Indo-US Economic Relations

Prospects and Challenges

Pravakar Sahoo, Ashwini *and* ***Geethanjali Nataraj***

India and the Unites States of America (USA) have much in common – diversity, democracy, commitment to global causes. India being the 10th largest and USA being the number one economies account for about 27 per cent of the world production and play a major role in shaping the global economy. The last decade witnessed increased economic relations between these two resulting in four-fold increase in trade and investment making India the twelfth largest trading partner of USA. Though trade and investment constitute the core of the Indo-US strategic dialogue, such cooperation in its current form lacks focus and the actual trade has been much below potential given the size and complementarity between the two countries. In this context, the present paper analyzes trade, investment and mutual cooperation between the two countries and identifies a number of issues to improve US-India economic relations.

Introduction

INDIA and USA enjoy a lot of complementarity such as diversity, democracy, commitment to global causes. Both are key players in world trade and their relationship is expected to play a key role in the future. Further, with the Indian economy estimated to grow to 90 per cent of the US economy by 2050[1], the flourishing Indo-US relationship will be a decisive force shaping the contours of the world economy in the 21st century. USA has remained one of India's foremost trading partners, a primary source of investments, the first resort for technology acquisition, and significant partner for funds and aid support. The US-India relationship is taking on increased political

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and economic importance, particularly after the successful conclusion of the landmark deal on cooperation in civil nuclear technology. Since the opening up of the Indian economy in 1991, the US companies have been attracted to India's large consumer markets and there has been substantial improvement in economic relations since then.[2] Since 2000, the two countries have been making efforts to strengthen institutional structures relating to bilateral economic relations through the "India-USA Economic Dialogue" that aims at deepening the Indo-American partnership through regular dialogue and engagement (CRS report, 2005; 2009). Overall, economic relations have been the backbone of a rapidly strengthening strategic relationship between the two countries. The three key aspects of the India-US strategic dialogue[3] include: (1) trade and investment; (2) security cooperation; and (3) the civil nuclear agreement.

The visit of Prime Minister Dr. Manmohan Singh to Washington during 22-26 November 2009 reaffirmed the global strategic partnership between India and the United States and emphasized on strengthening high-technology trade between the two countries. In 2009, both the countries signed the Framework for Cooperation on Trade and Investment, based on the success of the Trade Policy Forum[4], to bring maximum benefit to both the countries. In November 2010, President Obama's visit to India helped establish a long-term framework for Indo-US global strategic partnership. In this backdrop, an assessment of the Indo-US economic partnership would not be only appropriate but also provide some direction to policy makers and scholars interested in the area to learn about the issues affecting the relationship and the opportunities that exist for both the countries.

Indo-US Trade Relations

The trade and economic partnership between USA and India has been a key component of the bilateral relationship and important to each other as India is now one of the fastest growing economies in the world and USA is the world's largest economy. During 2000-2010, the value of all bilateral trade (goods and services) increased fourfold amounting to US$73.1 billion in 2010. India is a net exporter to USA, with exports amounting to US$43.4 billion as against imports of US$29.7 billion. The US merchandise trade totalled US$48.75 in 2010 billion making India the 12th largest trading partner of USA. Exports to USA constitute 11 per cent of India's exports while imports from

USA contribute to 6 per cent of India's total imports. As Figure 1 shows, there has been increase in both exports and imports of USA to India. The US exports to India have increased from US$6.81 billion in 2001 to US$29.71 billion in 2010. Imports on the other hand have increased at a faster pace from US$11.59 billion in 2001 to US$43.37 billion in 2010. Therefore, there has been a marked increase in the US trade deficit with India over last one decade. However, India's export

FIGURE 1

USA'S TRADE WITH INDIA (US$ BILLION)

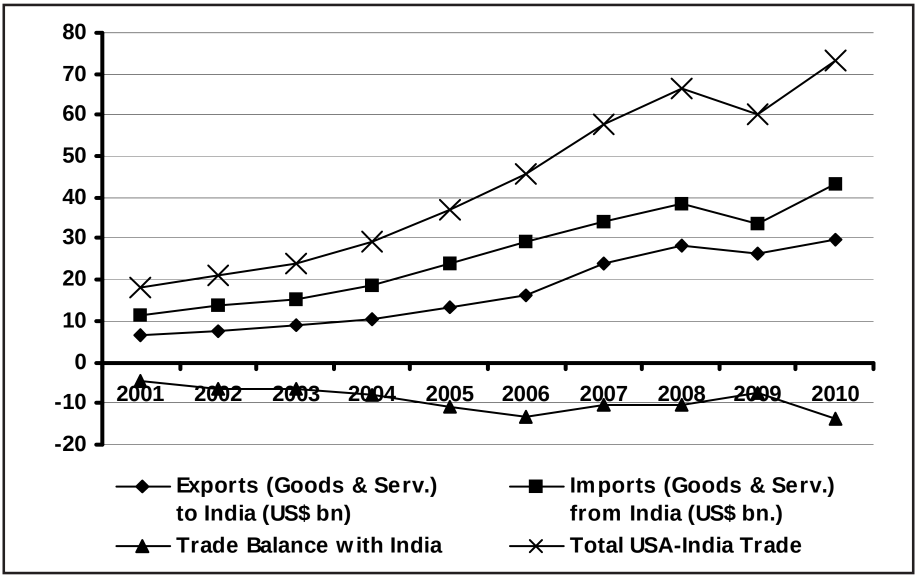
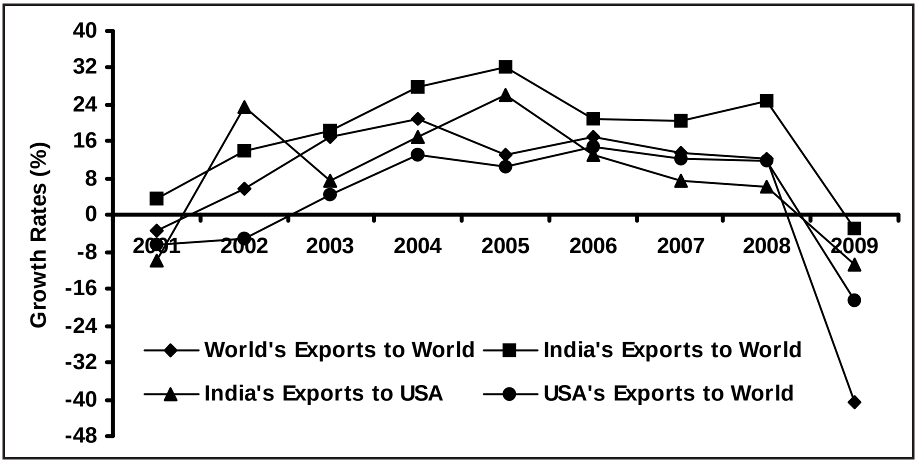


FIGURE 2

GROWTH RATES OF EXPORTS



growth to USA has been lower than the India's exports to the rest of the world (Figure 2). In the aftermath of the global financial crisis, India's exports witnessed overall decline but the intensity of decline to USA is higher than to the rest of the world. Overall, India's export growth has been higher than world export growth showing India's increasing integration with the rest of the world and India's export competitiveness.

USA has been increasingly exporting high-tech exports to India and as a result the total exports of advanced technology products from USA to India have increased from US$1.3 billion in 2003 to over $4 billion in 2009. Some of top export commodities in last few years have been aircraft, spacecraft, diagnostic or lab reagents, advanced machinery, computer hardware, etc.[5] (Table 1). On the other hand, India's exports constitute mostly labour intensive products, raw materials and semi engineering goods. Major US imports from India include textiles and ready-made garments, internet-enabled services, agricultural and related products, gems and jewellery, leather products, and chemicals (Table 2).

In addition to their merchandise trade flows, India and USA have significant service trade relations. In 2009, the US private services exports to India totalled US$9.94 billion, and imports from India totalled US$12.38 billion. The leading US services export to India was education (US$3.15 bn), and the leading service import from India was "business, professional, and technical services" (US$8.92 bn). The rapidly growing software sector is boosting India's service exports and modernizing its economy. Software exports surpassed US$35 billion in FY 2009, while business process outsourcing (BPO) revenues hit US$14.8 billion in 2009, mostly to USA. The following section reports trade indices reflecting pattern, compatibility and success of bilateral trade relations.

Trade Indices

International and Bilateral Competitiveness: The sectoral comparative advantage is an important indicator of a country's export prowess on the assumption that the commodity pattern of trade reflects the inter-country differences in relative costs as well as in non-price factors. Here we compute the International Revealed Comparative Advantage (IRCA) of India and USA in the world market at the HS 2, 4 and 6

TABLE 1

USA'S TOP 10 EXPORTS TO INDIA

Product Code	Product Name	Values (US$ '000)			Share in Total Imports (%)		
		TE 2002	TE 2006	TE 2009	TE 2002	TE 2006	TE 2099
88	Aircraft, spacecraft, and parts	332562	888047	2948435	8.66	11.03	16.78
84	Nuclear reactors, boilers, mchy	875213	1459699	2346699	22.78	18.14	13.35
71	Natural/cultured pearls, prec stone	230224	747483	2258896	5.99	9.29	12.85
85	Electrical mchy equip parts thereof	536438	991728	1291144	13.96	12.32	7.35
90	Optical, photo, cine, meas, checking	292697	581704	904289	7.62	7.23	5.15
27	Mineral fuels, oils & product	73898	355137	747427	1.92	4.41	4.25
29	Organic chemicals	230566	479223	613275	6.00	5.95	3.49
72	Iron and steel	58189	274274	572750	1.51	3.41	3.26
39	Plastics and articles thereof	90417	216284	504241	2.35	2.69	2.87
38	Miscellaneous chemical products	155790	213209	349581	4.06	2.65	1.99
	Total Exports	3841633	8048036	17573809	100	100	100

Note: TE refers to Triennium ending which implies average of three years. For example, TE 2002 refers to average between 2000 to 2002.

Source: Calculated from UN COMTRADE, 2010.

TABLE 2

INDIA'S TOP 10 EXPORTS TO USA

Product Code	Product Name	Values (US$ '000)			Share in Total Imports (%)		
		TE 2002	TE 2006	TE 2009	TE 2002	TE 2006	TE 2099
71	Natural/cultured pearls, prec stone	3230378	5155245	5470094	28.46	26.08	22.15
62	Art of apparel & clothing access	1445467	2068755	1890138	12.73	10.47	7.65
73	Articles of iron or steel	319505	664715	1429404	2.81	3.36	5.79
61	Art of apparel & clothing accessories	556315	994337	1374923	4.90	5.03	5.57
30	Pharmaceutical products	110352	343451	1362753	0.97	1.74	5.52
29	Organic chemicals	313070	702070	1361292	2.76	3.55	5.51
85	Electrical mchy equip parts thereof	264524	884463	1291546	2.33	4.47	5.23
84	Nuclear reactors, boilers, mchy	273160	771954	1283788	2.41	3.91	5.20
63	Other made up textile articles; set	568280	1056874	1283558	5.01	5.35	5.20
87	Vehicles o/t railw/tramw roll-stock	159259	434394	600815	1.40	2.20	2.43
	Total Exports	3841633	8048036	17573809	100	100	100

Note: TE refers to Triennium ending which implies average of three years. For example, TE 2002 refers to average between 2000 to 2002.

Source: Calculated from UN COMTRADE, 2010.

digit levels using Balassa's (1965) measure of relative export performance by country and industry/commodity.[6] Similarly, India and USA bilateral revealed comparative advantage (BRCA) is computed using modified version of Balassa's index called the Pasche formula (2002).

The summary table of India's IRCA shows that nearly 40 per cent of India's commodities at the HS 2 digit level are competitive in the world market over the last decade. However, this percentage drops at more disaggregate levels of classification at the HS 4 and 6 digits. More importantly, the number of commodities having comparative advantage witnessed gradual fall over the period 2002-2009. Similarly, the IRCA's of USA were also calculated. It is evident that being a large advanced economy, USA has a better comparative advantage as compared to India in the world market. This gets reflected at a more disaggregate level of HS 4 and 6 digit level (see Table 3).

TABLE 3

INTERNATIONALLY COMPETITIVE COMMODITIES FOR INDIA AND FOR USA

Classification	TE 2002	TE 2004	TE 2006	TE 2007	TE 2008	TE 2009	Total number of Commodities
Internationally Competitive Commodities for India							
2 Digits Level	41	43	38	40	41	39	96
4 Digits Level	372	387	393	380	377	352	1241
6 Digits Level	1452	1504	1501	1527	1486	1287	5111
Internationally Competitive Commodities for USA							
2 Digits Level	31	34	38	39	36	34	96
4 Digits Level	502	510	519	494	475	460	1241
6 Digits Level	1877	1914	1948	1821	1762	1756	5111

Note: TE refers to Triennium ending which implies average of three years. For example, TE 2002 refers to average between 2000 to 2002.

Source: Calculated from UN COMTRADE, 2010.

While a country may be internationally competitive in a certain product, it may not necessarily be competitive *vis-a-vis* a particular export destination. In the case of India, the summary Table 4 shows that there is not much difference between IRCA of India and BRCA of India with USA when it comes to the number of commodities in recent years. Interestingly, the number of commodities showing BRCA in USA has been consistently increasing and that supports India's success in the US markets in recent years. However, the

TABLE 4

BILATERALLY COMPETITIVE COMMODITIES FOR INDIA AND FOR USA

Classification	TE 2002	TE 2004	TE 2006	TE 2007	TE 2008	TE 2009	Total number of Commodities
Bilaterally Competitive Commodities of India with USA							
2 Digits Level	27	26	31	36	37	43	96
4 Digits Level	270	312	365	386	399	421	1241
6 Digits Level	925	1040	1266	1326	1384	1389	5111
Bilaterally Competitive Commodities of USA with India							
2 Digits Level	26	25	21	20	19	19	96
4 Digits Level	266	249	269	237	221	212	1241
6 Digits Level	780	813	865	786	771	722	5111

Note: TE refers to Triennium ending which implies average of three years. For example, TE 2002 refers to average between 2000 to 2002.

Source: Calculated from UN COMTRADE, 2010.

bilateral revealed comparative advantage of USA in the Indian market shows that USA does not have a strong presence in the Indian markets *vis-a-vis* its competitiveness in the world market. This is obvious, USA is one of India's largest trading partner but not *vice-versa*.

Export Dynamism

The export dynamic products can be recognized by setting a cut-off growth rate and identifying a list of products that have growth rates at the same level or above the cut-off over a period of time. In this analysis, the benchmark to determine export dynamic commodities for both the countries is the total aggregate export growth rate of both India and USA.[7] It is important to identify such commodities as these would eventually contribute significantly to the overall export earnings of a nation. The export dynamic indices show that performance of USA is marginally better than India. During the period 2001-2009, there is no commodity which is export dynamic at the HS 2 digit level for India and only 1 commodity at the 4 digit level and 4 commodities at the 6 digit level that are export dynamic. In the case of United States, there is 1 commodity which is export dynamic at the 2 digit level and 3 and 7 commodities at the 4 and 6 digit levels, respectively. The export dynamic commodity of USA at the 1 digit level includes pharmaceutical products and the commodities which are dynamic at the 4 and 6 digit levels are shown in Table 5.

TABLE 5

USA'S AND INDIA'S EXPORT DYNAMIC COMMODITIES

Sl. No.	Product Code	Product Names	Sl. No.	Product Code	Product Names
		USA's Export Dynamic Commodities at 2 Digits Level			*India's Export Dynamic Commodities at 2 Digits Level*
1	30	Pharmaceutical products.			
		USA's Export Dynamic Commodities at 4 Digits Level			*India's Export Dynamic Commodities at 4 Digits Level*
1	3303	Perfumes and toilet waters.	1	3211	Prepared driers.
2	3002	Human blood; animal blood prepared			
3	5205	Cotton yarn (other than sewing there of			
		USA's Export Dynamic Commodities at 6 Digits Level			*India's Export Dynamic Commodities at 6 Digits Level*
1	81020	Raspberries, blackberries, mulberry	1	40610	Fresh (unripened or uncured) cheese
2	160249	Of swine: Other, including mixture	2	320619	Pigments and preparations based on
3	681120	Other sheets, panels, tiles and sim	3	321100	Prepared driers.
4	71310	Peas (Pisum sativum)	4	380890	Other
5	848340	Gears and gearing, other than tooth			
6	847130	Portable digital automatic data pro			
7	330300	Perfumes and toilet waters.			

Source: Calculated from UN COMTRADE, 2010.

Trade Complementarity and Similarity Index

The trade complementarity index (TCI)[8] measures the degree to which the export pattern of one country matches the import pattern of another. The TCI takes the values between 0 and 100, with zero indicating no overlap and 100 indicating a perfect match in the import/ export pattern. TCI of India with USA shows that there has been an increasing degree of complementarity of India's export pattern with import patterns of USA. The index has been above 40 and has increased over the decade. Similarly, the trade complementarity index of USA with India has also increased over the given period (See Figure 3a). The Export Similarity Index (ESI) is another overlap index which measures the degree of similarity between the export profiles of the two economies. The more similar the export profiles are, the more likely that economies are competitors in global markets. High similarity indices may also indicate limited potential for inter-industry trade with a regional trading arrangement. Export similarity index between India and USA at all levels has increased over the decade but has remained below 50 implying that there is less overlapping between the exports of both the countries (see Figure 3b). The countries therefore are less of competitors.

FIGURE 3a

TRADE COMPLEMENTARITY INDEX

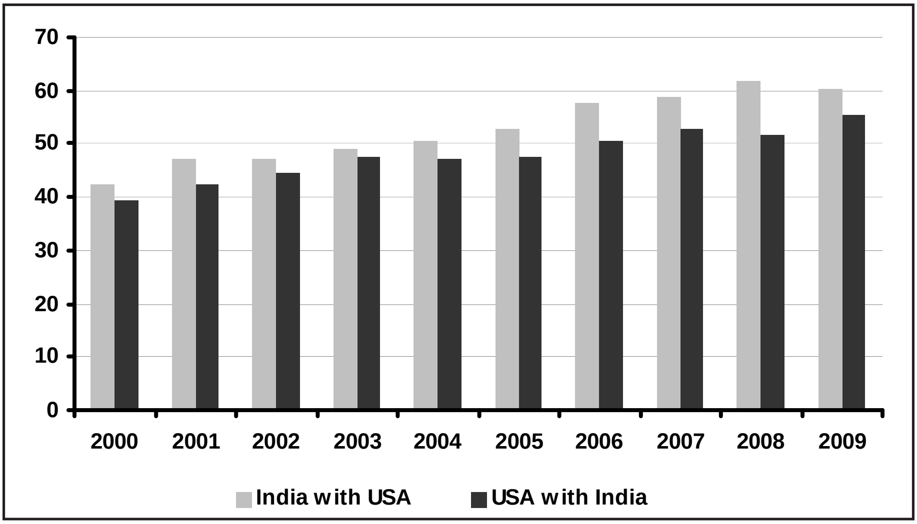
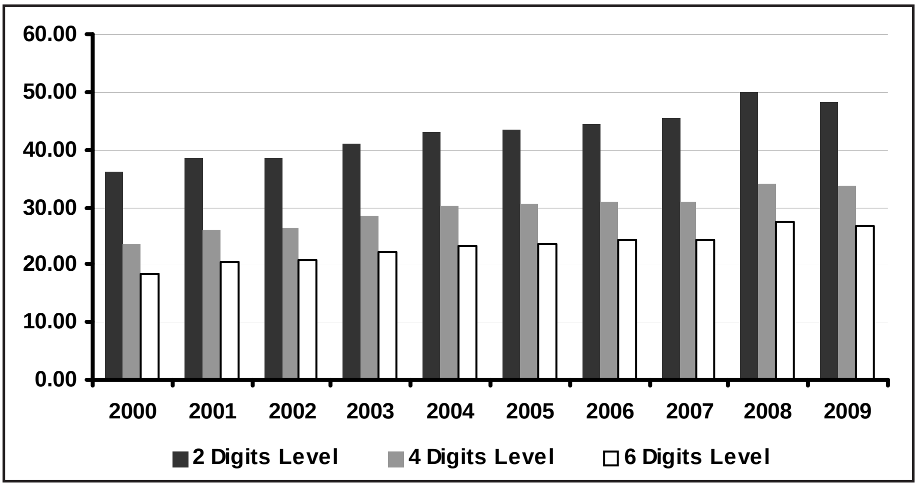


FIGURE 3b

EXPORT SIMILARITY INDEX BETWEEN INDIA AND USA



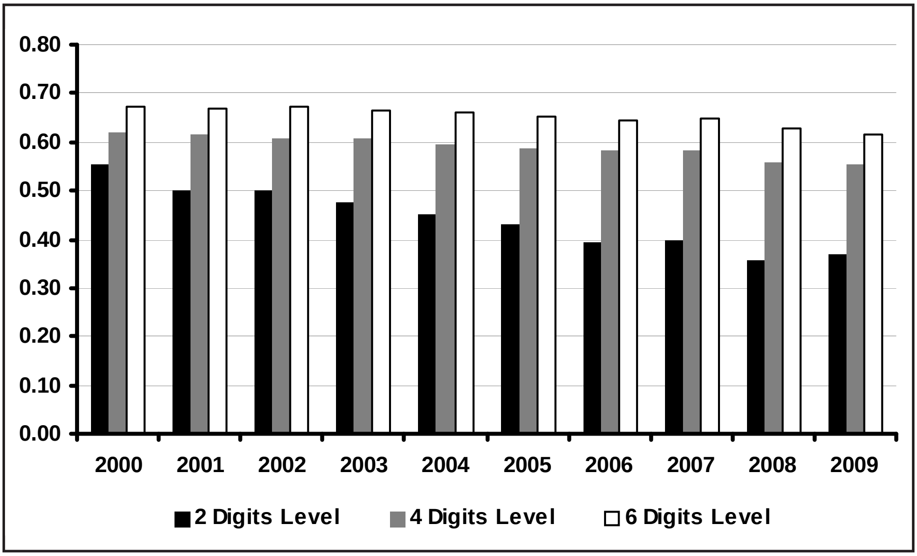
Source: Calculated from UN COMTRADE, 2010.

Export Diversification Index

The Hirschman export diversification index[9] indicates the degree to which a country's exports are dispersed across different economic activities. Export diversification is considered to be important for developing countries as its strongest positive effects are normally associated with diversification into manufactured goods, and its benefits include higher and more stable export earnings, job creation and learning effects, and the development of new skills and infrastructure that would facilitate the development of even newer export products. The value of the index ranges from 0 to 1. A value of zero indicates that the export pattern exactly matches the world average. Higher values indicate greater dependence on a small number of products. The export diversification index for India (Figure 4) has been declining over this decade but still considerably high at approximately 0.62 at the 6 digit level. This shows that India still depends on a small number of products for exports. A similar decline in the index is experienced when export diversification is computed at the 4 digit level. The decline is even faster when the index is computed at 2 digit level. Export diversification index for USA (Figure 5) at 2, 4 and 6 digits level

FIGURE 4

EXPORT DIVERSIFICATION INDEX FOR INDIA



Source: Calculated from UN COMTRADE, 2010.

has been at low levels and has remained below 0.4 This shows that US export pattern closely matches the world average. The export similarity index[10] (Figure 6) has been increasing but it is still much lower indicating there is hardly any competition between the two economies.

FIGURE 5

EXPORT DIVERSIFICATION INDEX FOR USA

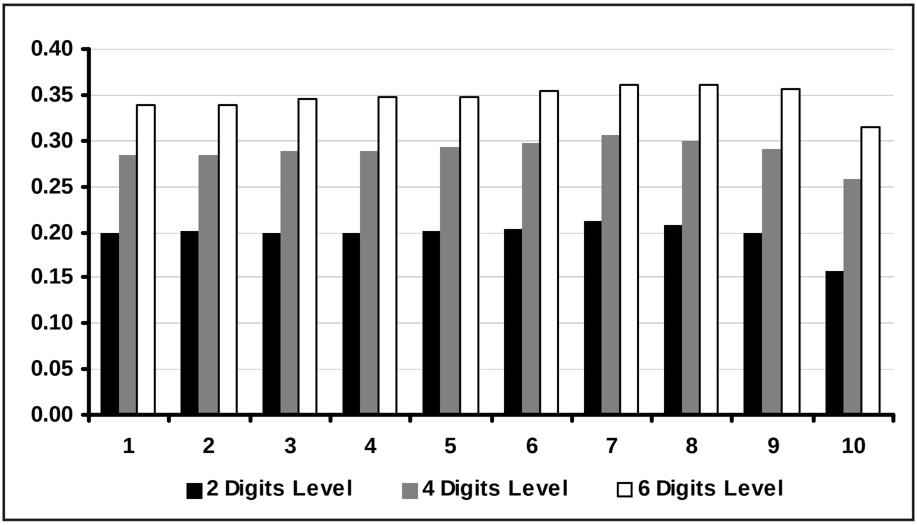
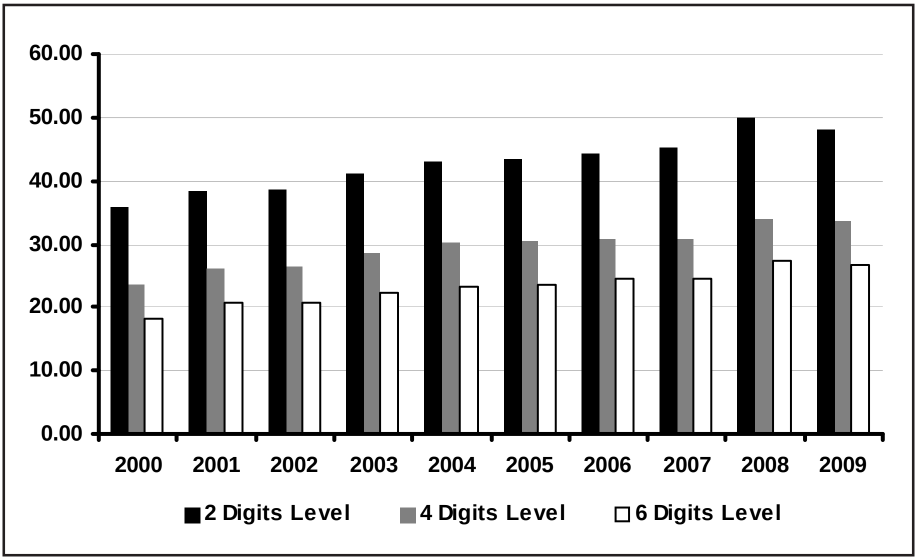


FIGURE 6

TRADE COMPLEMENTARITY INDEX



Barriers to Trade between India and USA

Though the bilateral trade between India and USA has been increasing, it is almost one tenth of China-USA trade. There are a number of tariff barriers between India and USA hindering trade between the two countries.

Trade Barriers (US Perspectives): The three most pressing issues for USA against India include (i) intellectual property rights protection – India remained on the US Special 301 "Priority Watch List" in 2011 for failing to provide an adequate level of IPR protection or enforcement, or market access for persons relying on intellectual property protection; (ii) trade in dual-use technology and access to selective Indian markets; and (iii) India's participation in the US Generalized System of Preferences[11](GSP). India was the third largest GSP beneficiary in 2010, after Angola and Thailand. The US policy makers no longer support India to remain a GSP beneficiary given the rise of the Indian economy and its stance on various issues related to Doha Round negotiations especially on agriculture and market access for industrial goods. The US government maintains that India is using sanitary and phytosanitary (SPS) regulations to restrict the import of certain US agricultural goods. India maintains that the US farm subsidy programme – worth an estimated $17.7 billion per year – provides US agricultural exports with an unfair trade advantage. India imposes high tariff rates, surcharges and taxes on imports from USA. For example, coffee, tea and most grains are effectively kept out of India by 100 per cent tariff rates. Further, the enthusiasm of US defence companies themselves is somewhat dampened by India's Offset Policy for defence procurements. Discriminatory government procurement practices, inefficient structural policies like price controls for many "essential" commodities, extensive government regulation over many sectors of the economy, and extensive public ownership of businesses are some of the other difficult issues affecting US exports to India.

The United States would like greater access to India's markets, particularly for such products and services as agricultural goods, financial services, and retail distribution. Multi-brand foreign retailers such as Wal-Mart and Target continue to be barred from the Indian market due to fears that India's small shops (around 12 million mom-and-pop shops) would be overwhelmed by the competition. India's extensive trade and investment barriers have been criticized by US government officials and business leaders as an impediment to its own economic development, as well as to foster stronger US-India ties.

Trade Barriers (Indian Perspective): The key issues for India are negotiations of a bilateral investment treaty (BIT), US restrictions on trade in services (including the limited supply of H1-B visas), high-technology export controls, and the USA's farm subsidy programme. India remains critical of US efforts to pressure developing nations, including India, to adopt laws and regulations governing pharmaceuticals that are overly supportive of the major pharmaceutical companies and could potentially deny poorer nations access to life-saving medicines.

India would like to have greater access to US services market in two aspects: (1) its various certification programmes under which the USA restricts the ability of many Indian professionals (such as accountants, medical doctors, and lawyers) from providing services in USA; and (2) Second, the USA limits the number of people who can work in the country under its H1-B visa programme. Strict sanitary and phytosanitary (SPS) restrictions for Indian exports and trade-distorting domestic subsidies, export subsidies, and issues of threats to public health and strict SPS rules are affecting India's exports of primary products. In addition, India sees the US reluctance to curtail or eliminate its farm subsidy programme as a major roadblock in making progress in the Doha Round negotiations. In 2006, "Doha Round" of multilateral trade negotiations were suspended due to disagreement among the WTO's six core group members – which include the United States and India – over methods to reduce trade-distorting domestic subsidies, eliminate export subsidies, and increase market access for agricultural products. India, like other members of the G-20 group of developing states, has sought more market access for its goods and services in the developed countries, while claiming that developing countries should be given additional time to liberalize their own markets.

Indo-US Investment Relations

USA has remained one of India's foremost trading partners, a primary source of investments, the first resort for technology acquisition, and significant in funds and aid support. There is a significant two-way investment relationship that flourishes between the two countries. USA continues to be the third largest source of foreign direct investment into India after Mauritius and Singapore. Infact, a large part of the investment coming into India from Mauritius is also from USA as majority of the US companies route their investments into India through Mauritius to avail the benefits of the double taxation treaty that India has signed with Mauritius. The US investments cover almost every sector in India, which is open for private participants. The US companies have invested in almost every sector and brought in some of the best business practices in business and technology transfer and most importantly, generated thousands of jobs in India. USA has been the primary catalyst in building India's off shoring services capability.

Since 1991 economic reforms, a number of controls were dismantled in the areas of industrial policy, taxation, export-import policy and foreign investment. De-licensing of industry, de-reservation of the public sector, easing of competition controls, trade reforms, deregulation of interest rates, and opening up of capital markets were among the reforms undertaken to encourage investment and capital formation. The establishment of various agencies such as Foreign Investment Promotion Board (FIPB), Secretariat of Industrial Assistance (SIA), and Foreign Investment Implementation Agency (FIIA) to facilitate investment has improved actual inflows substantially. The ratio of actual FDI (through both the approved and automatic route) as percentage of approved FDI (through the approved route only) used to be at an average of 20 to 25 per cent before 1991, but has increased to more than 220 per cent in 2008. This is a clear reflection of a favourable policy environment towards FDI, and of foreign investors' lasting interest in India as an investment destination.

From 1991 till 2000, most of the FDI came through government approval routes such as FIPB and SIA rather than through the automatic route of the RBI. However, the government has since eased foreign investment regulations by increasing FDI equity caps and making more sectors eligible for the automatic route. The FIIA has also been crucial in reducing cumbersome procedures and delays. The post-reform period also witnessed an increase in FDI through technical collaboration, confirming improved investment norms. Finally, since 2005 there has been an increasing preference for greenfield foreign investment rather than acquisition. Although a major share of FDI still comes from a few countries, the FDI reforms have seen a diversification of sources. FDI was approved from only 29 countries in 1991 which has increased to around 90 countries by 2008. India's FDI inflows used to be around 5 per cent of China's FDI inflows in 2000, but this stood at around 30 per cent till the onset of the global financial crisis in 2008.

After revision of FDI definition which includes FDI equity inflows, equity capital of unincorporated bodies, re-invested earnings, and other capital, there has been substantial increase in total FDI inflows. FDI equity flows during the last five years 2005-2006 to 2009-2010, has been almost seven times more than the preceding five years, 2000-01 to 2004-05. Average annual FDI equity flows through (both FIPB & SIA route and also automatic route) has increased from US$1.72 billion in 1991-00 to 2.85 billion 2001-05 and then to US$19.73 billion during 2006-10. Another notable feature of FDI inflows is that inflows through government approval route have come down from more than 60 per cent in 2000-01 to little over 13 per cent in 2009-10 whereas inflows through automatic route have increased from 22 per cent in 2000-01 to 74 per cent in 2009-10. Financial sector received increased amount of FDI (around 19%) of total FDI equity flows during 2005-2008. Most of the FDI equity in financial sector (around 65%) has been through the automatic route due to the relaxed norms for investment in financial sector.

The cumulative FDI inflows from USA during April 2000 to March 2011 amounted to about $9.44 billion constituting nearly 7.28 per cent of the total FDI into India. During the financial year 2010-11 (from April 2010 to March 2011), the FDI inflows from USA into India were $1.17 billion contributing 7 per cent of the total FDI inflows during this period. However, the share of FDI equity flows from USA has gone down from 20 per cent for the period 1991-2000 to 14 per cent in 2001-04 and again to 7.28 per cent between 2005-09. However, it is a known fact that most of the US investment has been routed through Mauritius and Singapore, top two investing countries for the period 2005-2009, for tax benefits.

Similarly, India's investments in USA are picking up. Indian companies' greenfield investments in the USA between 2004-2009 amounted to nearly US$5.5 billion. The average investment per project exceeded US$45 million and 10 Indian companies accounted for more than 70 per cent of the US$5.5 billion invested in greenfield initiatives in the USA. Metals, IT and ITES, media and entertainment, industrial machinery, equipment and tools, and financial services were the sectors that received the maximum Indian investments. Major investments included JSW steel's investment of US$1 billion, TCS – US$274 million, Welspun group – US$246 million, Reliance Adlabs – US$161 million, etc. During FY 2009 and 2010, Indian companies made 536 outbound acquisitions globally of which 105 were in the USA. As the latest data shows, there were 25 outbound acquisitions (worth of US$3.3 bn) by Indian companies out of total 101 outbound acquisitions in FY 2011 ending June. This growing flow of capital from India reflects the increased integration of the two economies which has brought many benefits to USA, such as creation of jobs and expansion of US economy.

India has attracted major fortune 500 companies such as Morgan Stanley, Goldman Sachs, etc. in financial sector. Many private equity and venture capital firms from USA have started operating in India. The relaxation of banking norms and development of corporate bond markets will attract more investment in future as well. On the other hand, Indian banks like State Bank of India, ICICI have started their operation in USA though their presence is negligible and meant for remittance purposes only. There is huge potential in banking, insurance and pension sectors in India to attract investment from USA. Take the example of insurance sector which has got maximum potential to grow given the fact that it is at the nascent stage with only around 50 insurers and US$50 billion gross premium written. While USA market is the largest with 1000 insurers and gross premium written exceeding US$700 billion. Insurers in USA have experience and financial muscle to capitalize this potential and tap the Indian insurance market. The health insurance sector which is fastest growing in India has the maximum potential.

There are some major reforms which have taken place in recent years to attract foreign investment including FDI from USA. However, there are some reforms pending required to bring about transparency in both financial and capital markets which would further enhance investment in the Indian financial sector. Creating a financial sector appellate tribunal to hear appeals on all aspects of capital flows and its management would respect and protect basic principles of a due legal process for market participants. Another step would be to abolish different class of investors leading to Qualified Foreign Investors (QFI) who would invest in cutting across all asset classes. Further, it has been proposed that within the automatic route there should not be any distinction between FDI and portfolio investment. Overall, creation of transparent and approachable ways to get clarity in laws and regulations would be useful to market participants, particularly, foreign investors. Further, expanding QFI model, making it single window for clearance of portfolio investment and debt management and harmonizing the regulation of futures, forwards and options would streamline foreign investment. For Indian investors steps like extending consumer protection guidelines for investment in foreign securities under liberalized remittance schemes to investment in debt securities and allowing Indian investors in derivatives trade abroad with some ceiling would be very encouraging. Now, Indian companies are permitted to invest upto 400 per cent of their net worth in overseas joint ventures and wholly owned subsidiaries. Listed Indian companies can invest 50 per cent of their net worth in portfolio investment abroad. Further, there has been hike in ceiling for Indian mutual funds from US$5 billion to US$7 billion to invest overseas. Similarly, the limit on FII investment in the Indian debt market has been revised from US$4.7 billion to US$8 billion. Moving away from a source based taxation to residence based taxation would be also attracting.

Overall, India has been successful in attracting substantial FDI inflows in recent years though the US investment share has slowed down substantially. A close look at the business and macroeconomic indicators of India shows that India is far from China in providing basic requirements, labour market efficiency and infrastructure. In some of the important factors affecting foreign investors such as registering properties, trading across borders and enforcing contracts, India ranks much lower than China. Some of the necessary reforms to attract US investors to Indian economy including financial sectors are providing adequate infrastructure, harmonizing rigid labour laws, reducing bureaucratic delays, bringing about better coordination between Center and States with respect to policy coherence and state level reforms are imperative to enhance FDI potential. Further, increasing FDI caps in sectors with FDI potential and allowing more sectors under the automatic route would be necessary steps. Measures to enhance India-US Investment relations could include: (a) an Investment Facilitation Desk in each state of India to guide US investors on opportunities, regulations and partners; (b) active role of Industry associations in business matchmaking; (c) active role of Indian community overseas in helping foreign businesses wanting to invest in India; and (d) expediting the proposed bilateral investment treaty (India Review, 2011). In order to attract more investment in financial sectors, long-pending financial sector reform proposals such as banking amendment that proposes to lift a 10 per cent cap on voting rights, insurance bill which would hike FDI limit to 49 from 26 per cent in insurance sector and reforms in pension sectors are essential.

In this context successful completion of India-USA Bilateral Investment Treaty (BIT) would be useful both ways investment flows. However, there are few contentious topics to be solved for the successful negotiation of the US-India BIT such as:

(1) Market Access/Treatment of pre-establishment rules: India has rarely agreed to BITs that would exempt foreign companies from local ownership requirements. For USA, this is an important protection.

(2) Prohibitions on performance requirements such as local content rules, are also a standard part of the US BITs, but not given under Indian BITs.

(3) As a result of the White Industries case, India would prefer not to have the treaty guarantee investor-state arbitration. From the US perspective, investor-state arbitration is at the heart of the treaty, which would be worthless without it. This is framed as a topic for negotiation, but if it is a red-line for the Indians, it doesn't seem there would be much to negotiate.

(4) Due to past current account problems, the Government of India may like to maintain the ability to institute capital controls if it deems them necessary.

(5) Labour and environmental protections seem to be contentious in any BIT negotiation, and USA has just unveiled a new Model BIT with even stronger requirements on these sections – although still no enforcement mechanism.

Future Potential Areas of Cooperation between India-USA

India–USA trade relations have strong potential as there can be robust trade in mass-market and niche products and high interface in services trade. The characteristics of India, e.g. it being a preferred investment destination, scope in building infrastructure in India also provide a good reason for USA to have interest in partnership with

India. In addition, collaboration on clean energy, climate change and healthcare are areas of good potential. Knowledge economy sector is another area in which both countries can take benefits from mutual trade. In the education sector both countries can further strengthen institutional exchanges through MoU's between universities, universities and governments, faculty and student exchanges, etc. Holding higher education summits in India to help Indian students to acquire US education can be highly beneficial for capacity building of Indian students. The US-India agriculture knowledge initiative was started to include cooperation in water management, capacity building, food safety and biotechnology. In Agriculture, joint efforts to spur innovation in food processing, cold chain distribution, marketing and retail are required to benefit from this economic relation. The likely areas for agreement between the two countries are cooperation in weather and crop forecasting, strengthening collaboration in IT and ICT, setting up of a joint clean energy research and development centre and establishment of a global disease detection centre in India. India needs to expand its access to high technology, and modernize and upgrade its manufacturing processes as USA is seeking markets, and also more competitive high-quality products. Therefore, there is high scope of cooperation between the two countries in the coming years. The sectors/areas that the two countries can collaborate and mutually benefit from include: (1) Infrastructure; (2) Clean Energy; (3) Biotech/e-Health; and (4) Education.

Infrastructure

Key issues for infrastructure development include a slow pace of capacity addition in several infrastructure sectors partly due to bottlenecks in physical clearances (e.g., land, other approvals, etc.), lack of domestic debt funding and up-to-date technology. USA is well placed to participate in India's booming infrastructure sector. India can avoid use of customs duties, taxes, technical and other measures that may make these technology and heavy appliances less affordable for Indian consumers. Another area of opportunity is to reduce spoilage and waste of grain in India by leveraging US commodity handling and storage capabilities; specifically, issue a global tender for logistics and warehouses for storage of grain (i.e., outsource some part of Food Corporation of India activity).

Clean Energy

Clean energy is projected to account for 25 per cent of India's additional energy demand in the next decade, entailing an investment of US$21 billion in areas such as wind, solar, and hydro energy as well as energy efficiency. US companies[12] are examining opportunities in wind, biomass, hydro and nuclear energy, and some companies are already active in India. The two Heads of the Government launched a Green Partnership in November 2009 and the countries have also signed an MoU to enhance cooperation on energy security, energy efficiency, clean energy and climate change. Key issues for both countries center on high dependence on imported hydrocarbons, and inadequate incentives for clean energy. The US-India CEO Report (2006), recommends accelerating development and deployment of clean energy technologies through launching a US$1 billion venture capital/private equity fund for clean energy technology development projects with special focus on: (a) biofuels; (b) solar energy; (c) energy from biomass; and (d) fuel cells. Further, a Joint Research Center of Indo-US Clean Energy Research and Deployment Initiative needs to be set up.

Biotech/E-Health

Biotech: E-health is another area that offers a strong potential for cooperation between the two countries. This was reaffirmed during the November 2009 Summit by way of a "US-India Cooperation to Protect the Health of their People" covering aspects such as a global disease detection programme, medical research, cooperation on urban health & health services and regulatory harmonization. There is therefore a critical need for acceptance of new biotechnologies featuring joint collaborative research on some key staple crops. The report recommends fostering research collaboration for diseases of the developing world and providing incentives to innovate through a robust Intellectual Property Rights regime. It is recommended to develop an orderly policy framework for the sharing of Agri-Biotech Intellectual Property with respect to Public-Private-Partnerships (PPPs) which will hasten the pace at which PPP projects are implemented in India.[13]

Education

The large population of overseas Indians in USA is a repository of knowledge and resources, and can serve as an effective bridge to doing business with India. Given the shortage in quality education at all levels, India will need an estimated 800 more universities and 35,000 more colleges in the next 10 years. The Government of India has set up the Global Indian Network for Knowledge, envisaged as a single point of exchange for information, advice and consultancy on business and social sectors between India and its diasporas in 110 countries. The US-India CEO Report (2006) recommends a US-India Educational Forum to facilitate collaborations between Indian and the US educational institutions and related businesses, and to provide a vehicle for private sector input to both governments and demonstration projects. On evaluation front, it recommends establishing a function within the Accrediting Agency Evaluation Unit of the US Department of Education to formally recognize reliable accrediting agencies that can approve Indian higher education institutions to issue degrees in USA. In addition it reiterates to enable vocational training collaboration, modelled on the Indo-US Collaboration for Engineers, to further skill development initiatives announced by India.

The next decade of India-USA relations would need to focus on following things: (i) Strategic shift from high-technology trade to frontier technology, (ii) Robust trade in mass-market and niche products, (iii) High interface in services trade, (iv) Preferred investment destinations, (v) Building infrastructure in India, (vi) Collaboration on clean energy and climate change, (vii) Collaboration in healthcare, (viii) Seamless cross-continental cooperation in knowledge economy sectors, and (ix) Strong cooperation in education and academia.

Conclusion

India-US strategic dialogue which started in 2010 covering all areas of mutual cooperation has been a key factor in consolidating and strengthening the relationship between the two countries. Another important step that could enhance the relations between the two countries is the signing of a Comprehensive Economic Partnership Agreement (CEPA). A CEPA is normally viewed as a platform for increasing investment-led trade and in this context there would be many issues for both sides to address. USA may prefer greater flexibility in the area of IPRs while India is likely to bargain removing NTBs which hamper market access. The protectionist tendencies in USA against issues such as outsourcing in the last few years have added to the Indian business' concerns for accessing the US market.

As of now USA has 14 free trade agreements (FTAs) in place and a few are under negotiation. Given the fact that more than 20 negotiations have already been concluded or many more are on-going, India would have FTAs with nearly every major trade partner except USA and China in the coming few years. Interestingly, nearly all of India's agreements are comprehensive agreements. Therefore, a CEPA with USA would be a major step to not only boost exports but also enhance relations with USA. The key issues would remain IPRs, agriculture, services trade and market access. Given the slow movement of the Doha Round of negotiations and slowdown in the developed world, it appears that an alternative for both the countries is to negotiate for a CEPA including all areas of mutual collaboration. India would try to remove non-tariff barriers (NTBs) which hamper market access. One area sensitive to both sides is agriculture, for different reasons. Signing of a CEPA covering goods, services and other areas of economic cooperation and expediting the signing of a BIT to aid investors in both the countries would take India-USA economic relations to the next level. From the Indian point of view, free movement of people under H1-B Visa scheme would be important. Industry associations in both countries need to play a key role in overcoming the information barriers and forge new business ventures. USA must view India as a strategic partner and pay more attention to its economic priorities.

NOTES

1 Report by Price Water House Coopers, 2008.

2 Though nuclear tests conducted in 1998 led to a temporary set-back in bilateral relations.

3 The dialogue has also addressed and covered all areas of mutual cooperation including counterterrorism cooperation, intelligence sharing, law enforcement exchanges, defence cooperation, export controls, non-proliferation including robust people-to-people ties; scientific, space, and technology collaboration; clean energy cooperation; and connections among entrepreneurs and social innovators. The next meeting of the Strategic Dialogue is planned at Washington DC in 2012·

4 The USA-India Trade Policy Forum (TPF), which was launched during the visit of Indian Prime Minister Dr. Manmohan Singh to Washington in July 2005, is an institutional arrangement between the two countries to discuss

trade and investment issues. So far five ministerial meetings of the TPF have been completed.

[5] Aircraft, spacecraft, parts, natural/cultured pearls, precious stone, mineral fuels, oils & product, iron, steel, plastics and articles have experienced a rise in their share in the total US exports to India over the decade. Nuclear reactors, boilers, machinery, electrical machinery equip parts; opticals, photo, cine, organic chemicals and miscellaneous chemical products have experienced a fall in their share in the total exports of US to India.

[6] International revealed comparative advantage (IRCA) of an export *category* of India or USA has been defined as a ratio of "the share of India's (or USA's) export of this export *category* to the world in India's (USA's) total exports to the world (numerator)" to "the share of world exports of this *category* in total world merchandise exports (denominator)". An export commodity is said to be competitive if its IRCA is greater than or equal to unity. The discussion of IRCA and BRCA are confined to trade in goods only. While the RCA is a potent instrument in analyzing relative comparisons of export performance of a country it may not reveal the "true" competitiveness if the exports of a commodity are high due to, say, export or other subsidies.

[7] Here a *strict test* has been used which identifies dynamic products as the ones which have their annual growth rate above India's and USA's total annual export growth rate in each of the nine years under consideration, viz. 2001 to 2009.

[8] We have used UNESCAP Interactive Trade Indicators to calculate Trade Complementary Index.

[9] Herfindahl Hirschman Index = $\sum_i (X_i/X)^2$;

where X denotes total Exports and Xi denotes Exports of ith firm. The range of this sum therefore is 0 to 1; and if this sum nears 1, it is interpreted as the market being owned by a single firm, and therefore, high concentration in the market. On the contrary, a low sum of squares indicates low concentration in the market.

[10] The export similarity index is another overlap index. It is designed to measure the degree of similarity between the export profiles of two economies. The more similar the export profiles are, the more likely that economies are competitors in global markets. High similarity indices may also indicate limited potential for inter-industry trade with a regional trading arrangement.

[11] The US Generalized System of Preferences (GSP) is a programme designed to promote economic growth in the developing world by providing preferential duty-free entry for up to 4,800 products from 129 designated beneficiary countries and territories. GSP was instituted on 1 January 1976, by the Trade Act of 1974. India is designated as a beneficiary developing country (BDC) in the US GSP programme since its inception.

[12] There are many opportunities for the US companies and also beneficial for the US economy. For example, if USA supplies two reactors to India, this will mean 3000 to 5000 new direct jobs and an additional 10000 to 15000 indirect jobs being created there.

[13] US-India CEO Report (2006) suggests collaboration in medical education and standardization of hospital management systems and form a taskforce to develop an action plan to address issues related to "communicable diseases".

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