

Hoda, Anwarul; Rai, Durgesh Kumar

**Working Paper**

## Trade and investment barriers affecting international production networks in India

Working Paper, No. 281

**Provided in Cooperation with:**

Indian Council for Research on International Economic Relations (ICRIER)

*Suggested Citation:* Hoda, Anwarul; Rai, Durgesh Kumar (2014) : Trade and investment barriers affecting international production networks in India, Working Paper, No. 281, Indian Council for Research on International Economic Relations (ICRIER), New Delhi

This Version is available at:

<https://hdl.handle.net/10419/176299>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

# **Working Paper 281**

## **Trade and Investment Barriers affecting International Production Networks in India**

**Anwarul Hoda  
Durgesh Kumar Rai**

**July 2014**



## Table of Contents

<b>Acknowledgement .....</b>	<b>iii</b>
<b>Abstract.....</b>	<b>iv</b>
<b>1. Introduction .....</b>	<b>1</b>
1.1 Rise of international production networks .....	1
1.2 Quantifying trade in international production networks .....	2
1.3 Off-shoring and outsourcing .....	3
1.4 Objective and methodology of study .....	4
<b>2. India's Participation in International Production Networks .....</b>	<b>5</b>
2.1 Manufacturing sector in India.....	5
2.2 India in global production networks .....	6
2.3 India in regional production sharing arrangements.....	7
2.4 Foreign direct investment in India's manufacturing sector.....	8
<b>3. Trade Barriers &amp; Logistics in India .....</b>	<b>9</b>
3.1 Do trade barriers affect international production sharing? .....	9
3.2 Evolution of India's trade policy.....	10
3.3 Current level of MFN tariff .....	10
3.4 Inverted tariff structure in India and other anomalies.....	11
3.5 Import duty on capital goods.....	12
3.6 Gap between applied and bound duty levels .....	12
3.7 Logistics.....	13
<b>4. Domestic Investment Environment .....</b>	<b>16</b>
4.1 Labour laws.....	16
4.1.1 Industrial Disputes Act, 1947 .....	17
4.1.2 Contract Labour (Regulation and Abolition) Act, 1970 .....	17
4.1.3 Trade Unions Act, 1926.....	18
4.2 Power supply .....	21
4.3 Taxation and incentives for investment .....	23
4.4 Taxation environment.....	23
4.5 Internal Taxation.....	25
4.5.1 Deficiencies in the current internal taxation regime in India.....	25
4.5.2 Proposed Goods and Services Tax (GST).....	26
4.6 Land.....	27
4.7 Special Economic Zones (SEZs) and other industrial clusters .....	29
4.7.1 Special Economic Zones (SEZs) in India.....	29
4.7.2 Industrial area development schemes in India .....	30
4.8 Entry and exit barriers .....	31
4.8.1 Entry barriers in India.....	31
4.8.2 Exit barriers in India .....	32
4.9 Access to finance for small and medium enterprises (SMEs) .....	33

4.9.1 Priority sector lending in India.....	34
4.9.2 Small Industries Development Bank of India (SIDBI).....	34
4.9.3 Credit Guarantee Fund.....	35
4.9.4 Other government schemes .....	35
<b>5. Recommendations .....</b>	<b>36</b>
5.1 Top priority measures for stimulating international production sharing .....	36
5.2 Priority measures to improve domestic environment for investment in manufacturing ..	37
5.3 Other measures to boost domestic investment environment .....	39
5.4 Concluding remarks .....	40
<b>References: .....</b>	<b>41</b>

### **List of Tables and Figures**

<b>Chart 1:</b> Share (%) of Manufacturing in GDP .....	5
<b>Chart 2:</b> Share of India and comparator countries in world trade of manufacturing .....	6
<b>Chart 3:</b> Share (%) of India and comparator countries in global trade of P&C .....	7
<b>Chart 4:</b> Share of India and comparator countries in East Asia intra-regional P&C trade, 2011 ..	7
<b>Chart 5:</b> Inward FDI stock in India and comparator countries (in US\$ billions).....	8
<b>Chart 6:</b> T&D losses in India and comparator countries .....	22
<b>Table 1:</b> Annual FDI inflow in Manufacturing (in US\$ billions) and its share (%) in total FDI ...	9
<b>Table 2:</b> Comparative picture of import tariffs in India, China, Thailand and Malaysia in groups of products in which international production sharing is common .....	11
<b>Table 3:</b> Comparative overall position of India on logistics, liner shipping and air connectivity	14
<b>Table 4:</b> Dwell time for import and export cargo at ports and airports in days .....	16

### **List of Boxes**

<b>Box 1:</b> Transport infrastructure and logistics processes in India and comparator countries ...	14
<b>Box 2:</b> Labour laws in India and comparator countries.....	20
<b>Box 3:</b> Power supply situation in India and comparator countries .....	22
<b>Box 4:</b> Taxation and tax incentives in India and comparator countries .....	24
<b>Box 5:</b> Internal taxes regimes in India and comparator countries .....	27
<b>Box 6:</b> Land for industry in India and comparator countries.....	28
<b>Box 7:</b> SEZs and industrial area development schemes in India and comparator countries ...	31
<b>Box 8:</b> Entry and exit barriers in India and comparator countries.....	33
<b>Box 9:</b> SME access to finance in India and comparator countries .....	36

## **Acknowledgement**

This paper is a part of the research undertaken at ICRIER for the project “Capacity Building for Implementing Private Sector-Led Integration in South Asia - An Analysis of Economic Effects of Intensified Regional Cooperation and Integration”, commissioned by the Asian Development Bank (ADB), Manila, Philippines. The authors would like to acknowledge the invaluable comments on the preliminary draft received from Prof. T. N. Srinivasan, Dr. Ashok Desai and Amb. Hemant Krishan Singh. We would also like to thank the participants of the Second and Third Workshops on “Integrating South and East Asia: An Analysis of the Economic Effects of Intensified Regional Cooperation and Integration” at Seoul, Republic of Korea and Manila, Philippines, respectively.

## Abstract

This paper analyses the reasons behind India lagging behind East and South East Asian economies in participating in international production networks, on which growth in manufacturing has become increasingly dependent in the contemporary world. Since multinational firms are the main coordinating agents in these networks, whether through affiliates or procurement of inputs through arm's length transactions, the paper examines the reasons for India's inability to attract foreign investment in manufacturing. It examines in particular the role played by logistics infrastructure and processes in the selection by investors of particular locations for investment in manufacturing. The paper also lists out other shortcomings in the domestic investment environment that have made India less attractive for foreign as well as domestic investors in comparison with East and South East Asian countries. A feature of the analytical framework adopted is comparison of the situation prevailing in India with that in three comparator countries, viz., China, Malaysia and Thailand with respect to logistics and other factors that determine the investment environment, so as to enable an assessment of the scale and direction of effort needed to bring India on par with these countries.

---

**JEL Classification:** *F13, F21, L23, L24, L52.*

**Keywords:** *International Production Sharing, FDI, Outsourcing, Trade Barriers, Logistics*

**Authors Emails:** *ahoda@icrier.res.in, drai@icrier.res.in*

---

**Disclaimer:** Opinions and recommendations in the paper are exclusively of the author(s) and not of any other individual or institution including ICRIER.

# **Trade and Investment Barriers affecting International Production Networks in India**

Anwarul Hoda<sup>1</sup> and Durgesh K. Rai<sup>2</sup>

## **1. Introduction**

The Indian economy has slipped woefully at the start of the current decade. It had shown strong performance in recovering from the effects of the post-Lehmann global recession and returned to the path of high growth, clocking 9.3 per cent in 2010-11. But the rate of growth decelerated sharply thereafter, to 6.2 per cent in 2011-12 and 5.0 per cent in 2012-13. To a large extent, the fall was due to a drop in the growth rate of industry, to 3.5 in 2011-12 and 3.1 per cent in 2012-13. The laggard in this sector was manufacturing, which registered a growth rate of only 2.7 and 1.9 per cent respectively in these years.

India has to achieve an economic growth of 8-9 per cent on a sustained basis to eradicate poverty and raise the standard of living of its people to a reasonable level. In order to realise such a significant step up in economic growth, reviving manufacturing has to be on top of the agenda. The Government of India has already brought manufacturing to the forefront and enunciated the National Manufacturing Policy.

The policy is overly ambitious in aiming to increase the share of manufacturing in gross domestic product (GDP) from 15 to 25 per cent by the year 2025 and in setting a target of 100 million jobs in manufacturing in the next decade. However, even modest progress in achieving these targets is not conceivable without a new initiative to accelerate the growth of manufacturing. China, Malaysia and Thailand have all achieved impressive growth in manufacturing by encouraging regional and global production networks, particularly in the last two decades. The issue before India is whether providing a policy stimulus to increase India's participation in international production networks can be the new initiative needed to propel manufacturing forward.

An additional objective of economic policy in India should be to ensure that a substantial proportion of new employment opportunities are created by way of regular and decent jobs, unlike the low quality jobs in the unorganised sector, with low wages and without even a modicum of social security benefits, which currently constitute 95 per cent of industrial employment. International production networks have the potential to enable the achievement of this objective as well.

### **1.1 Rise of international production networks**

One of the features of global trade and industrialisation over the last three decades has been the segmentation of production processes in both goods and services and the dispersal of the segments over an international network. The process is variously described in literature as

---

<sup>1</sup> Chair Professor of ICRIER's Trade Policy and WTO Research Programme.

<sup>2</sup> Research Associate, ICRIER.

international production fragmentation, slicing the value chain or international production sharing, global and regional production networks, but they all refer to the same phenomenon, for which we use the term ‘international production networks’.

The main factors that led to global production sharing in the post-1980 phase of globalisation were steep reductions in tariff and non-tariff barriers (multilaterally as well as in regional agreements), coupled with a reduction in the time taken for transporting goods from one country to another and advances in communication technologies (radio frequency identification tags, internet and transponders) that made it possible to track, monitor and control production in different locations. In ocean transport, which accounts for the bulk of international shipments of manufactured goods, it was the reduction in shipping time rather than a further fall in the cost of transport that stimulated international production networks (World Trade Organisation, 2008). According to estimates made by Hummels (2007), the tariff equivalent of each day taken in transport is 0.8 per cent. Thus, a 20-day period taken in transporting and clearing goods between two ports can neutralise tariff reduction of 16 percentage points.

In the first phase of globalisation in the 19<sup>th</sup> century, consumers were separated from factories (the first unbundling). Baldwin (2011) argues that after 1980, the nature of globalisation changed and led to the second unbundling whereby manufacturing stages were dispersed across countries. In this phase, unbundled production activities are linked by services such as co-ordination, transportation, telecommunication and financial services.

The dispersal of individual segments of the production process over distant territories may seem to raise questions on the validity of the principle of comparative advantage. Jones and Kierzkowski (1990 and 2001) argue that the principle of comparative advantage still holds, but it is at the level of components or tasks and not finished products. Each nation now exports the individual task in which it has comparative advantage.

## **1.2 Quantifying trade in international production networks**

There are two main alternative approaches for quantifying trade in international production networks. The conventional approach relies on the input-output databases developed from national sources, but limited in terms of the countries, industrial sectors and periods covered.

In the second approach, trade in parts and components can be used as a proxy for international production sharing in manufacturing. What made this approach possible was that the Standard International Trade Classification (SITC) Revisions 2 & 3 used by the UN trade data reporting system allow trade data to be extracted separately for parts and components (P&C) and fully assembled manufactured goods at least in respect of SITC 7, which accounts for about 50 per cent of world trade in all manufactures. Based on the revised SITC classification, Alexander J. Yeats (1998) estimated the relative importance of trade in P&C in the Organisation for Economic Co-operation and Development (OECD) trade in machinery and transportation equipment group (SITC 7). The methodology pioneered by Yeats was used by Athukorala and Yamashita (2007); Athukorla (2010) developed it further,



drawing up a comprehensive list, which expanded the coverage of P&C beyond SITC 7 and included assembled goods as well.

Global estimates based on the SITC definition show that the share of P&C in world trade of manufactures increased from about 22 per cent in 1980 to 29 per cent in 2000 before declining by about 4 per cent during the period 2000-2008 (WTO 2013). Thereafter, the share has come back on the growth path, albeit somewhat slowly.

### **1.3 Off-shoring and outsourcing**

International production networks may involve sourcing of inputs from foreign affiliates (off-shoring) or acquisition of inputs from unaffiliated firms through arm's length transactions (outsourcing). To become more competitive, firms have to decide first on whether to produce an input in-house or to source it from an affiliate located abroad. In the alternative, it may decide to outsource it domestically or to a foreign unaffiliated firm.

Existing studies (World Bank 2005, Gaulier et al. 2005, Sen and Srivastava 2011 and UNCTAD 2013) strongly suggest that foreign direct investment (FDI) plays a key role in international production networks. Whether by production through affiliates or procurement of inputs through arm's length transactions, multinational firms are the main co-ordinating agents in international production networks. The United Nations Conference on Trade and Development (UNCTAD), 2013, estimates that about 80 per cent of world trade is linked to international production networks of multinational corporations, whether through intra-firm trade or arm's length transactions. There is no conclusive empirical evidence, however, on whether off-shoring via intra-firm trade or outsourcing via arm's length transactions is relatively more important. The World Bank estimates that intra-firm trade constitutes about one-third of world trade (World Bank 2005).

FDI inflows tend to have a larger effect on bilateral imports compared to exports, as the host country imports not only capital goods but also P&C (Aminian et al. 2007). However, there is a wealth of evidence globally that FDI inflows can result over time in a large growth of net world exports of the host country, as observed in China (Gaulier et al. 2005) and East Europe (World Bank 2005).<sup>3</sup>

---

<sup>3</sup> Experience in India relating to FDI inflows from Japan and South Korea in the automotive sector broadly supports the conclusions reached by these authors on the effect of such inflows both on bilateral trade between home and host countries and world exports from the host country. According to data made available to ICRIER by the Automotive Component Manufacturers Association (ACMA), between 2010 and 2012, imports of automotive components from South Korea into India rose from US\$ 1.52 billion to US\$ 1.72 billion while exports increased from US\$ 77 million to US\$ 88 million. Imports from Japan increased from US\$ 1.19 billion to US\$ 1.79 billion while exports rose from US\$ 82 million to US\$ 208 million. The lack of dynamism in exports from the host to home country is attributed by ACMA to the practice among the businesses in South Korea and Japan to restrict trade as far as possible to entities within business conglomerates known as Chaebol in South Korea and Keiretsu in Japan. It is significant also that world exports from India in automotive components registered an impressive increase from US\$ 5.2 billion in 2010-11 to US\$ 9.3 billion in 2012-13, although it must be acknowledged that all the increase in India's world exports cannot be attributed to FDI from these countries.

In deciding on off-shoring, multinational firms are guided by the relative abundance of factors of production needed for a particular stage of manufacture (e.g. skilled labour for assembly activities) or by the economies of scale that might be possible in the new location. In selecting among alternative locations, they are influenced not only by the relative situation of trade barriers and logistics cost but equally by the investment climate and ‘behind-the-border’ institutional conditions. These factors influence industrial activities in general and not just the functioning of international production networks, although some of them may have a greater relevance for international production networks. The gateway infrastructure and logistics cost, for instance, affect international production networks more as the manufactured inputs may have to move across borders several times and deficiencies get magnified.

#### **1.4 Objective and methodology of study**

The starting point for this study is that India is an outlier in the development of international production networks, which is both a global and regional phenomenon. A number of authors (Athukorala 2010, Sen and Srivastav 2011, Rajan 2003, Kimura and Obashi 2010 and 2011, Athukorala and Menon 2010) have concluded that, among Asian countries, India has the lowest participation in international production networks. While large economies with a diversified industrial structure like India may not need to depend for industrial growth on such networks to the same extent as smaller economies, the fact is that manufacturing in India has remained stuck at around 15 per cent of the GDP for more than a decade. India needs to expand manufacturing in order to provide employment to the millions of people being added every year to the job market, but it has been unable to seize the opportunity provided by production sharing networks to meet this objective. What should make this route attractive for the country is that it offers a quicker route to expand manufacturing than the alternative of building productive capacity covering all stages of production. In any case, the strategy needs to be only to supplement, not supplant, more comprehensive industrialisation.

The objective of this study is to investigate the reasons for India’s poor participation in production-sharing networks and to make recommendations to overcome the hurdles. The approach that we adopt is of analysis and comparison and we have selected three comparator countries in the region that have been successful in production-sharing arrangements as well as in industrial growth, viz., China, Malaysia and Thailand. An important objective of the study is to delineate and measure the gap between India and the comparator countries in respect of each of the factors that we identify as responsible for India falling well behind them in international production networks.

The methodology includes both desk work and field surveys/interviews. A significant part of our field work was interviews with senior representatives of multinational firms that are manufacturers of original equipment (OEMs) in the Asian region and have a substantial presence in regional production networks. An examination of the gateway infrastructure and logistics costs occupies a central place in our study on account of its importance for the location of manufacturing enterprises participating in international production networks. During the field work on this aspect, the research team interacted with representatives of

freight forwarders and express delivery providers in five ports (Chennai, Mumbai, Port Klang, Laem Chabang and Shanghai) and two airports (Delhi and Beijing).

In Section B of the paper, we look at the latest picture of India's participation in international production networks. There we also describe briefly the trends in FDI inflows into India in view of the key role that such inflows play in international production networks. Section C is devoted to trade barriers and the gateway infrastructure and logistics costs on which international production networks are critically dependent. In Section D, we analyse the behind-the-border investment environment that influences investment, including FDI, in establishing manufacturing enterprises. In Section E, we make recommendations to improve the investment climate and adjust the policy framework to quicken the pace of development of manufacturing by expanding Indian participation in international production networks.

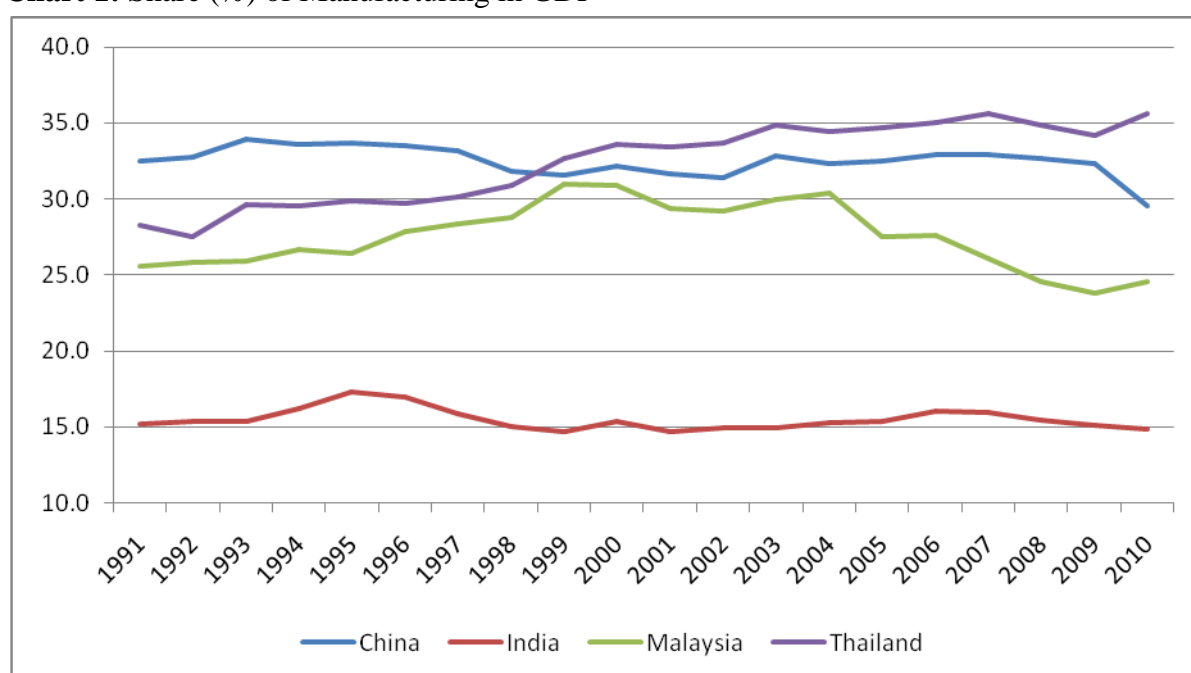
## 2. India's Participation in International Production Networks

Before undertaking an analysis of the underlying reasons for India being left out of the mainstream in the worldwide development of international production networks, we check the current position in this regard.

### 2.1 Manufacturing sector in India

India's lack of success in participation in international production networks is interlinked with the wider phenomenon of the lack of dynamism in India's manufacturing sector. In India, the share of manufacturing in GDP has hovered around 15 per cent for more than two decades, while according to World Development Indicators (WDI) of the World Bank, in 2010, it was 29.61 per cent in China, 24.56 per cent in Malaysia and 35.62 per cent in Thailand. For this reason, India has not been a dominant force in world manufacturing trade in recent decades.

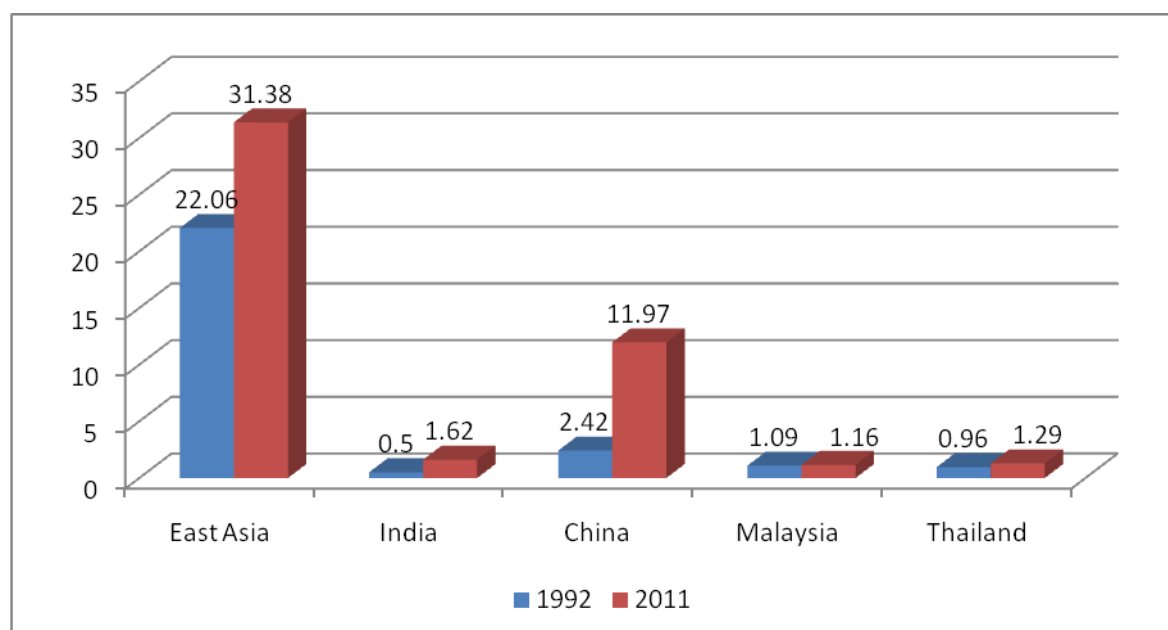
**Chart 1:** Share (%) of Manufacturing in GDP



Source: World Bank, WDI

In the last two decades, world trade in manufactures has risen sharply from US \$ 5.4 to 23.4 trillion. In 1992, India was behind not only China but even the comparatively small economies of Malaysia and Thailand in terms of its international trade share in manufactures. By 2011, China had made impressive strides in manufacturing to raise its share to about one-eighth of world trade and push East Asia's<sup>4</sup> share up to almost one-third. . While India has edged past Malaysia and Thailand, it trails far behind China, with a share of a meagre 1.62 per cent .

**Chart 2:** Share of India and comparator countries in world trade of manufacturing



*Source: WTO*

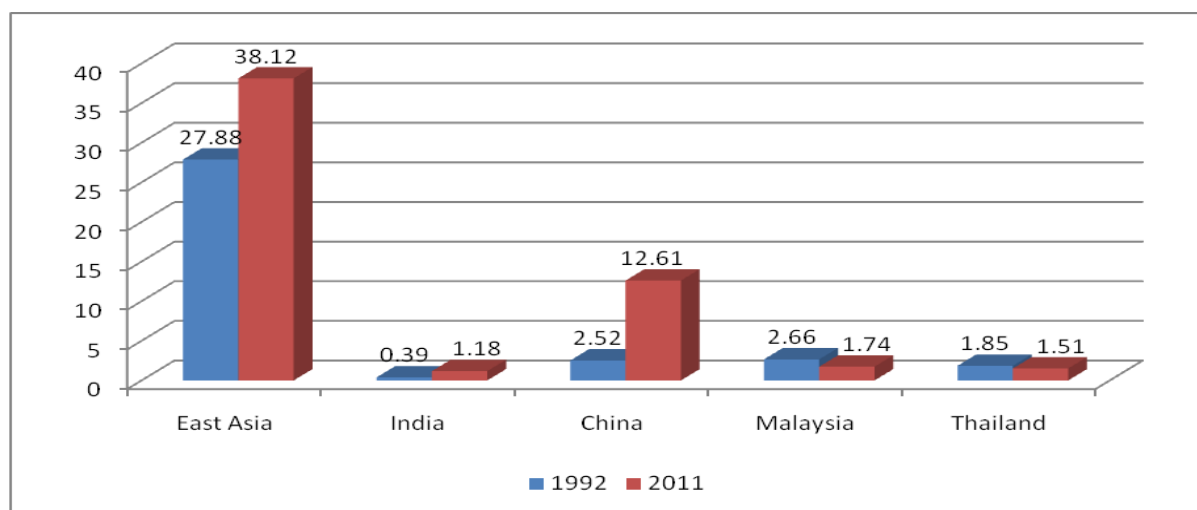
## 2.2 *India in global production networks*

International trade in parts and components (P&C) has risen even faster than in manufacturing with the result that its share in world trade in manufactures in 2011 was higher than in 1992, moving up from 15.47 to 24.08 per cent. If we count in the goods assembled from P&C and take all network products into consideration, the increase in the share of total manufacturing trade is marginal, from 52.70 in 1992 to 52.96 per cent during the period under consideration, possibly because a large proportion of the assembled goods is not traded but absorbed within the country in which the assembly takes place. For this reason, the growth of P&C trade can be said to better reflect the intensity of international production sharing and we consider trade in P&C only in our analysis. Chart 3 shows the evolving comparative position of India's share in world P&C trade during the last two decades. China has registered a big increase in share of international trade of P&C and India is slowly

<sup>4</sup> In this paper East Asia includes 6 ASEAN economies (Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam) and 5 major economies of the region (China, Hong Kong, India, Japan and South Korea).

increasing its share from a very low base level, while Malaysia and Thailand have not been able to retain the relatively large shares that they had already secured 20 years ago.

**Chart 3:** Share (%) of India and comparator countries in global trade of P&C



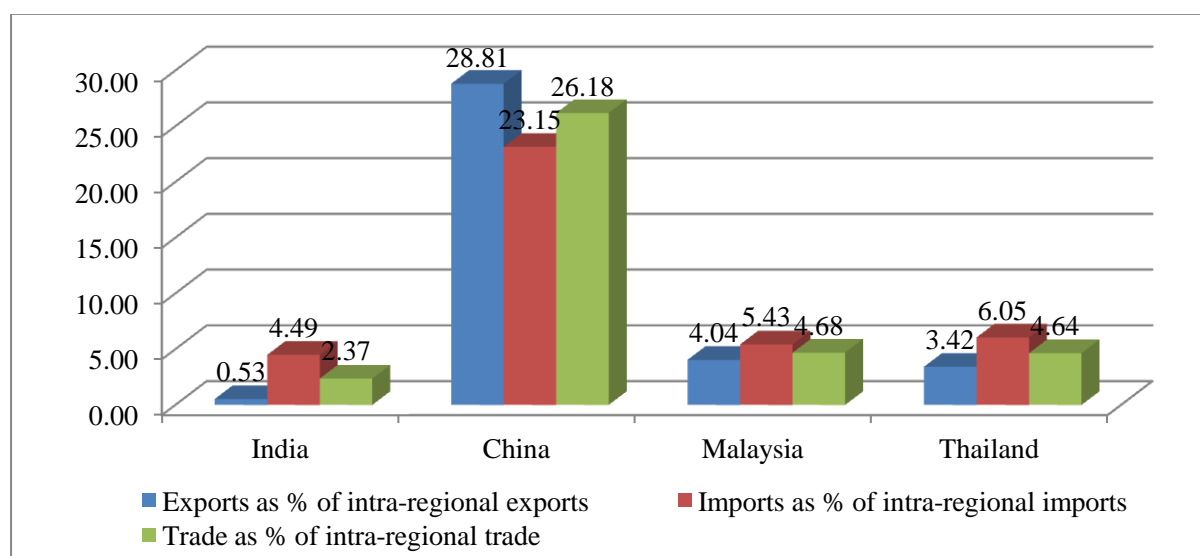
*Source: UNCOMTRADE, estimated by authors*

In 2011, India was the smallest player among comparator countries in P&C trade.

### 2.3 India in regional production sharing arrangements

Statistics of intra-regional P&C trade also bring out the fact that regional production sharing is more significant in East Asia. Out of East Asia's global P&C trade of US\$2151.6 billion, intra-East Asia trade accounts for US\$1254.5 billion or about 58.3 per cent. Chart 4 shows the share of India and the comparator countries in intra-regional P&C trade.

**Chart 4:** Share of India and comparator countries in East Asia intra-regional P&C trade, 2011



*Source: UNCOMTRADE, estimated by authors*

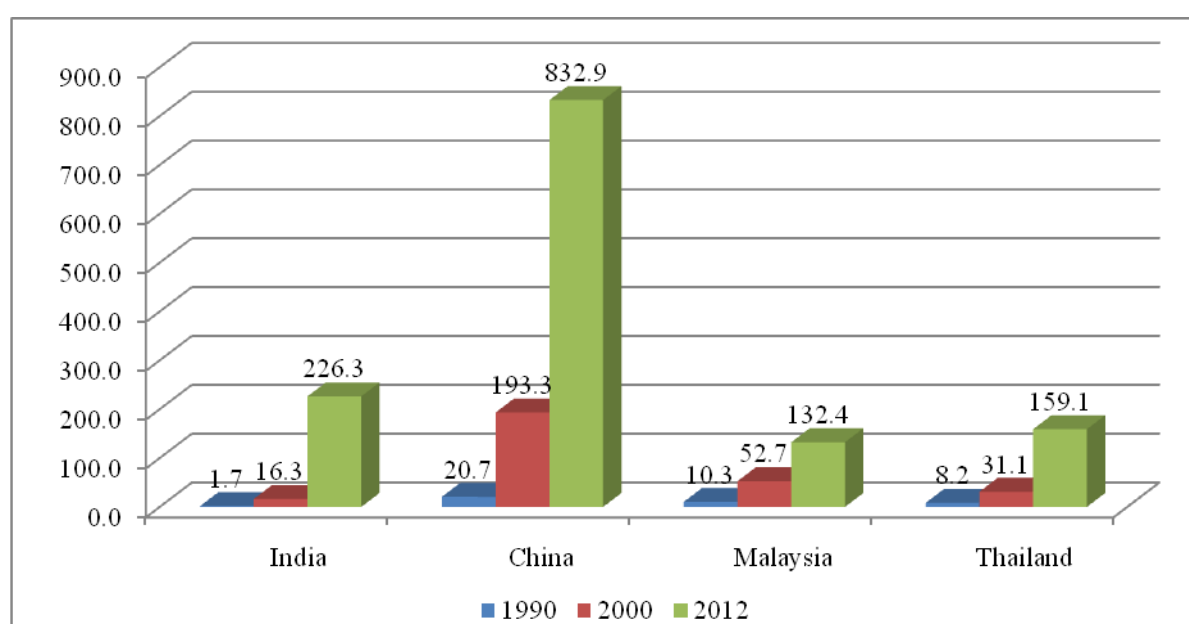
In intra-regional trade in P&C, China is once again the dominant and India the smallest player. India's share is about half even compared to Malaysia and Thailand. What is even more significant is that India's exports of P&C are a fraction of one per cent against 4.04 and 3.42 per cent for Malaysia and Thailand respectively.

## 2.4 Foreign direct investment in India's manufacturing sector

If India has had a low participation in international production networks, it is principally on account of very limited stock of FDI in India's manufacturing sector. Until the economic reforms of 1991-92, India's external economic policy was biased against FDI and foreign equity in industrial ventures could not be above 40 per cent, except with the express permission of the central government, which was given only in limited cases involving transfer of technology, and that too with strict conditions. Even after the introduction of economic reforms, foreign equity was allowed only up to 51 per cent to start with and was increased gradually to 100 per cent in most manufacturing activities only at a later stage.

Chart 5 shows the evolving position of FDI stock in India and comparator countries during the last two decades.

**Chart 5:** Inward FDI stock in India and comparator countries (in US\$ billions)



Source: UNCTADstat

India was a late starter in seeking FDI and the comparator countries were well ahead of India up to 2000. It was only around 2007 that the annual inflows of total FDI into India became substantial, but a point of significance was that while a major proportion of FDI inflows in China, as also in Malaysia and Thailand, was in the manufacturing sector, the bulk of FDI inflows in India was in the services sector. Table 1 gives the figures of FDI flows into manufacturing in India and comparator countries in the years 2003-10.

**Table 1:** Annual FDI inflow in Manufacturing (in US\$ billions) and its share (%) in total FDI

	2003	2004	2005	2006	2007	2008	2009	2010	Cumulative 2003-10
<b>India</b>	0.8	1.5	2.1	2.3	4.8	6.2	7.2	7.5	32.4 (16.9%)
<b>China</b>	36.9	43	42.5	40.1	40.9	49.9	46.8	49.6	349.7 (58.3%)
<b>Malaysia</b>	1.4	3.5	1.8	1.3	3.2	3.7	-0.7	5	19.2 (44.0%)
<b>Thailand</b>	2.4	3.8	3	4.1	3.7	5.7	3.7	3.4	29.8 (49.9%)

**Source:** For India, Department of Industrial Policy and Promotion (DIPP) and Reserve Bank of India (RBI). In case of China, National Bureau of Statistics of China and ASEAN Investment Report 2011 for Malaysia and Thailand.

**Note:** All the figures for India are for financial years from April 1 to March 31. RBI data on manufacturing does not include reinvestment. The reinvestment amount is projected on the basis of the share of reinvestment in total FDI in India shown in DIPP data.

While India caught up with Thailand and Malaysia and even outstripped them during this period, the cumulative FDI inflow in China was more than ten times that in India.

The foregoing analysis shows that India's participation in international production-sharing arrangements is very low in comparison with other developing countries in the region and that there is a close correspondence between such participation and FDI inflows into manufacturing. In Sections C and D we look closely at the trade barriers and logistics situation in India and examine various facets of the domestic investment environment, in order to determine the contributory factors for the meagre FDI inflows into India and the poor participation of the country in international production networks.

### **3. Trade Barriers & Logistics in India**

We have noted earlier that one of the factors that led to global production-sharing in the post-1980 phase of globalisation was a reduction in trade barriers. In this section, we look at the trade barriers in India vis-à-vis the comparator countries.

#### ***3.1 Do trade barriers affect international production sharing?***

Before we do so we must ask a preliminary question. Is international production sharing, which involves, inter alia, import into and exports from a country of P&C affected by the tariff levels in that country? In purely processing operations, where only imported P&C are used and the final goods are exported, import tariffs are not an impediment. Because of the destination principle of indirect taxation that is universally accepted and incorporated in the WTO rules, import duties and charges levied on the P&C imported for use in the manufacture

of finished goods that are later exported are either exempted or refunded through drawback schemes when the actual exports take place. However, the final product, produced through international production networks, may be sold and finally consumed in domestic markets as well, and in these cases there is no refund of import duties and charges. Moreover, irrespective of whether the final product is exported or sold domestically, the manufacturer may use domestically produced P&C as well, and the tariff level can be expected to be reflected in the price of such P&C, thereby affecting the competitiveness of manufacturing in the country. We conclude that in principle, tariff levels on P&C are a factor in determining the participation of countries in international production networks.

### ***3.2 Evolution of India's trade policy***

In India's case, in the trade regime that existed before the economic reforms of 1991-92, import barriers were very high and India's participation in global and regional production networks was negligible. Quantitative import restrictions on P&C were eliminated in the years immediately following the reforms in 1991-92. The residual restrictions that remained on some P&C were also eliminated in 2000-2001 following a WTO dispute. Tariffs levels were also rapidly reduced from prevailing levels, which were as high as 150 per cent or more before the introduction of economic reforms. Even so, peak tariffs on non-agricultural products were still as high as 35 per cent in 2001, and there was a surcharge of 10 per cent on basic customs duty as well. The high level of applied duties constituted a major impediment to India's participation in international production networks. The position changed rapidly after 2001. The surcharge on basic customs duty was given up in 2001-02, and the peak basic customs duty was reduced every year from 2002-03 onwards until it was 10 per cent in 2007-08, with very few exceptions. After that, the general level of non-agricultural tariffs has remained stable in the country.

### ***3.3 Current level of MFN tariff***

In terms of the simple average of applied most favoured nation (MFN) tariffs, India is not out of line with the comparator countries. According to the WTO Secretariat's Integrated Data Base (IDB), the latest available simple averages in ad valorem percentage are India: 9.8 (2010); China: 8.7 (2009); Thailand: 8.0 (2011); and Malaysia: 5.8 (2010).

Simple averages do not reflect the full picture as we must also take the peak tariffs into account. In Table 2, we take six P&C product groups in which international production sharing is common and compare not only the simple averages but also the peak duties.



**Table 2:** Comparative picture of import tariffs in India, China, Thailand and Malaysia in groups of products in which international production sharing is common

Country	Tariffs	Power generating equipments	Office machine & automatic data processing machine	Telecom & sound recording equipments	Semiconductors & semiconductor devices	Electrical goods	Road vehicles & other transport equipments
India	Simple average	6.84	0.63	7.28	5.25	7.32	9.45
	Peak tariff	8.8	10	10.0	10.0	10.0	10.0
China	Simple average	7.16	1.54	13.25	5.66	7.73	8.89
	Peak tariff	7.16	24.5	35.0	18.0	24.5	30
Malaysia	Simple average	2.90	0.0	6.60	3.07	4.05	11.23
	Peak tariff	25	21.7	20.0	15.0	21.7	30
Thailand	Simple average	4.62	1.67	9.18	3.79	6.97	17.23
	Peak tariff	10.0	30	30.0	10.0	30	80

*Source: WTO, IDB*

**Note:** The data year for India and Malaysia is 2010, for Thailand 2011 and for China 2009.

India's MFN tariff profile is comparable to that of the three countries included in our analysis, even when both the simple average and peak tariffs are taken into consideration. If Malaysia scores over India in respect of the simple average, India looks more liberal if we take into consideration the lower incidence of tariff peaks.

### ***3.4 Inverted tariff structure in India and other anomalies***

The effective levels of import tariffs have come down further by virtue of the FTA type agreements entered into by India with several countries including Singapore, Thailand, Malaysia, the ASEAN, Korea and Japan. In all these agreements, the parties envisage exclusions as well as reduction rather than elimination of duty in selected non-agricultural products. Exclusions have resulted in an inverted tariff structure, whereby the import duty has been eliminated on the finished product while being retained on P&Cs. Even where P&Cs are included in a particular agreement it may be of no avail as the trade partner concerned has no manufacturing ability in the particular P&C and Indian manufacturers obtain their requirement from MFN sources. Egregious cases of inverted tariff structure are refrigerators, air conditioners, washing machines, LCD and LED TVs (below 19 inches), and microwave ovens. As a result of the inverted duty structure, the OEMs prefer to import finished goods from their affiliates in East and South East Asia rather than manufacture the products in India with imported and/or domestically produced P&C.

The IT hardware industry has also been affected by India's entry into the Information Technology Agreement-1 (ITA-1), under which import duty was eliminated on more than 200 tariff lines including computers. Although the P&C required for the manufacture of the IT products are also included in ITA-1 and benefit from tariff elimination, certain materials that are widely used in other industries such as plastics, copper, aluminium etc (dual use items) attract duties at significant levels, thus creating an inverted duty structure. For the dual use items the government has issued an exemption notification (25/99-Customs) allowing imports at zero duty by IT product manufacturers. These procedures are, however, cumbersome and it is much simpler for OEMs to import the finished products (ELCINA 2013).

We would normally have expected that the cumulative effect of the economic integration arrangements referred to above would be that India's preferential tariffs will become substantially lower than the MFN tariffs, which by themselves are comparable with those prevailing in the region. This might well be the case for many products, but in some key consumer electronic products and domestic appliances, an inverted duty structure has been created, impeding international production-sharing.

Other anomalies also exist in Indian non-agricultural tariffs. For instance, in automobiles there are high nominal tariffs on finished products while much lower tariffs apply on parts and components. As noted by Badri Narayan and Vashist (2008), the result is an inordinately high effective rate of protection in automobiles. This may have stimulated market-seeking rather than efficiency-seeking investment inflows in the sector, constraining rather than promoting international production sharing arrangements.

### ***3.5 Import duty on capital goods***

The import duty on capital goods can be an important factor for competitiveness in manufacturing, because the duty on these goods cannot be exempted or rebated consistently with WTO obligations when the goods produced with the capital goods are exported. Among the comparator countries, Malaysia and Thailand have an advantage as the import duties on capital goods are either zero or very low at 1-5 per cent. In India, the import duty on capital goods is around 7.5 per cent, while China has a higher duty going up to even 15 per cent in some cases.

### ***3.6 Gap between applied and bound duty levels***

When the current round of multilateral trade negotiations (the Doha Round) commenced in 2001, India's bindings covered 69 per cent of the tariff lines in non-agricultural products. Seventy per cent of these tariff lines are bound at the level of 40 per cent ad valorem, 17 per cent at 25 per cent ad valorem and the remaining 13 per cent at various levels (Hoda and Verma 2004). Since the Doha Round has not concluded, no opportunity has been provided until today for India or any other WTO member (apart from those acceding to the WTO) to make fresh tariff commitments in the WTO. In the meantime, as we have seen above, the peak level of non-agricultural tariffs has been brought down autonomously and unilaterally in

India to 10 per cent ad valorem, leaving aside a few items. As a result, a large gap has opened between India's bound and applied levels of non-agricultural tariffs.

India has been criticised for the gap between the applied and bound levels of both agricultural and non-agricultural tariffs. The point has been also made that the absence of WTO commitments for the reduced levels of tariffs is a cause for uncertainty and could be impeding investments in manufacturing in the country. Three points need to be made in this context. First, that although a binding in the WTO could give de jure stability to prevailing tariff levels, the external economic policy followed by successive governments in the past two decades has imparted de facto stability as it has been manifest that the policy of reduction of external trade barriers is here to stay. Since industries rely on the continuity of tariff policy, such policy tends to become irreversible in practical terms. Second, India's major trading partners, namely the USA and the EU, have attached little importance in the WTO negotiations to the locking in of the current levels of tariffs in India and are only demanding further reduction in and/or elimination of tariff. Third, during their interactions with the ICRIER research team, foreign investors did not show even an awareness of the gap between bound and applied levels in India's non-agricultural tariffs, let alone registering concern in this regard. Binding of reduced levels of tariffs is only a negotiating chip in multilateral trade negotiations and, even as a negotiating chip, its value has eroded in light of the fact that integration with the world economy is seen in most countries as key to efficiency and economic growth.

### **3.7 Logistics**

International production sharing involves large volumes of exports and imports in P&C and, in some cases, these traverse borders several times. Once the final goods have been assembled, these are once again exported to destinations within the country and without. With the fall in the traditional barriers to trade, such as tariffs and non-tariff barriers, the importance of logistics has increased as a determinant of trade flows between countries. Logistics cover freight transportation, loading and unloading, border clearance, payment systems, warehousing and a host of other functions.

Since more than 80 per cent of merchandise is transported by sea, the availability and quality of shipping services and port facilities is critical for international production sharing. The need to save on the time taken in transportation has led to the adoption of such business models as just-in-time manufacturing and has increased freight transportation by air also in international production sharing, even though air freight cost is 12-16 times the sea transport cost.

We have three international indices that have a bearing on logistics efficiency of individual countries viz., the World Bank's Logistics Performance Index (LPI), the UNCTAD's Liner Shipping Connectivity Index and the World Bank's Air Connectivity Index.

India's standing in overall logistics efficiency vis-à-vis comparator countries is mirrored in its rankings in these three indices, which are shown in the Table below.

**Table 3:** Comparative overall position of India on logistics, liner shipping and air connectivity

Country	Position in World Banks Logistics Performance Index (LPI) 2012	Position in UNCTAD'S Liner Shipping Connectivity Index 2011	Position in World Bank's Air Connectivity Index 2007
China	26	1	46
Malaysia	29	7	83
Thailand	38	28	75
India	46	22	88

*Source: World Bank 2011, 2012 and UNCTAD 2011*

India's rank is lower than that of the comparator countries in virtually all the indices. ICRIER research teams visited major ports and airports in India and in comparator countries and interacted with freight forwarders and express delivery service providers to understand the reasons for India's low rank in logistics performance. The feedback from representatives of OEMs during the field work was that India needed to benchmark its port infrastructure with countries like China, Malaysia and Thailand. In light of these inputs, the ports visited for survey by research teams were Jawaharlal National Port Trust (JNPT) and Chennai in India, Shanghai in China, Westport Klang in Malaysia and Laem Chabang in Thailand. The airports included in the survey were New Delhi in India and Beijing in China.

The comparator countries do not suffer from inadequacies in transport infrastructure and inefficiencies in the logistics processes at the gateways, which reduce India's competitiveness in manufacturing and lower its attractiveness as a destination for FDI. The comparative position is described in Box 1.

**Box 1:** Transport infrastructure and logistics processes in India and comparator countries

- India's 12 major ports are congested and port capacity constrained due to the lack of a cushion between installed capacity and actual traffic. The ports of comparator countries have sufficient spare capacity and new berth construction is taken up well in time to avoid congestion. ICRIER's field survey revealed a large gap in the vessel turnaround time (in hours) between Indian and comparator ports (JNPT-31; Chennai- 40; Shanghai- 19; Laem Chabang-12; and Port Klang- 12).
- Another deficiency is inadequate draft in the channels and harbours as a result of which Indian ports, particularly those on the Eastern seaboard, are ignored by liner vessels and figure lower in the connectivity index. Inadequacies of draft are unknown in comparator countries. The Indian government does not undertake the responsibility for capital dredging and expects the ports to finance such dredging from their revenue.
- Indian ports suffer from inadequate road and rail connectivity with the hinterland and long queues of both incoming and outgoing vehicles are common. There is absence of a world class, access-controlled expressways such as those in China and Malaysia or of high quality dual carriageway as in Thailand. Railways suffer from congestion in the corridors linking industrial centres, making freight transport by

rail unreliable in terms of timeliness of delivery. Dedicated freight corridors being constructed by Indian Railways will alleviate the situation to some extent but India has no credible plan to build access controlled expressways and, at present, the total length is less than 500 km in the entire country (Planning Commission 2009). China built 10,000 km in 2012 bringing the total to 100,000 km.

- In India, air cargo transportation received a boost from the adoption by government of ‘Air Cargo Open Sky Policy’ and the abolition of the regulatory regime over cargo rates for major export commodities. However, there is scarcity of space in Indian airports, which translates itself into a dearth of storage facilities for perishable cargo, shortage of landside truck docks and an inadequate number of dedicated bays for freighter traffic. The need to establish an air cargo village outside the airport has been felt but taking cargo outside the airport may cause delays (Ministry of Civil Aviation 2012). In Beijing airport, there is no shortage of space within the airport. Although there is an air cargo village, it is used for storage and sorting, not customs clearance.
- A risk management system (RMS) was introduced in India in December 2005 for imports but the assessment is that up to 10 per cent, and sometimes even more, of consignments are still physically checked. In China, it is three per cent, in Malaysia one per cent and in Thailand even less. Since India had not extended RMS to exports earlier the gap in dwell time was wider for exports as 100 per cent of the export consignments were being checked. But the position has changed and with effect from 14 November 2013 RMS has been extended to exports as well, although the physical checking remains high at 30 per cent. The Indian Customs Electronic
- Data Interchange (EDI) System (ICES) has been operational for many years. It is supposed to be ‘a comprehensive, paperless, fully-automated customs clearance system, that makes the functioning of Customs clearance transparent and efficient’, according to the website of the Ministry of Finance, Department of Revenue of the Government of India. Interactions with the trade confirm that the introduction of EDI has facilitated the filing of documents by individual companies as they can do it from their office. Similarly, online payment of customs duty, introduced recently and made compulsory for payments of INR100,000 and above, has eased procedures. However, the main objective of enabling the customs clearance process through a single window without face-to-face contact with officials has not been achieved. Despite the existence of EDI (ICES) a large number of processes for both export and import clearances require paper copies, and signature endorsement of customs officials on such physical documents. Examples include the requirement of endorsed copies for availing export incentives (Export Promotion copies of shipping bills), endorsement of bills of entry for imports that are bound for a SEZ or EOU from a gateway port or airport, and endorsed copies of excise documents relating to exports. Additionally, all allied agencies (i.e. agencies other than customs that have statutory role in clearance) such as Textile Committee or Additional Drug Controller operate completely in the manual mode requiring paper documents including physical endorsement from officials. This creates a huge paper trail, and causes delays and complications in the clearance process. Despite the recognition of digital documents and digital signatures in the Information Technology Act the requirement continues for providing several copies of excise documents or export promotion copies of shipping bills. Importers covered by the Accredited Clients Programme (ACP) get the benefit of exemption of physical inspection but still have to submit the hard copies of the documents other than those relating to excise. On the other hand, freight forwarders and express delivery service providers in the Shanghai, Laem Chabang and Port Klang expressed great satisfaction with the functioning of the EDI system, which they regard as smooth, efficient and standardised.
- While the benefits of the ACP are limited, some of the eligibility criteria for admitting entities into the programme are very stringent, e.g. they should have no cases (including a show cause notice) of customs, central excise or services tax booked against them in the previous three financial years. This has severely restricted access to the programme.

The deficiencies in physical infrastructure in ports and airports and the shortcomings in processes adopted for border controls get reflected in the dwell time of both import and export cargo. The comparative position in respect of dwell time in ports in India and comparator countries is given in the following table.

**Table 4:** Dwell time for import and export cargo at ports and airports in days

Name of port	Total dwell time on import	Time taken in customs on imports	Total dwell time on exports	Time taken in customs on exports
Indian ports	9-10	3 1/2	9-10	3 1/2
Shanghai	2-3	2	1-2	1
Port Klang	2	3/4	1	1/2
Laem Chabang	2-3	Very little	1-1 1/2	Very little

*Source: Centre for WTO Studies, 2012 for Indian ports and ICRIER field survey for others*

A recent report (Government of India, 2014) has confirmed that Indian ports are far behind on international best practices in cargo dwell time, but has made the additional point that the best performing Indian ports are in line with international best practice, while the worst performers are 10 times worse.

It is seen from Table 3 that other parties (port authority, terminal operator and the shippers) contribute more to the cargo dwell time than customs. One major cause of delay is the pre-berthing detention of ships due to insufficient cargo handling capacity and congestion in ports. The time taken for unloading or loading the cargo adds to the dwell time and finally there is the factor of the shipper using ports as storage location because of the free storage time.

The above analysis reflects the situation mainly in India's 12 major ports, which in 2011-12 handled about 60 per cent of seaborne cargo. In the period 2001-02 to 2011-12, the 200 or so non-major ports have increased their share of the cargo from 25 per cent to 39 per cent. Although these ports suffer from the same infrastructure deficiencies as the major ports, they are reputed to be more efficient and for this reason some of them have been attracting more cargo, including containers, than the major ports.

## **4. Domestic Investment Environment**

### **4.1 Labour laws**

During interactions and consultation, the representatives of OEMs and business associations in FDI source countries emphasised that Indian labour laws were too protective of workers and unfriendly to investors. They observed that laws that made downsizing difficult were out of tune with the globalised world of manufacturing. Three statutes were mentioned as particularly important in this connection, viz., the Industrial Disputes Act, 1947, the Contract Labour Regulation and Prohibition Act, 1970, and the Trade Union Act, 1926.

#### ***4.1.1 Industrial Disputes Act, 1947***

The Industrial Disputes Act, 1947, lays down the procedures for the settlement of industrial disputes. In 1976, Chapter VB was introduced through an amendment, whereby employers were restrained from laying-off or retrenching workmen or even closing down factories without prior permission of government, if the number of employees is more than 300, and this threshold was lowered to 100 through another amendment in 1982. Although permissions have been given for lay-off, retrenchment and closure, the important point is that no objective rules are laid down in the law on the basis of which such permission would be given.

Under Chapter VC of the Industrial Disputes Act, 1947, it is an unfair labour practice (punishable with a jail sentence of up to six months) for the employer to keep a worker temporary for years with a view to depriving him of the privileges of permanent workmen. In this context it is also relevant to mention that by virtue of the Industrial Standing Orders Act, 1946, workmen become permanent after probation of three months.

The cumulative effect of the above provisions is to grant total job security to workmen, who have a virtual guarantee against being laid-off or retrenched. Not only downsizing but even closure of loss-making industrial undertakings is made difficult. This creates a sense of uncertainty among entrepreneurs and inhibits investment, as they are reluctant to expose themselves to the risk of indefinite liability. Alternatively, employers adapt to the situation by making their investment capital intensive. India's comparative advantage lies in having competitively priced semi-skilled and skilled labour but Chapter VB of the Industrial Disputes Act, 1947 substantially neutralises the advantage. Another effect of the rigidity in labour laws is that the growth of industry is taking place in the unorganised sector, with lower pay and benefits for workers.

The Second National Commission of Labour (Government of India, 2002) had recommended that the requirement of prior permission should be dispensed with in respect of lay offs and retrenchment, while retaining it for closures. It had, however, recommended an increase in compensation from the current level of 15 days' pay per year of completed service for both retrenchment and closure. In addition, the Commission had talked of the need for the government to develop unemployment insurance mechanisms to take care of the concerns of labour adequately for protection against loss of income. Proposals have also been made for any amendment to the Industrial Disputes Act, 1947 in this respect to apply only to employees hired after the date of the amendment so that existing employees continue to benefit from the protective shield of government permission for lay off, retrenchment and closure. However, consensus has been elusive on the issue in the tripartite machinery that advises government on all labour matters.

#### ***4.1.2 Contract Labour (Regulation and Abolition) Act, 1970***

The intention behind the *Contract Labour (Regulation and Abolition) Act, 1970*, was to give the central and state governments authority to abolish contract labour in respect of jobs of a perennial nature and to regulate the service conditions of contract labour where abolition was

not possible. Rigidity in this law was imparted by court judgments (Debroy 2005) and two court judgements are mentioned in particular. In *Gujarat Electricity Board vs Hind Mazdoor Sabha* (1995), the Supreme Court took the view that the employment of contract labour in public sector undertakings was an unfair labour practice and recommended that the practice be abolished and the concerned workmen absorbed by the undertaking. In *The Air India vs United Labour Union* (1996), the Supreme Court went further and ruled that wherever contract labour was abolished the workmen were to be automatically absorbed as regular workers. The position changed completely in the case of *SAIL United Waterfront Workers* (2001) in which a constitutional bench of the Supreme Court overturned the earlier judgements.

While the intention of the law is to limit the use of contract labour, the actual position is that the practice is widely prevalent in the country, including in the manufacturing sector.

Manufacturers and other employers in India are outsourcing jobs so that private placement agencies are the primary employers of temporary contract workers supplied to factories and other establishments (New York Times, November 30, 2011). The prevailing practice of employing contract labour is at cross purposes with the extant laws that discourage such employment in jobs that are perennial in nature. The de facto situation is at wide variance with the de jure position in respect of contract labour.

A related deficiency in the Indian labour laws is that direct employment on fixed term contracts is not recognized. The Model standing orders at Schedule I to the Industrial Employment (Standing Orders) Central Rules, 1946, classifies workmen as permanent, probationers, badlis, temporary, casual and apprentice and there is no mention of employees on fixed term contracts. In 2003, an amendment was made explicitly listing employees on fixed term employment in the Model Standing Order, but the amendment proved to be shortlived and was deleted in 2007. One suggestion made by the industry is that the amendment should be reintroduced so that employment under fixed term contracts becomes generally permissible. Even though the restriction on employing contract labour for jobs of a perennial nature is hardly being enforced, employers would have a preference for employing workers with fixed term contracts directly under a law explicitly allowing such employment. A clear enabling provision would give them immunity from adverse court interpretations in future as well as from harassment by labour inspectors.

#### **4.1.3 Trade Unions Act, 1926**

The Trade Unions Act, 1926 seeks to regulate trade unions, which are necessary to facilitate collective bargaining. However, several features of the law and practice in respect of trade unions are not conducive to the maintenance of harmonious industrial relations in the country.

The multiplicity of trade unions in India is a fundamental weakness as it impairs the process of collective bargaining. Any combination of workmen having a membership of seven persons can apply for registration, although registration is not mandatory. The position



becomes even more anomalous by virtue of the fact that there is no obligation on the employer to recognise any registered trade union. Collective bargaining settlements can be arrived at even by unrecognised unions but such settlements are binding only on the participating unions. Other trade unions are free to raise the same issues, with the result that there is competition among unions to ask for greater benefits. It has been suggested that it would create harmonious industrial relations if multiplicity of unions is curbed and only recognised unions are granted industrial relations rights (FICCI-AIOE 2005).

Two other aspects of the trade union law in India must be mentioned. First, the Trade Unions Act expressly permits admission of non-workers to trade unions, under the guise of honorary or temporary members. Second, the law does not provide anywhere for election or secret ballot to elect representatives of workers or to take a decision on such matters as going on strike. Entry of outsiders into trade unions or the appointment of office bearers without election or the taking of decisions to strike and other important matters without endorsement of a majority are against the interests of not only employers but also of workers. (Nath 2005).

The above features of Indian law and practice make collective bargaining difficult with the result that the system has got biased towards adjudication, which is much more time taking.

There is one other potential source of industrial unrest in the country. We have noted earlier that, contrary to the letter and spirit of the Contract Labour (Abolition and Regulation Act, 1970, there is a widespread practice in the country of employment of contract labour supplied by placement agencies. What makes this problematic is that the conditions of service of contract labour including wages and social security benefits are far inferior to those enjoyed by the regular employees and what is worse, the contract labour remain outside the purview of collective bargaining.

### **Box 2: Labour laws in India and comparator countries**

- The laws of China, Thailand and Malaysia specifically allow employment contracts for a fixed term, giving flexibility to investors to vary the number of employees in order to respond to changing market conditions (Labour Contract Law of the PRC 2007; Labour Protection Act, 1998 and Labour Protection Act, 2008, Thailand; Employment Act 1955 Malaysia). Indian labour laws do not allow this flexibility. Fixed term employment directly by the principal employers is not recognized in Indian labour laws. The central objective of the Contract Labour (Abolition and Regulation) Act, 1970, is to abolish contract labour for jobs of a perennial nature.
- China has laid down detailed procedures for reduction in workforce and Malaysia has stipulated the rules regarding termination notice, prioritisation of workers and payments in the event of retrenchment due to redundancy. In Thailand, there are no specific laws on retrenchment, and the general rules regarding notice of termination and severance pay apply. In all three countries, the ultimate decision on the matter of reducing the labour force is left with the employer. In India, the Industrial Disputes Act, 1947, mandates companies with 100 or more workmen to obtain express permission of government authorities for lay-off, retrenchment and closure. What makes the situation untenable is that no rules or principles are laid down in law on the basis of which the authorities can be expected to grant permission, making the whole process discretionary and liable to abuse.
- The de facto situation in respect of contract labour in India is widely at variance with the de jure position and there is widespread use in the country of contract labour supplied by placement agencies even for jobs of a perennial nature. This practice also serves to alleviate to some extent the problem of labour rigidity created by the Industrial Disputes Act. However, as long as the laws remain in the statute books, they constitute a big deterrent for both foreign and domestic investors intending to invest in manufacturing enterprises.
- In China, the trade union movement has not emerged from the shadow of the past when the All China Federation of Trade Unions (ACFTU) and its lower formations had strong ties with the Communist Party of China, and the election of office bearers, strikes and collective bargaining were unknown. Besides, employers still finance the union through a two per cent union levy on the payroll and there is no separation between the management and workers. (Ministry of Commerce, PRC 2007). In Thailand and Malaysia, laws relating to the functioning of trade unions make them better suited for collective bargaining. Registration of trade unions is compulsory and collective bargaining takes place only with recognised unions. Decisions on strikes have to be taken through a democratic process. (Malaysia's Trade Union Act, 1959; Thailand's Labour Relations Act 1975). In India, registration of trade unions is not compulsory and even recognition is not required for participation in dispute settlement or collective bargaining. Industrial peace is disturbed when rival unions vie with each other in demanding better terms from the management. The fact that non-workers and outsiders can be office-bearers of trade unions and they do not always have the welfare of workers in mind exacerbates the uneasy situation in industrial relations. Since the law does not require that office bearers be elected or that decisions on strikes must be taken by the full membership through secret ballot, the situation gets aggravated further.

In sum, the rigidities in Indian labour laws inhibit the creation of regular jobs by enterprises, induce informalisation, discourage labour intensive investment and do not foster the maintenance of harmonious industrial relations. The labour laws in comparator countries are geared more towards meeting the exigencies of a globalised world and at the same time are more conducive to maintaining harmonious industrial relations. A snapshot of the comparative position in labour laws in the four countries is given in Box 2.

## 4.2 Power supply

Uninterrupted supply of good quality power is one of the prerequisites for the efficient functioning of modern manufacturing units. Unreliable supply due to frequent power failures and uneven quality on account of voltage fluctuation seriously affect India's ability to attract FDI in manufacturing and hamper even domestic investment. In fact, the problem is felt more acutely by small and medium manufacturers as the only option for them is to invest in small captive power generation units, which substantially increases their operational cost. Uninterrupted and good quality supplies are particularly critical for manufacturing units in the ICT sector as an interruption affects the quality of output in the entire production cycle.

The current power scenario in the country from the perspective of industry has been very well analysed in a report (FICCI 2012) on a survey of industrial units published late in 2012.

**Extent of power cuts:** About 21 per cent of the industrial units included in the survey experienced power cuts of more than 30 hours a week, 5 per cent suffered 21-30 hours, 16 per cent face 6-10 hours, 15 per cent 1-5 hours and 37 per cent less than one hour. The majority of industries facing a shortage of more than 30 hours are situated in Tamil Nadu and Andhra Pradesh, while the majority facing a shortage of less than one hour is in Gujarat, Maharashtra and Karnataka.

**Reliability:** Fifty-four per cent of companies, mainly from Odisha, Andhra Pradesh, Tamil Nadu, Karnataka and Maharashtra said that they were made aware by the distribution companies (DISCOMs) of the load shedding schedule in advance, while this was not the case for the remaining 46 per cent.

**Cost escalation due to standby generators:** In order to mitigate the effect of power cuts, it is common for industrial units to deploy generators. The use of captive power generation leads to cost escalation: in the power deficit states of Andhra, Tamil Nadu and Odisha, the cost escalation was as high as 30 per cent; in states with a better power situation, such as Gujarat, Karnataka and Maharashtra, it was assessed at only two per cent.

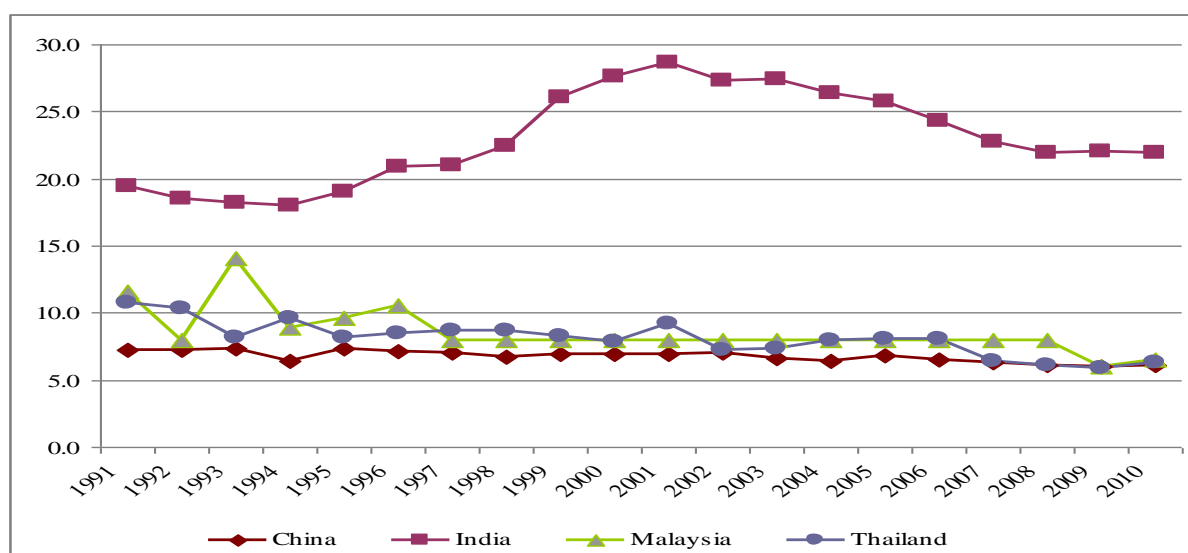
**Losses on account of voltage fluctuation:** High losses were also sustained by industrial units due to voltage fluctuation in Andhra Pradesh, Tamil Nadu and Odisha.

**Manufacturing sectors affected:** Product groups, which are particularly amenable for off-shoring or outsourcing, such as telecom and equipment, automobiles and components and electronic and equipment suffered cost escalation ranging between 21 to 30 per cent on account of power shortage. Sixty-four per cent of the firms surveyed felt that erratic power supply affected their international and domestic competitiveness.

Transmission and Distribution (T&D) losses are a traditional measure of efficiency in the performance of electricity utilities in India and here the position is dismal despite some progress during the last 10 years. The following graph shows the comparative position of India and the comparator countries over the period 1991-2010. The high losses cripple the

state electricity boards financially and make them inefficient suppliers of the service; the ultimate victims of such inefficiency are the users, including industrial units.

**Chart 6:** T&D losses in India and comparator countries



*Source: World Bank, WDI*

The power supply situation for industries is clearly a major factor driving down India's competitiveness in manufacturing and discouraging investments in the sector. The situation in comparator countries is far better than that in India as can be seen from the comparative picture given in Box 3.

### **Box 3:** Power supply situation in India and comparator countries

- During the last 10 years, India has consistently experienced energy shortages of 7-11 per cent and a peak deficit of 10-17 per cent (Central Electricity Authority 2011). In Malaysia and Thailand, a reserve margin of 30-50 per cent has ensured that there is no gap between installed capacity and maximum demand (Electricity Generation Authority of Thailand and Energy Commission of Malaysia).
- Interruptions in power supply occur in other countries also, arising from myriad causes including natural disasters, but their frequency and duration are very small when compared to the situation in India. Against interruptions extending to 30 hours a week in some industrial units in Andhra and Tamil Nadu, the average interruption duration was less than two hours for the whole year in Peninsular Malaysia, just more than one hour in metropolitan areas in Thailand and about six hours per year in the provincial areas of Thailand (Energy Commission, Malaysia 2012 and Metropolitan Electricity Authority, Thailand 2013).
- The share of firms that own generators, according to a World Bank Report of June 2008, was 8.3 per cent in Thailand, 18.3 per cent in China and as much as 63.6 per cent in India. The percentage of power consumption from own generator was 11.2 per cent in Thailand 1.5 per cent in China and 19.1 per cent in India (World Bank 2008).
- Another area of concern in India is that T&D losses stand at the high level of 22 per cent against about six per cent in comparator countries (World Bank WDI).

### ***4.3 Taxation and incentives for investment***

The corporate tax rate in India is 30 per cent for domestic companies plus education cess of 3 per cent. In addition, there is a surcharge of 5 per cent if the taxable income exceeds INR 10 million (US\$ 159,681)<sup>5</sup> and of 10 per cent if it exceeds INR 100 million (US\$ 1.59 million). Thus the total corporate income tax rate on domestic companies with a taxable income of more than INR 10 million (US\$ 159,681) is 32.4 per cent and the rate for those with a taxable income of INR 100 million (US\$ 1.59 million) or more is 33.9 per cent.

For foreign companies, the income tax rate is 40 per cent plus 3 per cent education cess plus a surcharge of 5 per cent for companies if the taxable income exceeds INR 10 million (US\$ 159,681). Thus foreign investors with a taxable income of more than INR 10 million (US\$ 159,681) pay corporate tax at the rate of 43.2 per cent.

Income tax exemptions available for Software Technology Parks of India (STPIs) and export oriented units (EOUs) were discontinued at the end of 2010-11. Now, the only exemption that is available is for units in the special economic zones, at the rate of 100 per cent of the profits derived from exports for the first five years and 50 per cent for the next five years. For the subsequent period of five consecutive years, the exemption of profits from exports is conditional on the entire amount being ploughed back for investment in the unit.

For zero tax companies, that is companies which were not liable to pay taxes despite book profits on account of various allowances available in the Income Tax Act, the income tax law provided for the levy of Minimum Alternate Tax (MAT). In 2011-12, the finance minister made MAT applicable to SEZs also, thereby subjecting them to a levy of 18.5 per cent plus an education cess of 3 per cent, considerably eroding the tax incentive for SEZ units.

In the past, India has been hesitant in granting tax incentives for investment in manufacturing generally, except for certain geographically disadvantaged regions. In 2007, when a decision was taken to grant incentives for high-technology industries, the capital subsidy route was taken. Since the 2007 scheme did not yield results, a new scheme was announced in 2012 for capital subsidy and reimbursement of central taxes. In the budget for 2013-14, a new incentive has been introduced for 15 per cent investment deduction allowance for the period 2013-15 for a minimum investment of INR 1 billion (US\$ 15.97 millions).

### ***4.4 Taxation environment***

Investor feedback suggests that the tax environment is high on the list of disincentives for FDI in India. Apart from high corporate tax rates in comparison with Asian countries, a complicated taxation structure and unclear rules lead to harassment of companies by tax officials. There is a general complaint that in India, the transfer pricing regime is not applied in a consistent manner to all taxpayers. Foreign enterprises have been requesting for the establishment of a fair and transparent regime, which could prevent the use of transfer pricing rules as a selective mechanism for raising revenue. Further, foreign investors have baulked at

---

<sup>5</sup> Converted at the exchange rate of US\$ 1 = INR 62.6250, as per RBI on 18 November 2013.

the introduction in 2012 of the General Anti-Avoidance Rules (GAAR) and certain retrospective changes in tax laws. Although the introduction of GAAR has now been deferred to 2016, the tendency to give retrospective effect to changes in tax laws constitutes a disincentive for companies proposing to invest in India. In September 2013, the Ministry of Finance has taken a step forward to clear the air on transfer pricing and also issued revised safe harbour rules after consultations with the stakeholders.

The level of corporate taxation, particularly the higher rate applicable to foreign enterprises, taken together with an unpredictable tax environment dissuades these enterprises from investing in India. The corporate tax rate is lower in the comparator countries and is sweetened further through long-standing investment incentives as reflected in Box 4.

#### **Box 4: Taxation and tax incentives in India and comparator countries**

In a globalised world in which foreign direct investment flows freely across borders and investors want to maximise their post-tax earnings, the following factors make India less attractive as a destination for FDI:

- As compared to the comparator countries (China – 25 per cent, Malaysia – 25 per cent and Thailand – 20 per cent), India’s rate of corporate tax is the highest at 33.99 per cent for domestic companies and 43.26 per cent for foreign companies in 2013 (KPMG 2013). While, in recent years, the comparator countries have brought down corporate tax rates, these rates have been creeping up in India.
- Until recently, China had encouraged FDI through a lower rate of corporate tax for foreign enterprises and it was only in 2008 that the preferential taxes for such enterprises were given up (GNS China). India, on the other hand, levies a higher rate of tax on foreign enterprises and the difference has been increased further in the 2013-14 budget (KPMG 2013).
- Thailand and Malaysia have long standing incentives for new investments in industries (PKF 2013 and PWC 2013). India has recently introduced 15 per cent investment deduction allowance on a temporary basis for 2013-15 for a minimum investment of INR 1 billion (PWC 2013a).
- High-technology industries have been getting substantial incentives, including reduced corporate taxes in all three comparator countries. In India, incentives in the form of capital subsidy, introduced in 2007 (Department of Information Technology 2007) did not bring results. In 2012, a new scheme has been announced for capital subsidy and reimbursement of central taxes (Department of Electronics and Information Technology 2012).
- India’s effective corporate tax rate, after taking the incentives into account, is even less attractive for foreign investors relative to the comparator countries. It has been estimated that the 2014-15 “Indian tax rate of 29 per cent is a full 11 percentage points higher than most of our East Asian competitors” (Bhalla, 2014).
- The tax environment in India has been vitiated by lack of stability in the taxation regime, retrospective changes in the tax laws and introduction of GAAR and arbitrariness and lack of transparency (on transfer pricing). Recently, the government has taken steps to defer the proposed introduction of GAAR and issued safe harbour rules on transfer pricing (Government of India 2013). Another positive development has been that the Advance Price Agreement (APA) Scheme, introduced through the Finance Act, 2012, has been made operational. The APA is an agreement, ‘which determines, in advance, the arm’s length price or specifies the manner of determination of arm’s length price (or both), in relation to an international transaction’. The Scheme has been welcomed by all, including MNEs and a good number of applications have been filed, and five agreements were finalised in March, 2014.

## **4.5 Internal Taxation**

Complexities in the internal taxation system are a constraint on manufacturing in India. One of the main reasons for this is that the authority to collect indirect taxes has been split under the Indian Constitution between the central government and the state governments (and six union territories). The centre collects service tax, excise duty and customs duty while the states (and union territories) collect sales tax on all goods. There is also the central sales tax on interstate transaction, which is collected by the states.

Before 2005, the taxation system was even more flawed than it is today. Sales tax or excise duty was payable at every level in the value chain and there was no mechanism for giving a rebate on the taxes paid on inputs at an earlier stage. Thus, the taxes on inputs at prior stages in the production process had a cascading effect, raised the final price of the product, dampened aggregate demand and encouraged evasion of taxes. Another major deficiency of the internal taxation system in the country was diversity in tax rates. However, both the centre and the states gradually adopted the value added taxation system and brought about a modicum of uniformity in the rates of taxes. The standard rate for state VAT is 12.5 per cent, with specific goods exempted or attracting lower rates of one or four per cent. Rates of 20 per cent or above apply to such goods as potable alcohol or motor spirits. The statutory CENVAT rate for non-petroleum goods is 12 per cent, lower rates of six per cent applying to merit goods and two per cent on a list of 130 items. Rates higher than the statutory rates, with ad valorem and specific components, apply to motor spirits and motor vehicles.

### **4.5.1 Deficiencies in the current internal taxation regime in India**

The introduction of VAT was a major reform, but the system needs more reform to eliminate impediments to business and bring it on par with developed and emerging economies.

The central sales tax (CST) on interstate transactions, levied earlier at the rate of four per cent but reduced to two per cent a few years back, constitutes a major barrier in internal trade as it is an 'export tax' on goods moving out of a state and entry tax and octroi are 'import taxes' on goods moving into a local area. The imposition of these taxes requires the erection of check posts at inter-state borders and at the gateways of cities imposing local area taxes and stoppages at the check posts increase the logistics component of the cost of manufacturing. Moreover, neither the CST nor entry taxes into local areas is integrated with the value added tax system and is not eligible as a credit in the imposition of VAT in downstream industries. The feedback on CST from investors is that it substantially increases the cost of manufacturing.

Several central taxes, such as additional customs duty collected on imported goods in lieu of excise duty and surcharges and service tax are not included in the framework of CENVAT. Manufacturers and dealers thus do not get the benefit of a comprehensive input tax and service tax set-off. At the state level also, several taxes on goods and services, such as luxury tax and entertainment tax, remain out of the purview of VAT. Additionally, the value of goods to be taxed at the state level remains loaded with CENVAT, thus contributing to a

cascading effect on this account. Lack of integration of VAT on goods and tax on services at the state level also implies that tax imposed on services used in the production of goods too has a cascading effect. Thus, CENVAT and state VAT as levied at present have not succeeded in eliminating the cascading effect of taxation in the country. Differential treatment of goods and services is also becoming problematic as advances in digital technology are blurring the distinction between goods and services. Moreover, separate taxation of goods and services requires splitting of transactions involving the supply of both goods and services, which further increases the cost of compliance.

Multiple taxes make India a fragmented market and impede the free flow of goods within the country and increase logistics costs. Cascading taxes discourage efficient production and lower India's competitiveness, particularly in manufacturing. The lack of a simple tax structure with one or two uniform tax rates increases the cost of compliance by businesses and is a further drag on efficiency.

#### ***4.5.2 Proposed Goods and Services Tax (GST)***

A decision in principle has been taken to introduce a national level goods and services tax (GST) to replace the existing multiple tax structure at both the central and state levels. It was initially proposed to introduce the GST by April 1, 2010 but differences between the centre and individual state governments have led to its postponement. Since the GST envisages that the states will also levy a tax on services, it would be necessary to amend the Constitution to empower them to do so. Consultations are still being held to determine the design of the GST and the institutional structure (the GST Council). The modalities of compensation for the loss of revenue entailed by the abolition of CST have also to be decided.

The final shape of the GST has not yet emerged but the discussion paper issued in November 2009 by the empowered group of state finance ministers gives an indication of the salient features of the GST that would be introduced in the country most likely after the 2014 general elections (Ministry of Finance 2009). There would be two components, central GST and state GST, applicable to all transactions of goods and services, except for motor spirits and alcoholic beverages. All the taxes levied currently would be subsumed by the GST. There would be a two-rate structure for state GST and most likely for central GST as well. There would be a single rate for GST on services at both levels.

The complex internal taxation system has weighed down India's competitiveness as an FDI destination in manufacturing in the past, but the position has improved with the gradual implementation of VAT in the country and is likely to improve even further once GST is introduced. However, on some aspects India still suffers in comparison with some of the comparator countries as shown in Box 5.



### **Box 5: Internal taxes regimes in India and comparator countries**

- Thailand has already implemented an integrated taxation system in goods and services wherein full set off is available for taxes on goods and services used in the earlier stages of production (PWC 2013). While China has not implemented such a system fully, and there are a number of services still subject to a business tax instead of VAT, the national expansion of VAT is planned for 2015 (KPMG 2013a). Malaysia is the only country behind India as it has not introduced VAT as yet (PKF 2013).
- In no country other than India is VAT levied and collected by more than one authority. Where the constitution so requires, as in China, the VAT proceeds are distributed between the centre and the state in the ratio of 75:25.
- No comparator country levies duties on goods crossing interstate borders or entering into the territory of a municipality, which is a major criticism of the Indian taxation regime figuring in investor feedback.

## **4.6 Land**

During interviews with business and industry associations, the general complaint was that buying land at suitable locations is a herculean task for new investors in India. Verification of titles is complex and procedures for purchasing land take time, sometimes more than a year. Developed land is also very expensive.

Availability of land is an important consideration for the location of manufacturing enterprises. Direct purchase of land from farmers by industries has been a challenge in recent years because the current status of both textual and spatial land records, incomplete and not updated as they are, renders the situation unclear about the ownership of the land and the purchaser has to carry out expensive research to establish title. Registration of changes in ownership and the maintenance of revenue records are done by different departments in all states and this makes the task of establishing title doubly difficult.

The price of land is an equally important issue. In India the population pressure has tended to drive up land prices and the upward trend has been exacerbated by the practice in many states of charging a substantial fees for permission to change land use from agricultural to non-agricultural purposes. While there are no restrictions to alienation of agricultural land through outright sales, leasing out is either impermissible or highly restricted. High stamp duty on land transfer is another factor that makes it expensive. Indeed, high stamp duties also have other undesirable effects in that the valuation of land is suppressed and the government loses revenue. Another consequence of the policy of high taxation of registered transfers is that buyers and sellers both prefer not to register sales and pass on the title by means of a power of attorney. Unregistered sales are not recognised in law in India, but purchasers are willing to take a risk to save money on stamp duty (World Bank 2007). These factors have made the task of establishing title on land to be purchased for establishing an industry difficult.

The Land Acquisition, Rehabilitation and Resettlement (LARR) Act, 2013, which has been recently approved by the Indian Parliament is likely to make it even more problematic as well

as expensive for industrial units to acquire land, whether through land acquisition by government or voluntarily agreed purchases. The act envisages that if land has to be acquired compulsorily, it should have the consent of 80 per cent of the land-holders. Before acquisition, a social impact assessment has to be carried out. Compensation will be payable at twice the market value for urban land and four times the market value for rural land.

In addition, there is a substantial rehabilitation and resettlement (R&R) package for project affected families (landowners and the families whose livelihood is primarily dependent on the land acquired) to be arranged by the investor, including subsistence allowance for 12 months besides employment of one member of the family or one time payment of Rupees five lakh per family or annuity policies resulting in payment of Rupees two thousand per month per family for 20 years with appropriate indexation to the Consumer Price Index for Agricultural Labourers. The R&R package is also applicable to voluntarily acquired land for industry, if the area is 100 acres or more in rural areas and 50 acres or more in urban areas.

Population pressure has made availability of land for industry problematic in all Asian countries, and all governments are keen to ensure that farmers and others who get dispossessed by the diversion of their land to industry are guaranteed a standard of living at least equal to the level that existed before the acquisition. However, in India acquisition of land for industry has been more difficult than in comparator countries, and has become considerably more burdensome after the enactment of the LARR Act, 2013, as shown in Box 6.

#### **Box 6: Land for industry in India and comparator countries**

- China and Malaysia have provision not only for adequate compensation but also resettlement of farmers and others whose land is acquired. However, in Malaysia the compensation is related to the market value of land and in China to the annual value of production (Land Acquisition Act 1960, Malaysia and Land Administration Law 1986, China). In these countries, there is no provision for the compensation to be in multiples of the market value (four times for rural land and two times for urban), as provided in the LARR Act, 2013, in India. No payment is to be made to people other than landowners even if their livelihood is dependent on the acquired land, as the law now provides in India.
- In China, if the acquisition involves more than 35 hectares of farmland, the approval of the State Council is needed. There are procedures to resolve disputes on the amount of compensation, and if all efforts fail at the level of local government, the government that approved the compensation is obliged to take recourse to arbitration. In Malaysia, public hearings are held not on the purpose of land acquisition but on the compensation. Thailand's Constitution recognises the concept of eminent domain, under which the state has the right to take over private immovable property compulsorily for public utilities, town and country planning agricultural and industrial development etc., subject to fair compensation. In comparator countries, the emphasis is on ensuring adequate compensation while in India, landholders have the right to object to the acquisition irrespective of compensation. The LARR Act, 2013, has introduced a new hurdle by requiring that before acquisition a social impact assessment should be carried out. This is over and above the requirement that 80 per cent of the landholders must voluntarily agree to the land acquisition.
- In India, even after land has been acquired by industry, it is sometimes a problem to actually take possession of the land. This type of governance problem is unknown in comparator countries.

## ***4.7 Special Economic Zones (SEZs) and other industrial clusters***

### ***4.7.1 Special Economic Zones (SEZs) in India***

In the pre-reform era when the import-substitution regime was deeply entrenched and the economy was virtually closed with trade barriers, which included quantitative restrictions on imports as well as high tariffs, the Export Processing Zones (EPZ) policy and the Export Oriented Units (EOUs) scheme in India achieved very little of significance. Infrastructural deficiencies and high logistics costs affected the international competitiveness of the units and tight customs control hobbled their functioning.

In the post-liberalisation period, the Government of India announced an SEZ policy in 2000 and moved on to a comprehensive policy by enacting the Special Economic Zones Act 2005. The new regime envisages a single window for all clearances, exemption from nearly all internal taxes as well as income tax concessions for developers and the units. In the first five years, the new policy was a great success in terms of the investment attracted, employment created and exports generated. The share of SEZs in total exports rose from six per cent in 2006-07 to 28 per cent in 2010-11. However, in subsequent years, the momentum for expansion of SEZs activity has been on a decline. (Aggarwal 2012; Department of Commerce 2011).

The immediate causes for this are changes in taxation laws in the 2011-2012 budget and the build up of public opposition during the 2011 state elections against acquisition of agricultural land for industrial and infrastructural purposes. One of the benefits given in the Income Tax Act through an amendment in 2005 is that a deduction of 100 per cent is allowed in respect of profits derived by a unit located in a SEZ from exports of goods and services for the first five years and of 50 per cent for the next five years. Thereafter, the exemption applies in respect of fifty per cent of the ploughed back export profits. The developers have been allowed exemption of 100 per cent of profits for 10 years. Originally the Income Tax Act also allowed exemption from minimum alternate tax (MAT) on book profits in respect of any business carried out by an entrepreneur or developer in a unit of SEZ. The SEZ developers were also exempted from payment of the dividend distribution tax (DDT). With effect from 2011-12, the exemption for SEZ units and developers from MAT was withdrawn and the exemption for developers from DDT was terminated. (Business Standard, March 3, 2011). Predictability in taxation policies is a sine qua non for making the environment conducive for investment, whether foreign or domestic, and the withdrawal of direct tax benefits has been a setback for the SEZ programme and has affected its future prospects.

Another major reason for the SEZs languishing is the absence of external infrastructure support. The SEZs have to be connected with ports and airports with world class roads and rail; ports and airports too have to be world class, with customs authorities adopting international best practices in trade facilitation. This is not the case at present. Deficiencies in the availability and quality of power are an equally important constraint, particularly for medium and small enterprises, which cannot set up cost efficient captive power units. The SEZs need other utility services as well, including water and drainage connections which

have not been provided for adequately. Investor feedback placed great emphasis on the creation of industrial complexes with basic infrastructural amenities.

The administrative structure envisaged for individual SEZs requires the initiative to be taken by the Development Commissioner, a functionary of the central government, in all matters, but most aspects, such as grant of connectivity to utilities or transport or exemption from internal taxes fall under the jurisdiction of the state government officials and agencies. Co-ordination between the central and state government is a casualty if the governments at these levels are in the hands of different political parties. The governance structure of the SEZs has become one of the problems impeding their development.

#### ***4.7.2 Industrial area development schemes in India***

After liberalisation, the Government of India has initiated several small area development schemes, placing reliance on private developers, who have been incentivised by means of income tax concessions or grant-in-aid to develop infrastructure. Some of these, notably the Industrial Parks Scheme and the Scheme for Integrated Textile Parks, have had a measure of success.

More noteworthy have been the bigger initiatives, although none is anywhere near the stage of completion. In 2006, a government policy resolution announced the proposed establishment of the Petroleum, Chemicals and Petrochemicals Investment Regions (PCPIRs). Four projects in Andhra Pradesh, Gujarat, Odisha and Tamil Nadu have been approved until March 2013 (Department of Chemicals and Petrochemicals 2013).

In 2007, the Government of India approved the development of the Delhi Mumbai Industrial Corridor (DMIC) alongside the Western Dedicated Freight Corridor being constructed by the India Railways for freight movement. Seven investment regions/industrial areas have been identified in the first phase. Master planning has been completed for these seven regions and land procurement is underway (DIPP 2013). The idea is to develop the physical infrastructure over the investment regions with a minimum area of 200 sq. km. and industrial areas with a minimum area of 100 sq.km. Government funding would be provided for trunk infrastructure and private participation will be invited for infrastructure projects that are commercially viable.

In 2011, the government announced the new national manufacturing policy of which the most important instrumentality is the National Investment and Manufacturing Zones (NIMZs). The NIMZs will function as self-governing and autonomous bodies and to make this possible, they would be declared as Industrial Townships under Article 243 (c) of the Constitution. State governments will have to provide full assurance of infrastructural linkages and, on its part, the central government has undertaken to provide rail, road, ports, airports and telecom connectivity. To start with, seven investment regions of the DMIC and three others have been notified as NIMZs.(DIPP 2013).

Slow implementation and lack of purposive action due to the absence of commitment at the political level has been the main drawback of industrial area development projects for manufacturing. Conceptually, the NIMZs scheme has all the ingredients of success and its early implementation will constitute a big step in attracting FDI and domestic investment in manufacturing and boost India's participation in regional production networks.

SEZs and industrial area developments in India have not achieved the level of success of the comparator countries because of shortcomings in external physical infrastructure, absence of full involvement of the state government machinery in the implementation of projects and lack of stability in the tax incentives. Details are given in Box 7.

**Box 7: SEZs and industrial area development schemes in India and comparator countries**

- The contribution of Special Economic Zones and other area development schemes to the development of manufacturing in India has been hampered by inadequacies in the external infrastructure (comprising the transport infrastructure, logistics parks, power, water and drainage). The extraordinary success of SEZs and similar programmes in China and other comparator countries was due to the fact that they benefited from world class external physical infrastructure, modern expressways and transport networks linking them with the hinterland and high class port and airports and transport services with the markets abroad. China established SEZs over large swathes of territory enabling the development of industry clusters and fostering individual plants that sometimes accounted for a large share of world production.
- In India, SEZs and industrial area development schemes and industrial units within them are victims of apathy from state government officials, when they seek connectivity with networks or clearance under various regulations. Lack of co-ordination between the state and central authorities on matters related to SEZs is a big hurdle. The situation is compounded by the fact that there is multiplicity of authorities at the state level and they are preoccupied with manifold duties. Due to the lack of interest at the state level, the authorities are not proactive in assisting entrepreneurs in securing regulatory clearances or obtaining connectivity. In Penang (Malaysia), one of the main reasons for the remarkable success in developing the electronics industry was the proactive involvement of government officials, right up to the level of chief minister. (Athukorala 2011).
- Policy stability has been another critical factor. The initial momentum in the SEZs programme in India was thwarted by an abrupt change in the direct tax incentives, which was applied retrospectively. In China, tax incentives were maintained over long periods and changed only prospectively after advance notice.

## **4.8 Entry and exit barriers**

### **4.8.1 Entry barriers in India**

Entry barriers for industry were a big issue in the pre-reform era prior to 1991-92 as industrial licensing applied comprehensively except for small-scale industry (those with a fixed investment in plant and machinery below the fixed ceiling, which was of INR10 million or US\$ 159, 681 at the time of reform). Foreign equity in industrial ventures also could not be above 40 per cent, except with the express permission of the central government, which was given only in limited cases involving transfer of technology, and that too with strict conditions. Now, the across-the-board control on industry is history, irrespective of the size

of investment, and only five industries are subject to compulsory licensing for environmental, safety and strategic considerations, viz., alcoholic drinks; cigars, cigarettes and manufactured tobacco, electronic aerospace and defence equipment; industrial explosives and specified hazardous chemicals. In 1991, there were eight industries reserved for the public sector, which has been reduced to only two, viz., atomic energy and railway transport. Similarly, a large number of items were reserved for exclusive manufacture by small-scale industries, in which large and medium industries were not allowed entry. This list has been progressively reduced and after 2008, only 20 items are left. Undertakings other than small-scale undertakings need a licence for the manufacture of items on the reserved list and are required to undertake an export obligation of 50 per cent of the annual production. (DIPP 2013).

Thus, now in a vast majority of cases, licences have been replaced by registration. For large industries, the applicant has to file an Industrial Entrepreneurs' Memorandum (IEM) with the Secretariat for Industrial Assistance (SIA) in the Department of Industrial Policy and Promotion (DIPP) of the central government. Micro (those with investment in plant and machinery in INR up to 2.5 million or US\$ 39, 920), small (more than 2.5 million but less than 50 million or US\$ 798,403) and medium (more than 50 million but less than 100 million or US\$ 1.59 million) enterprises are required to register with the district industries officer of the state government in the district in which they are established.

Entry barriers for industry now are not substantive but procedural (FISME 2013). The biggest problem is in obtaining power, water and drainage connectivity, particularly if the unit is situated outside a designated industrial area.

FDI is permitted automatically over virtually the entire manufacturing sector. It is prohibited only for cigarettes and other manufactures of tobacco, and sectoral caps and conditions apply in respect of defence industries (26 per cent) and products reserved for MSMEs (24 per cent). Conditions may also be imposed on brown field investments in the pharmaceutical sector (DIPP 2013a).

There is considerable potential for expanding manufacturing in defence industries, and little justification for maintaining the cap on foreign investment in them. It can be argued that the country's security interest would be better served if the defence equipments were manufactured domestically through domestic and/or foreign investment rather than being procured from foreign manufacturers established abroad. In the budget speech for 2014-15, the Finance Minister has announced the government intention to raise the foreign equity limit for defence industries to 49 per cent.

#### ***4.8.2 Exit barriers in India***

Ease of exit is as important for the investors as ease of entry and businesses take these into consideration while choosing between alternative destinations. Two aspects of the law and the judicial system have given India a bad name in connection with the ease of exit. First, as we noted in the section on labour laws, permission is needed by industrial units employing more than 100 workers before laying off or retrenching workers or before closure; to make

matters worse for the entrepreneurs, the whole process is discretionary as no rules or principles, which the authorities can be expected to follow, are laid down in law. Second, until recently, the Companies Act, 1956, provided for the process of liquidation to be initiated by a court order if the company concerned was unable to pay its debt. Since the judicial system was clogged with a large backlog the cases of liquidation of companies were badly delayed. Fortunately, the situation changed in August 2013 with the enactment of the Companies Act, 2013, which has established the National Company Law Tribunal (NCLT), and the Appellate Tribunal (NCLAT) with exclusive jurisdiction on all matters, proceedings or cases under the Companies Act, 2013 (as well as the previous Act), including winding up of companies.

While on the subject of exit barriers, it is necessary to mention the related issue of the long time taken in contract enforcement and dispute settlement because of delays in legal procedures are endemic in the country. An alternative mechanism was introduced in India in 1998 in the form of the Arbitration and Conciliation Act, which replaced the 1940 legislation. However, this too has proved to be a non-starter because of the large fees charged by the retired judges acting as arbitrators (FISME 2013).

India suffers in comparison with China, Malaysia and Thailand in the ease of entry as well as exit of industrial enterprises as evaluated by the World Bank in its Doing Business Report, 2013. The comparative picture is given in Box 8.

#### **Box 8: Entry and exit barriers in India and comparator countries**

The data given in the Doing Business Report of the World Bank, 2013, enables us to assess the comparative position in India and the comparator countries on entry and exit barriers.

- If we take the time taken in days (shown in brackets) for starting business as a proxy for entry barriers, prima facie there is not much difference between India (27), China (33) and Thailand (29) but clearly Malaysia (6) outshines the bigger players. However, what is not captured by the data is the facility to establish manufacturing enterprises provided by not only the SEZs but also the industrial zones in China, which provide at the outset the full infrastructure, including shell factories (on plug and play basis), regulatory clearances and connectivity with external infrastructure.
- In terms of the facility for closing a business, clearly the time taken in years, shown in brackets is a good indicator of the ease of exit: India (4.3); China (1.7); Malaysia (1.5) and Thailand (2.7). Although the situation has improved in India with the enactment of the Companies Act, 2013, it is still well behind the comparator countries. No other country has a requirement for companies to seek government permission to close a business.
- In so far as enforcement of contract is concerned, India is a laggard by a big margin, in terms of the time taken, shown in days in brackets: India (1420); China (406); Malaysia (425) and Thailand (440).

### **4.9 Access to finance for small and medium enterprises (SMEs)**

Difficulty in accessing bank credit is a universal phenomenon for small and medium enterprises, as commercial banks prefer dealing with larger companies, which involve lower transaction cost and reduced risks. SMEs find it difficult to access capital because of the lack or even absence of collateral, limited or no credit history and lack of expertise on matters related to banking and finance. At the same time, these enterprises are vital for the industrial

development of developing countries, not only because of their employment intensity but also because they widen the industrial base and strengthen the industrial structure. They are also relevant for the growth of international production-sharing arrangements as they provide the opportunity for outsourcing to multinational firms, whether located in the host or home countries. Governments and central banks in developing countries take special measures to facilitate the flow of funds to them from commercial banks and other financial institutions.

#### ***4.9.1 Priority sector lending in India***

The most important instrument in India for stimulating lending by commercial banks to SME units is the priority sector lending guideline of the Reserve Bank of India, under which 40 per cent of bank advances by domestic commercial banks and 32 per cent by foreign banks are to be provided for micro, small and medium (MSME) manufacturing and service enterprises and other designated areas that include agriculture, housing and education loans. There are targets and sub-targets set for agriculture, weaker sections and micro-enterprises, and penalties are imposed for non-achievement of these targets and sub-targets. (RBI 2012).

RBI has advised public sector commercial banks to open at least one specialised branch in each district to deal with the MSME enterprises. Separately, the Government of India has advised public sector banks to ensure the establishment of specialised MSME branches in identified clusters with a preponderance of small enterprises to enable these enterprises to have easy access to bank credit.

#### ***4.9.2 Small Industries Development Bank of India (SIDBI)***

SIDBI is the apex financial institution for the MSME sector, established to address financial and non-financial gaps in the functioning of MSMEs. It is primarily a refinance institution for commercial banks and other financial institutions lending to MSME units but it also undertakes direct lending to the enterprises. In addition, it provides equity capital and plays a promotional and developmental role for MSMEs. The funds contributed by domestic scheduled banks and foreign banks as a result of penalties arising from shortfalls in achieving targets for priority sector lending are allocated to SIDBI for providing refinance to banks and financial institutions for lending to SMEs. SIDBI also complements and supplements efforts by banks and other financial institutions by providing financial assistance for energy efficient and environment friendly investment, for factoring and bill discounting to enable SMEs to overcome delayed payments by clients, and for SMEs in the service sector (SIDBI 2012).

SIDBI has been entrusted by the Government of India to manage the INR 50 billion (US\$ 798.4 millions) India Opportunities Fund established in 2012-13 for providing equity assistance to MSMEs. Earlier, in 1999, SIDBI had established SIDBI Venture Capital Ltd (SVCL) for providing venture capital assistance to knowledge-based MSMEs. As the apex financing institution for the MSMEs, SIDBI has taken a number of initiatives, including establishing credit advisory centres and a credit rating agency. (SIDBI 2012).



### ***4.9.3 Credit Guarantee Fund***

As in other countries, the most important problem facing MSMEs, particularly micro and small enterprises, in securing loans is that they cannot provide collateral security that banks and financial institutions need for covering risk. The RBI has given clear guidelines to banks and financial institutions not to ask for collateral security for loans up to Rs.1 million. However, this advice has generally not been heeded by lending institutions. To enable the MSMEs to overcome the problem, SIDBI, jointly with the Ministry of MSMEs of the Government of India, has established the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) to provide credit guarantee support to collateral free/third party guarantee for loans up to Rs.10 million extended by commercial banks and financial institutions to micro and small enterprises. (SIDBI 2012).

### ***4.9.4 Other government schemes***

The Ministry of MSMEs has introduced a credit-linked capital subsidy scheme for technological up-gradation, and the Ministry of Textiles has had a long standing scheme for the textile sector, to provide capital subsidy or interest subsidy for investment in capital equipment, which benefits SMEs.

Pursuant to a central statute, the State Financial Corporation Act 1951, 17 states established state financial corporations (SFCs) to provide funds to SMEs for establishing industries. The Tamil Nadu Industrial Investment Corporation Limited, which had been established earlier in 1947, also functions as an SFC under the Act. Apart from Tamil Nadu, many other states have set up state industrial development corporations with a view to providing equity support to SMEs.

At present, many of the SFCs are not in good financial health and are under-capitalised and the Ministry of Finance is not well disposed towards any suggestion to revive them.

India has been active in taking steps to facilitate commercial lending to SMEs but these fall short of the measures required by these enterprises. In particular, there is absence of a comprehensive and proactive approach from lending institutions that has been adopted in comparator countries. The comparative position is given in Box 9.

### **Box 9: SME access to finance in India and comparator countries**

- Malaysia has set up a bank dedicated to the MSME sector and responsible for meeting the financing needs of the units in their totality, from term loans for fixed assets to line of credit for working capital, bank guarantee, etc (SME Bank of Malaysia 2013). Thailand has similarly established its SME Bank with the objective of ‘providing loans, guarantees, counselling, and other necessary services (SME Bank of Thailand 2013).
- India has taken a number of steps to facilitate access to finance for SMEs but it has not established a bank dedicated to the SME sector to meet their financing requirements comprehensively.
- Further, financial institutions in India need to be transparent in their functioning and proactive in their approach towards SMEs. In Malaysia, banks display the client’s charter, which mentions the relevant documents to be submitted by SMEs, eligibility criteria for obtaining loans, duration taken for processing a loan application and the requirement to inform unsuccessful applicants of the reasons for rejection of the application (Central Bank of Malaysia 2005). In Thailand the Small Business Credit Guarantee Corporation holds credit guarantee clinics in various regions and is proactive in assessing the need for additional loans and facilitating their sanction.

## **5. Recommendations**

If India wishes to achieve quick growth in manufacturing, as it must, to quicken the pace of economic growth and provide regular and decent employment opportunities to millions of job seekers, encouraging international production sharing by stimulating FDI inflows seems to be an attractive strategy. Allowing FDI in manufacturing or exhorting foreign enterprises to invest in India is not sufficient. We need concrete measures that would encourage them.

### ***5.1 Top priority measures for stimulating international production sharing***

#### ***Taxation incentives***

To improve the environment for FDI inflows, it is imperative as a first step to eliminate discriminatory taxation of foreign enterprises. The next step should be to bring down corporate tax levels progressively to the ASEAN level of 25 per cent, which is also the level in China. In addition, high technology industries should be granted incentives by way of reduced corporate taxes to provide for a level playing field between India, China and ASEAN countries.

It is also imperative for the government to forswear enactment of tax laws with retrospective effect. In order to redress investor sentiment, which suffered a severe setback when the government amended the law retrospectively in 2012, it is necessary to amend the law to provide that the change shall apply prospectively only. In fact, it would be best to introduce a provision in the Income Tax Act, 1961 that no change in future shall apply retrospectively.

#### ***Tariff barriers, inverted tariff structure and other tariff anomalies***

India’s non-agricultural tariffs are now on the whole on par with those prevailing in comparator countries. However, there are still certain aspects of the tariff structure that need attention. The import duty on capital goods, even at the level of 7.5 per cent, puts India at a disadvantage vis-à-vis Malaysia and Thailand, as these countries have either zero or low

duties on these goods. There is a case for India to cut duties on capital goods in order to improve its overall competitiveness in manufacturing. More importantly, India needs to eliminate the inverted duty structure in a number of consumer durables in which the establishment of manufacturing enterprises in India is being impeded by this anomaly. In the case of ITA-I products, there is also a case for streamlining procedures for duty-free import of materials on which the levy of customs duty results in an inverted duty structure. It is also necessary for India to gradually bring down its tariffs on automobiles so as to reduce the excessively high effective rate of protection on the product.

### ***Gateway infrastructure***

The port infrastructure has to be improved by increasing the capacity of ports substantially from the current level of about 1,000 to 2,500 million MT entirely through PPP. Government should fund programmes for carrying out capital dredging for deepening drafts in harbours and channels up to 14 metres wherever necessary. The rail and road connectivity of ports needs improvement on a war footing.

### ***Customs procedures***

Equally important is the improvement of customs procedures. In particular, it is necessary to ensure that a single window is made effective for the processing of documents and that the application of EDI enables a truly paperless process and eliminates face-to-face contact between the customs officials and agents of exporters and importers. For this, the customs need to stop the practice of seeking paper copies and instead accept digital copies of documents and digital signature. In RMS, physical checking should be gradually brought down to the international level of 2-3 per cent. To widen the use of the ACP, the eligibility criteria should be made less stringent and only those who have been found actually guilty of wrong-doing should be excluded.

### ***Raising limits for FDI in defence production***

Defence industries are the only major area of manufacturing in which a low cap of 26 per cent applies on FDI. Although protection of the country's security interest is given as the main reason for this restriction, it can be argued that India's security interest would be better served if military supplies are manufactured within the country rather than abroad. In order to generate investor interest, the foreign equity limit should be raised to 51 per cent.

## ***5.2 Priority measures to improve domestic environment for investment in manufacturing***

The domestic environment for investment affects foreign investors as much as it affects domestic investors. In order to stimulate international production sharing through foreign investment we have, therefore, to give equal attention to the domestic investment environment. And for this, three aspects need to be given priority attention: provision of physical infrastructure, availability of land and framework of labour laws.

### ***Physical infrastructure***

*Power:* Power shortages have a crippling effect on the international competitiveness of manufacturing in India and deter foreign investors from setting up manufacturing establishments in the country. There has been an impressive increase in generation capacity in recent years and a large reserve margin has been built between installed capacity and peak demand. However, uncertainties in the supply of fuel, particularly coal, have created a situation in which the reserve margin is not enough and there is a gap between the demand for and supply of power. While additions to generation capacity need to continue, simultaneous action is needed to augment coal supplies within the country. For this, it is necessary to build political consensus for the denationalisation of coal mines if alternative action does not yield results within a very short time.

*Dedicated freight corridors:* In railways, the North-South and East-West dedicated freight corridors should be completed speedily and work should be taken up in four other identified stretches in which the traffic has reached saturation levels to improve the reliability of container delivery through the railways.

*Roadways:* While the existing programme of building national highways needs to be implemented with greater speed, an important gap that needs to be filled is the construction of access controlled expressways with good connectivity with metropolitan areas and major ports. Without such expressways, India will not have world class roadway infrastructure. In addition, the process of repair and maintenance of highways already built needs to be streamlined.

## ***Land***

In view of the fact that the LARR Act, 2013, is pro-farmer and for this reason it had bipartisan support, it is difficult to envisage changes in it, even though it has undeniably raised the price of land steeply and also put formidable procedural hurdles in the way of land acquisition for industrial purposes. However, at a minimum, a political consensus could be developed in favour of alleviating the procedural hurdles (such as the need to have consent of 80 per cent landholders and the requirement for social impact assessment) that have been introduced before land can be acquired for industrial purposes. In order to ease the population pressure in rural areas, we should be facilitating the movement of people from agriculture to non-agricultural occupations rather than impeding the process.

Two lines of action can be envisaged to alleviate the difficulty in finding land for industry. First, the Government of India should move quickly towards establishing National Manufacturing Zones (NMZs), as announced in the National Manufacturing Policy. Providing developed land to industry is even better than facilitating access to land for them. Although the new law will apply for acquisition of land for the NMZ also, the government could provide a modicum of cushion and not pass on to the enterprises the entire cost of the land. It could, for instance, decide to bear the expenses on account of rehabilitation and resettlement. Since the government has raised the cost by passing a law it has a responsibility to ensure that manufacturing enterprises do not become incompetent internationally because of the high price of land. Particular care should be taken also to develop world class external

infrastructure around the NMZs simultaneously with their establishment. Second, the laws should be changed, wherever necessary, to liberalise transfer of agricultural land for industrial development on leasehold. This will meet the objective of giving a permanent income to the farmer without loss of ownership. At the same time, it will ensure that the initial investment in land by industry is not burdensome.

### ***Labour laws***

Chapter VB of the Industrial Disputes Act, 1947, which is out of tune with the current economic policies of government and acts as a psychological barrier against large investments in manufacturing, needs to be removed from the statute. At the same time, the scale of compensation admissible to the employees in the event of retrenchment or closure should be enhanced on the lines recommended by the Second Labour Commission. The central government should also take the initiative for putting in place a suitably designed unemployment insurance scheme in the country.

The Contract Labour (Abolition and Regulation) Act, 1970, needs to be revised so as to bring it line with current realities, with sole emphasis on regulation rather than abolition. Additionally, as in comparator countries, specific provision has to be made in the law to allow employment on fixed term contracts.

Trade union laws need to be revamped in order to improve the process of collective bargaining and promote harmony in industrial relations. For this, the agenda should include granting industrial relations rights only to recognised unions, providing for election of office bearers, requiring endorsement of a majority for taking industrial action, and exclusion of non-workers from trade union.

## ***5.3 Other measures to boost domestic investment environment***

### ***Internal taxes***

Abolition of central sales tax, which is an indirect tax on inter-state transactions, and the introduction of the goods and services tax (GST), which are already in the pipeline, need to be accomplished at the earliest.

### ***Special Economic Zones (SEZs)***

The most important action that needs to be taken is to strengthen the physical infrastructure around the SEZs so that individual units get power, water and connectivity to drainage automatically once they decide to establish units in SEZs. The governance structure of the SEZs or the nodes in the industrial corridors must have the involvement of state chief ministers so that there are no problems for the SEZ units in getting connectivity and regulatory clearances. Lastly, and importantly, the fiscal benefits announced in the past for developers and units of SEZs should be restored for existing beneficiaries. Changes, if any, made in the future should apply prospectively.

### ***SME Financing***

SIDBI is already extending term loans directly and also refinancing those extended by commercial banks, but what is needed is that it substantially scales up its operations. Further, it needs to move in to fill the gap in the working capital financing needs of MSMEs, which critically affects their functioning. Working capital requirements of manufacturing MSMEs are at present the responsibility of commercial banks, which cater to all sectors and units of all sizes, and typically do not take full care of the smaller entities. SIDBI itself could set up a subsidiary bank to take care of the working capital needs of MSMEs, with branches in places where industrial clusters have come up. The existence of a dedicated bank providing credit for working capital for MSMEs may prove to be a greater boon to them than the reservation of 40 per cent funds for priority sector lending.

The proactive approach of financial service companies has been a great help in Malaysia and Thailand and this is something that Indian development finance companies need to emulate.

### ***Entry and exit barriers***

The foremost action needed in India is the upgradation of external infrastructure needed by industry – power supply, water supply, drainage and roads (both trunk routes and roads leading to industrial areas) – so that once land is allocated to industrial units in SEZs or national manufacturing zones, there is no hassle in power, water, drainage and road connectivity. These are the new entry barriers with which entrepreneurs are confronted.

The repeal of Chapter VB of the Industrial Disputes Act, 1947 as recommended above will also improve the situation regarding exit barriers in India. In addition, it is necessary to address the practical problem that has made the Arbitration and Conciliation Act, 1998 a non-starter, so that the enforcement of contracts in India is not delayed by congestion in courts.

### ***5.4 Concluding remarks***

The measures suggested above will stimulate FDI inflows into manufacturing in India and also improve the environment for domestic investment in manufacturing. As has been noted earlier, foreign enterprises participate in international production sharing not only by undertaking manufacturing by affiliates established in different countries, but also by outsourcing manufacturing of P&C to purely domestic enterprises. The measures suggested above will not only facilitate foreign investment into India but also strengthen the MSMEs in India and make it possible for multinational firms to outsource to these enterprises. Such outsourcing has already taken place substantially in the automobile sector in India and has resulted in the MSMEs growing up into highly competitive units and exporting large volumes to the OEMs unconnected with the multinational firms that first outsourced P&C to them. Technology co-operation agreements rather than FDI have helped these enterprises to grow into world class suppliers of P&C. A replication of the experience in the automobile sector will bear rich dividend for the Indian manufacturing sector.

## References:

- Aggarwal, Aradhna. 2012.** *Social and Economic impact of SEZs in India*. Oxford University Press, New Delhi.
- Aminian, Nathalie; K. C. Fung and IIZAKA Hitomi. 2007.** Foreign Direct Investment, Intra-Regional Trade and Production Sharing in East Asia. *RIETI Discussion Paper Series*. 07-E-064.
- Athukorala, Prema-chandra. 2011.** Growing with Global Production Sharing: The Tale of Penang Export Hub. *Working Paper No. 2011/13*, Australia National University.
- Athukorala, Prema-chandra. 2010.** Production Networks and Trade Patterns in East Asia: Regionalization or Globalization?. *ADB Working Paper Series on Regional Economic Integration*, No. 56, August.
- Athukorala, Prema-chandra and Jayant Menon. 2010.** Global Production Sharing, Trade Patterns and Determinants of Trade Flows. *Working Papers in Trade and Development*. No. 2010/06, July, Australian National University.
- Athukorala, Prema-chandra and Nobuyuki Yamashita. 2007.** Production Fragmentation in Manufacturing Trade: The Role of East Asia in Cross-border Production Networks. *Working Paper Series*. CCAS No.003. Center for China and Asian Studies. College of Economics, Nihon University, June 2007.
- Badri Narayanan, G. and Pankaj Vashisht. 2008.** Determinants of Competitiveness of the Indian Auto Industry. *ICRIER Working Paper No. 201*. January.
- Baldwin, Richard. 2011.** Trade and Industrialisation after Globalisation's 2<sup>nd</sup> Unbundling: How building and Joining a Supply Chain are Different and Why it Matters. *NBER Working Paper Series*. Working Paper No. 17716. National Bureau of Economic Research.
- Bhalla, Surjit. 2014.** No More Bandaid Tax Policy. *The Indian Express*. June 7, 2014.
- Business Standard. 2011.** Budget 2011: FM has limited tax proposals. March 3.
- Central Bank of Malaysia. 2005.** SMEs Access to Financing. *Small and Medium Enterprise (SME) Annual Report 2005*. Chapter 6. Available at [http://www.bnm.gov.my/index.php?ch=en\\_publication\\_catalogue&pg=en\\_publication\\_smear&ac=37&yr=2005](http://www.bnm.gov.my/index.php?ch=en_publication_catalogue&pg=en_publication_smear&ac=37&yr=2005) (accessed October 15 2013).
- Central Electricity Authority. 2011.** *Annual Report 2010-11*. Ministry of Power, Government of India. June. Available at [http://www.cea.nic.in/reports/yearly/annual\\_rep/2010-11/ar\\_10\\_11.pdf](http://www.cea.nic.in/reports/yearly/annual_rep/2010-11/ar_10_11.pdf) (accessed October 15 2013).

**Centre for WTO Studies. 2012.** *Trade Facilitation Gap Analysis for Border Clearance Procedures in India*. Indian Institute of Foreign Trade (IIFT). New Delhi.

**Land Administration Law, 1986**, China, Database of Laws and Regulations, China. Available at <http://www.npc.gov.cn/englishnpc/Law/Frameset-page5.html> (accessed October 16 2013).

**Debroy, Bibek. 2005.** Issues in Labour Law Reform. In *Reforming the Labour Market*, ed. Bibek Debroy and P D Kaushik. Academic Foundation, New Delhi.

**Department of Chemicals and Petrochemicals. 2013.** *Annual Report 2012-13*. Ministry of Chemicals and Fertilisers, Government of India.

**Department of Commerce. 2013.** Ministry of Commerce and Industry, Government of India. <http://commerce.nic.in/> (accessed October 30 2013).

**Department of Commerce. 2011.** Discussion Paper to Facilitate Stakeholder Consultation on Potential Reform of the SEZ Policy and Operating Framework. *Discussion Paper on Potential Reform of the SEZ Policy and Operating Framework*. SEZ Division. Ministry of Commerce and Industry, Government of India. Available at [http://sezindia.nic.in/writereaddata/updates/SEZ\\_REVIEW.pdf](http://sezindia.nic.in/writereaddata/updates/SEZ_REVIEW.pdf) (accessed October 30 2013).

**Department of Electronics and Information Technology. 2012.** Modified Special Incentive Package Scheme (M-SIPS) to Offset Disability and attract Investment in Electronics Systems Design and Manufacturing (ESDM) Industries. *Notification No. 24(10)/2010-IPHW*. Ministry of Communication and Information Technology, Government of India. 27<sup>st</sup> July. Available at [http://deity.gov.in/sites/upload\\_files/dit/files/MSIPS%20Notification.pdf](http://deity.gov.in/sites/upload_files/dit/files/MSIPS%20Notification.pdf) (accessed October 28 2013).

**Department of Information Technology. 2007.** Special Incentive Package Scheme to Encourage Investment for Setting up Semiconductor Fabrication and other Micro and Nano Technology Manufacture Industries in India. *The Gazette of India*. Part-1-Section 1. Ministry of Communication and Information Technology, Government of India. 21<sup>st</sup> March. Available at [http://deity.gov.in/sites/upload\\_files/dit/files/Notification%20Special%20Incentive%20Package%20Scheme%20\(2007\)%20\(377%20KB\).pdf](http://deity.gov.in/sites/upload_files/dit/files/Notification%20Special%20Incentive%20Package%20Scheme%20(2007)%20(377%20KB).pdf) (accessed October 30 2013).

**DIPP. Fact Sheet on Foreign Direct Investment (FDI) (from April 2000 to June 2013)**, Ministry of Commerce and Industry, Government of India.

**DIPP. 2013.** *Annual Report 2012-13*. Ministry of Commerce and Industry. Government of India.



**DIPP. 2013a. Consolidated FDI Policy: Effective from April 5, 2013. Circular 1 of 2013.** Ministry of Commerce and Industry. Government of India.

**Dominic, Joseph; Shashank Priya and Pankaj Agrawal. 2012. Trade Facilitation Gap Analysis for Border Clearance procedures in India.** Centre for WTO Studies, India Institute of Foreign Trade (IIFT), New Delhi.

**ELCINA Electronic Industries Association of India. 2013. Pre-Budget Recommendations 2013-14.** Available at <http://www.elcina.com/ELCINAs%20Pre%20Budget%20Recommendations%202013-14.pdf> (accessed October 25 2013).

**Electricity Generation Authority of Thailand. Various Annual Reports.** Available at [http://www.egat.co.th/en/index.php?option=com\\_content&view=article&id=165&Itemid=146](http://www.egat.co.th/en/index.php?option=com_content&view=article&id=165&Itemid=146) (accessed October 25 2013).

**Energy Commission, Malaysia. 2012. Electricity Supply Industry in Malaysia: Performance and Statistical Information 2010.** Department of Energy Management and Industry Development, Putrajaya. Available at <http://meih.st.gov.my/documents/10620/e92bbc28-ff35-4e80-8981-a849b2fce14b> (accessed October 30 2013).

**Federation of Indian Chambers of Commerce & Industry (FICCI). 2012. Lack of Affordable & Quality Power: Shackling India's Growth Story.** Available at <http://www.irgamag.com/images/pdf/Power%20Report.pdf> (accessed October 25 2013).

**FICCI- AIOE .2005. Report of Core group on Restructuring Labour Policy. In *Reforming the Labour Market*, ed. Bibek Debroy and P D Kaushik. Academic Foundation, New Delhi.**

**Federation of Indian Micro and Small & Medium Enterprises (FISME). 2013. Suggestions for Inter-Ministerial Committee (IMC) for Accelerating Manufacturing in the Micro, Small and Medium Enterprises (MSME) Sector.** Available at [http://www.fisme.org.in/document/IMC\\_FISME\\_Suggestions\\_26042013.pdf](http://www.fisme.org.in/document/IMC_FISME_Suggestions_26042013.pdf) (accessed October 30 2013).

**Gaulier, Guillaume; Françoise Lemoine and Deniz Ünal-Kesenci. 2005. China's Integration in East Asia: Production Sharing, FDI & High-Tech Trade. *CEPII, Working Paper*. No 2005-09. CEPII.**

**GNS China.** <http://www.gnschina.com/indexIE.php> (accessed November 2 2013).

**Govrnment of India. 2002. Report of the National Commission on Labour, Volume-I.** Ministry of Labour.

- Government of India. 2013.** Safe Harbour Rules Finalised After Considering Comments of Various Stakeholders: Rules to be Applicable for 5 Assessment Years Beginning from Assessment Year 2013-14. *Press Information Bureau*. September 18. Available at [http://finmin.nic.in/press\\_room/2013/Safe\\_Harbour\\_Rule\\_18092013.pdf](http://finmin.nic.in/press_room/2013/Safe_Harbour_Rule_18092013.pdf) (accessed October 20 2013).
- Government of India. 2014.** India Transport Report: Moving India to 2032. National Transport Development Policy Committee. Volume III, Sector Reports, Part II. New Delhi, Routledge.
- Hoda, Anwarul and Monika Verma. 2004.** Market Access Negotiations on Non-Agriculture Products: India and the choice of Modalities. *ICRIER Working Paper No. 132*. May 2004. New Delhi.
- Hummels, David. 2007.** Transportation Costs and International Trade in the Second Era of Globalization. *Journal of Economic Perspectives*—Volume 21, Number 3—Summer 2007—Pages 131–154.
- Jones, Ronald W. and Henryk Kierzkowski. 1990.** The Role of Services in Production and International Trade: A Theoretical Framework. Available at [http://www.econ.rochester.edu/people/jones/Role\\_of\\_Services.pdf](http://www.econ.rochester.edu/people/jones/Role_of_Services.pdf) (accessed November 5 2013).
- Jones, R. W., & Henryk Kierzkowski. 2001.** Globalization and the Consequences of International Fragmentation. In *Money, capital mobility and trade: Festschrift in honor of Robert A. Mundell*, ed. R. Dornbusch, G. A. Calvo, R. Dornbusch and M. Obstfeld. MIT Press.
- Kimura, Fukunari and Ayako Obashi. 2010.** International Production Networks in Machinery Industries: Structure and Its Evolution, *ERIA Discussion Paper Series*, ERIA-DP-2010-09. Economic Research Institute for ASEAN and East Asia (ERIA), Jakarta, Indonesia.
- Kimura, Fukunari and Ayako Obashi. 2011.** Production Networks in East Asia: What We Know So Far, *ADB Working Paper Series*, No. 320, Tokyo: Asian Development Bank Institute.
- KPMG. 2013.** *Corporate tax rates table*. Available at <http://www.kpmg.com/global/en/services/tax/tax-tools-and-resources/pages/corporate-tax-rates-table.aspx> (accessed October 30 2013).
- KPMG. 2013a.** New regulations to implement nationwide expansion of China's VAT pilot programme on August 1, 2013. *China Tax Alert*. Issue No. 13. June.

**Labour Contract Law of the PRC. 2007.** Available at [www.12333sh.gov.cn/200912333/2009english](http://www.12333sh.gov.cn/200912333/2009english) (accessed November 10 2013).

**Labour Protection Act B.E. 2541 Thailand. 1998.** Available at <http://www.Labour.go.th/en/attachments/article/18/L> (accessed November 10 2013).

**Labour Protection Act, 2551 2008** and Employment Act 1955 (as of April 2012) Malaysia. Available at <http://www.agc.gov.my.Akta/vol.%206/Act%20265.pdf> (accessed November 10 2013).

**Metropolitan Electricity Authority, Thailand. 2013.** Reliability Indices. *Statistic Data-Statistical Knowledge.* Available at <http://www.mea.or.th/profile/index.php?l=en&tid=2&mid=96&pid=91> (accessed November 11 2013).

**Ministry of Civil Aviation. 2012.** *Working Party Report on Air Cargo Logistics in India.* Government of India. 7<sup>th</sup> May. Available at <http://www.eiciindia.org/frontsite/MOCA%20WORKING%20GROUP%20ON%20AIR%20LOGISTICS%20REPORT.pdf> (accessed November 1 2013).

**Ministry of Commerce, PRC .2007.** *Trade Union Law of the People's Republic of China.* March 20. Available at <http://English.mofcom.gov.cn/aarticle/policyrelease/internationalpolicy/20070304475394.html> (accessed November 3 2013).

**Ministry of Finance. 2009.** *First Discussion Paper on Goods and Services Tax in India.* The Empowered Committee of State Finance Ministers. November 10. Available at <http://finmin.nic.in/GST/Empowered%20Committee%20of%20SFM%20%20First%20Discussion%20paper.pdf> (accessed November 15 2013).

**Nath, Surendra. 2005.** Labour Policy and Economic Reform in India. In *Reforming the Labour Market*, ed. Bibek Debroy and P D Kaushik. Academic Foundation, New Delhi.

**National Bureau of Statistics of China.** *China Statistical Yearbook (various issues).* Available at <http://www.stats.gov.cn/english/statisticaldata/yearlydata/> (accessed November 10 2013).

**PKF. 2013.** *Malaysia Tax Guide 2013.* Available at <http://www.pkf.com/media/1960332/malaysia%20pkf%20tax%20guide%202013.pdf> (accessed November 10 2013).

**Planning Commission. 2009.** *Report of the Working Group on Logistics.* Government of India. Available at [http://planningcommission.gov.in/reports/genrep/rep\\_logis.pdf](http://planningcommission.gov.in/reports/genrep/rep_logis.pdf) (accessed October 10 2013).

- PWC. 2013.** *Thai Tax 2013 Booklet.* Available at [http://www.pwc.com/en\\_TH/th/publications/2013/thai-tax-2013-booklet.pdf](http://www.pwc.com/en_TH/th/publications/2013/thai-tax-2013-booklet.pdf)(accessed November 9 2013).
- PWC. 2013a.** *Navigating growth amidst challenges: Union Budget 2013.* Available at [http://spain-india.org/files/documentos/38\\_india-union-budget-2013-pwc-analysis-booklet.pdf](http://spain-india.org/files/documentos/38_india-union-budget-2013-pwc-analysis-booklet.pdf)(accessed November 10 2013).
- Rajan, S. Ramkishen. 2003.** Production-Sharing in East Asia: Implications for India. *Economic and Political Weekly*. Vol - XXXVIII No. 36, September 6. pp. 3770-3772.
- RBI. 2012.** *Master Circular- Priority Sector Lending – UCBs.* RBI/2012-13/57. July 2. Available at [http://rbi.org.in/scripts/BS\\_CircularIndexDisplay.aspx?Id=7334](http://rbi.org.in/scripts/BS_CircularIndexDisplay.aspx?Id=7334) (accessed November 5 2013).
- Sen, Rahul and Sadhana Srivastava. 2011.** Integrating into Asia's International Production Networks: Challenges and prospects for India. *Studies in Trade and Investment* 75. India: A New Player in Asian Production Networks?, Edited by Witada Anukoonwattaka and Mia Mikic. UNESCAP.
- Small Industries Development Bank of India (SIDBI). 2012.** *Annual Report 2011-12: Addressing Gaps in MSME Eco-system.* Available at [http://www.sidbi.in/sites/default/files/financials/SIDBI%20ANNUAL%20REPORT%20202011-12\(ENGLISH\)-Final.pdf](http://www.sidbi.in/sites/default/files/financials/SIDBI%20ANNUAL%20REPORT%20202011-12(ENGLISH)-Final.pdf) (accessed November 14 2013).
- SME Bank of Malaysia. 2013.** <http://www.smebank.com.my/>(accessed November 3 2013).
- SME Bank of Thailand. 2013.** <http://www.smebank.co.th/en/about.php>(accessed November 3 2013).
- Thailand's Labour Relations Act 1975,** BE 2518. Available at <http://www.samuiforsale.com/law-texts/labour-relations-act.html>(accessed November 3 2013).
- Malaysia's Land Acquisition Act 1960,** Act 486 (as 1 January 2006). *Laws of Malaysia.* The Commissioner of Law Revision. Available at <http://www.agc.gov.my/Akta/Vol.%2010/Act%20486.pdf> (accessed November 3 2013).
- Malaysia's Trade Union Act, 1959,** Act 262-Trade Unions Act 1959 (as 1 January 2006). *Laws of Malaysia.* The Commissioner of Law Revision,. Available at <http://www.agc.gov.my/Akta/Vol.%206/Act%20262.pdf>(accessed November 5 2013).

- The New York Times. November 30, 2011.** Outsourcing Giant Finds It Must Be Client, Too. Available at [http://www.nytimes.com/2011/12/01/world/asia/for-india-outsourcing-does-the-job-at-home-too.html?\\_r=0](http://www.nytimes.com/2011/12/01/world/asia/for-india-outsourcing-does-the-job-at-home-too.html?_r=0)(accessed November 2 2013).
- UNCTAD. 2011.** UNCTAD Liner Shipping Connectivity Index. *Review of Maritime Transport 2011*. The UNCTAD Secretariat. Available at [http://unctad.org/en/docs/rmt2011\\_en.pdf](http://unctad.org/en/docs/rmt2011_en.pdf) (accessed November 3 2013).
- UNCTAD. 2013.** *World Investment Report 2013: Global Value Chains- Investment and Trade for Development*. United Nations, New York and Geneva 2013.
- World Bank. 2005.** Linkages between Foreign Direct Investment and Trade Flows. *From Disintegration to Reintegration: Eastern Europe and the Former Soviet Union in International Trade*. Washington DC 2005. Available at <http://siteresources.worldbank.org/INTECA/Resources/tradereport-complete.pdf> (accessed November 5 2013).
- World Bank. 2007.** India Land Policies for Growth and Poverty Reduction. *Report No. 38298-IN*. July 9. Available at [http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2007/08/31/000310607\\_20070831102106/Rendered/PDF/382980INoptmzd.pdf](http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2007/08/31/000310607_20070831102106/Rendered/PDF/382980INoptmzd.pdf) (accessed November 5 2013).
- World Bank. 2008.** Thailand Investment Climate Assessment Update. *Report No. 44248-TH*. June. Available at [http://siteresources.worldbank.org/THAILANDEXTN/Resources/333295-1249970320257/TH\\_ICA\\_Update08\\_fullreport.pdf](http://siteresources.worldbank.org/THAILANDEXTN/Resources/333295-1249970320257/TH_ICA_Update08_fullreport.pdf) (accessed November 1 2013).
- World Bank. 2011.** The Air Connectivity Index: Measuring Integration in the Global Air Transport Network. *Policy Research Working Paper 5722*. World Bank.
- World Bank. 2012.** *Connecting to Compete 2012: Trade Logistics in global Economy- The Logistics Performance Index and Its Indicators*. Available at [http://siteresources.worldbank.org/TRADE/Resources/239070-1336654966193/LPI\\_2012\\_final.pdf](http://siteresources.worldbank.org/TRADE/Resources/239070-1336654966193/LPI_2012_final.pdf) (accessed November 10 2013).
- WTO. 2008.** *World Trade Report 2008: Trade in Globalising World*. Geneva: WTO.
- WTO. 2013.** *World Trade Report 2013: Factors Shaping the Future of World Trade*. Geneva: WTO.
- Yeats, Alexander J. 1998.** Just How Big Is Global Production Sharing?. *Policy Research Working Paper*. 1871. World Bank, January 1998.

## LATEST ICRIER'S WORKING PAPERS

NO.	TITLE	Author	YEAR
280	INDIA-KOREA CEPA: HARNESSING THE POTENTIAL IN SERVICES	NISHA TANEJA NEETIKA KAUSHAL NAGPAL SAON RAY	JULY 2014
279	SALIENT FEATURES OF MEASURING, INTERPRETING AND ADDRESSING INDIAN INFLATION	KIRTI GUPTA FAHAD SIDDIQUI	JULY 2014
278	THE ECONOMIC IMPACTS OF TEMPERATURE ON INDUSTRIAL PRODUCTIVITY: EVIDENCE FROM INDIAN MANUFACTURING	ANANT SUDARSHAN MEENU TEWARI	JULY 2014
277	JOINING THE SUPPLY CHAIN: A FIRM-LEVEL PERSPECTIVE FROM SOUTHEAST ASIA	GANESHAN WIGNARAJA	JUNE 2014
276	EL NIÑO AND INDIAN DROUGHTS- A SCOPING EXERCISE	SHWETA SAINI ASHOK GULATI	JUNE 2014
275	INDIA-PAKISTAN TRADE: AN ANALYSIS OF THE PHARMACEUTICAL SECTOR	MANOJ PANT DEVYANI PANDE	JUNE 2014
274	ENHANCING INDIA-PAKISTAN ECONOMIC COOPERATION: PROSPECTS FOR INDIAN INVESTMENT IN PAKISTAN	PALAKH JAIN AND SAMRIDHI BIMAL	MAY 2014
273	SECURITIES TRANSACTION TAX- CASE STUDY OF INDIA	NEHA MALIK	APRIL 2014
272	IMPACT OF TRANSACTION TAXES ON COMMODITY DERIVATIVES TRADING IN INDIA	SAON RAY NEHA MALIK	MARCH 2014
271	FEEDSTOCK FOR THE PETROCHEMICAL INDUSTRY	SAON RAY AMRITA GOLDAR SWATI SALUJA	FEBRUARY 2014
270	USING IPRS TO PROTECT NICHES? EVIDENCE FROM THE INDIAN TEXTILE AND APPAREL INDUSTRY	SUPARNA KARMAKAR MEENU TEWARI	JANUARY 2014
269	MONSOON 2013: ESTIMATING THE IMPACT ON AGRICULTURE	ASHOK GULATI SHWETA SAINI SURBHI JAIN	DECEMBER 2013

## **About ICRIER**

Established in August 1981, ICRIER is an autonomous, policy-oriented, not-for-profit, economic policy think tank. ICRIER's main focus is to enhance the knowledge content of policy making by undertaking analytical research that is targeted at informing India's policy makers and also at improving the interface with the global economy. ICRIER's office is located in the institutional complex of India Habitat Centre, New Delhi.

ICRIER's Board of Governors includes leading academicians, policymakers, and representatives from the private sector. Dr. Isher Ahluwalia is ICRIER's chairperson. Dr. Rajat Kathuria is Director and Chief Executive.

ICRIER conducts thematic research in the following seven thrust areas:

- Macro-economic Management in an Open Economy
- Trade, Openness, Restructuring and Competitiveness
- Financial Sector Liberalisation and Regulation
- WTO-related Issues
- Regional Economic Co-operation with Focus on South Asia
- Strategic Aspects of India's International Economic Relations
- Environment and Climate Change

To effectively disseminate research findings, ICRIER organises workshops, seminars and conferences to bring together academicians, policymakers, representatives from industry and media to create a more informed understanding on issues of major policy interest. ICRIER routinely invites distinguished scholars and policymakers from around the world to deliver public lectures and give seminars on economic themes of interest to contemporary India.

