Testimony

United States International Trade Commission Hearing No. 332-543 on Trade Investment, and Industrial Policies in India: Effects

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Introduction and Summary

This testimony consists of five sections. Section 1 describes longer term developments in US-India economic integration. Section 2 analyzes the Indian trade policy regime more broadly, highlighting the distinction between the policy regime and trade outcomes. Section 3 provides both an inventory of recent trade and investment policy actions that have been the subject of concern and a framework for evaluating these actions, including in the particularly contentious intellectual property area. Sections four and five offer policy conclusions from economic and strategic perspectives, respectively.

Five points summarize this testimony.

First, trade frictions between the two countries obscure the remarkable fact that in recent years, rapid and robust integration has been occurring between the two countries not just in goods, but also in services and foreign direct investment. This integration has not come at the expense of US employment.

Second, India’s overall trade integration is also proceeding rapidly. Judged by actual trade outcomes, India is not only open but might be unusually so for a country of its size and level of development. And India’s openness has been accompanied by current account deficits that have added to global demand. In terms of policies, India's manufacturing sector faces modest levels of protection, while the services sector is more highly protected.

Third, the concern that India has systematically turned protectionist in the last few years is belied by the inventory of actual policy changes. The picture is more mixed with retreat in some sectors coexisting with significant liberalization in several others. What is unambiguously true is that the Indian regulatory regime has become more uncertain and arbitrary in a manner affecting both foreign and domestic investors. Worsening foreign perceptions reflect in part changes in the overall state of the Indian economy with declining growth, stubbornly high inflation, and fiscal and external imbalances.
Fourth, like in the rest of the economy, the intellectual property (IP) regime has witnessed developments that have straddled the positive, negative, and uncertain. Any assessment of the IP regime in pharmaceuticals hinges crucially on the benchmarks used.

Fifth, a key policy conclusion is that the concerns of sectoral interests should not obscure the broader and medium-run developments in policies and trade outcomes, which have been positive. Given the potential for further integration, as India’s growth revives, the shared security and strategic interests in Asia between the United States and India, and the likelihood of political change in India, the focus should be on building a framework that can address frictions and revive cooperation more broadly. Moving toward an eventual free trade agreement can provide such a framework.

I. US-India Bilateral Integration: Paradox of Vibrant Trade but Contentious Trade Policy

At the “ground level” of actual trade and investment, ties between India and the United States have been expanding rapidly; trade in goods has more than doubled over the past seven years, trade in services remains dynamic, two-way foreign direct investment (FDI) has been rising, and Indian labor flows to the United States are generating substantial economic benefits

A. Trade

US-India trade has been growing rapidly. Between 2000 and 2012, India-US merchandise trade (excluding fuel and gold) has grown at a robust 13.3 percent a year, surpassing in dynamism India’s growth with the European Union and Japan. This is significantly greater than overall US trade, which has grown at 4.6 percent a year. However, India’s overall trade has grown a little more rapidly than US-India trade (16.8 percent including and 15.6 percent excluding China), reflecting the dynamism of China and other East Asian economies.
Second, US exports to India have been growing more rapidly than India’s exports to the United States. In part, this differential reflects the lower level of US exports to India compared with Indian exports to the United States. For India, the United States is still the largest export market (not counting the European Union as a single entity), accounting for 13 percent of total exports, and China the second largest market. On the import side, however, China (11 percent) has now comfortably overtaken the United States (5 percent) and European countries as the largest source of imports. Even 15 years ago, China was a negligible supplier of goods to India, but that has changed dramatically, partially at the expense of India-US trade.

Third, even in those sectors where India imposes high tariffs, the United States is not the most affected trading partner. The table below lists the ten most protected sectors in India, the applied tariff, and the largest exporters to India in each of these sectors. The United States is not the largest supplier in any of them, suggesting that the United States is spared the impact of India’s most protectionist policies.

The same applies for antidumping actions, which India has used heavily. For the period 1995–2012, India imposed 126 measures against China (accounting for a quarter of all measures), which was five times as many against the United States (24 measures).
Table 1 Shares of countries in imports of India's 10 most protected sectors, 2009

<table>
<thead>
<tr>
<th>HS-2</th>
<th>Product</th>
<th>Applied Tariff Rate (%)</th>
<th>Range (%)</th>
<th>Major Importing Partners</th>
<th>Import Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>87</td>
<td>Vehicles o/t ralw/tramw roll-stock, pts &amp; access</td>
<td>23.7</td>
<td>0-100</td>
<td>EU27 Korea Japan China Thailand</td>
<td>28 23 22 15 3</td>
</tr>
<tr>
<td>35</td>
<td>Albuminooidal subs; modified starches; glues; enzy</td>
<td>13.6</td>
<td>0-20</td>
<td>EU27 USA China Korea Japan</td>
<td>34 18 18 6 5</td>
</tr>
<tr>
<td>33</td>
<td>Essential oils &amp; resinoids; perf, cosmetic/toilet</td>
<td>11.6</td>
<td>0-20</td>
<td>EU27 China USA Switzerland Singapore</td>
<td>29 16 11 7 6</td>
</tr>
<tr>
<td>50</td>
<td>Silk</td>
<td>11.3</td>
<td>0-30</td>
<td>China Vietnam Brazil Korea Unspecified</td>
<td>97 1 0 0 0</td>
</tr>
<tr>
<td>40</td>
<td>Rubber and articles thereof.</td>
<td>10.3</td>
<td>0-70</td>
<td>EU27 Korea China Thailand Japan</td>
<td>21 11 11 10 9</td>
</tr>
<tr>
<td>36</td>
<td>Explosives; pyrotechnic prod; matches; pyrop allo</td>
<td>10.0</td>
<td>10-10</td>
<td>S. Africa USA EU27 China Australia</td>
<td>40 37 9 7 5</td>
</tr>
<tr>
<td>45</td>
<td>Cork and articles of cork.</td>
<td>10.0</td>
<td>10-10</td>
<td>EU27 Philippines China Algeria Tunisia</td>
<td>67 12 5 4 3</td>
</tr>
<tr>
<td>46</td>
<td>Manufactures of straw, esparto/other plaiting mat</td>
<td>10.0</td>
<td>10-10</td>
<td>China Philippines Vietnam Indonesia Taiwan</td>
<td>80 3 3 2 2</td>
</tr>
<tr>
<td>61</td>
<td>Art of apparel &amp; clothing access, knitted or croc</td>
<td>10.0</td>
<td>10-10</td>
<td>EU27 China Bangladesh Sri Lanka Hong Kong</td>
<td>29 27 8 7 7</td>
</tr>
<tr>
<td>54</td>
<td>Man-made filaments.</td>
<td>10.0</td>
<td>7.5-10</td>
<td>China Japan Taiwan EU27 Korea</td>
<td>42 9 9 8 7</td>
</tr>
<tr>
<td></td>
<td>Average/Total</td>
<td>12.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Mattoo, Ng, and Subramanian (2011)

Finally, rising US-India trade in goods is not a result of a large trade imbalance, which can adversely affect the US economy and labor market, especially at a time of substantial unemployment and idle resources (Bergsten and Gagnon, 2012). Figure 2 contrasts the trade imbalance (deficit) that the United States runs with India and China. The deficit with China has been high and rising and currently stands at over $300 billion. US trade with India has been roughly balanced, with deficits close to or less than $10 billion in the last decade.

Figure 2 US trade imbalance with China and India (billions of dollars)
B. Services

The services sector, especially information technology (IT), has been the engine of Indian economic growth over the last two decades. India’s share of services in GDP has risen considerably, from about 51 percent of GDP in 2000 to nearly 58 percent in 2012. Mirroring or even causing this increase has been the spectacular rise in services trade. India-US trade in services has also thrived (figure 3). Between 2000 and 2012, bilateral services trade grew at 17.4 percent a year, significantly faster than overall US services trade (6.7 percent). Bilateral trade has been almost as dynamic as India’s overall services trade, which grew at 19.7 percent a year. Both in level and growth terms, India’s exports to the United States has outperformed US exports to India. The United States is the largest market for Indian services exports but the second largest (next to the European Union) as a provider of services.

Figure 3 Services trade of India and the United States

C. Foreign Direct Investment

India’s inward FDI has also increased but from a very low base of about $3.5 billion in 2000 to $43.5 billion just before the global financial crises. It is well-known that FDI data are problematic and hence estimates of FDI subject to considerable margins of error. New estimates
from Jacob Funk Kirkegaard (2013) suggest that FDI flows—both into and from India—may be considerably greater than suggested by official estimates. His data suggest that FDI inflows (greenfield as well as mergers and acquisitions calculated based on transactions data) into India since 2003 averaged about $62 billion annually compared with 6 billion before that. In other words, India experienced a near ten-fold increase in annual FDI inflows. Similarly his calculations suggest that India’s outward FDI averaged about $33 billion since 2003 compared with about $3 billion before that.

In terms of US-India FDI, two points are worth noting. First, the United States has been the single largest FDI investor (consistently) in India for the last decade. The United States has accounted for about 22 percent of all FDI inflows (about $14 billion based on transaction data), considerably greater than the United Kingdom, Japan, Germany, and France. Also, US FDI into India has been very dynamic, increasing ten-fold compared with the early years of this millennium.

Second, FDI like trade in goods and services is also increasingly becoming two-way. Kirkegaard’s estimates suggest that Indian FDI to the United States amounted to about $3 billion a year since 2003, which represented a little over 20 percent of US FDI to India.

A study commissioned by Federation of Indian Chamber of Commerce and Industry (FICCI) showed that between 2004 and 2009, 90 Indian companies made 127 greenfield investments worth $.5 billion in metals, software and IT services, leisure and entertainment, industrial machinery, equipment and tools, and financial services. During the same period, 239 Indian companies invested in excess of $20 billion in merger and acquisitions in different states and across a wide range of sectors. As a result, tens of thousands of direct jobs (predominantly for US citizens), supporting many more indirect ones, have been created.

II. India’s Trade Regime: Paradox of Open Trade Outcomes Versus Relatively Restrictive Trade Policy

The paradox that characterizes the US-India bilateral trade relationship is also true of India’s overall trade. This paradox underlies or explains differing perceptions about India’s trade integration. The paradox is that the trade policy regime is restrictive especially in services, but actual trade outcomes suggest that India is almost an unusually open economy given its size. Consider each.

Figure 4 shows that India’s most favored nation (MFN) tariffs that were stratospherically high (in absolute terms and relative to the rest of the world) prior to 1991 have declined dramatically and, at 10 percent today, have almost converged with tariffs in the rest of the world.
In contrast, barriers are very high (both in absolute terms and relative to other countries) in services. The figure below provides a sense of magnitudes (circa 2008).

**Figure 4 MFN Tariffs in Goods, 1981–2010**

OECD = Organization for Economic Cooperation and Development
MFN = most favored nation
Note: See figure 2.7 in Subramanian and Kessler (forthcoming).

**Figure 5: Services Restrictions**

Sources: Services Trade Restriction Database and World Bank. See also Borchert, Goottiz, and Mattoo (2012).
India’s barriers in services are amongst the highest in the world and nearly four to five times greater than those in Organization for Economic Cooperation and Development (OECD) countries (figure 5). But this picture may have changed as a result of India’s liberalization of its foreign direct investment regime, which affected a number of services sectors.

This picture of India changes quite dramatically when it is judged in terms of trade outcomes. Reflecting the combined impact of policy liberalization, technological change, and India’s internal dynamism, India’s trade surged during the last decade (figure 6). Exports of goods and nonfactor services surged seven-fold in just over a decade from $60 billion to $420 billion. And imports also increased seven-fold from $75 billion in 2000 to $525 billion in 2011. As the figure shows, India recovered robustly from the impact of the global financial crisis. India’s openness ratio (the ratio of trade to GDP) doubled over the course of a decade from about 25 to 53 percent in 2012; the recovery from the global financial crisis in 2008 was also swift.

**Figure 6 Trade in goods and services, trade openness ratio, 2000–2012**

![Trade openness ratio graph](image)

Source: World Bank, World Development Indicators

Are these numbers indicative of a country that is open or closed? India, it turns out, is a fairly, even unusually, open economy. One of the overlooked facts about trade, which derives from a geography-based view of trade, is that large countries tend to trade less. Being large makes the cost of trading with the outside world relative to trading within the country very high. The converse is that small countries tend to be more open in terms of trade outcomes.

When allowance is made for country size, it turns out that from a cross-country perspective, India’s merchandise trade is normal—that is, it trades about what one would expect for a country
of India’s size and level of development. Strikingly, its overall trade (merchandise and services) is unusually high.

**Figure 7 Merchandise trade and size, 2011**

![Merchandise trade and size, 2011](chart)

**Figure 8 Overall trade and size, 2011**

![Overall trade and size, 2011](chart)

*Source: World Development Indicators*
In figure 7 (for merchandise trade) India is above the regression line but not significantly so. But in figure 8 (trade in goods and services) it is above the line and significantly so. China is an unusually large trader in merchandise trade. It is countries such as Brazil and the United States that are closed in terms of trade outcomes. A more formal regression analysis confirms that India’s overall trade is about 20 percent greater than it should be for a country of its size and development. Contrary to popular belief, India may not be such a closed economy especially when its size is taken into account.\textsuperscript{1}

While India has achieved a high degree of trade integration, it has done so without imposing harm on the rest of the world in the form of running current account surpluses based on mercantilist policies. Figure 9 below contrasts India, which has almost consistently run current account deficits that have added to global demand, with China, which has run large surpluses. India has followed a relatively flexible exchange rate policy without massively intervening in foreign exchange markets. Its reserves today stand at around $290 billion compared with nearly $4 trillion for China.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure9.png}
\caption{Current account balance (in percent of GDP)}
\end{figure}

Source: World Economic Outlook

III. Recent Policy Actions: Paradox of Perceptions of Rising Protectionism Versus Reality of Mixed Actions

Has India turned more protectionist in recent years? And how should recent actions even be assessed? Judging from the recent reactions of US businesses—and indeed from the fact of this hearing—it would seem that the answer is a resounding yes. An important reason for

\textsuperscript{1} In this cross-country analysis, a country’s trade-to-GDP ratio is regressed on its per capita GDP (log, PPP), its size (log), and population (log), and a dummy for oil exporting countries. See table 6.2 in Subramanian (2011) for details.
deteriorating foreign perceptions has been the state of the macroeconomy. As figures 10 through figure 12 illustrate, India’s growth declined over 11 quarters from highs of close to 11 percent to about 4.5 percent, inflation has remained at close to double-digits for four years, and the fiscal deficit has been close to 9 percent. As a result, India suffered a heavy bout of turbulence last fall, with sharp downward pressure on the rupee. Recently, there has been greater stability as the external deficit has been reduced and as the central bank has taken stronger measures against inflation. Nevertheless, the macroeconomic environment is still not reassuring enough for foreign or domestic investors.

**Figure 10 Indian GDP growth rate, 2005–13, in percent**

*Source: Reserve Bank of India*
Figure 11 Inflation (in percent)

CIP = Consumer Price Index
WPI = Wholesale Price Index

Figure 12 Government budgetary position (net lending in percent of GDP)

Sources: IMF and World Economic Outlook
Moving beyond the macro-environment to the policy changes themselves, the picture is more mixed, and, on balance, India has perhaps become more open in some important ways than before.

Table 2 below provides both an inventory of recent actions and a possible framework for assessing them in trade policy terms. It highlights a number of important features.

**Table 2 Inventory of and framework for assessing recent policy actions**

<table>
<thead>
<tr>
<th>3. Inventory of and Framework for Evaluating Recent Indian Trade and Investment Policies</th>
<th>Liberalizing</th>
<th>Restrictive</th>
<th>Neutral/Unclear</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Border measures that affect/discriminate against foreign business</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural tariffs</td>
<td>Local content requirements (LCRs) in solar energy (under WTO adjudication)</td>
<td>LCRs in government procurement of electronic products</td>
<td></td>
</tr>
<tr>
<td>Foreign direct investment (retail, defence, telecommunications, pensions, civil aviation)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Foreign portfolio investment and foreign debt limits</td>
<td>LCRs in electronic products (fully reversed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Domestic regulations that predominantly affect foreigners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual Property (IP): Due process</td>
<td>IP: Section 3(d) of Indian patent law</td>
<td>IP: Patent denial</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compulsory licensing for non-working</td>
<td>Compulsory licensing for access to affordable drugs</td>
<td></td>
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<tr>
<td></td>
<td>Sanitary and phyto-sanitary measures (under WTO adjudication)</td>
<td>Nuclear liability law</td>
<td></td>
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<tr>
<td></td>
<td>Taxation (partially addressed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III. Domestic regulations that affect foreign and domestic investors</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Land acquisition bill</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standards for and testing of electronic products</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>In-country security certification of telecommunications equipment</td>
<td></td>
</tr>
</tbody>
</table>

First, recent actions can be placed into three categories:

- Pure border measures that affect foreign investors and suppliers
- Behind-the-border domestic measures or regulations that disproportionately affect foreign business
- Behind-the-border domestic measures that affect both foreign and domestic business

So, it is not the case that all recent actions have targeted or affected foreign business alone.

Second, recent actions have encompassed those that are positive (liberalizing), negative (restricting), and more mixed in their impact and difficult to evaluate. Liberalizing measures have largely related to foreign capital. Sweeping liberalization of the capital account has been introduced in the last 12–18 months, much of it in response to the rupee crisis last year. The FDI regime was liberalized in several sectors—multibrand retail, defense, petroleum and natural gas, stock exchanges, telecommunications, and infrastructure—to a greater extent than in recent
history. In many of these sectors, FDI is allowed to the extent of 75 percent. Similarly, in order to attract foreign capital to finance the current account deficit, the government also relaxed a number of constraints to foreign equity, portfolio, and debt inflows. Apart from restrictions on foreign inflows into the bond market, the capital account is mostly unrestricted.

Less noticed but no less important has been the sweeping liberalization of tariffs in agriculture. Since the food crisis, tariffs on the major cereals including rice and wheat have been slashed to zero, and most quantitative restrictions in this sector have been eliminated.

Restrictive trade or “protectionist” (interpreted in a broad sense as discriminatory against foreign suppliers) actions have mainly taken the form of requiring local sourcing of inputs, parts, and components, not just in relation to government purchases but also for the private sector. The sectors covered include electronic products and solar energy. Popularly referred to as Preferential Market Access (PMA), they are more aptly described as local content requirements (LCRs).

On taxes, retroactive taxation measures were introduced in the 2012 budget, and tax actions were taken against several foreign companies, which had a dampening effect on investor sentiment.

Some of the more restrictive actions, such as LCRs in the electronic sectors, that could have been imposed on private firms have been withdrawn. On taxation, two potentially problematic tax circulars on taxation of research and development (R&D) centers have been withdrawn, and so-called safe harbor provisions have been announced. Disputes with individual companies have also been addressed to some extent.

Some restrictive actions reflect sound objectives, but their implementation needs improvement. These relate in particular to the in-country security testing requirements imposed on telecommunications equipment where security fears against China have resulted in stringent—perhaps overly stringent—actions.

Some restrictive actions are being adjudicated in the World Trade Organization (WTO), such as the LCRs in solar energy and sanitary and phytosanitary measures in agriculture. And some are restrictive in effect but are not inconsistent with India’s WTO obligations, such as the LCRs imposed in government procurement because India is not a member of the WTO's Government Procurement Agreement.

In some cases, the actions are difficult to evaluate and really depend on the appropriate yardstick. In the case of the land acquisition bill and standards imposed in the electronic sector, foreign and domestic businesses have been equally impacted. Yet others have become bones of contention, not because they are restrictive but because they have arguably not been clear and liberal enough. The best example relates to the civil nuclear liability law passed by parliament where limits have not been placed on the liability of suppliers, which is having a deterrent effect on investment in this sector. Similarly, in retail, having opened up the sector to FDI, the government clawed back
some of the opening by imposing obligations (relating to sourcing and up-front capital) on potential investors. These claw-backs have themselves witnessed claw-back. But the impact of stop-go policies has been to create uncertainty and a sense of arbitrariness.

**Intellectual Property**
Perhaps the most contentious issues have related to intellectual property protection in the pharmaceutical sector. The complaints can be summarized as the alleged dilution of the intellectual property of foreign patent owners in the pharmaceutical sector. This dilution has taken the form of patent denial and revocation (Glivec), actual and potential compulsory licensing (Nexavar), and offending provisions in India’s patent law, notably Section 3(d) and compulsory licensing for nonworking.

How should these actions be assessed?

**Positive Developments.** Not all IP-related actions can be characterized as protectionist or inimical to foreigners. A very positive development, namely due process, has gone unnoticed. For foreign companies and patent holders, India has provided due process comparable to that of advanced democracies. This was especially true in the Novartis patent denial case and also in the Nexavar compulsory licensing case. Patent offices have decided on patents and compulsory licensing granted to Indian companies; their verdicts have been challenged before an independent appellate body, whose verdicts have in turn been contested in the courts.

In every instance, the deciding authority has reviewed the arguments and facts, drawn on evidence, relied upon domestic and foreign precedents, and explained its decisions. Even if outcomes have gone against foreign companies, there can be little doubt about procedure. And in a country notorious for interminable delays in administrative and judicial procedures, patent-related cases have been decided in timely fashion.

Moreover, balance and fairness toward foreigners and to the demands of intellectual property rights have not been ignored. For example, the Indian Supreme Court decided to take on the Novartis case instead of waiting for the lower courts out of concern that delays could cut into the life of the patent. Also, when deciding on the compulsory licensing fee that generic drug makers should pay Bayer (the German maker of the cancer drug Nexavar), the Indian patent office opted for the highest end of the range recommended by the World Health Organization (WHO). In the subsequent review, the appellate body increased this fee further. And several recent cases have been decided in favor of higher protection of patents owned by foreign pharmaceutical companies (e.g. Bristol Meyer's *Desatinib*; Roche’s *Herceptin*, and Schering’s compound for treating heart disease).

**Restrictive Developments.** In contrast, certain aspects of Indian patent law, such as Section 3 (d) and compulsory licensing for nonworking, are problematic. Apart from the fact that very few countries have the equivalent of the Section 3 (d) provision in their law and that defining efficacy
can be arbitrary, there are other policy tools that can help India address frivolous patenting. And compulsory licensing for nonworking sits uneasily with Article 27.1 of the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs).

On both of these issues, the United States should consider initiating WTO disputes against India. Given the possibility that the United States might successfully prosecute these issues in the WTO, there would be a deterrent effect on other countries seeking to emulate India’s example. A successful WTO/multilateral verdict would also help to bolster the credibility of the US pharmaceutical industry and its claims against India.

**Mixed/Open Developments.** In relation to other aspects of the Indian IP regime—especially patent denial and compulsory licensing for providing affordable drugs—however, the prima facie claims of unfairness to foreign holders of IP need to be more carefully assessed. The metrics can be crucial in assessing Indian actions.

If the Indian IP regime is to be compared with those in industrial countries or the richer trading partners of the United States, it will fall short. However, on a number of other metrics, the assessment would be different. If the metric is consistency with India’s WTO obligations or comparison with India’s TRIPs regime in a historical perspective, India’s IP regime may not fare badly. On the latter, table 3 shows that most of today’s industrial countries adopted strong pharmaceutical protection when they were roughly 10 to 17 times as rich as India was when it undertook the TRIPs commitments.

<table>
<thead>
<tr>
<th>OECD adopters</th>
<th>Year of adoption</th>
<th>GDP per capita at adoption</th>
<th>GDP per capita relative to India at adoption</th>
<th>GDP per capita in 2011 relative to India's</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>1976</td>
<td>14,193</td>
<td>9.7</td>
<td>8.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1977</td>
<td>24,309</td>
<td>16.7</td>
<td>12.4</td>
</tr>
<tr>
<td>Italy</td>
<td>1978</td>
<td>15,380</td>
<td>10.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1978</td>
<td>19,127</td>
<td>13.1</td>
<td>10.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>1978</td>
<td>17,584</td>
<td>12.1</td>
<td>10.0</td>
</tr>
<tr>
<td>Canada</td>
<td>1983</td>
<td>21,977</td>
<td>15.1</td>
<td>9.8</td>
</tr>
<tr>
<td>Denmark</td>
<td>1983</td>
<td>19,683</td>
<td>13.5</td>
<td>9.9</td>
</tr>
<tr>
<td>Austria</td>
<td>1987</td>
<td>18,824</td>
<td>12.9</td>
<td>10.4</td>
</tr>
<tr>
<td>Spain</td>
<td>1992</td>
<td>16,881</td>
<td>11.6</td>
<td>8.0</td>
</tr>
<tr>
<td>Greece</td>
<td>1992</td>
<td>15,176</td>
<td>10.4</td>
<td>6.6</td>
</tr>
<tr>
<td>Norway</td>
<td>1992</td>
<td>24,032</td>
<td>16.5</td>
<td>14.6</td>
</tr>
<tr>
<td>Emerging Country adopters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>1995</td>
<td>7,594</td>
<td>5.2</td>
<td>2.6</td>
</tr>
<tr>
<td>China</td>
<td>1992/93</td>
<td>2,297</td>
<td>1.6</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>India</strong></td>
<td><strong>1995</strong></td>
<td><strong>1,456</strong></td>
<td><strong>1.0</strong></td>
<td><strong>1.0</strong></td>
</tr>
<tr>
<td>Argentina</td>
<td>1995</td>
<td>9,078</td>
<td>6.2</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Source: Penn World Tables, 8.0 and Lanjouw (2002)

Notes: GDP per capita is in PPP, constant 2005 dollars; the year of adoption for emerging countries (excluding China) refers not to the enactment of their laws but to the TRIPs date for protecting pharmaceutical product inventions.
Another metric might be an Indian calculus that balances three objectives: contributing to a “fair” share of the fixed costs of genuine global R&D generation (which is consistent with the spirit of the TRIPs agreement), promoting technological development domestically, and providing affordable access to medicines for the domestic population. This is a more difficult calculus and is at the heart of disagreements about the strength of IP protection in India and other developing countries—not least because, as the last column of table 3 shows, India’s level of development is still substantially below that of industrial countries.

Finally, a model of cooperation between global pharmaceutical companies and developing countries is emerging that should be watched closely. A California-based pharmaceutical company—Gilead Sciences Inc. —and a number of Indian companies are entering into a partnership based on effective protection of IP combined with tiered pricing and extensive licensing to domestic companies that ensures better diffusion of IP products at affordable prices in India while ensuring a decent return for the innovating company.

**IV. Policy Conclusions: Economic**

India’s economy has been a source of concern because of a deteriorating investment climate for all business (foreign and domestic), declining growth, and a slowly stabilizing macroeconomy. These conditions have contributed to worsening foreign perceptions of the Indian economy and business climate.

The concerns of US business should be addressed seriously and expeditiously. Many of these concerns could be addressed through WTO dispute settlement. This approach is desirable for a number of reasons. India takes its WTO obligations very seriously and has had a very good track record of implementing WTO dispute settlement rulings (table 4 below).

| Table 4 India as respondent: Compliance in World Trade Organization disputes |
|---------------------------------|----------------|----------------|------------------|-----------------|
| Initiated by US                 | All disputes | Disputes in process | Disputes settled | Compliance 2/ |
| Initiated by other countries    | 6            | 2               | 4                | 4               |
| Total                           | 22           | 10              | 12               | 12              |

1/ Defined to include parties in consultation, panels composed, or authority for panel lapsed

2/ Defined to include panel reports adopted, implementation of adoption reported, or disputes settled or terminated, and to exclude requests for compensation or retaliation

Source: Compiled from WTO website ([http://wto.org/english/tratop_e/dispu_e/dispu_current_status_e.htm](http://wto.org/english/tratop_e/dispu_e/dispu_current_status_e.htm))
In fact, it is not widely recognized that arguably the most important and sweeping reform of Indian trade policy occurred because of a WTO dispute panel—initiated by the United States—that ruled against India’s quantitative restrictions on consumer goods. These restrictions were severe in intensity and very broad in scope. From a political perspective, India can more easily change policies in response to WTO rulings than if they are seen as being dictated by the United States or other major trading partners. For the United States, the virtue of using WTO dispute settlement is to reassure the world of its faith in rule-based multilateral institutions; it is also diplomatically and politically less confrontational than unilateral and bilateral actions.

Most critically, it must be recognized that many of the recent concerns are sectoral. They should not obscure positive developments in broader policies (such as India’s opening up to foreign capital). They should also not obscure the positive, long-term trends in US-India bilateral trade and FDI outcomes as well as in India’s overall trade outcomes.

V. Policy Conclusions: Strategic

As this body deliberates on Indian trade and investment policies and delivers its findings, it should take account of the broader strategic setting. Trade policy does not operate in a vacuum. It is important to ensure that the United States exercises care in rendering unilateral verdicts based on sectoral interests, which carry the risk of punitive actions.

Moreover, it is important to adopt a forward-looking perspective. Elections are looming in India, and it is increasingly likely that there will be a new government eager to revive the Indian economy based on a more business-friendly approach. Ensuring that a positive start to that effort is not set back by adverse foreign judgments is critical.

At a time when Asian security is in a great flux and the United States has serious security interests and concerns in the region, it is important to strengthen ties with India with a view to building a strategic partnership. The United States and India, individually and collectively, have a vital common interest and key role in ensuring China’s peaceful rise.

Thus, trade and economic relations between India and the United States need a broad strategic framework for which this hearing should pave the conditions. This framework would include as critical elements embracing the principle of, and initiating preparatory work toward, a free trade agreement in the medium term. This is so for a number of reasons.

First, the prize is big. The starting point for forging a cooperative partnership is the recognition that despite frictions, the underlying potential is enormous. In my recent book *Eclipse: Living in the Shadow of China’s Economic Dominance*, I project that the Indian economy has the potential to post medium-term growth of about 8 percent. Once India navigates the current turbulence, this $4.7 trillion economy will double every 7 to 10 years; the trillion-dollar trade could also double every 7 years so that by 2018, it could reach close to 2 trillion dollars.
Second, the framework is required to address the broader regulatory challenges facing US business in telecommunications, preferential market access policies, intellectual property, tax uncertainty, and others. These problems will inevitably be of a recurring nature. To resolve them without excessive friction, the two countries will need an ongoing mechanism of dialogue backed up by more formal arrangements, including possibly a free trade agreement.

Third, the framework is required to address the discrimination faced by US business in Indian markets and vice versa. This discrimination is happening indirectly but substantially because of the free trade agreements each country is signing with other trading partners.

India’s FTAs include: the South Asia Free Trade Area (SAFTA) with Afghanistan, Bangladesh, Bhutan, and Maldives; India-ASEAN Comprehensive Economic Cooperation Agreement (CECA); Regional Comprehensive Economic Partnership (RCEP) Agreement among ASEAN + 6, the latter comprising Japan, Korea, New Zealand, Australia, China, and India); and the India-EU Broad Based Trade and Investment Agreement (BTIA). The key US FTAs that will discriminate against India are the Trans-Pacific Partnership (TPP) and the Trans-Atlantic Trade and Investment Partnership (TTIP).

Finally, the broader framework will represent “going big.” And going big is necessary because this is a relationship between two great democracies with deep commonalities and shared strategic interests; because this is a marathon not a sprint; because this is a multi- not uni-dimensional relationship; and because going big is the best way to address even the small. To put it more colloquially, “you can’t solve problems relating to chicken by only talking chicken.”

My colleague C. Fred Bergsten and I will soon be finalizing a book, From Wariness to Partnership: An Economic Partnership of the Largest Democracies, which will elaborate fully on such a broad framework, its rationale, content, and the impediments to achieving it and how they might be overcome.
Bibliography


India’s Trade Investment and Industrial Policies: A Macro Assessment

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Dennis Weatherstone Senior Fellow, Peterson Institute for International Economics, and Senior Fellow, Center for Global Development

Oral Testimony
Section 332-543 hearing on India
United States International Trade Commission

February 12, 2014
Overview

• Technical assessment
  – US-India economic integration
  – Indian trade regime
  – Recent policy developments

• Policy Conclusions
1. **US-India bilateral economic integration remains strong**

Bilateral goods trade grew at 13% per year, faster than US goods trade (4.6%), and faster than India’s trade with EU and Japan.

Bilateral services trade grew at 17.4% per year, faster than US services trade (6.7%) and almost as fast as Indian services trade (19.7%).

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**Trade of India and U.S.**

*(in current dollars; index 2000=100)*

- **India-Total**
- **India-Total excl. China**
- **India-US**
- **United States-Total**

Labels represent dollar amounts in 2000 and 2012. Trade excludes fuel and gold.

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**US - India Services trade**

- **Total US Services trade**
- **Total Indian Services trade**

Labels represent dollar amounts in 2000 and 2012.
1. **US-India bilateral** economic integration remains strong without adversely affecting US employment.

US trade with India is almost balanced compared with more than $300 billion deficit with China.

**Source:** Direction of Trade Statistics
2. India’s **global** economic integration remains strong
2. India’s overall trade outcomes are positive while adding to global demand

India’s trade-to-GDP (goods and services) ratio is unusually high given its size and level of development. But unusual trade also accompanied by flexible exchange rate and current account deficits which add to global demand.
2. Manufacturing tariffs have declined dramatically and are now close to OECD levels
2. However, services regime remains highly protected
3. Inventory of and Framework for Evaluating Recent Indian Trade and Investment Policies

<table>
<thead>
<tr>
<th>Liberalizing</th>
<th>Restrictive</th>
<th>Neutral/Unclear</th>
</tr>
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</table>

**I. Border measures that affect/discriminate against foreign business**

- Agricultural tariffs
- Local content requirements (LCRs) in solar energy (under WTO adjudication)
- LCRs in government procurement of electronic products
- Foreign direct investment (retail, defence, telecommunications, pensions, civil aviation)
- LCRs in electronic products (fully reversed)
- Foreign portfolio investment and foreign debt limits

**II. Domestic regulations that predominantly affect foreigners**

- Intellectual Property (IP): Due process
- IP: Section 3(d) of Indian patent law
- Compulsory licensing for non-working
- Sanitary and phyto-sanitary measures (under WTO adjudication)
- Taxation (partially addressed)

- IP: Patent denial
- Compulsory licensing for access to affordable drugs
- Nuclear liability law

**III. Domestic regulations that affect foreign and domestic investors**

- Land acquisition bill
- Standards for and testing of electronic products
- In-country security certification of telecommunications equipment
III. Recent Actions

• Three kinds of actions:
  – Pure border measures
  – Domestic measures with greater foreign impact
  – Domestic measures affecting foreign and domestic business

• Liberalizing actions have had macroeconomic impact (opening to FDI and other foreign capital);

• Restrictive actions are mostly sectoral and some have been reversed or partially addressed (local content requirements (LCRs) and taxation)

• Some restrictive actions reflect sound objectives but clumsy implementation (security testing of telecom equipment stems from fear of China)

• Some restrictive actions are being adjudicated in WTO (LCRs in solar energy, and sanitary and phytosanitary measures in agriculture)

• Impact of some actions unclear because it depends on yardstick for evaluation. They:
  – impact both foreign and domestic business (land acquisition bill, safety, and product testing);
  – are consistent with WTO obligations (LCRs in government procurement)
  – don’t go far enough to satisfy foreign concerns (civil nuclear liability law and FDI in retail)
Intellectual Property

• Recent Indian measures have encompassed the positive, negative, and open

• Due process has been commendable: Expeditious, transparent and well-explained verdicts, recourse of appeal to higher authority, remuneration in line with, even greater than, international norms
  – Several recent decisions in favor of foreign patent holders (Bristol-Meyer, Roche, Schering)

• Restrictive ones should be tested in WTO: (Section 3(d) and compulsory licensing for non-working)

• How to assess patent revocation and compulsory licensing?
  – If standard is IP in richer trading partners of US, India falls short

• But assessment more open under alternative standards:
  – Consistency with WTO obligations
  – IP regime in rich countries at comparable levels of development
  – Indian welfare calculus balancing three objectives: contributing to “fair” share of global R&D, promoting technology, and providing affordable access to medicines

• Emerging model of cooperation based on effective IP protection combined with tiered pricing: Gilead Sciences Inc.
Policy Conclusions: Economic

• India’s economy is a source of concern because of a deteriorating investment climate for all business (domestic and foreign), declining growth and a slowly stabilizing macro-economy.

• Concerns of US business should be addressed seriously and expeditiously, many through WTO dispute settlement.

• But concerns are mostly sectoral and;

• should not obscure positive developments in broader policies (opening to FDI and foreign capital); and

• should not obscure positive, long-term trends in actual trade outcomes (rising trade-GDP) achieved without harming others (current account deficits not surpluses).
Policy Conclusions: Strategic

• Exercise care in rendering unilateral verdicts that reflect sectoral interests and carry risks of punitive actions

• Adopt forward-looking perspective especially with likelihood of new government in India

• Take account of shared security and strategic interests in Asia

• Create conditions for best addressing economic and strategic concerns: through reviving trade cooperation and eventually moving toward an India-US free trade agreement (INDUS) elaborated in Bergsten and Subramanian (forthcoming)