulted in **99%** of Indian households having a bank account as compared to **58%** in **2011**

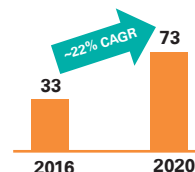


A fifth of Indian households have access to internet banking on the back of a digital revolution

Only 7 per cent accessed internet banking in 2011

### Fintech transactions in India (USD billion)

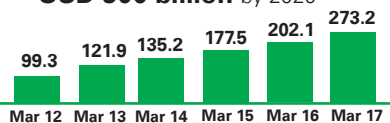
The Indian fintech software market is set to double to **USD 2.4 billion** by 2020



Strong internet penetration: Internet users expected to touch **450-465 million** by June 2017, a 4-8% rise from 432 million in December 2016

### Mutual funds segment AUM (in USD billion): 22% CAGR (FY12-17)

AUM expected to almost touch **USD 300 billion** by 2020



India is the **15th** largest insurance market in terms of premium volume

FDI limit in insurance recently increased from 26 per cent to **49%** under the automatic approval route

Insurance penetration in India: **3.4%**  
Likely to cross **4%** in 2017

Life insurers' total premium underwritten: **USD 54.8 billion**  
Non-life insurers' gross direct premium: **USD 14.4 billion**

## The India-U.S. dynamic<sup>11,12,13,14</sup>

There has been a steady rise in the U.S. investments into India since 2014. The government's strong focus on the ease of doing business has attracted FDI investments from the U.S., which grew by 500 per cent between FY14 and FY16.

The Indian banking sector, has so far witnessed limited investment activity from U.S. players due to stringent regulations. Most of the large U.S. banks have offshore back offices in India for support functions, employing a significant number of people.

In the asset management space, U.S. firms have been active, through investment in Indian units and joint ventures. With India having a low AUM-GDP ratio, there is a massive investment opportunity for U.S. firms in the near future.

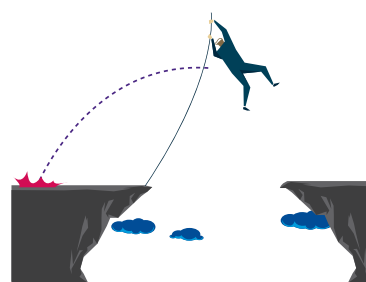
U.S. players are present in India's insurance sector mostly through joint-ventures (JV) with local players. With the recent increase in FDI limits, the sector could see more interest from U.S. insurance companies. Recent policy changes are resulting in U.S. companies increasing their stake in these joint ventures.





## Opportunities<sup>15,16,17,18,19</sup>

- **Favourable demographics:** India has a growing per capita income, better financial inclusion, rising middle-class population, and a young working population with necessary skill sets; the country's insurable population is expected to reach to 750 million by 2020
- **Bankruptcy law:** The recently introduced bankruptcy law is expected to empower banks to take quick action on default accounts
- **Reforms in asset reconstruction companies (ARCs):** 100 per cent FDI is now allowed under the automatic route thereby providing significant opportunities for U.S. companies
- **Listing norms for insurance companies:** In 2016, the Insurance Regulatory and Development Authority of India (IRDAI) proposed that insurance firms with more than eight years of operations in general and reinsurance, and 10 years in case of life insurance, can go for mandatory public listing to meet capital requirements
- **Entry licence to global reinsurers:** Showing an intent to reduce entry barriers, the IRDAI granted certificates of registration to five global reinsurers
- **Online insurance distribution network:** Surge in internet users and smartphone penetration has resulted in growth of buying online insurance in India
- **Emergence of payment banks:** The Reserve bank of India (RBI) recently introduced payment banks and gave 'in-principle' licences to 11 entities. The mobile payments industry in India witnessed a CAGR of 68 per cent between 2011 and 2016. Aadhar-linked biometrics payment and other digital payment initiatives, such as UPI (Unified Payment interface), are expected to define the future of payments
- **P2P (peer-to-peer) lending:** With strong growth forecasted in Fintech, there exists opportunities for U.S. players to use their technical expertise to tap India's nascent P2P space
- **Blockchain technology:** IT companies are venturing into blockchain technology, which could find a number of applications across various financial sub-functions like credit risk, trade settlement, virtual currency, etc
- **New-age technologies:** U.S. technology companies, who are global leaders in innovation have opportunities to set up labs in India to bring disruptions in the areas of robotics process automation, data analytics, artificial intelligence and machine learning into the Indian financial sector.



## Challenges<sup>15,16,17,18,19</sup>

- **Asset quality issues in the banking sector:** Bad loans have been a challenge for the banking industry with non-performing assets (NPAs) contributing to over 10 per cent of the gross advances of Public Sector Unit (PSU) banks. Foreign companies could look to invest in asset reconstruction companies, with the government allowing 100 per cent FDI under the automatic route
- **Low insurance penetration:** The current insurance penetration is only about 3.4 per cent, which provides a large potential market for foreign insurance players to leverage from, by forming JVs with local players
- **Low profitability owing to insurance price wars:** Due to high competition across most insurance products, the profitability of the players involved is relatively low. This could lead to consolidation in the sector which would present investment opportunities to foreign players
- **Shortage of trained insurance professionals and technicians:** Lack of awareness of insurance products leads to misselling. The country needs more insurance professionals and long-term association agenda to come up to global standards. Foreign players could look to bring in their expertise in the Indian market
- **Preference for safer savings instruments:** India suffers from lack of awareness of mutual fund products; there is a strong preference for old school modes of investment, such as fixed deposits, savings accounts and gold. Best practices from developed countries could help in better market penetration
- **Cybercrime threat:** Cybercrime has been increasing at an alarming rate in India. As per the Ministry of Electronics and Information Technology, the number of central and state government websites hacked have increased to 199 in 2016 from 164 in 2015 and 155 in 2014. This also provides an opportunity for foreign companies to establish cyber security protocols based on their technical expertise
- **Developing fintech regulatory framework:** Although, the fintech regulatory framework is still at a nascent stage, the government's aim to transform India into a 'less-cash' society could make investments into the sector very attractive for foreign investors. The government's approval for setting up 11 payment banks and the recent demonetisation drive are steps in this direction.

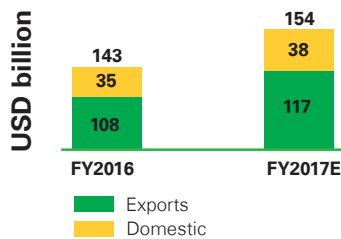
Sources: <sup>15</sup>KPMG-CII reports eye on efficient, secure 'Indian Banking' sector roadmap, Business Standard, 26 May 2016; <sup>16</sup>Quarterly Statistics On Deposits And Credit Of Scheduled Commercial Banks, RBI, accessed on 2 June 2017; <sup>17</sup>99% Indian households are covered by a bank account, Live Mint, 15 December 2016; <sup>18</sup>Digital divide in India: 20 per cent of households access Net-banking, cashless payments have a long way to go, Financial express, 7 June 2017; <sup>19</sup>Insurance penetration in India likely to cross 4% this year: ASSOCHAM, Times of India, 15 February 2017; <sup>20</sup>AUM of Indian mutual fund industry may touch Rs 20 lakh cr, The Economic Times, 4 January 2017; <sup>21</sup>Fintech in India, KPMG, June 2016; <sup>22</sup>Number of Internet users in India could cross 450 million by June: report, Livemint, 2 March 2017; <sup>23</sup>General insurance business set to cross Rs. 1.2 lakh cr in fiscal 2017: Experts, Hindu Business Line, 10 December 2017; <sup>24</sup>"AUM Data", AMFI Website, accessed on 02 June 2017; <sup>25</sup>IRDAI Annual report 2015-16, IRDAI, accessed on 2 June 2017; <sup>26</sup>Consolidated FDI Policy, DIPP, 07 June 2016; <sup>27</sup>FDI statistics, Department of Industrial Policy & Promotion, accessed on 02 June 2017; <sup>28</sup>Why global banks are opting out of India or streamlining their businesses, The Economic Times, 20 May 2016; <sup>29</sup>The future of mobile wallets in India, Hindu Business Line, March 2016; <sup>30</sup>Credit growth shows dismal numbers for government banks, but still grabbing major share in total credit disbursed, The Economic Times, 1 March 2017; <sup>31</sup>Demonetisation impact: Bank NPAs mount to Rs 614,872 crore, set to rise further, Financial Express, 20 April 2017; <sup>32</sup>Credit growth plunges to over 60-year low of 5.1% in FY17, Business Line, 16 April 2017; <sup>33</sup>Financial Services – Union Budget 2017-18 PoV, KPMG, February 2017; <sup>34</sup>Mint Insurance Conclave, Livemint, accessed on 7 June 2017

# Information and Communication Technologies

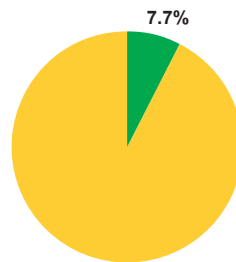


## Sector overview<sup>1</sup>

The Indian technology industry is expected to reach USD 154 billion by FY17-end



Contribution towards India's GDP - FY2016



**3rd largest**  
start-up ecosystem



**1,100+**  
global in-house centres



**3.9 million**  
employee base

## The India-U.S. dynamic

**5x**  
increase in trade between  
2011 and 2015<sup>2</sup>



**USD 20 billion**  
of U.S. federal, state and local  
taxes have been paid by Indian  
technology companies between  
2011 and 2015<sup>2</sup>



**500**  
India based technology companies  
provide operational support to more  
than 75 per cent of Fortune 500  
companies in the U.S.<sup>2</sup>



**>100,000** jobs were  
supported directly by the Indian  
technology companies<sup>2</sup> in the U.S.



**USD 375 million**  
paid to the U.S. Treasury as  
additional visa application fees<sup>2</sup>



The unilateral flow of investments and intellectual talent is essential to strengthen commercial and strategic relationship between India and the U.S. American companies have significant first mover advantage in India's growing ICT market.

**Nine** out of the **top 15** technology companies in India are U.S. subsidiaries<sup>2</sup>.

As the Indian economy grows and more Indians get access to the internet, broadband and smartphones, the Indian technology sector is expected to get even more attractive for the U.S. technology companies.



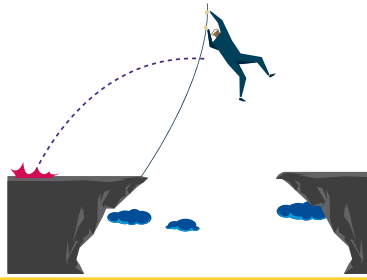


## Opportunities

- Increased focus on new technologies:** The demand for new technologies in India is being driven by an amalgamation of factors that include a growing start-up landscape in the country, Internet of Things (IoT), analytics, automation, and increase in technology adoption by small and medium banks
- Riding on the digital wave:** The Indian government's initiatives, such as 'Digital India', 'Make in India' and 'Smart Cities Mission', present U.S. technology companies a good opportunity to sell high-tech products and services in India. The Indian government aims to grow the digital economy to USD 1 trillion by 2022<sup>3</sup>
- Rise in IT spending in the banking and securities industry:** It is estimated that IT spending by banking and securities firms in India is likely to reach USD 8.9 billion in 2017, an increase of 9.7 per cent over 2016.<sup>6</sup> The Indian banks are investing to enhance their customer platforms and tools
- Internet economy:** India's internet user base has already surpassed that of the U.S. and is the second largest after that of China<sup>4</sup>. With a booming e-commerce industry and internet driven economy, there would be significant opportunities for the companies developing local language apps and sites, video streaming, search interfaces among others
- Rising demand in the electronics industry:** The Indian Printed Circuit Board (PCB) market is expected to reach USD6 billion by 2020<sup>5</sup>, growing at a CAGR of 20.6 per cent, driven by the demand of consumer electronics and industrial lighting equipment
- Growing Indian healthcare IT:** The Indian healthcare IT market is valued at USD 1 billion and is projected to grow about 1.5 times by 2020<sup>7</sup>, driven by the privatisation of healthcare and patient-driven healthcare.



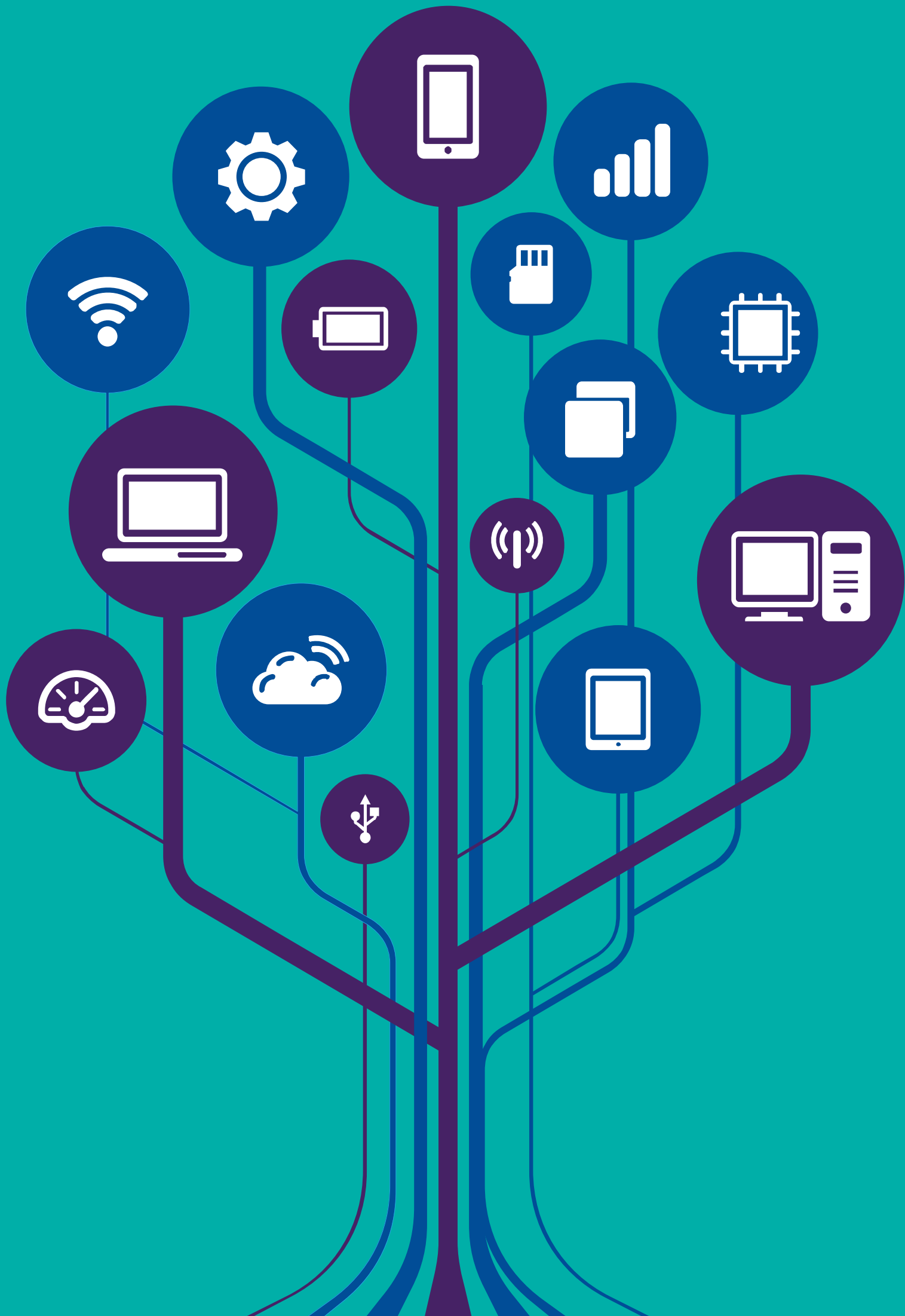
Sources: <sup>1</sup>NASSCOM Strategic Report, NASSCOM, February 2017, <sup>2</sup>Value creation by Indian IT sector in America, NASSCOM, March, 2017, <sup>3</sup>India eyes \$1 trillion digital opportunity, The Hindu, 23 May 2017, <sup>4</sup>India's Internet user base to reach 730 million by 2020, Mashable, 19 August 2016 <sup>5</sup>Gartner Says IT Spending in the Banking and Securities Industry in India to Reach \$8.9 Billion in 2017, Gartner, 13 February 2017, <sup>6</sup>Indian The Indian PCB industry Challenges and opportunities, Electronics2b.com, 21 March 2017, <sup>7</sup>Healthcare IT now a \$1 billion market, says Nasscom, ET, 30 April 2016



## Challenges

- Limitation on preferential market access (PMA):** Scope of regressive and protectionist measures, such as mandatory conditions of value addition as prescribed under the preferential market access, should not be expanded, as this would limit access to global technologies at competitive prices. The industry feels that Government of India does include high-end technology and telecom equipment, like servers, under Preference for Domestically Manufactured Electronic Goods (PMA). To ensure access to world-class, cost-effective services for Digital India, Indian Government should exclude software services from the scope of PMA
- Public procurement hurdles:** There are entry barriers in public procurement process that impact the IT industry's performance and investment sentiment. Tenders are onerous on the bidders/System Integrators (SI) and Original Equipment Manufacturer (OEM)
- Stringent policy framework:** Although India is a preferred outsourcing destination for U.S. technology companies, the Indian policy framework with respect to taxation, intellectual property, innovation and research and development (R&D) make them reluctant to venture into the market
- Transfer pricing:** Multinational technology companies in India face a complex tax regime manifested by multiple controversies on the characterisation of income and Transfer Pricing (TP). However, India and the U.S. have solved more than 100 pending transfer pricing cases under the bilateral Mutual Agreement Procedure (MAP)<sup>7</sup>
- Capacity building:** The industry feels that the need of the hour is to bridge the gap in government's understanding of the existing challenges and formulate relevant industry groups which would support the government and ministry in quick and easy resolution. Public participation is a must
- Ambiguity around Goods and Services Tax (GST):** Owing to the lack of clarity under GST, certain hardware imports such as monitors may have an inverted duty impact
- Operational hurdles:** IT companies continue to face uncertainty, prohibitively high compliance costs and operational hurdles for in-country Safety and Security testing of their products. In certain instances, the industry has felt that safety testing procedure (under Compulsory Registration Order) is saddled with unrealistic timelines, tedious processes, unique labelling requirements, and certificate/test validity periods and per-factory testing requirements
- Skills gap:** Increasing skill gap in the existing workforce to work on disruptive technologies, such as cloud, Internet of Things (IoT), mobile application development, security and mobile hardware, may impact employability levels in the sector
- Inadequate data privacy laws:** Several corporations have pointed at the inadequacy of Indian data protection laws<sup>8</sup> e.g., India's data privacy policy for cloud services needs more clarity, as it has few undefined elements, namely lack of a formal data breach notification rule<sup>9</sup>
- Data localisation challenges:** Regressive policies mandating data localisation and restricting data flows across borders pose a big challenge in front of the U.S. based companies operating in India. It also impacts the smooth adoption of cloud computing, Machine to Machine and IoT wherein globalisation is key. There needs to be appreciation of the fact that data security is not affected by data location, to a large extent. Trans border data flows is viewed as an enabler of economic growth
- Updating government regulations:** Certain regulations with respect to the services that technology companies can perform are not adequately updated thereby creating hindrances in the ease of doing business for multinational companies. The government needs to update policies in line with the emerging new technology and service formats like SDN, NFV etc and wherever applicable adopt the established global best practices.

Sources: <sup>7</sup>Indian data protection norms insufficient: report, The Mint, 20 January 2017, <sup>8</sup>India – U.S. trade a formidable economic force, KPMG India, June 2016, <sup>9</sup>India-US resolve 100 tax dispute cases worth Rs 5,000 crore, Business standard, 18 November 2016



# Infrastructure and Smart Cities



## Sector overview<sup>1,2,3</sup>

**USD 1.2 trillion**

Smart cities investment potential across 20 years



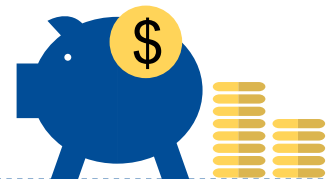
**USD 5.2 trillion**

India's infrastructure spending requirement until 2030



**USD 59.2 billion**

Budgetary allocation for infrastructure during FY18



## The India-U.S. dynamic<sup>4,5,6,7,8</sup>



Three MoUs have been signed to develop Allahabad, Ajmer and Visakhapatnam as smart cities



Terms of reference agreement signed with Pune Municipal Corporation to launch a municipal bond for civic projects on a pilot basis.



The U.S. is expected to lend support in areas such as project planning, infrastructure development, feasibility studies and capacity building

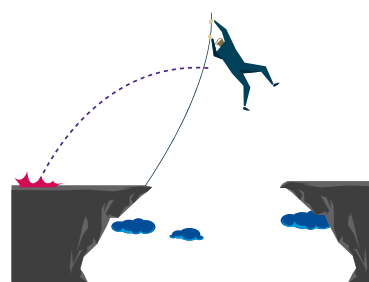


Many U.S.-based technology companies are collaborating with several state governments in areas such as networking, digital transformation and Wi-Fi connectivity to help them implement 'Smart Cities Mission'



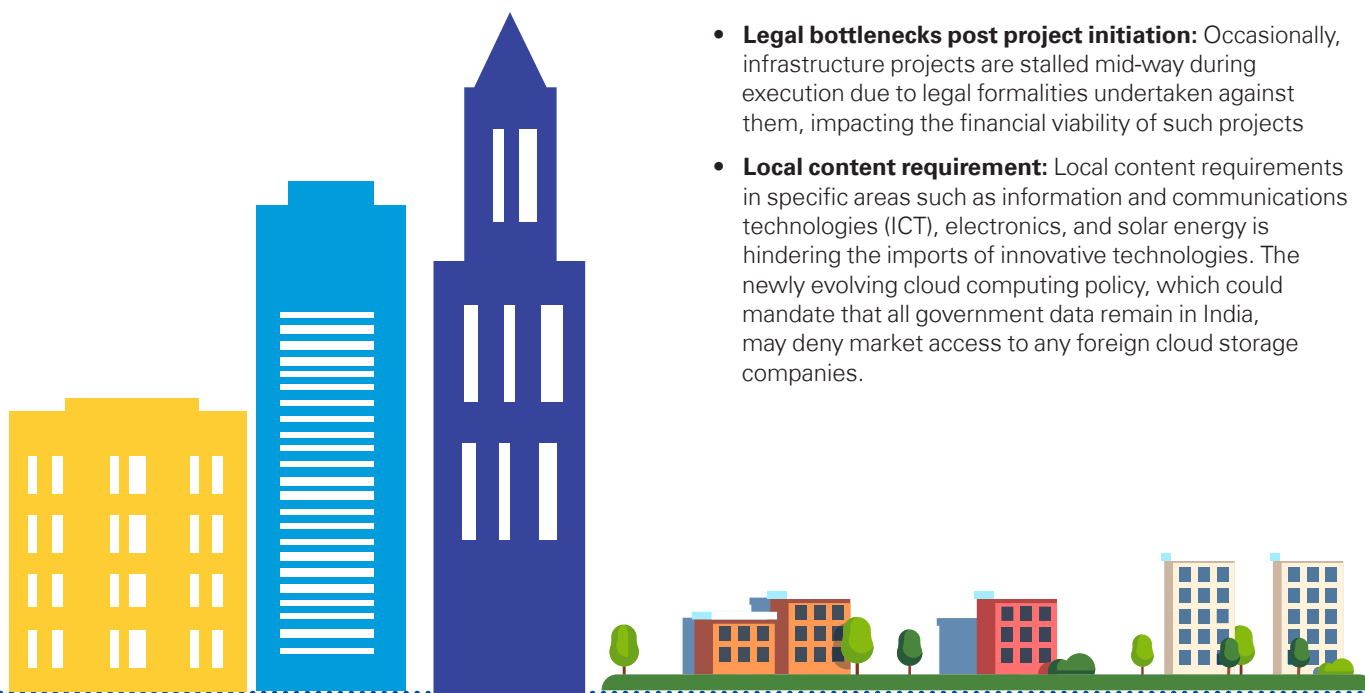
## Opportunities<sup>9,10,11</sup>

- **‘Smart cities’ solution providers to expand their presence in India:** U.S. based companies with a portfolio of ‘smart city’ solutions, such as smart buildings, public security, networking, waste management and ICT infrastructure, could tap into India’s burgeoning smart city market
- **Investment prospects for pension or Private Equity (PE) funds:** Foreign funds could explore India’s infrastructure market with a long-term growth outlook, as the infrastructure market is poised for a high growth trajectory
- **Health and Insurance:** U.S. companies can explore opportunities in Smart Health Hospitals with the government’s special focus on improving affordable healthcare for all, increase in the health budget and relaxing of FDI norms in insurance and medical devices
- **Government’s focus on augmenting infrastructure:** Several infrastructure segments, such as industrial corridors, roads, railways, ports, smart grids, renewable energy and housing, are expected to witness significant activity, backed by the recent government policy measures, programmes and investments.



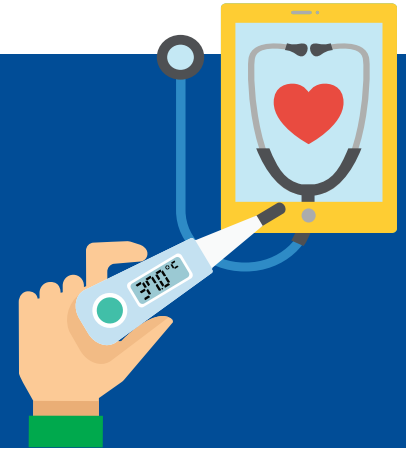
## Challenges<sup>12,13</sup>

- **Three-tier governance structure:** Companies that are engaged in smart city projects have to deal with three layers of the government — at the centre, state and municipal levels, which impact the implementation pace of projects
- **Urban Local Body (ULB) level challenges:** Several ULBs are not financially sustainable and have inadequate technology capacity; this could potentially create synergic challenges for foreign companies collaborating with them. Additionally, toxic and hazardous waste management is absent in most designated smart cities
- **Logistics issues:** Infrastructure for smart logistics, and handling incoming and outgoing cargo is underdeveloped
- **Policy gaps:** There is lack of clearly defined policies for utilities, integration of data ports, setting up of intelligent law enforcement data systems and alert systems, and smart roads to get real-time traffic data and for operating intelligent transportation systems
- **Regulatory issues:** Several infrastructure projects in India are marred by regulatory and compliance related challenges, pertaining to land acquisition, environmental clearance and obtaining approvals from several ministries and ULBs
- **Legal bottlenecks post project initiation:** Occasionally, infrastructure projects are stalled mid-way during execution due to legal formalities undertaken against them, impacting the financial viability of such projects
- **Local content requirement:** Local content requirements in specific areas such as information and communications technologies (ICT), electronics, and solar energy is hindering the imports of innovative technologies. The newly evolving cloud computing policy, which could mandate that all government data remain in India, may deny market access to any foreign cloud storage companies.



Sources: Smart Cities, Make in India, accessed on 1 June 2017; <sup>2</sup>India needs \$5.15 trillion in infra by 2030 to sustain growth, says ADB, The Hindustan Times, 28 February 2017; <sup>3</sup>Budget speech, India Budget, 1 February 2017; <sup>4</sup>US help in development of India's smart cities to go on under Donald Trump, The Economic Times, 21 December 2016; <sup>5</sup>US exploring new partnership in smart cities in India, Economic Times, 13 January 2017; <sup>6</sup>"Bhopal smart city plan now has an 'intel inside'", The Hindustan Times, 9 September 2016; <sup>7</sup>"Smart City mission: Google bags first city Wi-Fi deal for Pune", The Economic Times, 8 February 2017; <sup>8</sup>"Cisco aims to hook up 100 smart cities in India", Read write, 3 November 2016; <sup>9</sup>US-based PE firm | Squared Capital to invest up to \$1b in India, Deal Street Asia, 13 June 2016; <sup>10</sup>"Smart Cities", Make in India, accessed on 8 June 2017; <sup>11</sup>"India- Infrastructure/Smart Cities", 8 August 2016; <sup>12</sup>The top 10 implementation challenges for smart cities in India, The Economic Times, 21 July 2015; <sup>13</sup>"India- Market challenges", Export, 29 July 2016

# Medical Devices



## Sector overview<sup>1</sup>

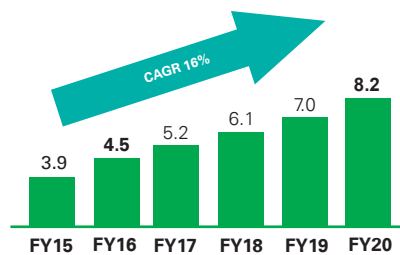


**Fourth** largest market in Asia

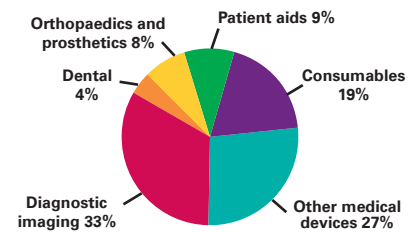
Constitutes ~ **25% - 30%** of total healthcare costs

Over **75%** of current consumption is **import** dependent

Market size of the medical device industry in India (USD billion)



Medical device industry, split by category, 2016



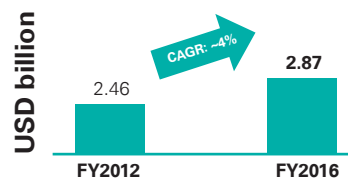
### Drivers

- Expanding middle income group with rising healthcare expectations
- Growing healthcare infrastructure
- Increasing prevalence of life style diseases
- Government initiatives to promote investments, such as FDI relaxation

### India's total imports

In FY16, import reached USD 2.87 billion i.e., over 75 per cent of the total medical devices sales in India

Highest CAGR of 43.2 per cent (2012–16) for imports of IV Diagnostic medical devices



### FDI inflow<sup>5</sup>



**USD 165 million in FY16**

U.S., Europe and Japan are the key source countries for FDI in medical devices.

The equipment and instruments, consumables and implants segments have attracted the most FDI

## The India–U.S. dynamic<sup>3,4</sup>

### Exports



The U.S. accounted for almost **15 per cent** of India's total exports of medical devices in FY16, valued at USD 168.7 million

Diagnostic imaging, consumables and other medical devices form 86 per cent of total export trade in India in FY16

### Imports



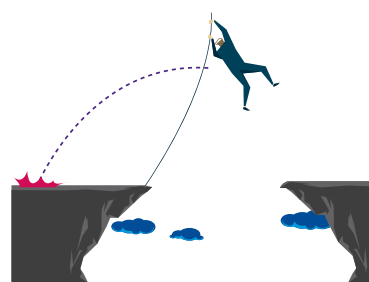
The U.S. accounted for **28.1 per cent** of the total imports of medical devices in India worth USD 948.3 million in FY16

U.S., Germany, China, Japan, and Singapore constitute the five largest exporters of high technology medical equipment to India



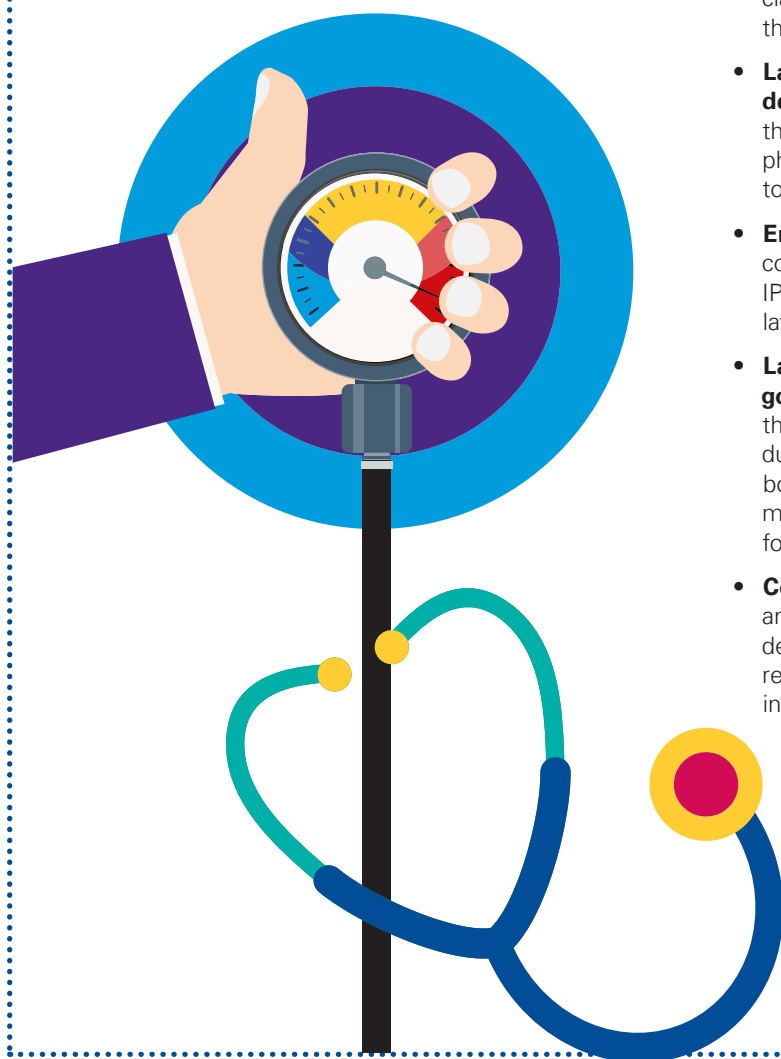
## Opportunities<sup>1,2,5</sup>

- **Growing domestic market:** With the growing healthcare market and increasing prevalence of lifestyle diseases, the country's medical devices market is experiencing steady growth thus providing opportunities for investment
- **Relaxed FDI norms:** In FY15, the government allowed 100 per cent FDI through automatic route for medical device manufacturers, which is expected to attract companies from the U.S. and other countries to open their subsidiaries in India.



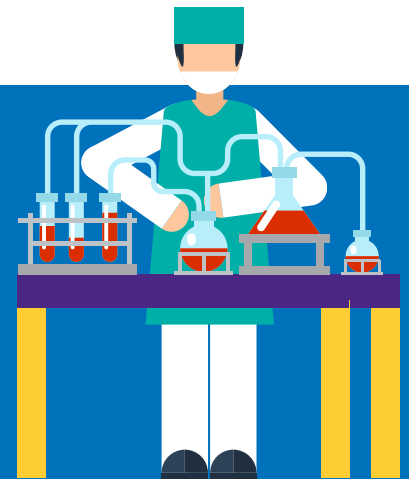
## Challenges<sup>1,2,7, 8</sup>

- **Price control regime:** The government is becoming more critical in controlling prices of the medical devices. In February 2017 for example, the government has imposed a stringent price cap of ~USD 480 on coronary stents plus 14 other categories under purview which may lead to margin erosion
- **Price cap impacting innovation:** Expansion of price controls to other segments of the medical devices industry would restrict innovation, R&D spend and development of new technology
- **Medical Devices Rules 2016:** Some provisions require clarity, e.g., evaluation of a license application filed prior to the new rules
- **Lack of independent regulations for medical devices:** An independent regulatory pathway is still in the draft phase. Since medical devices are regulated as pharmaceuticals, this creates a roadblock for companies to design, develop and launch new products in India
- **Enforcement of IP (Intellectual Property) policy:** U.S. companies are also facing some challenges around the IP protection for its innovative products owing to weak IP law enforcement in the country
- **Lack of robust foreign exchange laws and multiple governing bodies:** The industry feels that at a policy level there is not enough support on foreign exchange laws, duty structures and the presence of many governing bodies with diverse requirements and standards which may result in an unattractive investment environment for foreign participants
- **Cost and labour arbitrage:** The cost of talent, technology and medical devices infrastructure are at par with other developed countries thereby leading to investors re-evaluating the comparative advantage of manufacturing in India.

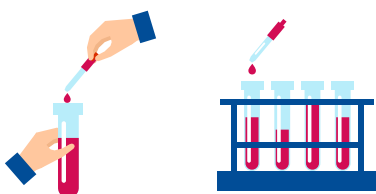


Sources: Medical Device Manufacturing in India - A Sunrise, AMTZ, WHO, DoP, DIPP, Feb 2017; <sup>2</sup>Industry Forecast - Medical Device Market Forecast - India - Q1 2017, BMI Research, 15 November 2016; <sup>3</sup>Annual Medical Device Imports - India - Q4 2016, BMI Research, 09 September 2016; <sup>4</sup>Industry Forecast - Annual Medical Device Exports - India Q1, BMI Research, 15 November 2016; <sup>5</sup>Fact sheet on foreign direct investment (FDI), DPPI, December 2016; <sup>6</sup>Govt wants more medical devices under price cap, Times of India, 11 May 2017; <sup>7</sup>Lack of independent regulatory system stifling growth in medical devices, Live mint, 20 April 2016; <sup>8</sup>Dun & Brand Street report, Medical device sector, September 2016;

# Pharmaceuticals



## Sector overview<sup>1,2</sup>

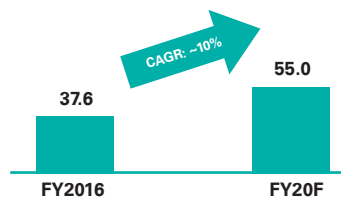


**Third** largest globally by volume

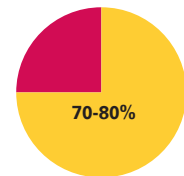
**Thirteenth** largest globally by value

**Sixth** largest by absolute market size by 2020 (expected)

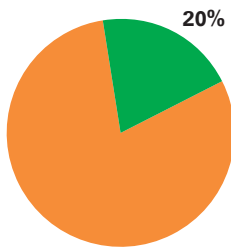
Market size of pharmaceuticals in India (in USD billion)



Branded generics make up 70–80%

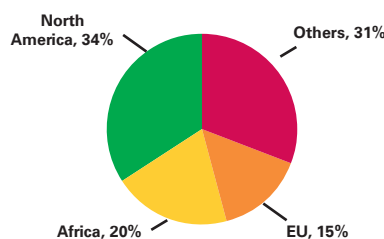


India has about **300** large and **8,000** small and medium scale pharmaceuticals units, and over **20,000** manufacturers



India is the biggest exporter of generic drugs and accounts for 20 per cent of global exports in terms of volume

India's total exports in FY16: USD 16.9 billion



**USD 14.7 billion**

The cumulative FDI inflows in India between April 2000 and March 2017 in the drugs and pharmaceuticals sector, representing 4 per cent of the total inflows

## The India–U.S. dynamic<sup>4,5,6,7,8</sup>

The U.S. accounts for almost **1/3rd** of India's pharmaceutical exports

Indian companies account for **30%**, by volume, and **10%**, by value, of the USD 70-80 billion U.S. generics market

**572**

Highest number of U.S. FDA approved production plants outside the U.S.

**201** drug approvals were given by the U.S. Food and Drug Administration (FDA) to Indian companies in FY16 as compared with **109** in FY15

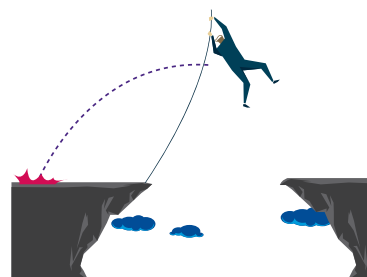
India is a preferred low cost destination for manufacturing generic formulations and APIs, which are compliant with the U.S. FDA standards. Indian companies file the largest number of Abbreviated New Drug Applications (ANDA) to the U.S. FDA every year





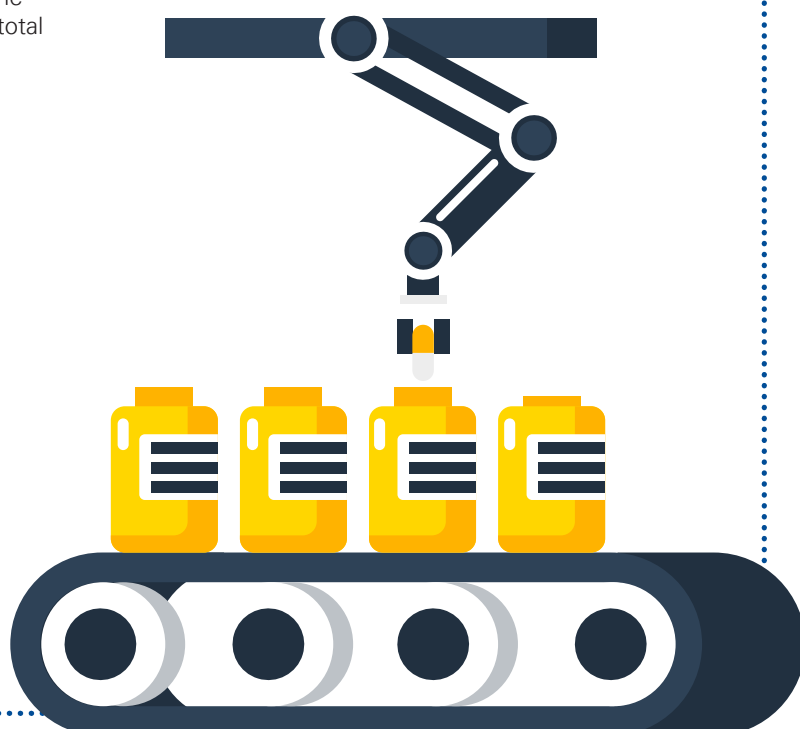
## Opportunities<sup>5,6,7</sup>

- **Low cost, high quality:** A fine balance of manufacturing at low cost, without compromising on quality
- **Abundance of talent:** One of the largest producers of doctors every year; India boasts of a scientific base with lot of researchers and scientists
- **Ease of doing business and easing FDI norms:** Initiatives undertaken, such as 'Make in India' and easing FDI norms, are positive steps. India recently allowed FDI in brownfield pharmaceuticals under automatic route up to 74 per cent
- **Favourable government policies:** In 2016, a new IPR (Intellectual Property rights) policy was launched, which could address some of the concerns raised by the U.S. pharmaceutical industry bodies in the past
- **Market enablers:** India boasts of consistent increase in per capita income, better health awareness and increasing health insurance penetration
- **Demand for generics in the U.S.:** There has been an increasing demand for generics in the U.S. to reduce the overall healthcare cost. Further, the U.S. has been India's largest pharmaceuticals export partner over the past one decade. In FY16, India's pharmaceuticals exports to the U.S. stood at USD 5.5 billion, almost one-third of the total exports.



## Challenges<sup>5,6,7,8</sup>

- **Enforcement of IP (Intellectual Property) policy:** This issue has been a perennial challenge with U.S. trade bodies, who presumably have doubts about India's IPR laws
- **Lack of statutory trade secret protection:** India does not provide for a statutory trade secret protection, discouraging the transfer of technologies
- **Market access barriers:** India suffers from discriminatory and non-transparent market access barriers like the price control regime which discourages foreign players to launch their innovative products
- **Regulatory hurdles:** The approval process for drugs sometimes get stretched in India owing to the multiplicity of regulatory bodies
- **Counterfeit and parallel import products:** The government loses revenue and customs collection on account of such goods
- **Regulatory data protection:** Indian law at present does not provide for protection against the unfair commercial use of test data.



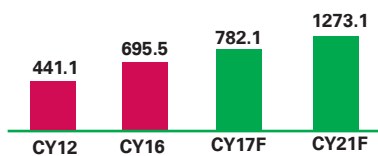
Sources: <sup>1</sup>Indian pharma market growing at over Rs.2 lakh crore', Business Standard, 24 April 2016; <sup>2</sup>India's pharma industry expected to grow to \$55 bn by 2020, The Economic Times, 02 July 2016; <sup>3</sup>India's leading pharmaceuticals companies 2016, Dun & Bradstreet, 21 October 2016; <sup>4</sup>Indian drug makers wary as US FDA sharpens focus on quality control, LiveMint, 16 May 2017; <sup>5</sup>Tariffs on Medicines is a Sick Idea, The wire, 18 October 2015; <sup>6</sup>India-US trade – a formidable economic force, KPMG, June 2016; <sup>7</sup>US pharma sector demands keeping India in patent violator list, Live Mint, 14 February 2017; <sup>8</sup>Despite Modi's New IPR Policy, US Continues to Cry Foul Over Indian Laws, The Wire, 31 March 2017

# Retail

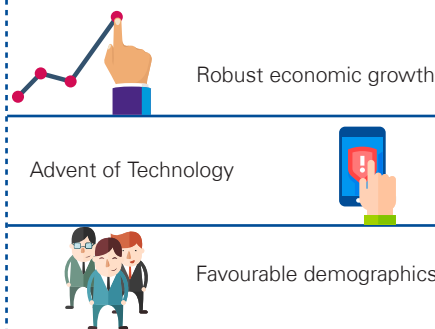


## Sector overview<sup>1,2,3,4</sup>

Indian retail market  
(USD billion)



### Leading retail investment destination in the world



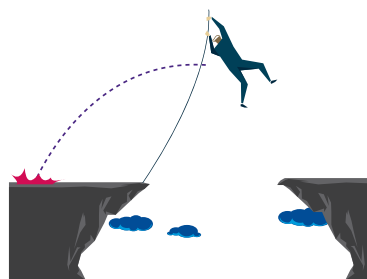
**2nd largest** e-commerce market by 2034

**USD 6.6 billion** projected mobile wallet market by 2020

**10 - 15%** projected share of ecommerce sales of total retail by 2020

## Opportunities<sup>5,6,7</sup>

- Most attractive retail market:** India is one of the most attractive retail markets owing to the following reasons:
  - Growing young population:** With the median age of approximately 27, India has one of the youngest populations amongst the major global economies
  - Rising Personal Disposable Income (PDI):** With a PDI growth of over 20 per cent from 2014–16 (YoY growth of more than 13 per cent), India is amongst the frontrunners in emerging countries
  - Increasing internet penetration:** India's internet penetration is expected to grow from the current 35 per cent to 60 per cent by 2020
  - Growing Consumption:** India is among the top five consumer markets in Asia offering retailers very strong consumer spending growth potential over the next five years
  - Others:** Factors such as increasing urban population, large female workforce, changing consumer preferences and brand consciousness are making India a highly lucrative retail market
- Large unorganised market:** Currently, India has a significant share of unorganised market. It accounts for more than 90 per cent of the overall retail market and hence a major opportunity for foreign retailers both in terms of serving the organised market through organised cash and carry and building modern trade
- One Country One Tax regime-GST:** The unified tax regime scheduled to be introduced from 01 July 2017 can bring in efficiency and reduce transaction costs
- Ease of doing business:** Immense government focus on ease of doing business and formalisation of the economy
- Liberal FDI policies:** Today India is one of the most open large economies. India permits 100 per cent FDI in single-brand retail trade (SBRT), 100 per cent FDI in food processing and 100 per cent FDI in B2C marketplace e-commerce.
  - In July 2016, the government also announced the relaxation of local sourcing norms for three years for FDI in SBRT, and for five years for companies providing leading technologies.



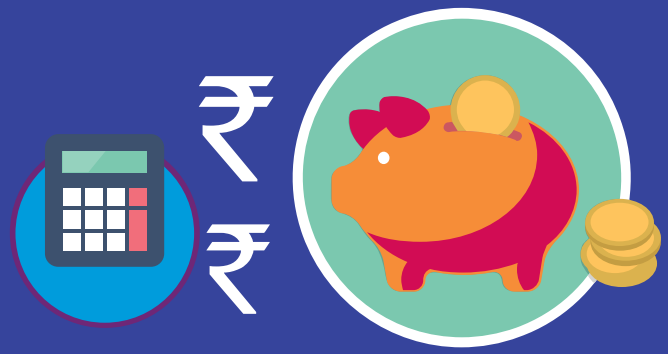
## Challenges<sup>7,8</sup>

- Single brand retail involving FDI of more than 51 per cent requires obtaining approval from the government and mandatory sourcing of 30 per cent of the value of goods, preferably from MSMEs
- While the government has amended the FDI policy to grant local sourcing exemption to foreign entities undertaking retail trading of products having 'state-of-art' technology and where local sourcing is not possible, there needs to be clarity around which technology would qualify for such an exemption.
- The multi brand segment is still not accessible to many investors since it restricts FDI up to 51 per cent under the government approval route, thereby stipulating minimum investment, local sourcing and investment in back end infrastructure and state approval thereby creating an unfavourable investment environment for foreign investors
- Lack of a uniform country level policy for retail and FMCG sectors leads to a complex regulatory environment, which is a challenge to operate
- **Inadequate infrastructure**
  - **Digital:** Low internet penetration in non-urban areas has led to a lack of options for alternate modes of payments, such as plastic money, e-wallets and online transfers
  - **Physical:** The industry lags in terms of modern warehousing and storage management capabilities that collectively pose as a major challenge for the retail supply chains.



Sources: <sup>1</sup>India Retail sector 2016/2017, via ISI Emerging Markets, 31 March 2017; <sup>2</sup>GDP of India, Statistics Times, 3 March 2017; <sup>3</sup>India mobile wallet market to reach \$ 6.6 bn by 2020 accessed 09 June 2017; <sup>4</sup>India to overtake US as world's largest e-commerce market, 05 December, 2016; <sup>5</sup>India World's Second-Most Attractive Retail Market, PowerRetail, 9 June 2016; <sup>6</sup>Population Division, UNDESA, accessed June 2017; <sup>7</sup>Single-brand retail trade: US asks India to relax local sourcing norms, The Business Standard, 21 October 2016; <sup>8</sup>Challenges of Retailing in India, Shodhganga website, 8 March 2016; <sup>9</sup>India Data Tool, via EIU research, accessed 12 June 2017

# Tax, Tariff and Regulatory Affairs



## Evolving tax landscape

### Direct Tax<sup>1,2</sup>

2016 saw various countries realigning their tax laws with increased focus on tax treaty abuse, substance and transparency in view of the final BEPS report released by OECD in 2015. Many countries including India have adopted the Country by Country reporting for transfer pricing purposes in line with BEPS Action Point 13. Further, India, to avoid treaty abuse, renegotiated its tax treaties with Mauritius, Singapore and Cyprus which now provide taxing rights for capital gains to India post 01 April 2017. It also introduced the controversial Equalization Levy to tax the digital economy which was one of the action plans in the BEPS Project. Recently, the Multilateral Instrument to implement tax treaty related measures as part of

the BEPS project, was signed by 67 countries including India. It will be interesting to see how eventually the objective of the relevant BEPS action plans get actualized through the changes adopted in the various tax treaties.

Also, the government has recently introduced General Anti-avoidance Rules (GAAR) which will be effective from 1 April 2017. GAAR aims to equip the revenue authorities to look at arrangements deprived of substance and bonafide, primarily entered into for obtaining tax benefits. Given this will be first year of implementation, the efficacy and judiciousness of the use of these rules by tax authorities remains to be seen.

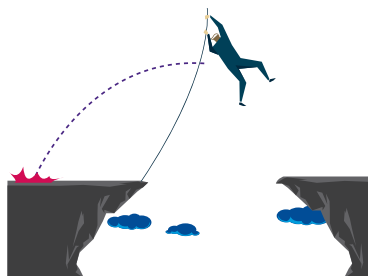
### Indirect Tax

'One Nation, One Market, One Tax' seems to be transforming to reality with the transitioning to India's biggest indirect tax reform – The Goods & Services Tax (GST). This new tax regime subsumes most of the existing Central and State taxes on supply of goods and services.

GST is expected to result in an inevitable holistic business transformation, which should lead to a new target operating

model for the organisations that aim to improve profitability, cash flows, sourcing, pricing, distribution as well as their Enterprise Resource Planning (ERP) systems. For the government's 'Make in India' initiative to attain its goals, the implementation of GST is considered to be very crucial as it could be transformational for the business ecosystem of the country.



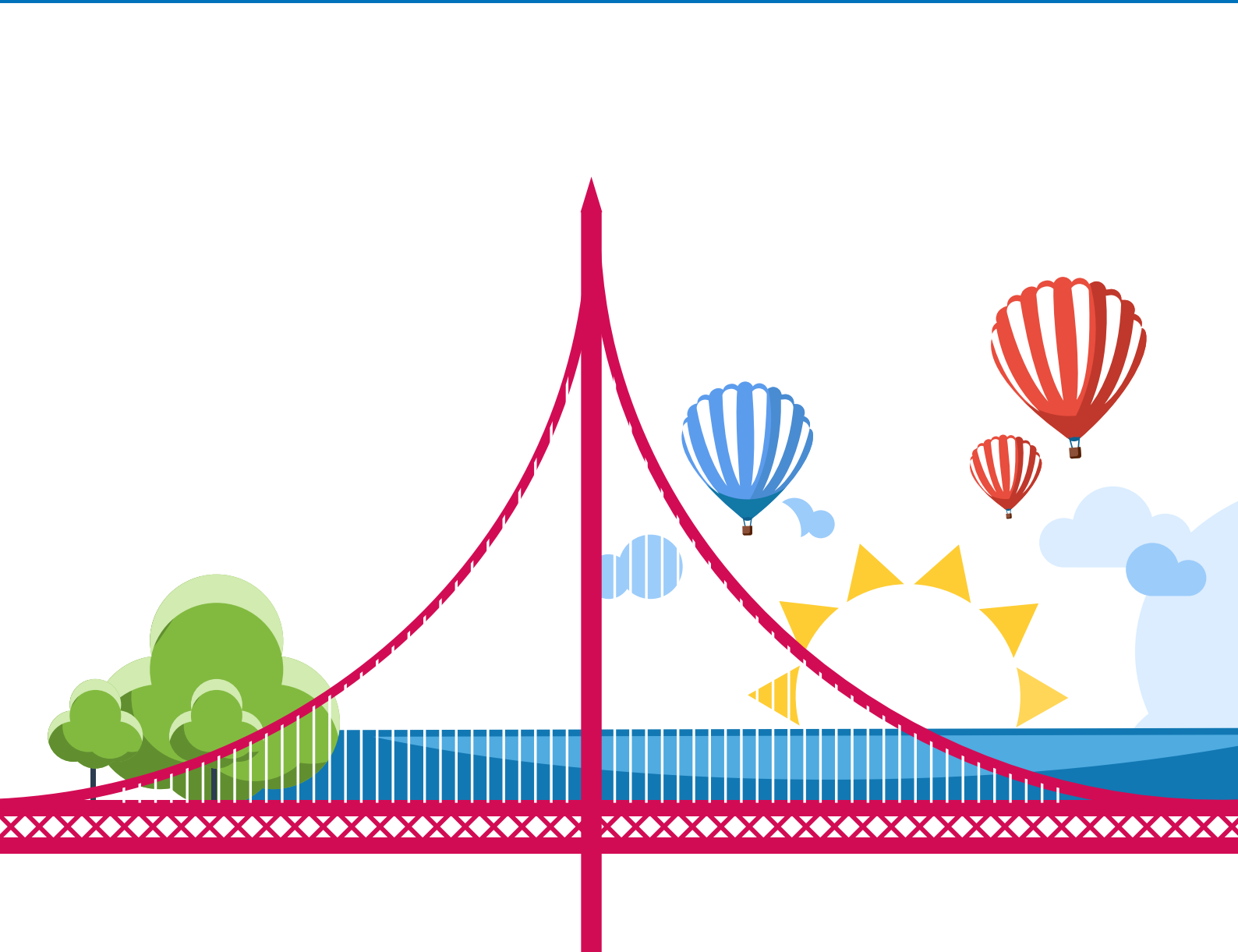


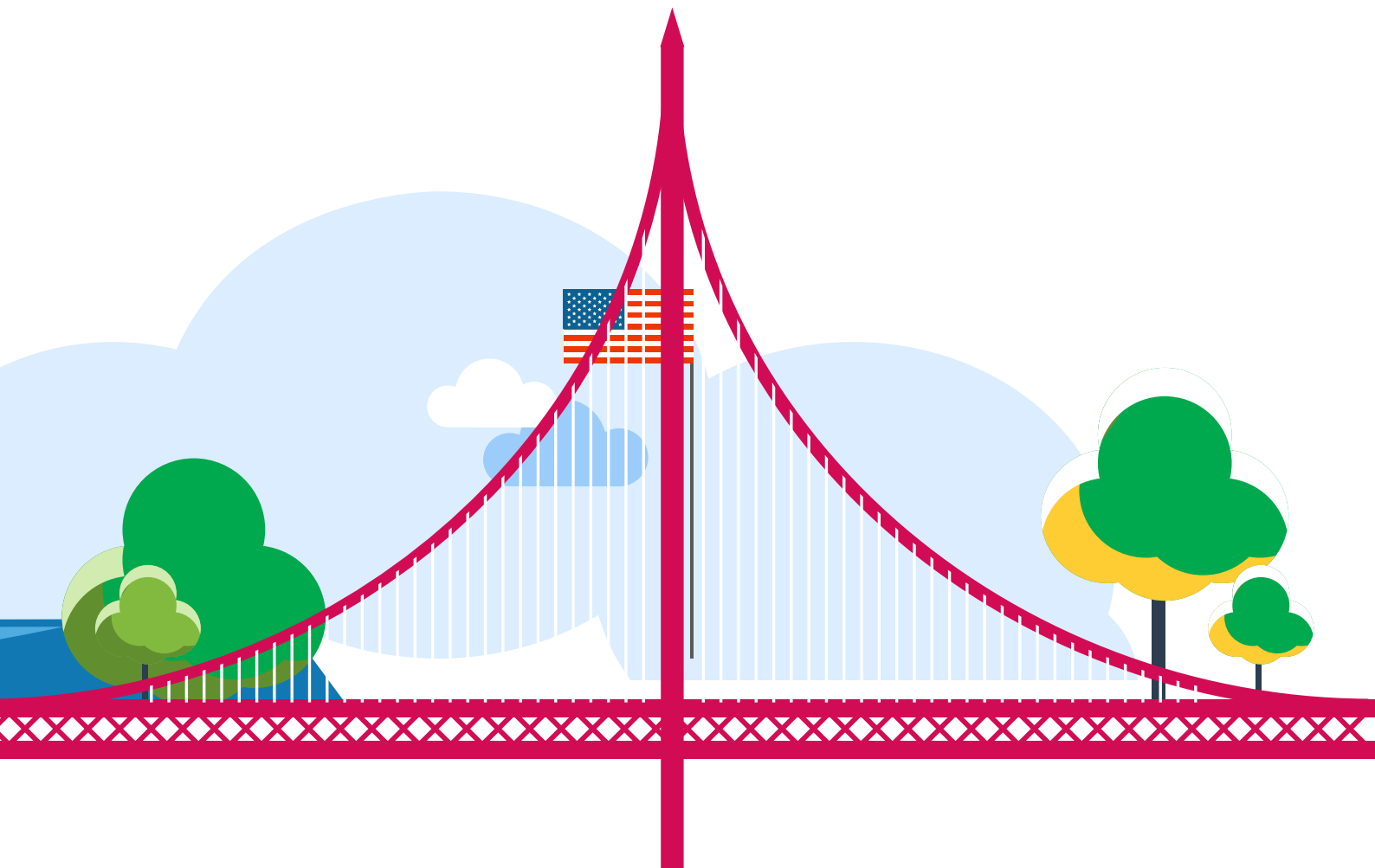
## Challenges

Below are some key challenges generally faced by foreign companies operating in India, including some specific concerns confronting U.S. based companies:

- **Expeditious resolution of pending cases:** Some foreign held Indian companies including India based U.S. companies have received notices from the Indian tax authorities with respect to key issues faced by such companies around underpricing an intragroup share transfer, constitution of subsidiary and related PE profit attribution, taxation of software and reimbursement of group level expenditure
- **Authority for Advance Rulings (AAR):** AAR is an alternate dispute resolution mechanism to provide certainty on tax implications on certain transactions, largely involving taxability of non-residents. Recently, another bench was added and the pool of judges/ members was expanded to increase the outreach of the mechanism. However, there is still an increasing dependency, as the AAR has practically been non-functional for around a year now on account of the incomplete constitution of the bench and other administrative issues
- **Corporate tax rate:** Foreign/ U.S. entities having their presence in India in the form of branch offices, project offices, etc. are taxed in India as foreign companies and they bear the highest corporate tax rate i.e. 40 per cent, whereas domestic Indian companies pay tax at the rate of 25-30 per cent<sup>3</sup>
- **Secondment of expatriates:** There is intense litigation exposing companies to a permanent establishment risk, risk of withholding taxes in India, etc. arising from arrangements where foreign companies second expatriates to work in their Indian subsidiaries for specified durations (more than six months, generally up to two to three years.) Courts/ tribunals have held that despite Indian subsidiaries having the effective and economic employment, such expatriates continue to have a lien on their jobs and continue their employment with the foreign company, exposing the foreign company to a PE risk
- **Cross charges made by foreign/ U.S. Company for headquarter services under scanner:** The U.S. entities face significant litigations in India with respect to cross charges made by a U.S. Company for headquarter services. The tax authorities have been asking for evidence of services rendered and benefits derived by the Indian company
- **Contract R&D serviced by Indian Company to U.S. Company and IP transferred:** There has been considerable controversy in India with respect to what constitutes contract R&D. Generally, Indian affiliates providing services operate as 'contract service providers' where the assumption is that the Indian affiliates are providing routine services without bearing significant risks and are typically remunerated using traditional TP approaches such as a mark-up on total costs. However, the Indian tax authorities adopt an aggressive approach during transfer pricing assessments, contesting that significant functions are performed in India to make transfer pricing adjustments
- **Establishing a physical presence in India:** Investors struggle with the number of approvals and registrations that are required for setting up business operations in India. While the Ministry of Commerce and Industry has simplified the company incorporation process by introducing one simplified application, there is room for a lot more with respect to state level registrations such as those relating to employment, shops and establishments, etc.
- **Lack of unanimity amongst various stakeholders:** There is a disconnect between the administrative machinery and the foreign investment regulatory authorities. Certain government departments encourage foreign investors to make a direct payment before the Indian leg is incorporated (say for earnest money to participate in a bid or advance for acquisition of factory land), which is per se not allowed under the foreign exchange regulations and requires a prior regulatory approval.

Sources: <sup>1</sup>India notifies amended tax treaty with Singapore, Economic Times, accessed on 08th June 2017; <sup>2</sup>GAAR, POEM to come into effect from April 1, Indian Express, accessed 08th June 2017; <sup>3</sup>KPMG in India Analysis, India Tax profile, published on June 2015, accessed on 08th June 2017





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