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Diversifying India's Services Exports through SEZs: Status, Issues and the Way Forward

Arpita Mukherjee
Saubhik Deb
Shreya Deora
Tanu M. Goyal
Bhavook Bhardwaj

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Abbreviations

ATF	Aviation Turbine Fuel
BoE	Bill of Entry
DDT	Dividend Distribution Tax
DIFC	Dubai International Financial Centre
DTA	Domestic Tariff Area
EOU	Export Oriented Unit
EPCES	Export Promotion Council for EOUs and SEZs
EPZ	Export Processing Zone
EU	European Union
FDI	Foreign Direct Investment
FEMA	Foreign Exchange Management Act
FIAS	Facility for Investment Climate Advisory Services
FTWZ	Free Trade Warehousing Zone
FTZ	Free Trade Zone
GDP	Gross Domestic Product
GIFT	Gujarat International Finance Tec-City
GSP	Generalized System of Preference
ICC	Indian Chamber of Commerce
IFC	International Finance Centre
IFSC	International Financial Services Centre
IRDA	Insurance Regulatory Development Authority
IT	Information Technology
ITeS	Information Technology enabled Service
MAT	Minimum Alternate Tax
MIHAN	Multi-modal International Cargo Hub and Airport at Nagpur
MRO	Maintenance, Repair and Overhaul
NFE	Net Foreign Exchange
R&D	Research and Development

RBI	Reserve Bank of India
SEBI	Securities and Exchange Board of India
SEZ	Special Economic Zone
UAE	United Arab Emirates
UNCTAD	United Nations Conference on Trade and Development
US	United States
VAT	Value Added Tax
WTO	World Trade Organization

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Abstract

Services play a key role in enhancing competitiveness of manufacturing and establishing global value chains. Realising the importance of services, a number of countries such as China, Taiwan, Philippines and United Arab Emirates (UAE, Dubai) are focusing on special economic zones (SEZs) for services sectors. Moreover, the World Trade Organization (WTO) is yet to develop a discipline on subsidies in services, and therefore, it is easier to subsidise the services sectors rather than manufacturing.

India's growth in the post-liberalisation period has been propelled by the services sector and India enjoys a positive trade balance in services, as opposed to trade in goods. The services sector has the largest share in foreign investment. It is, therefore, prudent for the country to promote services SEZs to enhance exports, investment and employment. This paper focuses on how India can leverage on its strength of human resource and improve its global competitiveness through services-based SEZs. It discusses in details four sector-specific services SEZs, namely free trade warehousing zones (FTWZs), finance SEZs, power SEZs and aviation SEZs; that have been approved by the Department of Commerce, Ministry of Commerce and Industry. Further, given India's export potential in audio-visual and business services, the paper also examines the possibilities of enhancing India's services exports through creation of special services SEZs for these sectors. The paper presents the current status of these SEZs, identifies the barriers and makes policy recommendations on how to make such SEZs successful. The paper strongly recommends that SEZs can be used as a test-bed for reforms in the services sectors.

Keywords: *Services, SEZs, FTWZ, International Finance Centres, Power SEZ, Aviation, Audio-visual services, Business Services*

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Author's email: *Arpita@icrier.res.in, saubhik@gmail.com, shreya.deora@gipe.ac.in, tgoyal@icrier.res.in, bbhardwaj@icrier.res.in*

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Diversifying India's Services Exports through SEZs: Status, Issues and the Way Forward

Arpita Mukherjee, Saubhik Deb, Shreya Deora, Tanu M. Goyal, Bhavook Bhardwaj*

1. Introduction

With a growing share of services in global trade, services special economic zones (SEZs) today hold tremendous potential in enhancing a country's trade prospects. Since the year 2000, a number of countries including China, Taiwan, United Arab Emirates (UAE**,** Dubai), Singapore and Philippines have shifted their focus towards services-based zones, because of the growth in global trade in services. Services such as finance and logistics services are being extensively promoted through SEZs in countries such as Singapore, China and UAE (Dubai). One such example is the Tianjin Free Trade Zone in China which includes aviation, heavy equipment, high-technology research and development, aviation logistics and manufacturing service industries. Other notable examples include Dubai International Finance Centre (DIFC) for financial services and the Dubai Media City for audio-visual services.

There are a number of reasons to promote services SEZs. First, services such as logistics are key inputs into manufacturing sector. Therefore, by subsidising services, countries can not only enhance the global competitiveness of their manufacturing sector but can also establish global production networks. Hence, many countries are expanding the range of services within the existing SEZs or are creating specialised SEZs for services such as warehousing and other business services to make their manufacturing sector globally competitive. Second, services SEZs can be used to incentivise domestic businesses to become export competitive and attract foreign investment in certain services such as infrastructure services in developing countries, which in turn can help to promote trade. Since the World Trade Organization (WTO) is yet to develop a discipline on subsidies in services, countries can subsidise services to enhance its export capabilities. Third, services SEZs can help in liberalising the services sector of a country in a phased manner and thereby promote trade. These SEZs can be used as test-beds for reforms as has been done by countries such as China. Once the reforms are successful in a closed enclave, they can then be implemented in the whole country.

India, too, has been actively promoting services exports. Services sector is the largest contributor to the gross domestic product (GDP) and its share in trade has been rising. In 2014–15, the services sector accounted for 53% of India's gross value added.[1] The share of

* Arpita Mukherjee is a Professor at the Indian Council for Research on International Economic Relations (ICRIER). Saubhik Deb and Tanu M Goyal are Consultants, Shreya Deora is a Research Intern and Bhavook Bhardwaj is a Research Assistant at ICRIER

[1] The share is 61% of the gross value added including construction services. For details, see Chapter 7, Ministry of Finance (2015a).

services trade in India's total trade was about 27% in 2014.[2] India's share in global exports of services has increased from 1.2% in 2000 to 3.2% in 2013[3] and India's rank among WTO member countries in trade in services has improved substantially. In 2001, India was ranked 24th in terms of services exports and 20th in services imports. By 2013, India ranked as the 6th largest exporter, with export of commercial services amounting to $151 billion[4], and was the 9th largest importer of commercial services with $125 billion worth of imports (WTO 2014).[5] According to the A.T. Kearney Global Services Location Index, in 2014, India was ranked as the top most location for off-shoring services.[6] It is worth mentioning that services sector is the largest recipient of foreign direct investment (FDI) in India. The cumulative FDI in the services sector for the period April 2000 to September 2015 was $45.3 billion with a share of 17% in the total FDI in India.[7]

The contribution of SEZs to India's services exports, especially exports of information technology/information technology enabled services (IT/ITeS), is well-known. After the implementation of the SEZ Act in 2005, a major proportion of exports of IT/ITeS came from the SEZs. In 2014-15, the IT/ITeS sector contributed to 45% of total SEZ exports[8] and 68% to SEZs employment.[9] Out of the 202 operational SEZs in India, 96 are solely in the IT/ITeS sector as on March 31, 2015.

While SEZs will continue to play an important role in supporting IT/ITeS exports from India and the IT/ITeS sector is likely to dominate the exports of services from Indian SEZs, it is important for India to use SEZs to diversify its export base of services, enhance the competitiveness of manufacturing sector, establish value chains and remove barriers to trade in services. In this context, this paper focuses on some special types of services SEZs such as free trade warehousing zones (FTWZs), finance SEZs, power SEZs and aviation SEZs, which not only create employment in high technology and knowledge driven sectors but can also help to enhance the efficiency and competitiveness of production network and value chains. Further, given that India has positive trade balance in sectors such as audio-visual services and professional/business services, the paper examines the possibility of creating SEZs for audio-visual services and professional/business services to diversify the country's export basket.

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2 United Nations Conference on Trade and Development (UNCTAD) database on international trade in services. http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx (accessed on 17 October, 2015). Note that figures for 2014 are estimates in the UNCTAD database.

3 Ministry of Finance (2015a).

4 All Dollar figures are in the United States (US) Dollar.

5 Note that this includes European Union (EU). Considering EU member states individually will change the rankings accordingly.

6 A.T. Kearney (2014).

7 For details see Department of Industrial Policy and Promotion (DIPP) FDI Factsheet for the month June 2015 available at http://dipp.nic.in/English/Publications/FDI_Statistics/2015/FDI_FactSheet_JulyAugustSeptember2015.pdf (accessed on 4 December, 2015).

8 This includes exports from IT/ITeS SEZs, multi-product and multi-service SEZs.

9 This includes SEZs in the IT/ITeS only. It excludes multi-product and multi-services SEZs. The data has been provided by the Department of Commerce and EPCES (Export Promotion Council for EOUs and SEZs).

The paper is based on secondary information analysis and in-depth interviews with 20 SEZ developers and 25 units. In addition, around 28 one-to-one meetings were held with officials of central government (Department of Commerce, Ministry of Commerce and Industry, Ministry of Finance, Ministry of Civil Aviation and Ministry of Power) and state government officials in Andhra Pradesh[10], Maharashtra, Karnataka, Gujarat, Tamil Nadu, Uttar Pradesh and West Bengal. The paper tries to understand the development of different types of SEZs globally and in India, the issues that these SEZs are facing in India and what should be the right policy to make them successful.

2. Free Trade Warehousing Zones

In the current era of rapid globalisation and liberalisation, companies across the globe are setting up cross-country production units. With the establishment of global production networks and the creation of value chains, there is a greater need to enhance logistics efficiencies. As a result, countries are experimenting with new types of economic zones, such as FTWZs.

FTWZs or Free Trade Zones (FTZs) are fenced-in, duty-free areas that offer warehousing, storage, and distribution facilities for trade, transshipment, and re-export operations (FIAS 2008). They provide end-to-end supply chain facilities with value-added services. Such services include facilities such as categorised and temperature-controlled warehouses, break-bulk cargo distribution, swift one-stop custom clearances for imports and exports, service tax exemptions on services rendered within FTWZs, exemptions from local taxes and hassle-free re-exports. FTWZ units can trade with or without labelling, packing or repacking without any processing and are allowed to re-export, re-sell or re-invoice the goods they import. Assembly of completely knocked down and semi-knocked down kits as well as refrigeration for the purpose of storage can also be carried out.

Apart from such value-adding services, FTWZs enable global vendors to hold their inventories closer to their target markets, facilitating just-in-time deliveries that cut down inventory holding costs for such producers. Such logistics centres have the additional advantage of not requiring any capital investment from distributors. Trade and transfer of titles can occur within such centres and it also facilitates quality checks, which reduces rejections and returns later in the supply chain.

FTWZs provide the flexibility of carrying out various types of transactions based on business needs. They can be used for transshipment, i.e., import from overseas into FTWZs and re-export with or without value addition; import from overseas to domestic tariff areas[11] (DTAs) through FTWZs with or without value addition that allows vendor inventory management and just-in-time delivery; export from DTA/Export Oriented Units (EOUs)/other SEZs to overseas through FTWZs with or without value addition; export from overseas and DTA to

[10] Andhra Pradesh refers to the erstwhile Andhra Pradesh prior to the bifurcation of the state into Andhra Pradesh and Telangana in 2014.

[11] Domestic tariff area (DTA) means an area within a country (say, India) that is outside the SEZs.

FTWZ and re-export to overseas through FTWZs; and import from overseas to DTA through FTWZs with addition of domestic inputs at FTWZs[12].

In the United States (US), the Foreign-Trade Zones Act initiated the FTZ Programme as early as 1934. However, the Shannon Free Trade Zone in Ireland, which was established in 1959, is the world's first well-known free trade zone. Since then, these zones exist around the world under different names such as Foreign Trade Zones (US), Bonded Logistics Parks and Bonded Port Area Zones (China), Warehouse Transshipment Zones (Taiwan) and Logistics Complex (South Korea). These zones have changed over time. Today, free trade zones not only provide warehousing and logistics but also a number of value-added services such as labelling.

In terms of policies, either FTWZs have been incorporated within existing SEZs/Export Processing Zones (EPZs) policy or they have been set up under a separate policy. The Taiwan government, for instance, launched two programmes, Global Logistics Development Plan and Free Port Plan, between 2000 and 2003 to set up such zones. The government also launched the Warehouse Transshipments Special Zones to integrate the functions of EPZs and offshore shipping centres. Under this programme, logistics facilities and storage centres can be developed inside the EPZ, which would help in the speedy transportation of cargo. This plan augmented the attractiveness of EPZs and substantially increased EPZ investment in Taiwan (Chiu 2010).

Initially, FTWZs were attractive because they were zero tariff zones. Over time, with countries joining the WTO and signing bilateral and regional trade agreements, the need for FTWZs seems to have diminished since WTO and trade agreements have lowered tariffs, quotas and other import barriers. Subsequently, countries started focusing on FTWZs as a means to promote their logistics services sector and develop trading hubs. For example, Chinese FTZs, which were already located in strategic points near ports, developed themselves into trade and distribution centres. More recently, the Shanghai Free Trade Zone was launched in 2013, which is an amalgamation of four existing trade zones - the Waigaoqiao Free Trade Zone, Waigaoqiao Free Trade Logistics Park, Yangshan Free Trade Port Area and Pudong Airport Comprehensive Free Trade Zone with the aim of promoting Shanghai as the logistics hub of the country.

There are several other reasons to promote FTWZs. The WTO rules prohibit providing export-linked subsidies to manufacturing units. Since services such as logistics services help to increase the global competitiveness of manufacturing through faster end-to-end reliable transportation of goods, countries such as China and Taiwan realised that they could improve the competitiveness of their manufacturing sector by subsidising services such as logistics.

[12] In simple language, there can be three possible ways in which goods are moving out of the FTWZs. There is little value addition (say re-packaging) and the goods are exported; goods are moved for further processing for exports or goods are moved for further processing for domestic consumption. In case goods are meant for domestic consumption, a Bill of Entry (BoE) is required. If goods are going for value addition out of the FTWZ, then a transshipment certificate is required.

Developing countries with large consumer base, low-cost labour and cheap raw material, such as India, are becoming attractive destinations for global companies to establish production networks. These countries face high logistics costs. Logistics costs by value account for around 13.5% of the GDP of India, 18% in China and 16% in Thailand, compared to 8.5% in the US, 10% in the Europe and 11% in Japan.[13] Several infrastructural bottlenecks coupled with cumbersome administration processes in these countries substantially increase the cost of production. Therefore, policymakers have adopted FTWZs as an option to reduce logistics costs.

Focusing on India, it is one of the fastest growing economies in the world with high domestic demand. India is liberalising trade and is trying to develop as a hub for manufacturing and exports.[14] However, the logistics infrastructure is weak and inefficient and this results in additional costs to the extent of $45 billion every year.[15] To overcome this, the Indian government has been encouraging private investment in infrastructure sectors such as in FTWZs. The government has allowed 100% FDI in FTWZs. It also wants to set up FTWZs along economic corridors such as the Delhi-Mumbai Industrial Corridor and near major ports and airports.

With respect to the policy related to them, FTWZs were first defined under Chapter 7A of India's Foreign Trade Policy (2004–2009) as a special category of SEZs with a focus on trading and warehousing. The SEZ Act, 2005 and the SEZ Rules, 2006, govern them. All benefits extended to the SEZs are applicable to FTWZs. The policy also requires FTWZs to be net foreign exchange earners in five years. The aim behind establishing FTWZs in India is to create infrastructure to facilitate the import and export of goods and services and to create international trading hubs. As of May 2015, there are 11 FTWZs in India (Table 1), which are in different stages of development. Most of these are privately owned and accounted for around 14% of the total investments in SEZs as on March 31, 2015.[16]

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13 Deloitte and ICC (2012).

14 For details, see Foreign Trade Policy 2004-09 available at http://www.ftwz.com/acts/ftp_2004_09.pdf and Foreign Trade Policy 2009-2014 available at http://cgibirmingham.org/pdf/ForeignTradePolicy.pdf (accessed on 10 August, 2015).

15 See http://www.mckinsey.com/insights/travel_transportation/transforming_indias_logistics_infrastructure (accessed on 30 September, 2015).

16 Date provided by Department of Commerce and EPCES. The data is not available for three SEZs namely Lepakshi Knowledge Hub Private Limited, Indian Strategic Petroleum Reserves Limited and M/s Venkatesh Coke & Power Ltd.

Table 1: Snapshot of FTWZs in India as of May 2015

S. No.	Name of the SEZ	Ownership	Location	Status of the SEZ
1	Adani Ports and SEZ	Private	Village Dhrub, Taluka Mundra, District Kuch, Gujarat	Notified
2	Arshiya International Limited	Private	Village Bori, Taluka Nagpur, District Nagpur, Maharashtra	Notified
3	Karanja Infrastructure Private Limited	Private	Village Chanje, Taluka Uran, District Raigad, Maharashtra	Notified
4	FAB City SPV (India) Pvt. Ltd.[a]	State government	Villages Srinagar and Raviryal, Maheshwaram Mandal, Ranga Reddy District, Andhra Pradesh	Operational
5	Arshiya International Limited	Private	Village Sai, Taluka Panvel, District Raigad, Maharashtra	Operational
6	Arshiya Northern FTWZ Limited	Private	Ibrahimpur, Junaidpur Urf Maujpur, District- Bulandshahar, Uttar Pradesh	Operational
7	J. Matadee Free Trade Zone Private Limited	Private	Mannur and Valarpuram Villages, Sriperumbudur Taluk, Kancheepuram District, Tamil Nadu	Operational
8	Lepakshi Knowledge Hub Private Limited	Private	Chillamaturu Mandal, Ananthapur District, Andhra Pradesh	Formally approved
9	Indian Strategic Petroleum Reserves Limited	Central government[b]	Padur, Karnataka	Formally approved
10	Cochin Port Trust	Central government	Southern end of Willingdon Island, Thoppumpady Ramesaram village, Kochi, Kerala	Formally approved
11	M/s Venkatesh Coke & Power Ltd	Public	Athipattu, Nandiambakkam and Puludivakkam villages, Ponneri Taluk, Thiruvallur District, Tamil Nadu	In-principal approval

Note: a) FAB City SPV (India) Pvt. Ltd. Also provides facilities for manufacturing and developing semiconductors in the FTWZ.

b) A subsidiary of Oil Industry Development Board.

The process of approval of an SEZ is in four stages. If the land has been identified but is not yet under the possession of the developer, in-principle approval is given. If the land is under the possession of the developer, a formal approval is given. Documents on land possession/ ownership including survey area/ map, non-encumbrance certificate, vacancy and contiguity report are scrutinised by the Development Commissioner; if they are found to be in order, the proposal is recommended for notification to the Department of Commerce. At the notified stage, the SEZ gets the tax exemptions and incentives. The SEZ is said to become operational if one unit start production.

Source: Compiled from information provided by the Department of Commerce, Ministry of Commerce and Industry.

When the idea of establishing FTWZs was conceived, it was expected that they would create significant trade infrastructure. However, to date only four of them are operational although the policy received significant interest from private developers. Further, some notified and approved FTWZs, such as Balaji Infra Projects Limited, Jafza Chennai Business Parks Private Limited, Haldia Free Trade Warehousing Private Limited and Hari Fertilisers Limited, have been cancelled.

There are several reasons why FTWZs have not worked in India. When the Foreign Trade Policy 2004–09 was announced, the Indian economy was on a high growth trajectory and the Policy aimed to double India's share in global trade by 2009. When the global economy experienced an economic crisis, India's growth rate and exports also slowed down and there was a general decline in business. Since most of these FTWZs were established in an economy that was facing an economic downturn, the condition of becoming a NFE earner in a span of five years, which as to be met by any SEZ under the SEZ policy, proved to be a difficult task.

Several reforms that were supposed to be implemented did not take off. For instance, the government was in the process of allowing 100% FDI in multi-brand retail but the reform did not take off. The government on November 2015, proposed liberalisation of FDI in a number of sectors, including single-brand retail, construction and e-commerce, but multi-brand retail trading continue to face FDI restrictions. Nevertheless with the recent reforms, the retailers, manufacturers and e-commerce companies could use FTWZs to provide end-to-end services and generate enough business from manufacturers, exports, distributors and retailers. While e-commerce and especially cross-border e-commerce would be a demand driver for FTWZs, the primary business of FTWZs can expand and grow even without e-commerce, if India can offer a viable model for low-cost inventory management. The location for inventory for the global value chain is a competitive decision taken by the company and low cost drives this decision. Unless reforms are implemented, logistics and inventory management costs in India will continue to be high and India has to compete with countries such as Sri Lanka, which also has the advantage of low-cost labour. Survey respondents pointed out that the efficiency at Colombo port in Sri Lanka is much better than at any Indian port. Further, the slow pace of reforms in areas such as land acquisition has slowed down infrastructure development and adversely affected the zones.

To have a smooth supply chain, it is important to allow the free movement of goods and services. However, there has been a significant delay in the implementation of the single goods and service tax. In addition, the FTWZ policy is evolving and several issues are not clear to the developers. For example, during the survey they pointed out that they did not know what kind of services could or could not be provided in an FTWZ. The Department of Commerce issued several notifications to clarify their doubts but still there are confusions. The concept of an FTWZ is also new to state governments; they often fail to treat an FTWZ as an SEZ and start imposing taxes.

Apart from these, several operational barriers came up during in-depth discussions with FTWZ developers and users. First, an FTWZ developer often constructs common infrastructure and provides storage/warehousing services including other infrastructure support services to units instead of leasing land to units where units can construct their own infrastructure. In such cases, the units do not get possession of the premises and therefore do not have an individual water or power connection. The FTWZ developer enters into a long-term contract with the units to provide them with storage services and related infrastructure support such as water usage/power usage. Further, a unit or a client of a unit may procure into the FTWZ different types of goods, for example, commodities/ chemicals/ palletised products, over-sized cargo and perishable goods, that need to be stored at different locations/ facilities based on requirements such as racked warehouse, non-racked warehouse, open yard/ and cold storage. An FTWZ developer (unlike any other SEZ developer) therefore may not be able to allocate fixed individual space/ sheds, etc. Accordingly, instead of leasing land/ sheds where possession of premises is granted, an FTWZ developer can enter into a long-term arrangement to provide warehousing/ storage services that are computed in terms of pallet spaces/ square feet usage. Under such arrangements lease/ possession of land/ premises is not granted to the unit holder. These arrangements are, therefore, not agreements for lease of immovable premises and, therefore, under the state stamp duty legislations there is no provision for registration of the agreements.

Second, the movement of cargo from a port, airport, Customs station etc. to the FTWZ is allowed upon filing a Bill of Entry (BoE) for home consumption, which requires details such as classification, valuation and assessment by the authorised/specified officers. For goods coming into an FTWZ for warehousing/storage, this creates the following operational problems: (a) Filing a BoE requires an assessment of goods to take place, but this should not be required since the goods have not been imported and are coming to be warehoused; (b) Filing a BoE requires an Importer Exporter Code to be mentioned. Invariably the Importer Exporter Code of the unit is mentioned even if it is bringing in goods for its client. This imposes a liability on a unit that is not the actual importer and is only providing warehousing services and does not own the goods; (c) SEZ online, the e-portal that enables electronic filing and processing of important SEZ-related transactions, does not allow multiple windows, and so simultaneous import clearance and background check of inbound cargo is not possible. Due to this problem, the Customs officers at FTWZs generally ask for a printed copy of the BoE. So, if an FTWZ client wants to sell an imported cargo to a DTA buyer and has to share the hard copy of the BoE with the buyer, the buyer gets to know the actual import price. Moreover, SEZ online is slow and sometimes not linked to the Customs electronic data exchange system or the e-commerce portal of the Central Board of Excise and Customs called the IceGate.

Third, SEZ Rule 18.5 allows the unit holder in an FTWZ to hold cargo for foreign suppliers. However, there is lack of clarity about whether FTWZs can hold cargo for foreign buyers or DTA suppliers or DTA buyers without whom the FTWZs would lose the bulk of their business. For example, any cargo coming through Mumbai port would not be allowed to be transshipped to FTWZs unless it is in the foreign supplier's name. However, the Customs at

Jawaharlal Nehru Port Trust, Mumbai allow all cargo to be transshipped to FTWZs. So, lack of clarity in the rule makes it susceptible to interpretation by Customs officers, leading to uneven implementation across ports and jeopardising the business model of FTWZs.

Fourth, there is no set process for claiming duty drawbacks from FTWZs. Any cargo coming from the DTA to the FTWZ is technically an export, but there is no set process for the DTA exporter to claim duty drawback on it even when the DTA exporter is selling it to a foreign supplier, receiving payment in foreign currency and the FTWZ is holding the cargo on behalf of the foreign supplier. If the DTA supplier is a production unit, it can claim duty drawback through the Excise Department. However, if the DTA supplier is a trader, there is no way it can claim duty drawback and hence they are not interested in doing business through FTWZs. Similarly, there is no set process to issue Generalized System of Preference (GSP)[17] certificates to exports from FTWZs. GSP certificates will not be issued to an otherwise GSP-eligible cargo if it is brought to FTWZs, broken down and then exported.

Fifth, online intra-unit trading is not allowed in SEZs in India. However, in FTWZs a unit might hold cargo from multiple clients and this means that the clients of a unit cannot sell to each other. The existing units cope with this by having an additional unit in the FTWZ to facilitate the transaction.

Sixth, various services such as threading, coupling, repairing, reconditioning and rectification are not allowed in FTWZs. However, in order to be a transshipment and consolidation hub, FTWZs should provide a wider variety of services to cater to all business needs instead of just warehousing. Moreover, the larger the number of services that could be provided inside FTWZs, the greater would be the value addition and the foreign exchange earnings of the FTWZs.

Seventh, there is a lack of clarity with respect to taxes while supplying goods to DTA units from an FTWZ. Often state governments fail to treat FTWZs as foreign territories, and imports from Indian FTWZs to the DTA face sales tax and value added tax (VAT). These taxes are not imposed if the same product is imported from an FTWZ outside the country, for example, from Sri Lanka or Thailand. Further, state VAT authorities insist on getting Form I from the DTA exporters as per the provisions of Rule 32 of the SEZ rules. Form I can be issued by a registered dealer only under the central sales tax/ VAT Act[18]. Often goods do not enter the FTWZ for consumption by the FTWZ unit but are solely for the purpose of export where the FTWZ unit is only acting as a custodian service provider to the overseas buyer, who may not be registered under central sales tax/VAT. If all foreign buyers are required to make such a registration across several Indian states, this adds to the transaction costs of operations. Additionally, with the proliferation of FTAs, the duties paid for supplying to the DTA from the FTWZ would be higher relative to the preferential rates applicable to the

[17] Generalised System of Preference (GSP) is a preferential tariff system extended by developed (donor) countries to developing (beneficiary) countries. It involves reduced most-favoured nation tariffs or duty-free entry of eligible products exported by beneficiary countries to the markets of donor countries.

[18] For details see http://rajtax.gov.in/vatweb/download/forms/CST%20Form%2001.pdf (accessed on 16 November, 2015).

partner countries. This problem is faced by all types of SEZs and is not specific to the FTWZs.

Eighth, there are issues with respect to service tax. Service tax is levied on all services provided to overseas suppliers from the FTWZ even where these services are wholly provided and consumed in the FTWZ such as warehousing services. This defeats the purpose of having a 'Free Zone' and makes Indian FTWZs far less competitive than other locations.

Ninth, according to Rule 30/8 of SEZ Rules, 'Drawback or Duty Entitlement Pass Book credit against supply of goods by DTA supplier shall be admissible provided payments for the supply are made from the Foreign Currency Account of the Unit'. This means that the transaction of sale has to be between the SEZ/FTWZ unit operator and the Indian exporter in the DTA. Thus, third party payments do not qualify for claiming drawback or incentives under Duty Entitlement Pass Book scheme. This prevents the take-off of the vendor management inventory-based procurement model in India.

Last but not the least, there are issues with respect to the Double Taxation Avoidance Agreements[19] that India has signed with several countries. The definition of Permanent Establishment in most of India's Double Taxation Avoidance Agreements (as defined in Article 5 of bilateral Double Taxation Avoidance Agreements) is unclear about whether or not a long-term contract between an FTWZ and a party based abroad providing services related to storage and other value-added services and managing the foreign parties inventory will cause this operation to be categorised as a Permanent Establishment of the foreign party. This lack of clarity and the potential of being taxed in India for such services discourage many multinational corporations from using Indian FTWZs as regional production network hubs.

The Indian government is aware that if India wants to develop manufacturing it should also have efficient supply chain and state-of-the-art logistics facilities. For this, the government is implementing domestic reforms and has also recently signed the WTO's Trade Facilitation Agreement. FTWZs are a key component of an efficient logistics network. However, the policy related to the FTWZs has several loopholes as discussed above and there is a lack of knowledge and understanding across different ministries and departments at both the centre and the state levels on FTWZs. To tackle this, first, there is a need for a consolidated policy document on FTWZs that clearly mentions which services these zones can or cannot offer and what benefits/incentives they can expect in return. It is important to ensure that developers are aware of the incentives they get when they establish FTWZs.

Second, the concept of FTWZs has to be clarified and duly explained to the state governments, Customs officers and users. FTWZs need to be treated as SEZs and standalone

[19] Double Taxation Avoidance Agreement also referred to as Tax Treaty is a bilateral economic agreement between two countries that aims to avoid or eliminate double taxation of the same income in the two countries. For details on India's Double Taxation Avoidance Agreements see http://www.incometaxindia.gov.in/Pages/international-taxation/dtaa.aspx (accessed on 14 November, 2015).

FTWZs should be considered as foreign territories for state tax purposes. There is also a need for clarity under international agreements related to the Double Taxation Avoidance Agreement.

Third, several policy barriers in the way of development of FTWZs need to be removed. Free trade across the value chain is essential to sustain the idea of an FTWZ and the whole supply chain has to be liberalised including allowing FDI in retail.

Fourth, rapid implementation of the goods and service tax will remove hindrances to movement across states and allow for a smoother supply chain. This will encourage the hub-and-spoke model of business development, which is key to the success of FTWZs.

Fifth, the location of FTWZs is crucial. Since India is planning to set up economic corridors, FTWZs should ideally be developed at strategic points within these corridors. They should also be located close to major ports and airports where there are containerised cargo movements along with break bulk cargo.

Sixth, day-to-day operational issues of FTWZs should be addressed. For example, the SEZ rules need to provide for the registration of agreements where the lease of infrastructure is not granted to the unit holder but is based on square feet usage of storage service. The requirement for filing a BoE for home consumption is a major deterrent for conducting transshipment hub operations, because foreign clients do not intend to have a presence in India. It is important to rationalise the procedures for imports and the requirement to file a BoE needs to be done away with; instead, goods should be cleared from the port by Customs on the basis of a transshipment permit. If and when the goods move from the FTWZ to the DTA, then the necessary BoE for home consumption can be filed. It needs to be clarified that the movement of import cargo into an FTWZ is to be allowed without filing a BoE, because the FTWZ facility is just an extension of any other port such as an Inland Container Depot or Container Freight Station, where goods can be taken after import to avoid congestion at the port of import. A procedure for transshipment for import of goods into the FTWZ by units for authorised operations needs to be laid down clearly. At the same time, a proper system for claiming duty drawbacks for traders has to be established so that they are encouraged to do business with FTWZs. Further, the client of a unit using FTWZ facilities, whose goods or on behalf of whom goods are received and warehoused or stored in the FTWZ, needs to be recognised. It is important to understand that the units are just service providers and do not control either the prices or the quantity of imports and exports by the client. So, the exports and imports of clients of the units should not be used for NFE calculations.

Seventh, the software in SEZ online has to be upgraded to increase its speed and connectivity with the Customs electronic data exchange system IceGate. All filings should be online and the paperwork should be reduced.

Lastly, FTWZs should be allowed to provide a wide range of services including pick-and-pack, kitting, cutting, blending and polishing, bar coding, labelling and re-labelling, re-invoicing, assembly and re-assembly, quality control and reverse logistics, including repair and refurbishing. This will boost their earnings and add vital value-added services to the existing system.

To provide the Indian manufacturing and services sectors with the ability to compete on the international front, private investment in FTWZs needs to be encouraged with the right policies. The government, for its part, should market the FTWZs along with the Prime Minister's 'Make in India' campaign.

3. Finance SEZs

With the liberalisation of the capital markets, changes in business models and increase in world trade, financial services have become a significant part of services trade for both developed and developing economies. According to WTO (2014), world exports of financial services were $335 billion in 2013, registering an annual growth of 9% over the previous year. The data also shows that developing countries have become key players in trade in financial services. For example, China exhibited financial sector exports of $3,168 million and imports of $3,685 million in 2013, while Indian financial sector exports were $5,935 million and imports were $5,532 million. In the same year, the highest growth rate in exports of financial services was in Asia, with exports of financial services rising by 68% in China and by 16% in India. While developed countries continue to be large markets for financial services, in 2013 the European Union (EU) saw an increase in exports by 7% and the US exports rose by 10%.

The growth of trade in financial services has led to the proliferation of International Financial Services Centres (IFSCs). According to the Ministry of Finance (2007), financial centres that cater to customers outside their own jurisdictions and deal with the cross-border flow of finance/financial services are called IFSCs or International Finance Centres (IFC). In India, Section 18 (I) of the SEZ Act 2005 states that an IFSC can be established in an SEZ/as an SEZ after getting approval from the central government and given that it abides by the regulatory rules set up by the Reserve Bank of India (RBI), the Securities and Exchange Board of India (SEBI) and the Insurance Regulatory Development Authority (IRDA). If a financial centre is an SEZ or is located within an SEZ, it will avail of all the benefits given to an SEZ. The IFSC can also avail of an exemption from the securities transaction tax levied under Section 98 of the Finance Act, 2004. This is in case the non-resident enters into taxable securities transactions through the IFSC. The Ministry of Finance (2015b) in its report 'Policy Framework for Finance SEZs' considers finance SEZs as a controlled environment in which certain reforms can be implemented to make financial firms, government agencies and global investors familiar with these reforms before being implemented in the whole country.

Although IFSC is a relatively new concept in India, financial centres have developed across the globe in locations such as in London (United Kingdom), New York (US), Singapore, Hong Kong and Dubai (UAE). Countries such as Singapore embarked on financial reforms to attract foreign financial investors to its IFSC by providing full capital account convertibility, opening new financial markets, giving fiscal incentives and creating a Singapore Dollar bond market. The Monetary Authority of Singapore established the Singapore Exchange Limited, the first demutualised and integrated securities and derivatives exchange in Asia. In Dubai, the DIFC was set up in 2004 and has been attracting foreign firms to set up financial services in its regions. The DIFC gives various incentives to attract investors such as full capital account convertibility and a zero tax rate on income and profits with a tax holiday of 50 years. The DIFC has an independent judicial system along with its own code of law governing financial services regulations. These independent regulatory authorities allow financial firms to operate outside the UAE laws while still being within its broader purview. China launched an IFC in Shanghai in 2013 as a testing ground for major financial and economic reforms. The free exchange of its heavily regulated currency, the yuan, with other currencies is one of the major reforms that China plans to implement in its IFC. Other reforms that China proposes to implement in the Shanghai IFC include setting up foreign wholly owned banks and allowing foreign medical insurance and investment companies.

In a nutshell, IFSCs are sometimes created to initiate financial sector reforms and develop the country as a trading hub. Globally, IFSCs provide a wide array of financial products and services, which the Ministry of Finance (2007) lists as the following: (1) fund raising for individuals, corporations and governments, (2) asset management and global portfolio diversification, (3) personal wealth management for high net worth individuals, (4) global transfer pricing as increasing number of firms take operations across borders, (5) global tax management and cross-border tax liability optimisation, (6) global/regional corporate treasury management operations which involves fund raising, liquidity investment and management, risk management, etc., through insurances and traded derivatives, (7) global/ regional risk management operations and insurance/re-insurance involving traded derivatives, (8) global/regional exchange trading of financial securities, commodities and derivatives contracts in financial instruments/indices and in commodities, (9) financial engineering and architecture for large complex projects, (10) global/regional mergers and acquisitions activity and (11) financing for global/regional public–private partnerships.

India's rising GDP and growth in investment and savings have made it a large user of financial services. However, banking and financial services in India continue to face FDI restrictions and the country does not allow complete capital account convertibility to foreign companies. This restricts the import and export of financial services in India. Yet, India has the potential to develop as a financial services hub due to a skilled and educated workforce. A number of Indians are in key positions in global financial institutions and several Indian companies use the services of IFSCs in other countries. Given this situation, the Ministry of Finance (2007) recommended that Mumbai should be developed as an IFSC.

While Mumbai continues to be India's financial hub, the proposal for establishing India's first finance SEZ came from the Government of Gujarat in 2007. The formation of the Gujarat International Finance Tec-City or GIFT City (near Ahmedabad, Gujarat) was proposed as a joint venture between the state government's Gujarat Urban Development Company Limited and Infrastructure Leasing & Financial Services Limited. GIFT aims to attract global investors in its multi-services SEZ, providing state-of-the-art connectivity, infrastructure and technology. It proposes to include facilities such as offshore banking, insurance, assurance and reinsurance and regional financial exchanges. In recent months, several Indian banks such as the State Bank of India, Kotak Mahindra Bank, Yes Bank and HDFC Bank have expressed an interest in opening their units in GIFT. Several non-bank players such as Life Insurance Corporation of India, Bombay Stock Exchange, National Stock Exchange of India and National Commodity and Derivatives Exchange Ltd. are also planning to establish their presence in the Gujarat IFSC. Most of the interest in GIFT City has come from domestic firms since foreign investors are still looking for clarifications on regulations and dispute settlements regarding IFSCs.

One reason for the delay in GIFT becoming operational has been lack of clarity on finance SEZs and the services that they can offer. To ensure clarity, in February 2015 the Ministry of Finance released its report, 'Policy Framework for Finance SEZs' (Ministry of Finance 2015), which provides a strategic framework and lists the objectives in the implementation of finance SEZs. The report acknowledges that India is a large importer of international financial services and has the potential to be a global producer of financial services. However, it is difficult for India to compete with global IFSCs due to the restrictions on the capital account, the rigid financial regulations and the high and multi-layered taxation. Due to this, India is losing financial sector business to other IFSCs such as those in Singapore and Dubai. According to the Ministry of Finance (2015b), this has caused an estimated loss of revenue to the tune of Rs.13.3 billion per day or Rs. 2,001.4 billion per year. To address this issue, in June 2013 the Ministry of Finance set up a 'Standing Council of Experts on the International Competiveness of the Indian Financial Sector' to lay down a roadmap for the establishment of finance SEZs. In this context, it is important to mention that India is also in the process of undertaking reforms such as the implementation of the Indian Financial Code 2013, which was drafted by the Justice Srikrishna Commission (Ministry of Finance 2013a and 2013b). The Ministry of Finance (2015b) suggests that finance SEZs can be used as a test bed for some of the financial sector reforms proposed under the Indian Financial Code 2013.

In the Union Budget of 2015, it was announced that guidelines for appropriate implementation of IFSCs would be released. Subsequent to this, multiple regulators of financial services have made changes to accommodate the IFSCs. For example, SEBI released IFSC Guidelines, 2015 on March 27, 2015 to facilitate and regulate financial services relating to the securities market.[20] These guidelines provide a framework for setting up stock exchanges, clearing corporations, financial intermediaries and management companies in IFSCs. The RBI issued the Foreign Exchange Management (IFSC) Regulations, 2015 along with Operational Guidelines on IFSC, 2015. These regulations are under the Foreign Exchange Management Act (FEMA), 1999 stating that any financial institution set up in an IFSC shall be treated as a person resident outside India.[21] The IRDA of India released the IRDA (IFSC) Guidelines, 2015 for establishing and registering an IFSC

[20] SEBI (2015).
[21] Reserve Bank of India (2015a, 2015b).

Insurance Office to carry on reinsurance and direct insurance businesses in SEZs on April 6, 2015.[22]

These are indeed steps in the right direction but an IFSC in India will continue to face some concerns. These are given below.

GIFT took so long to take off despite getting an early approval due to several regulatory and operational restrictions and lack of clarity on policy related to finance SEZs. Financial services such as over-the-counter derivatives, commodity options, re-insurance and contingent contracts (like swaps) are prohibited in India. Even though the regulatory authorities have issued several guidelines for establishing financial services in IFSCs, the required market reforms have still not taken place.

Although the Ministry of Finance has come up with a paper on a policy framework for finance SEZs, there are several grey areas in the policy framework. For example, the paper suggests that the Ministry of Finance should be the nodal agency for finance SEZs, but the Department of Commerce under the Ministry of Commerce and Industry is the nodal agency for all SEZs. This raises concerns over who should be the nodal agency. Further, the SEZ Act, 2005 and SEZ Rules, 2006 have laid down the management structure of SEZs through the Development Commissioner's office. If the nodal agency is changed, this counters the basic principle of the SEZ Act and Rules. In this context, it is worth mentioning that an IFSC need not be an SEZ. However, the Ministry of Finance (2015b) seems to be confused about SEZ management and the management of IFSCs.

The SEZ Act, 2005 mentions finance SEZs but does not clearly lay down the rules and regulations pertaining to them. The Ministry of Finance thus recommends passing a specialised finance SEZ Act in lieu of the Indian Financial Code until the code is finalised. This leads to the question of whether a separate Act is needed. No country to the best of our knowledge with an IFSC in an SEZ has a separate Act. Countries such as Canada have an Act of establishment of IFSC in provinces such as Quebec.

The Ministry of Finance (2015b) states that 'financial centres/SEZs should service the firms in the hinterland' (p. 20). To elaborate on this, finance SEZs will get certain tax and other benefits. If financial companies located in finance SEZs offer services to the hinterland without any conditions, they are likely to give better rates such as lower interest rates on loans. In such cases, why would companies in the DTA borrow from other banks in the hinterland? Today, one of the major problems facing Indian businesses is the high interest rate for credit. This is why most Indian businesses borrow from foreign financial centres to avail of cheaper interest rates. If finance SEZs wish to develop into IFSCs, they must provide credit at globally competitive interest rates. The problem arises when everyone in the DTA can access such cheap credit. This may lead to substantial loss of business for established financial service providers in the DTA.

[22] IRDA (2015).

The concept of establishing an IFSC in a finance SEZ is unique to India. Other countries have aimed at establishing IFSCs in existing financial hubs, for instance, New York and Hong Kong. The question that arises is why, despite an existing and flourishing financial centre in Mumbai, GIFT and not Mumbai has been chosen as the International Financial Centre of India? Discussions with the government officials reveal that GIFT was the only proposal that came forward after the SEZ Act, 2005 and was hence approved. The government did not do any project viability study to decide whether this was the best project to test financial sector reforms. An IFSC is generally also a trading hub. In India, to date Mumbai is not only the financial centre but also the largest trading port of the country.

The Ministry of Finance (2015b) asserts the need to establish a unified system of financial regulatory institutions, incorporating a Financial Data Management Centre, a Financial Sector Appellate Tribunal and a resolution corporation, as the minimum institutional arrangement required. However, several regulators such as the RBI, SEBI and IRDA already exist, but they are also not clear about the regulatory laws to be imposed on finance SEZs. There is a lack of clarity on this issue among multiple regulators.

As India integrates with the global financial system, the vulnerability to global financial changes such as the global financial crisis also increases. Dubai, for instance, was severely impacted due to the recent crisis. Singapore, which was not affected in the 1997 Asian crisis, faced a crisis in 2009 after it liberalised the financial sector. Therefore, it is important to have appropriate regulations.

Lastly, any finance SEZ requires a high degree of predictability in enforcement of contracts. India was ranked 186 out 189 countries in enforcement of contracts in the Ease of Doing Business Report of the World Bank (2014), whereas China, Japan and the US were ranked 35^{th}, 26^{th} and 41^{st} respectively. Hence there is a pressing need to establish a contract dispute resolution, which is discussed in detail in Ministry of Finance (2015b).

There are several suggestions for establishing successful finance SEZs. First, the government needs to implement effective solutions for IFSCs to take off. Market regulatory authorities must undertake financial market reforms and liberalise the financial sector pertaining to the IFSC. Unless there is regulatory clarity and clearly defined timelines for reforms, the IFSC will not attract foreign investment.

Second, if the Indian government wishes to establish IFSCs within finance SEZs, the rules regarding the regulation and monitoring of finance SEZs need to be clear. Ideally, all SEZs should fall under the same nodal agency, the Department of Commerce, Ministry of Commerce and Industry. The Development Commissioners then can help in administration and management.

Third, the policy related to finance SEZs can be part of the existing SEZ Act, 2005 through an amendment. As India starts experimenting with different types of SEZs, it cannot have separate Acts because this will increase the cost of doing business and create confusion. The Department of Commerce should come up with a consolidated guideline for finance SEZs, which compile the changes and measures taken by regulators such as the IRDA, SEBI and RBI.

Fourth, the Ministry of Finance (2015b) paper confused the concept of finance SEZ with an IFSC. For finance SEZs to flourish, the clientele should be restricted to special units and not all firms in the hinterland. Therefore, when such special infrastructure and financial service centres are created, they can cater to other SEZs but not all of the hinterland, ie., the DTA. For example, if the firms in finance SEZs can offer international rates of interest that are much lower than interest rates in India, units and developers of other SEZs in India can avail of competitive interest rates (along with the usual exemptions) from the finance SEZ. This will make the whole SEZ policy attractive. It will also help to support the government's 'Make in India' campaign, under which the government is encouraging global investors to invest in manufacturing in India and build up production networks and supply chains.

Fifth, in the WTO there is no discipline for subsidies in services. Therefore, India can offer subsidies to its manufacturing sector by subsidising the services that go into manufacturing. All manufacturers need access to finance. If companies in SEZs can get world-class financial services from GIFT, then GIFT will become viable and operational. Thus, GIFT can become the financial centre for all SEZs.

Sixth, globally when an SEZ is established, it is done so after choosing a strategic location, and this strategy also applies to finance SEZs. Ideally, a finance SEZ should be located near financial centres to ensure better connectivity and ease of doing business. Rather than Gujarat where GIFT is located, Mumbai should have been the first choice for an IFSC. Therefore, the Indian government needs to rethink the location of the IFSC and may consider Mumbai as the IFSC for India, as proposed in the Ministry of Finance (2007).

Seventh, to safeguard India from global financial volatility, a regulatory framework based on consumer protection and prudential regulation needs to be implemented. The Union Budget proposes to establish a sector-neutral Financial Redressal Agency to address grievances against all financial service providers, keeping consumer protection in mind. However, a strong regulatory framework is needed to ensure consumer protection.

Eighth, to settle contract disputes an efficient arbitration system is the key requirement. Finance SEZs will be subject to the Arbitration and Conciliation Act, 1996 under which parties are free to contractually agree to their choice of applicable law and seat of arbitration and have it enforced in India.[23] At the same time, an efficient civil court system to enforce arbitration awards is required.

Finally, the taxation regime pertaining to finance SEZs needs to be restructured. Exemptions from securities transaction tax, commodities transaction tax and service tax are important for such SEZs to become globally competitive. The Ministry of Commerce and Industry has asked the Ministry of Finance to re-examine the imposition of Minimum Alternate Tax (MAT) and Dividend Distribution Tax (DDT) on SEZs because it discourages investment.

[23] Ministry of Finance (2015b).

In conclusion, establishing an IFSC in India is a welcome move towards greater financial services growth. This can also become a test bed for financial sector reforms. However, the success of such an SEZ lies in having a transparent regulatory framework and implementing financial sector reforms to attract global investors.

4. Power SEZs

For efficient functioning, an economy requires infrastructure facilities such as electricity to support the manufacturing and services sectors. One of the key objectives of the SEZ Act is the development of infrastructure facilities. Firms in SEZs need 24x7 high-quality electricity supply for efficient operations. Globally, SEZs are often provided with electricity connectivity by the zone management agencies or the government. For instance, in Bangladesh, the Bangladesh Export Processing Zones Authority purchases power from the national grid and sells it to the SEZs with a 10% surcharge (Farole and Akinci 2011). In China, the government prioritises the infrastructure needs of SEZs and takes the responsibility for providing electricity to these zones. However, the case in India is different. The nodal agency for SEZs—the Department of Commerce or the Development Commissioner's office—does not provide power/electricity supply to the SEZs. Moreover, in India there are several problems related to electricity supply and distribution (Ahn and Graczyk 2012). Some of these problems are compounded for SEZs because they are often located in a remote area without grid connection. Even if there are grids and the SEZs manage to get connections from the state electricity boards, they can still face irregular or expensive power supply. A recent incident is that of the Multi-modal International Cargo Hub and Airport at Nagpur (MIHAN) SEZ, where the state government promised power at the rate of Rs.2.97 per unit, but increased the rate to Rs.5.42 per unit in June 2015.[24] The SEZ developers, thus, have to ensure power supply either by setting up their own captive power units or by connecting to the existing power infrastructure.

To enable and ensure the supply of power to SEZs, the SEZ Division of the Department of Commerce, Ministry of Commerce and Industry, came up with the *Guidelines for Power Generation, Transmission and Distribution in Special Economic Zones*[25] on February 27, 2009. At the outset, it must be pointed out that the concept of a power SEZ is unique to India and the establishment of a power SEZ is different from other SEZs.

According to these guidelines, a power plant can be set up under three different scenarios. First, by a developer/co-developer in the non-processing area as part of the infrastructure facility. In such cases the power plant will be entitled to only fiscal benefits for the initial set-up, and no further fiscal benefits will be given for maintenance and operation of the facility. There will be no obligation to achieve positive NFE for such power plants. Second, a unit can be set up within the SEZ to generate power as a product or have a captive power plant that will be located in the processing area. This unit will be entitled to all the fiscal benefits

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[24] See http://timesofindia.indiatimes.com/city/nagpur/Mihan-power-cost-shoots-up-by-Rs1-a-unit/articleshow/47591933.cms (accessed on 19 October, 2015).

[25] For details, see http://sezindia.nic.in/writereaddata/GeneralNotifications/Power%20Guidelines.pdf (accessed on 15 October, 2015).

covered under Section 26 of the SEZ Act including the benefits for initial setting up, maintenance and duty-free import of capital goods, raw materials and consumables for the generation of power. In the case of sectors such as IT/ITeS, the developer /co-developer can generate power in the processing area subject to the consent of the Board of Approval. In such cases there is an NFE condition as is applicable to units. Third, a single standalone power plant can also be established in an SEZ. It will get all the fiscal benefits under the SEZ Act 2005, and duty-free imports of raw materials and consumables, which will be counted towards the NFE obligations.

The February 27, 2009 guidelines further clarify that the provisions under the Electricity Act, 2003 and the Electricity Rules, 2005 are applicable to all power generating units in SEZs in terms of distribution of power and determination of tariff. The guidelines also state that such power generating plants can supply power to (a) SEZ units located in the processing area of the same SEZ or of other SEZs, (b) facilities in the non-processing area of the same SEZ or other SEZ, (c) facilities in the processing area of the same SEZ or other SEZ and (d) the domestic tariff area (the duty applicable on import of such power).

The Department of Commerce revised these guidelines and the changes and clarifications were issued on March 21, 2012[26]. According to the revised guidelines, the developer/co-developer was allowed to set up a power plant in either the processing or non-processing area of an SEZ. If they set up a plant in the processing area, apart from the fiscal benefits for the initial set-up, duty-free imports and no NFE positive obligation, they would also get certain benefits for maintenance and repair operations. However, on 6 April, 2015,[27] the Department of Commerce withdrew the 21 March, 2012, guidelines and reverted to the 27 February, 2009, guidelines.

Power SEZs are linked to India's power generation system. In India, power generation is dominated by coal followed by hydroelectricity.[28] Of late, private players have shown an interest in gas power plants and power plants using renewable technology. Despite having large coal resources, India still relies on the import of coal and gas to meet its energy requirements. Duty-free import of raw materials and consumables is thus a major incentive for private players to invest in power SEZs. Therefore, the power SEZ policy received interest from various players and currently India has nine power SEZs, of which seven are operational (see Table 2).

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[26] See http://sezindia.nic.in/writereaddata/GeneralNotifications/Revised_Power_Guidelines.pdf (accessed on 15 October, 2015).

[27] See http://sezindia.nic.in/writereaddata/GeneralNotifications/1111.pdf (accessed on 15 October, 2015).

[28] For details see Ministry of Power, 2015

Table 1: List of Power SEZs in India as on June 19, 2015

S. No.	Name of the SEZ	Location	Private/Public	Type	Operational Status
1	Carborundum SEZ	Kerala	Private	Solar photovoltaic	Operational
2	Wardha Power Company Ltd.	Wardha Growth Centre, District Chandrapur, Maharashtra	Private	Power	Operational
3	Euro Multivision Pvt. Ltd.	Village Shikra, Tal Bhachau, Gujarat	Private	Non-conventional energy	Operational
4	Moser Baer SEZ	Greater Noida, Uttar Pradesh	Private	Non-conventional energy including solar energy equipment	Operational
5	Lanco Solar Private Limited	Mahroomkala, Mahroomkurd and Chaveli villages, Rajnandgaon District, Chhattisgarh	Private	Solar	Operational
6	APSEZ Ltd/Adani Power Limited merged with the APSEZ Ltd. (Co-Developer)	Gujarat	Private	Multi-product SEZ	Operational
7	MIHAN-SEZ, Nagpur M/s. Abhijeet MADC Nagpur Energy Pvt. Ltd	Nagpur, Maharashtra	State-owned	Power plant in multi-product SEZ	Operational
8	Lanco Solar Pvt. Ltd.	Ramdaspur, Cuttack District, Odisha	Private	Solar	Formally approved
9	Maharashtra Airport Development Company Limited	Nagpur, Maharashtra	State-owned	Power	In-principle approval

Source: Compiled from data provided by the Department of Commerce, Ministry of Commerce and Industry.

However, power SEZs continue to face several challenges in India. First, the concept of a power SEZ is economically non-viable. Indian SEZs are much smaller than their counterparts in countries such as China, which makes the power plants inside the zones non-viable due to the lack of economies of scale. Moreover, power SEZs set up in remote areas face various difficulties in getting connected to state grids. Even when SEZs enter into contractual agreements or power purchase agreements with private players, such agreements have failed in some cases as has been the case of the Wardha Power Company Limited in Maharashtra. Box 1 highlights the case of Wardha Power Company Limited. It shows how standalone

SEZs can face difficulties in accessing the markets and contracts in such unfavourable situations can fail.

Box 1: The Case of Wardha Power Company Limited

Wardha Power, a thermal power plant, was set up in the Chandrapur district of Maharashtra. Owned by KSK Energy Ventures, the plant became fully operational in 2011 and was the first operational power SEZ in the country. However, in 2014, the plant closed down due to lack of demand for the power generated by it. The three-year power purchase agreement it had with Reliance Energy Limited ended and was not renewed. The shutdown of the WPCL plant raises questions over the sustainability of standalone power SEZs when their access to markets is severely constrained.

Second, even when standalone SEZs manage to achieve grid connectivity, the pricing of power/electricity and the tariff charged by distribution companies may be a barrier. In India, power distribution is not perfectly competitive and there are transmission and distribution losses.

Third, neither the SEZ Act, 2005 nor the guidelines issued by the Ministry of Commerce and Industry in 2009 clearly specify which firms can be referred to as power SEZs. This has led to several firms, which do not directly produce power as an output but process petroleum/ petro-chemical products or provide equipment or machinery to energy producing companies, to tag themselves as power SEZs and avail of the benefits extended by the government.

Fourth, the guidelines and the clarifications on the guidelines issued by the Ministry of Commerce and Industry are confusing and often there are rollbacks, which add to the confusion. For instance, the Department of Commerce issued revised guidelines on 21 March, 2012 and then withdrew them on 6 April, 2015. This creates operational uncertainty.

Fifth, since electricity is in the joint jurisdiction of central and state governments, the existing regulations on electricity vary across states. States have their own regulators and regulatory frameworks which companies have to adhere to. Thus, power SEZs in different states may face different regulations.

Sixth, Indian power SEZs lack the technical knowledge required to be cost-effective. For example, discussions with power sector experts show that the high cost of producing renewable energy leads to high prices of such products. If the cost of power is high, consumers and industry may not be willing to pay the price. Instead, they can have their own captive units such as diesel generator sets.

To ensure the success of power SEZs, there are several recommendations for the government. While there is a power shortage in India and SEZs have to make captive power arrangements, power SEZs may not work in India, especially standalone power SEZs. Therefore, standalone power SEZs should only be promoted when a number of SEZs are developed in close vicinity to each other or when there is a large multi-product SEZ. In the case of the former, a power SEZ can supply power to the other SEZs. Moreover, such SEZs can be set up along the economic corridors in line with the government's National Investment and Manufacturing Zones Policy, 2011, wherever industrial clusters are being envisioned. In short, the power SEZs should be economically viable and the economic viability of the project has to be studied at the proposal stage.

Second, the Department of Commerce and the state governments must work in unison since power pricing is determined by the State Regulatory Commissions. While there may be a need for subsidising power, the government should ensure that these subsidies reach the target group and do not cause unnecessary distortions. Prices should be set at a level where they not only reflect the true prices in the markets, but also ensure that businesses generate reasonable profits.

Third, there is a need for upgradation of technology in the power generation and distribution sector and power SEZs can be used to attract global technology and best practices. The country can encourage inflow of new technology in this sector through a policy that will make power SEZs viable. Once the technology transfer takes place in the SEZ, the benefits will percolate down to the DTA as well.

Fourth, the SEZ guidelines and policy should have more clarity on power SEZs. The SEZs needs access to high-quality power supply. The Department of Commerce has to work with state governments and the concerned central government ministries and departments to ensure that SEZs get access to 24x7 high-quality power supply. Already states such as Andhra Pradesh and Rajasthan have declared that they will give 24x7 power supply, and other states should be encouraged to do the same. Globally, most SEZs get power at concessional rates. The Indian government should take this into consideration if SEZs are to become a medium for linking India with global value chains.

Last but not least, there is a need to create awareness about the 'dos' and 'don'ts' in power SEZs. Companies should not locate in SEZs only for tax benefits. They should have a clear long-term strategy to distribute and sell the power that is generated. The Board of Approval has to scrutinise the feasibility of the projects. A thorough demand and long-term sustainability assessment should be a prerequisite for approval of future power SEZs in the country.

5. Aviation SEZs

With the reduction in the cost of air transport and travel, liberalisation of international trade and the need for faster just-in-time delivery, the aviation industry has become an essential infrastructure requirement for international trade. Over time, airports have developed not only as transportation hubs but also as hubs for aviation-related services such as maintenance and repair services. Globally, aerospace parks have also emerged that not only manufacture civil and defence aircraft, but also provide a number of aircraft-related ancillary industries and services. For instance, Seletar Aerospace Park in Singapore provides facilities such as manufacturing and assembly of aircraft components; maintenance, repair and overhaul (MRO) of aircraft and components; and training and research and development (R&D). In Abu Dhabi (UAE), Nibras Al Ain Aerospace Park has been jointly created by Mubadala Aerospace and Abu Dhabi Airport Company to develop MRO facilities, a strong manufacturing base and original equipment manufacturer capabilities, along with pilot training projects.

In India, the civil aerospace industry is rapidly increasing. India is currently the 9th largest civil aviation market and is projected to become the 3rd largest aviation market by 2020.[29] Recently, several service providers in the aviation sector have collaborated with foreign investors in new mergers in the aviation sector (for instance, Tata Group with Singapore Airlines and with Air Asia). The government has allowed up to 100% FDI in MRO, flying and technical training institutions. Up to 49% FDI is allowed in domestic passenger airlines. The government wants to develop India as an MRO hub and has announced fiscal benefits to the aviation sector under the Union Budget 2014–15, in which aircraft engines and parts are eligible for duty exemption when imported for servicing, repair or maintenance of aircraft.[30]

To avail of the fiscal and non-fiscal benefits under the SEZ policy, several investors have shown an interest in setting up aerospace parks and MRO facilities within SEZs. The Indian government—both at the central and state levels—is of the view that India has the potential to develop aviation SEZs. Studies show that India's MRO market size is around $750 million and is expected to grow to $1.2 billion by 2020.[31] However, Indian carriers get 90% of their MRO services abroad,[32] because India does not have state-of-the-art-technology and most MRO centres in India are only equipped with line maintenance. This leads to a huge drainage of foreign exchange; in fiscal year 2012, MRO business worth $450 million was estimated to be outsourced by Indian carriers.[33] To set up more sophisticated aviation MRO services, India would need world-class infrastructure, the latest technology, ease of doing business, high-quality and educated manpower and a closely located air transport hub, which an SEZ close to an airport can offer. The government is also of the opinion that India possesses a skilled workforce in terms of engineering and production. For example, PricewaterhouseCoopers (2010) reports that approximately 500,000 engineers graduate every year. In addition, India can offer cost advantages ranging from 15% to 25% for aviation-related manufacturing and in some cases local sourcing of raw materials and parts can increase cost savings by an additional 10% to 20%. Indian automotive companies such as Hero Motors and the Tata Group are entering the aviation industry and there is scope for joint ventures and collaboration. All these factors are encouraging state governments to propose the creation of aerospace SEZs for manufacturing and MRO facilities.

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29 For details, see http://makeinindia.com/sector/aviation/ (accessed on 15 October, 2015).

30 For details, see http://makeinindia.com/sector/aviation/ (accessed on 15 October, 2015).

31 See http://aviationspaceindia.com/content/aviation-mro-india-opportunities-and-challenges (accessed on 15 October, 2015).

32 In the absence of such technology, the Directorate General of Civil Aviation has approved 40 overseas MRO providers to extend these services to Indian aircrafts.

33 See http://aviationspaceindia.com/content/aviation-mro-india-opportunities-and-challenges (accessed on 15 October, 2015).

Several private sector players and state government agencies have expressed an interest in establishing aviation SEZs. It is worth noting that under the Department of Commerce, SEZs are classified on the basis of the type of SEZ under which they are registered. Therefore, MIHAN SEZ has been classified as a multi-product SEZ (refer to Table 2) but it also provides aviation MRO services. Similarly, QuEST Global SEZ (now Aequs) is classified by the Department of Commerce as a precision engineering product SEZ, although it extends its services to provide MRO facilities. According to data provided by the Department of Commerce, India currently has three operational aviation SEZs. These SEZs cater to the air transport sector along with other manufacturing and services, and mainly focus on high-value manufacturing.

Table 1: List of Aviation SEZs as on June 19, 2015

S. No.	Name of the SEZ	Location	Ownership	Type	Operational Status
1	Karnataka Industrial Areas Development Board Aerospace SEZ	Village Bhatramaranahalli, Kavadadasanahalli, Dummanahalli, Talukas Bangalore North and Devanahali, Distt. Bangalore, Karnataka	State-owned	Aerospace and Other Industry	Operational
2	Andhra Pradesh Industrial Infrastructure Corporation Limited	Adibatla, Ranga reddy District, Telangana	State Owned	Aerospace Engineering Industries	Operational
3	GMR Hyderabad Aviation SEZ Ltd.	Village Mamidipalli, RR District, Telangana	Private	Aviation Sector	Operational
4	Lepakshi Knowledge Hub Private Limited	Chillamaturu Mandal, Ananthapur District, Andhra Pradesh	Private	Aerospace & Precision Engineering	Formally approved
5	Bangalore International Airport Limited	Devenahalli, Bangalore, Karnataka	Public	Airport-based SEZ	Formally approved
6	Cochin International Airport Limited	Angamali villages, Ernakulam, Kerala	Public-Private Partnership	Airport-based	Formally approved
7	GMR Hyderabad International Airport Limited	GMR Hyderabad International Airport, Shamshadbad, Hyderabad District, Telangana	Private	Airport-based, Multi-Product	Formally approved

Source: Compiled from data provided by the Department of Commerce, Ministry of Commerce and Industry.

If one investigates how aviation SEZs developed in India, the concept of an aviation SEZ was first conceived in Maharashtra in the form of the MIHAN at Nagpur (which was notified in the year 2007. As shown in Table 2 this SEZ is covered under the category of Power SEZ in the list of SEZs of the Department of Commerce). The project was implemented to take advantage of the central location of Nagpur. It was expected that aircraft, especially those of courier services, travelling along the north-south and east-west aviation routes would have to halt at Nagpur for refuelling. On May 20, 2015, the MRO facility at MIHAN, which was jointly created by Boeing International Corporation India Private Limited and Air India, was issued a commercial licence by the Directorate General of Civil Aviation.[34] However, Boeing International Corporation India Private Limited disassociated itself from this MRO facility in June 2015 citing financial constraints.[35] Moreover, there are concerns about the sustainability of this hub. With technological improvements, cargo flights can now travel longer distances without stopovers. At the same time, Nagpur is not a major passenger and cargo airline hub and, therefore, it is time-consuming and expensive for airlines calling at major airports such as Mumbai and Delhi to fly to Nagpur for their MRO services.

Subsequent to this, the GMR Hyderabad Aviation SEZ Limited was established at Hyderabad. The location was chosen owing to the five-hour flying radius to most cities in Southeast Asia and the Middle East. However, GMR faced several hurdles in its operations; these include issues related to land acquisition and rehabilitation and problems related to its contract with Malaysian Airlines (a major investor in the GMR Hyderabad operations), which was supposed to use this facility but later withdrew its investments. Then, the bifurcation of the state of Andhra Pradesh into Telangana and Andhra Pradesh, further delayed the project. In 2014, GMR announced that it would sell off its MRO facility since it had been making losses due to lack of demand and high taxation.[36] However, the GMR Rajiv Gandhi International Airport SEZ at Hyderabad is developing, although it too is facing issues such as high lease rates and restrictions on construction heights due to aviation rules and regulations.

Another case is that of Lepakshi Knowledge Hub Private Limited SEZ in Andhra Pradesh, which faced problems in becoming operational. Due to very slow progress of the project, the government has recently cancelled the land allocations and incentives extended to the SEZ. [37]

While some aviation SEZs are facing operational hurdles, other SEZs providing aviation services are doing comparatively well and showing business potential. For instance, Aequs (formerly QuEST Global Manufacturing) established an SEZ in Belgaum, Karnataka in 2009 as a precision engineering SEZ. It provides manufacturing, MRO and R&D services. It has signed a Memorandum of Understanding with the Belgian aerospace major, S.A.B.C.A, Magellan Aerospace and Farinia Group, a French foundry and forgings company.[38] The company has also collaborated with the Saab Group (Sweden) to initiate a joint venture named ‘Aero Assemblies India’. This joint venture will manufacture and supply assemblies

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34 See http://www.nagpurtoday.in/work-of-air-indias-mro-in-mihan-sez-starts-with-dgca-issues-commercial-license/06031052 (accessed on 15 October, 2015).

35 See http://www.ibnlive.com/news/india/boeing-no-more-associated-with-mro-facility-in-nagpur-nitin-gadkari-1002593.html (accessed on 15 October, 2015).

36 For details, see http://www.livemint.com/Companies/TarroVU5YZ4TUPNT0WDYaL/GMR-puts-aircraft-maintenance-unit-on-sale.html (accessed on 15 October, 2015).

37 For details, see http://www.thehindubusinessline.com/news/states/ap-cancels-concessions-extended-to-lepakshi-knowledge-hub/article5689139.ece (accessed on 15 October, 2015).

38 See http://www.mydigitalfc.com/sectoral-watch/quest-global-launches-aviation-sez-belgaum-641 (accessed on 15 October, 2015).

to the aerospace market. Aequs recently announced an investment commitment of five more infrastructure units at its Belgaum SEZ.[39] It provides services to several companies, including Airbus Group SE, UTC Aerospace Systems, Eaton Aerospace, Baker Hughes Incorporated, Halliburton Company, and Robert Bosch GmbH. The Aequs SEZ has moved up the value chain from being a supplier of components to a supplier of entire assemblies to the industry.

Several other aviation SEZs such as Karnataka Industrial Areas Development Board SEZ in Bangalore and Andhra Pradesh Industrial Infrastructure Corporation SEZ in Telangana are also expanding their businesses. Overall, the aviation SEZs in India have potential but they are facing some problems, which are discussed below.

Ideally, aerospace hubs should be located close to airports, which enable the establishment of forward and backward linkages. For example, an MRO hub has to ensure that the turn-around time for aircraft is low and it should take traffic flows into account. However, in India the locations for aviation SEZs have not kept this into consideration. The case of MIHAN in Nagpur shows that while most international and domestic flights call at major airports such as Mumbai and Delhi, Nagpur has been chosen as a hub. While states such as Andhra Pradesh, Telangana and Karnataka are providing several incentives to attract investment in aerospace parks, not all of these aerospace parks have good connectivity to major ports/airports.

Moreover, aviation SEZs in India face problems related to taxes and other charges. The re-imposition of MAT and DDT on SEZs has severely cut the income of such firms. MRO facilities provided within aviation SEZs are also subject to service tax, which was increased from 12.3% to 14% in the Union Budget 2015-16.[40] VAT is also imposed on the MRO industry. The Airports Authority of India charges royalty of 13–20% from Indian MROs above the rent they have to pay for using the airport premises.[41] These charges render Indian MROs uncompetitive compared to their global counterparts, which enjoy several incentives and, therefore, can offer competitive prices. For example, it is cheaper to avail of MRO services from tax-free places such as Dubai (UAE). This is a cause for concern since even Indian carriers find it cheaper to fly empty aircraft and crew to overseas locations for maintenance than to get them repaired in India, which leads to outflows of foreign exchange and loss of potential employment creation in the country.

Further, the aerospace industry in India faces high VAT on aviation turbine fuel (ATF), which makes up a significant portion of the cost. In 2013–14, VAT on ATF was as high as 29% in Chennai and 28% in Bangalore.[42] VAT on fuel has to be low to make Indian aviation SEZs competitive. With extremely high ATF charges, foreign players might not find it profitable to fly to Indian MRO services for repairs, since most aircraft go to locations where they can avail of refuelling maintenance services at the same time.

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39 See http://www.deccanherald.com/content/461060/aequs-expects-more-business-its.html (accessed on 15 October, 2015).

40 See http://indiabudget.nic.in/ub2015-16/bh/bh1.pdf (accessed on 15 October, 2015).

41 See http://www.moneylife.in/article/impact-of-union-budget-on-aviation-sector/40615.html (accessed on 15 October, 2015).

42 See http://www.thehindubusinessline.com/industry-and-economy/logistics/reducing-tax-on-jet-fuel-will-help-airlines-cut-costs-by-1015/article6719912.ece (accessed on 17 October, 2015).

The sale of services from aviation SEZs to the DTA is not treated as exports and is subject to full custom duties. This makes services such as precision engineering uncompetitive in the domestic market. Unlike other countries, in India exports can be made to the DTA only after NFE earning condition is met and the most favoured nation tariffs are paid.

Aviation SEZs require several separate clearances. For instance, MIHAN SEZ authorities had to acquire separate approvals from the Directorate General of Civil Aviation to work on the Boeing 777, Airbus 320 and Boeing 737 aircrafts, and for maintenance.[43] Filing for separate approvals is a cumbersome processes and it delays operations.

In addition, MRO facilities can avail of exemptions from duties for import of aircraft spares, on the submission of certain documents. However different custom authorities at different airports have varying document requirements, leading to a tedious process to avail of such benefits.

Finally, the manufacturing technology at Indian aerospace hubs is not at par with that in foreign aviation parks. Despite the availability of a vast educated workforce, there is a lack of specialised and trained manpower that has the same understanding of the manufacturing and assembly process as their foreign counterparts. Therefore, there is a skill shortage in this sector. If the SEZ is not located in the proximity of a talent pool, it faces manpower shortages.

Considering the severe problems aviation SEZs face, the Indian aerospace sector can only develop if the government undertakes certain reforms, some of which are discussed below.

India has the potential to develop aerospace centres/parks/SEZs. However, these aerospace SEZs need to be set up more strategically, keeping in mind proximity to airports and aviation clusters. Delhi and Mumbai seem to be the logical choice to develop aerospace clusters given the commercial and defence traffic at these airports. However, of late, Karnataka has shown the potential to be an aviation hub. Karnataka has been a pioneer in the aerospace industry, ever since Hindustan Aeronautics Limited was established in Bangalore in 1940. The state government has initiated an aerospace SEZ at Devanahalli, which is close to Bangalore airport. The Bangalore International Airport Limited SEZ has been formally approved and the Aequs SEZ at Belgaum has received considerable investments. Hindustan Aeronautics Limited has proposed to set up an MRO unit at the old Bangalore airport. The National Aviation Company of India Limited in collaboration with Airbus and Jupiter Aerospace are also setting up a joint venture MRO facility. Moreover, Karnataka is an attractive destination for R&D with its inherent advantage of having a number of highly qualified and low-cost engineers and scientists. It is home to the Indian Space Research Organisation and several facilities of the Defence Research and Development Organisation are also located there. Global aerospace companies such as Airbus Group SE and The Boeing Group have set up their research centres in Bangalore. Therefore, a supply chain providing end-to-end aviation

[43] See http://timesofindia.indiatimes.com/city/nagpur/Finally-maintenance-repair-and-overhaul-takes-off-with-Boeing-landing/articleshow/47020440.cms (accessed on 17 October, 2015).

services is already underway, centred in Bangalore.[44] Hyderabad is also attracting investment for aviation SEZs, with the state government providing infrastructure facilities specifically targeted for the aviation sector. For any city to develop into an aerospace hub, it needs to provide aviation SEZs with world-class infrastructure facilities, cheap and accessible land, quality and stable power supply and a good transportation system. Aviation SEZs need to be strategically located and the government needs to review the number of such aerospace hubs that it wishes to establish. Having a large number of aviation SEZs scattered over various locations is inefficient and does not provide economies of scale to the aerospace sector.

Second, the tax regime needs to be changed to encourage investment in MRO facilities. The government needs to reconsider the imposition of MAT and DDT as they are hindering the growth of SEZs. The service tax on MRO facilities provided within the aviation SEZs needs to be reviewed and the government should consider removing the VAT imposed on such SEZs. There is an immediate need to restructure the fiscal framework applicable to aviation SEZs in India, since they face tough competition from global aerospace centres such as those in Singapore and Dubai where MRO services are provided tax-free. In addition, VAT exemptions on ATF sales need to be extended to aviation SEZs. In June 2015, the Odisha government enacted a new SEZ policy and gave full waiver from VAT on ATF to international flights to and from Bhubaneswar.[45] Other state governments should also consider abolishing VAT on aviation fuel.

Third, the services produced within aviation SEZs when sold in the domestic market should be treated as exports to the DTA and, hence, they should be provided full tax exemptions from custom duties.

Fourth, aviation SEZs face several procedural delays because of the numerous approvals that they need to obtain from various government authorities. There should be a more cohesive system for clearances from the Directorate General of Civil Aviation, and approvals should be prioritised to fast-track operations in aerospace parks. Just as in the case of manufacturing SEZs, a single-window clearance mechanism should be created for companies operating in aviation SEZs

Fifth, the Customs authorities need to standardise their requirements for extending exemptions across all airports. At the same time, a 24x7 window for Customs clearance of aircraft spares should be set up to avoid delays.

Sixth, aviation SEZs need to possess state-of-the-art technology. Indian players need to keep themselves updated of technological advances to ensure that they can meet the cost advantage that foreign players offer.

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44 For details, refer to PricewaterhouseCoopers (2010).

45 See http://www.thehindubusinessline.com/industry-and-economy/logistics/odisha-exempts-vat-on-atf-for-international-flights/article7305801.ece (accessed on 17 October, 2015).

Seventh, there is need for a specific focus on aircraft maintenance engineering courses in India. It is not sufficient to merely have a large pool of manpower. For aviation SEZs to be a success, an appropriately skilled and trained workforce is needed.

The government can also consider some sector-specific benefits such as reimbursing part of the cost of acquiring global certifications to undertake heavy maintenance on Airbus and Boeing jets. Examples are certificates from the US Federal Aviation Administration or the European Aviation Safety Agency.[46]

Such reforms in the aerospace sector are needed to ensure that the aviation SEZs can be competitive and provide world-class MRO services.

6. Potential Services SEZs

This section discusses two service sector SEZs in which India has export potential, namely, audio-visual SEZs and professional/business services SEZs. India has significantly liberalised the audio-visual sector and is among the top ten exporters of audio-visual services among WTO member countries. SEZs can further help to boost exports of audio-visual services, create employment and lead to inflow of foreign investment. In India, audio-visual services already operate in clusters, extending SEZ status to these clusters will help boost exports. Further, several state governments are promoting SEZs for animation, graphics and other audio-visual services. In that context, it is important to understand the viability of such SEZs.

After IT/ITeS services, business services are the second largest export from India and the country has a strong comparative advantage in exports of professional/business services. However, there are restrictions on foreign investment and regulatory barriers (such as restrictions on advertising or form of operation) in a number of business services such as legal and accountancy services. The GIFT in Gujarat was proposed as multi-service SEZs, but it failed to attract global companies due to restrictions on foreign investment in services such as legal and accounting and other regulatory barriers. Some of these barriers are imposed to protect the domestic service providers. On one hand, there is significant opposition from domestic players and their professional bodies on allowing foreign investment in sectors such as legal and accountancy, on the other a number of mid-sized and large companies are in favour of foreign investment (Chanda and Gupta 2015). Given, such wide differences of opinion across different stakeholders, the government can try out reforms in these services in the SEZs. This will reduce the possibility of adverse impact, if any, while the benefits of reforms can be seen. Thus, the SEZs can be a test-bed of reforms in sensitive sectors.

6.1 Audio-visual Services SEZs

Audio-visual services broadly comprise the production, post-production and distribution of motion pictures, television and radio services and music and interactive digital media services

[46] See http://aviationspaceindia.com/content/aviation-mro-india-opportunities-and-challenges (accessed on 15 October, 2015).

such as animation, gaming and online/mobile media. Technological innovations and changes in business models have increased global trade in audio-visual services. This sector is closely linked to other services sectors such as IT, tourism, recreational and cultural services and education services. According to PricewaterhouseCoopers (2012), the global audio-visual service sector is projected to grow from $1,640 billion in 2011 to $2,120 billion by 2016. The US is the largest market for audio-visual services, followed by the EU. Over time, audio-visual hubs have developed in cities such as Los Angeles (US), Mumbai (India) and London (UK). Several other countries have established 'media cities' that provide production, post-production and distribution services for movies, animation and gaming. These media cities produce new content, promote themselves as broadcasting hubs and encourage investments in interactive and digital media. For example, Dubai (UAE) launched the Dubai Media City in 2001 as a free zone. It has attracted global media companies such as the British Broadcasting Corporation World, Cable News Network and Middle-east Broadcasting Centre to set up establishments. The Dubai Media City is connected to other free zones such as Dubai Internet City and Dubai Studio City. Similarly, the Abu Dhabi Media Company (UAE) was established in 2007 by consolidating the state-owned media assets. In this context, it is worth mentioning that in many countries there are restrictions on trade in audio-visual services due to its possible adverse impact on domestic firms and for cultural protection. The audio-visual SEZs enable foreign companies to operate in such countries in a liberalised environment, while still protecting the domestic market.

India is a major producer and exporter of audio-visual services. It is the largest film producing country in the world (Bagchi 2005), producing an average of 1,000 feature films annually in 27 different languages. Existing studies indicate that the Indian media and entertainment market (including TV, films, radio, music, animation and filmmaking, visual effects and gaming) will grow from Rs.1,026 billion in 2014 to Rs.1,964 billion by 2019. This sector is projected to grow at a compound annual growth rate of 13.9% during 2014–2019. Sub-sectors such as animation/visual effects, and gaming are estimated to have high growth potential with a compound annual growth rate of 16.3% and 14.3%, respectively, over 2014-19 (KPMG 2015). Several Indian cities such as Chennai, Bangalore, Mumbai, Hyderabad and Thiruvanathapuram are emerging as animation hubs.

The audio-visual sector is a high-skill, labour-intensive sector. India's advantage in the audio-visual industry lies in the large English-speaking workforce, skilled software engineers, post-production infrastructure and low costs. There are over 200 animation companies and about 40 specialised visual effects companies in India. India has significant cost advantage compared to other countries. For example, the cost of one hour of outsourced animation work in India is estimated to be only 30–40% of the costs in the Republic of Korea, Taiwan and the Philippines (Thomas and Rayadurgam 2005). The cost for 30 minutes of flash animation content is around $20,000 in India compared with $80,000 in the US, and the cost for 30 minutes of three-dimensional animated content in India is estimated to be $90,000, while in the US it costs $360,000 (FICCI and KPMG 2010). With global firms seeking to be cost-competitive, there has been an increasing trend of outsourcing audio-visual work to Indian production and post-production houses. Indian animation firms account for around 10% of the global animation outsourcing market (Deloitte and ASSOCHAM 2010). Thus, India has the potential to develop as an outsourcing hub for post-production, animation, graphic, sound recording and other such services. Specialised SEZs for these purposes can be created in the country, which can offer integrated services under one roof. These services may include studios (which can be rented to film and television producers), rental of equipment, post-production and sound recording facilities, dubbing, sound mixing, graphic designing and formatting, subtitling, etc.

Apart from the cost advantage for manpower, there are other reasons to develop audio-visual SEZs. First, several Indian companies have entered into collaboration with global players and are offering audio-visual services to foreign companies. For example, in May 2015, Eros International collaborated with China Film Group Corporation and the Shanghai Film Group Corporation Ltd. to promote and co-produce films across both countries.[47] Second, most of the audio-visual equipment including cameras, video equipment and sound recording equipment is imported from countries such as the US, the UK and China. SEZs will offer duty-free import of such equipment. Third, audio-visual SEZs can provide both domestic and international players with business facilities, ranging from dubbing and voice-over facilities to training imparted by specialised media schools, and create an end-to-end supply chain for media and entertainment facilities. Fourth, India has already allowed foreign investment in most segments of audio-visual services, and cities such as Bangalore, Hyderabad and Chennai already have IT, media and animation hubs. They possess the required talent pool and the proximity to a technically skilled workforce and animation and movie studios. Fifth, several companies in the IT/ITeS sector have ventured into post-production services. Therefore, creating audio-visual SEZs can help the existing companies to provide more integrated services.

The Indian government is aware of the country's strength in audio-visual services. Several state governments have provided various benefits to the audio-visual sector to encourage skill development, investment, technological upgrading, production of films and maintenance of regional cultural diversity, and to promote India as an outsourcing hub. They have also implemented policies to support this sector. For example, Karnataka implemented the Karnataka Animation, Visual Effects, Gaming and Comics policy in 2012[48] to attract global investment and tap into the global outsourcing market. State governments such as Tamil Nadu and West Bengal incentivise production in local languages by providing benefits such as exemptions from entertainment tax to films produced in local language.[49] These can also be availed of by film producers from neighbouring countries such as Bangladesh (in the case of West Bengal, which has the same language).

A few state governments have proposed animation and gaming clusters. For instance, the Kerela Industrial Infrastructure Development Corporation Film and Video Park in

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47 See http://www.reuters.com/article/2015/05/18/eros-international-idUSnBw185682a+100+BSW20150518 (accessed on 15 October, 2015).

48 See http://www.bangaloreitbt.in/docs/2012/09/KAVG%20Policy.pdf (accessed on 17 November, 2015).

49 See http://www.filmtvguildindia.org/entertainment_tax_in_various_states.html for entertainment tax exemptions (accessed on 15 October, 2015).

Thiruvananthapuram is an operational animation and gaming SEZ.[50] Two media cities have also been proposed in Kochi (Kerala); Cochin Media City was set up in 2006 and Insight Media City was proposed in 2013. The focus of these clusters is on production and post-production services, providing a skilled workforce through media schools (set up within such media cities) and providing state-of-the-art technology to the media and entertainment industry. Prior to its bifurcation the state of Andhra Pradesh had also proposed the establishment of a Gaming, Animation, Media and Entertainment Park at Hyderabad.[51]

Despite various state-specific policies for the audio-visual sector, India has still not fully tapped the potential of audio-visual SEZs. Given India's strength in audio-visual services, the government should consider setting up such SEZs in three or four strategic locations in close vicinity to already developed media, IT and animation clusters such as Mumbai, Bangalore, Hyderabad and Chennai. The government can examine the Dubai Media City model and work on a private-public partnership model to provide sector-specific infrastructure and incentives under the SEZ policy in order to encourage investors to set up audio-visual SEZs and units to locate in them.

6.2 Professional Services

Professional/business services such as legal, accounting, management and consultancy services, engineering, architecture, advertising and public relations services are integral for business facilitation across all sectors. With increasing cross-border operations, integrated professional services are essential for multinational business units to work efficiently. Companies operating in the manufacturing sector would like to continue getting the professional services of legal firms, accountants, etc. with whom they have long-standing relationships, and so they would want to continue working with them in countries where they establish a presence. Thus, a business services value chain is often established along with a manufacturing value chain, but business services value chains can also be independent of manufacturing value chains. To reduce costs, companies from developed countries outsource business services to developing countries like India. Therefore, countries such as the US and the EU are proponents of liberalising the market for the professional services sector under the WTO's General Agreement on Trade in Services and through regional and bilateral agreements. Developing countries such as India are also major proponents of liberalising business and professional services. However, professional services continue to face several trade-related restrictions including limitations on FDI and the form of operation and restrictions on advertising, registration and nationality requirements. Several countries, including India, have imposed restrictions on foreign business service providers in sectors such as legal and accountancy services, partly to protect their domestic service providers (Chanda and Gupta 2015). However, this adversely affects trade in business services and the users of such services do not have access to the most efficient firms.

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[50] http://sezindia.nic.in/writereaddata/pdf/ListofoperationalSEZs.pdf (accessed on 15 October, 2015).

[51] See Information Technology, Electronics & Communications Department (2014). http://www.aponline.gov.in/apportal/Downloads/GAME%20Policy-2014-19.pdf (accessed on 5 October, 2015).

With the growing need for an integrated services sector for business units, various countries have ventured into professional services SEZs or are providing integrated professional/ business services within SEZs. For instance, Chinese SEZs provides various business services including legal, business planning, marketing, skill training, laboratories, product testing services and management services (Zeng 2010). In Taiwan, EPZs provide technical and other support services. China has relaxed the restrictions on practice by foreign lawyers and law firms in selected zones (as part of its WTO accession commitments, which were later further liberalised), so that business units in these zones can avail of the facilities. This is a major benefit and incentive for foreign businesses to locate in SEZs.

India has a comparative advantage in professional services due to the availability of a high-skilled workforce at competitive rates. With a large educated workforce and a growing outsourcing and consulting industry (with revenues estimated to increase from $86.4 billion in 2014 to $99 billion in 2015[52]), India has the potential to develop as a hub for business services. However, the extent to which different professional services are regulated and FDI is allowed varies. For example, 100% FDI is allowed in engineering and consultancy services, but not in legal and accountancy services. Engineering is not a registered profession, while architecture and legal services are registered and regulated by professional bodies. Given the growing demand of legal services in international trade, countries such as the US, Japan and China have opened up their legal sectors for international access. India continues to impose a number of restrictions on foreign service providers in sectors such as legal and accountancy. This not only prohibits the development of services value chains but also adversely impacts India's negotiating position in trade agreements since the country portrays itself as a proponent of liberalisation of professions. The Indian government is aware of this and in 2015, the government announced phased reforms in the legal services sector to allow foreign lawyers to practice arbitration and mediation services and to eventually open up non-litigation services in Indian law for foreign law firms.[53]

Although India has not yet developed business SEZs, there are several reasons for India to develop multi-services business SEZs or to provide specialised business-related facilities within existing SEZs. For example, within existing SEZs, integrated business services such as legal, accounting, management and consultancy services can be provided to global corporations under one roof. They will benefit from such services if some of the existing restrictions on forms of entity and FDI can be relaxed within the zone. The standalone business services SEZs or business services units within SEZs can then cater to multiple SEZs. Unless they cater to multiple SEZs, they will not have economies of scale.

While this model will enable India to use SEZs as a starting point for reforms in the business services sector, as has been done by countries such as China, foreign companies will also find it lucrative to locate in SEZs. If the reforms are successful, they can then be gradually adopted in the rest of the country. This will be particularly useful if there is mutual

[52] See https://www.plunkettresearch.com/statistics/consulting-market-research/ (accessed on 5 October, 2015).
[53] See http://www.business-standard.com/article/opinion/liberalising-legal-services-115042600776_1.html (accessed on 5 October, 2015).

recognition of qualifications and degrees. The infrastructural and fiscal benefits that are available under the SEZ Act and Rules will provide a cost advantage to such business services firms and attract global players to expand operations in the SEZs.

Ideally, business services SEZs, like IT/ITeS SEZs, do not need large acreage of land and these can be set up near corporate hubs and talent pools such as Mumbai, Delhi and Bangalore. These professional services SEZs can boost the Indian economy by generating jobs and increasing the global competitiveness of the Indian services sector by providing an integral services extension to global business operations. It will also increase India's export of business services and link India's services sector to global services value chains.

7. Conclusion and the Way Forward

Given that services is a growing component of international trade and FDI flows, a number of countries including India have ventured into services SEZs. This paper analyses India's experiences with some services SEZs, namely FTWZs, power SEZs, finance SEZs and aviation SEZs. It also examines how India can diversify its services export baskets through SEZs for audio-visual and professional services. These services SEZs can be single product or multi-product. If successful, they will not only enhance India's services exports but also create quality employment. The paper also highlights that such SEZs will help the Indian economy to develop value chains and efficient production networks.

India's experiences with services SEZs, apart from those in the IT/ITeS sector, have not been successful and these SEZs have not taken off due to several barriers which are discussed in this paper. Some of these barriers are common across the different types of services SEZs while others are sector-specific. Among the most common barriers is the lack of clarity and transparency in policies related to services SEZs. The policy framework for SEZs is still evolving and the policies related to the above discussed services SEZs are modified or updated through the instructions and notifications of the SEZ Division of the Department of Commerce. These changes sometimes create confusion and affect the business environment. An example of policy ambiguity is the case of the guidelines issued for power SEZs. Such policy ambiguities need to be resolved in order to have a stable business environment for services SEZs. The different notifications and instructions should be compiled into a single document so that it is easier for businesses to understand the policy and its implications.

Another issue concerning the services SEZs has been the lack of coordination among the different departments of the central government. For instance, in the case of finance SEZs, the Ministry of Finance intends to be the nodal agency but the Ministry of Commerce and Industry is the nodal agency for all SEZs. Further, the Ministry of Finance imposed DDT and MAT on SEZs in the Union Budget of 2011-12 without consulting the Department of Commerce. There is also a lack of coordination between the centre and the state governments which make it difficult for businesses to operate. For the success of services SEZs, there is a need for greater coordination across different ministries and departments of the central government and between the central and state governments.

Globally, SEZs receive a wide range of incentives. Also, since the WTO is yet to develop a discipline on subsidies in services, most countries tend to subsidise services to enhance their export capabilities of both goods and services. Therefore, countries have now started developing services SEZs and they also offer attractive incentive packages. The case of India is an exception. Services SEZs are not given any special subsidies in India. Further, the MAT and DDT exemptions, which all SEZs enjoyed, were withdrawn in the year 2012. This reduced the attractiveness of the SEZs in general and services SEZs in particular. Sudden changes in the incentives create an uncertain operational environment. While incentives can change, it is important for the government to first understand the implications of such changes. Further, any withdrawal of incentives should be compensated by better business environment or other liberalisation and reform measures. Unilateral withdrawal of benefits may lead to relocation of companies to other countries. After the withdrawal of MAT benefits, a number of Indian companies in the services sectors are evaluating the cost and benefits of relocating to countries such as Philippines. If they do so, this will lead to revenue, employment, export and investment losses, among others.

As India competes with other countries to attract businesses and FDI, the incentives given to SEZs in India should be more predictable and in line with what is offered by competing countries in Asia. In this context, the government should examine the experiences of countries such as China, Philippines, Republic of Korea, Taiwan and UAE (Dubai) in establishing services SEZs, the type of incentives they offer and the policy framework they have to support services SEZs.

Success of services SEZs requires supporting regulations and reforms. Countries such as China have used SEZs as a test-bed for reforms. India, too, can use SEZs such as finance SEZs to try out reforms in the financial sector. SEZs such as finance SEZs cannot be successful unless RBI, IRDA and SEBI support it through reforms and regulations. Specifically, the success of finance SEZs will require full capital account convertibility and other reforms highlighted in this paper. This will require coordination across different regulators and stakeholders.

Another issue leading to the slow development of services SEZs is the location of such SEZs. Services SEZs need to be strategically located. For example, aviation SEZs need to be located near airports, while FTWZs should be located along the industrial corridors or adjacent to ports for business viability. The government must carefully analyse the costs and benefits of each SEZ on such grounds before approving them. In this context, the Board of Approval for SEZs should carefully evaluate the proposals for services SEZs and understand the project viability before giving approvals.

Services SEZs are a relatively new concept in India. While, a number of private players have come up with innovative models of services SEZs, they need help in terms of outside zone infrastructure, fast track clearances, etc. The Department of Commerce should work closely with other government ministries and departments and state governments to resolve the issues faced by the services SEZs. Also, the Department of Commerce and the EPCES should actively promote and market these SEZs so that they are able to attract units.

Overall, the paper highlights that India has the potential to diversify the services export basket and increase its share in global trade in services by developing services SEZs that provide a free and conducive business environment through a carefully crafted and well-coordinated policy structure. These SEZs will lead to quality employment creation, diversify and increase exports and lead to inflow of foreign investment. It will also complement and improve the efficiency of manufacturing value chains.

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