



ANATOMY OF INDIA'S MERCHANDISE EXPORT GROWTH

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Introduction

Trade and exchange rate liberalization has been central to the structural adjustment programmes implemented by India since the early 1990s. The quantitative restrictions (QRS) on importing capital goods and intermediates were mostly dismantled in 1992, although the ban on importing consumer goods continued, with some exceptions, until the late 1990s. Alongside the removal of QRS, customs duties in the manufacturing industries were gradually reduced. Following the new tariff reductions introduced in the March 2007 budget, India has emerged as one of the world's low protection and open industrial economies (Pursell et al 2007).

The focus of the export policy, by and large, shifted from product specific incentives to more generalized incentives based primarily on the exchange rate. It was held that the overvalued rupee had created a bias against exports and that a more realistic market determined exchange rate would make exporting activities inherently more attractive. The government introduced a major downward adjustment in the rupee exchange rate against the major international currencies in July 1991. In February 1992, a dual exchange rate system was introduced, which allowed exporters to sell 60% of their foreign exchange earnings at the free market rate and 40% to the government at the official lower rate. In April 1993, a further move towards the deregulation of the external sector took place when the government adopted full convertibility on the trade account by unifying the official exchange rate with the market one. These steps culminated in India adopting full current account convertibility in August 1994.

Growth Performance

This section deals with an analysis of growth performance using two types of data on merchandise exports. First, we use the data reported by India's official statistical agencies, which is referred to as the "reported" data. Second, we use the "mirror export data", which has been constructed on the basis of imports reported by India's partner countries. While mirror data are generally perceived as second-best to own-country reported data, the former provides us with an obvious way of checking the reliability of the latter. We may also note that imports, because it generates tariff revenue, are usually recorded with more accuracy than exports.

Analysis Based on Reported Data

Using the Reserve Bank of India's balance of payment statistics, Table 1 reports the average annual growth rates of India's aggregate merchandise exports for different periods and sub-periods.

Table 1: Growth Rates of India's Merchandise Exports (valued \$ billion, %)

Period	Growth Rates	
	Total	Non-Oil
1970-71 to 1990-91	10.8	10.4
1991-92 to 2010-11	14.5	13.3
1993-94 to 2010-11	14.9	13.6
1970-71 to 1979-80	18.2	18.3
1980-81 to 1989-90	7.1	7.6
1990-91 to 1999-2000	9.8	10.1
2000-01 to 2009-10	20.3	18.1
1993-94 to 2001-02	8.0	7.7
2002-03 to 2008-09	24.0	21.1
2002-03 to 2010-11	20.6	18.4
2009-10	-3.6	-4.6
2010-11	37.4	35.4
2011-12 (April to November)*	33.2	NA

1. Growth rates are calculated using semi-logarithmic regressions.
2. *Based on revised (but still provisional) data released by Department of Commerce in December 2011 after correcting for errors.

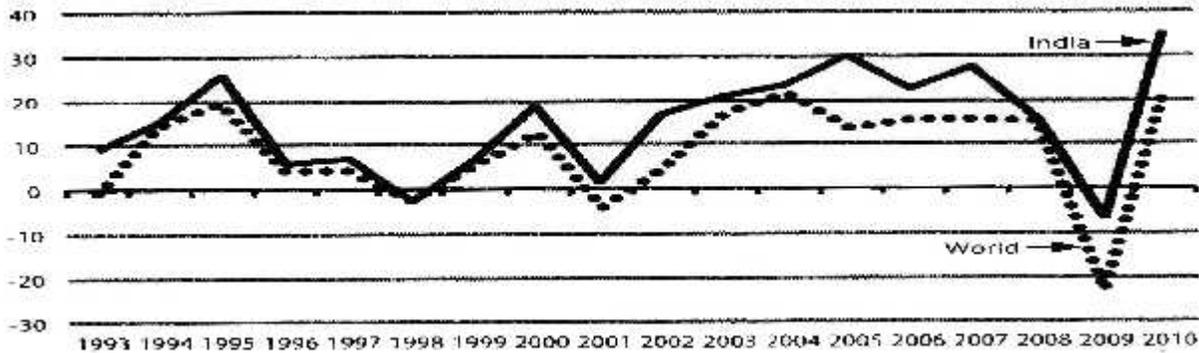
Sources: Data up to 2010-11 are from the RBI (BoP statistics); data for 2011-12 and the data on oil exports are DGCIS information from the Department of Commerce (Government of India).



The value of exports grew at the rate of 14.5% a year during the 20 years after 1991, which compares somewhat favourably with the performance during the 20 years before 1991 when exports grew at the rate of about 11% a year. Comparison of performance over such a long time horizon, however, masks some important decadal variations. It is evident that the average annual growth rate in the 1970s (18%) was distinctly superior to that in the 1980s (7%). Similarly, the first decade of the 21st century witnessed markedly better growth performance (20%) than the 1990s (10%).

The analysis that follows focuses specifically on the post-reform period, which has been further divided into two sub-periods: (1) the first decade of reforms (from 1993-94 to 2001-02); and (2) the second decade of reforms (from 2002-03 to 2010-11).

Figure 1: Annual Growth Rates of Exports, India and the World

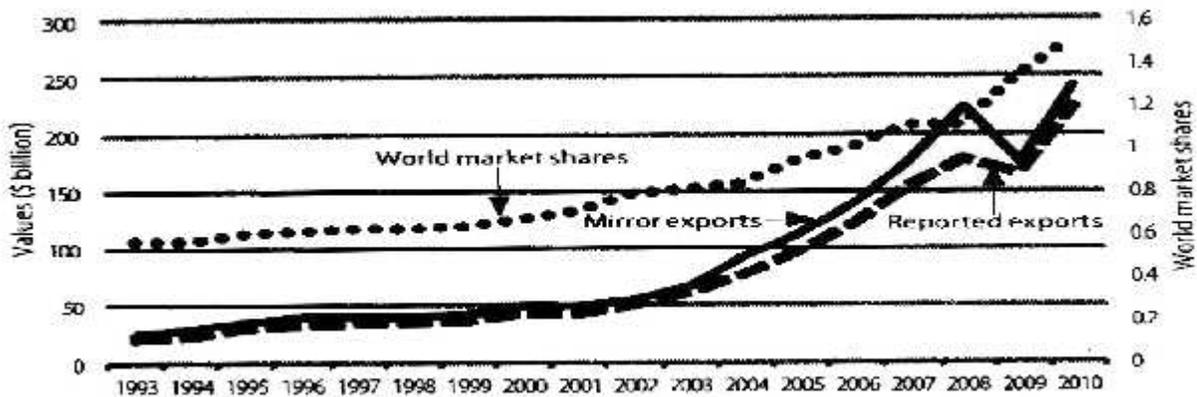


Source: Direction of Trade Statistics, IMF.

The first decade of reforms is characterised by a relatively low growth of 8% a year, while the second decade stands apart for its strong growth rate of 21% a year. In general, the growth rate of Indian exports has been higher than the world exports throughout the post-reform period (see Figure 1 and Table 3. This is in contrast to the pre-reform period when the Indian growth rates had been below the world average (Veeramani 2007).

Looking at the level rather than growth, the value of exports stood at \$23 billion in 1993-94 which increased to \$45 billion in 2001-02. In other words, during the early phase of the reforms, it took as many as eight years to double the value of exports. However, within a matter of four years, the export value more than doubled from \$45 billion in 2001-02 to \$105 billion in 2005-06. Further, between 2002-03 and 2010-11, the value of exports increased nearly five times from about \$54 billion to \$250 billion. Consistent with this trend, India's share in the world exports first increased slowly from about 0.6% in 1993 to 0.7% in 2001 and then increased relatively faster to 1.5% in 2010 (Figure 2).

Figure 2: Performance of India's Merchandise Exports (1993-2010)



World market shares are based on reported data.

Source: Direction of Trade Statistics, IMF.



The share of petroleum products in India's export basket increased dramatically from about 2% in 1993 to as high as 18% in 2010. This export surge has been driven mainly by India's private sector oil refineries. According to the Centre for Monitoring Indian Economy's (CMIE) Prowess database, Reliance Industries had contributed to about 68% of the petroleum exports in 2010-11, and Essar Oil, another private sector refinery, contributed 8%. The data on gross export values, however, should be interpreted with caution for the private refineries import almost all the crude oil that they process. This implies that the net export earnings and the domestic value added are much smaller than what the statistics on gross exports would indicate.

Reliance had exported about \$31 billion in 2011-12 but it consumed \$39 billion worth of imported raw materials, a major part of the latter would be crude oil. According to the United Nations Industrial Development Organization's (UNIDO) industrial statistics, the value added to output ratio for India's "refined petroleum products" industry is 0.155. Applying this ratio, the value added component of India's petroleum exports in 2010-11 is approximately \$6.5 billion while the gross export value, according to the official data, is as high as \$42 billion.

Table 2: Average Annual Growth Rates of Exports across Section of Commodities (1993-2010, \$ million)

Sections	Descriptions	1993-2001	2002-08	2002-10
I	Live animals and products	5.4	10.8	11.1
II	Vegetable products	5.6	16.2	13.2
III	Fats and oils	7.4	23.5	20.3
IV	Foodstuffs, beverages and tobacco	-0.2	30.7	22.4
V	Mineral products	6.1	51.5	37.1
VI	Chemical products	11.8	24.8	20.6
VII	Plastics and rubber products	6.7	21.1	15.4
VIII	Hides, skins and leather	3.4	11.0	7.1
IX	Wood and cork	-5.9	27.0	18.6
X	Paper and paper products	14.7	18.0	15.6
XI	Textile and textile products	7.2	12.9	11.0
XII	Footwear, umbrellas, etc	3.1	18.5	14.4
XIII	Stone, glass, cement, etc	11.3	19.1	14.5
XIV	Natural/cultured pearls, gems, etc	8.4	14.7	17.4
XV	Base metals and products	9.2	32.2	22.5
XVI	Machinery	11.6	29.2	25.7
XVII	Transport equipment	4.1	39.8	36.4
XVIII	Instruments and apparatus	20.0	18.1	17.2
XIX	Miscellaneous manufactures	7.8	24.4	19.7
	Total	7.7	24.5	20.8
	Total (excluding HS 27)	7.5	21.2	18.5

1. Growth rates are calculated using semi-logarithmic regressions.
2. Section XIX (arms and ammunition) and Section XXI (works of arts) are excluded. These sections account for a negligible share (less than 0.1%) in India's total exports.

Source: Author's estimation using Comtrade-WITS database.

Impact of the Global Financial Crisis

During the pre-financial crisis period of 2002-03 to 2008-09, exports had been growing at an impressive rate of 24% per annum. As a consequence of the financial crisis, the value of exports declined from \$189 billion in 2008-09 to \$182 billion in 2009-10. The next two years, however, exports recovered, registering a growth rate of 37% in 2010-11 and 33% during the first eight months of 2011-12 (April to November). It must be stressed that India's export performances in 2010-11 and 2011-12 reflect just a continuation of the trend since 2002-03 and do not represent a structural break from the recent past. The exceptionally high growth rates in the past two years are mainly explained by the low base effect arising from the growth moderation in 2008-09 and the negative growth in 2009-10 in the aftermath of the financial crisis. This can be established by comparing the counterfactual values of exports with the actual values, as done below.

India's exports in 2010-11 would have been \$324 billion (against the actual value of \$250 billion) had it continued to grow at the same rate as during 2002-03 to 2007-08 (i.e., at the rate of 25% per annum). Under this counterfactual scenario, the value of exports for 2011-12 should be as high as \$406 billion, a figure that is significantly higher than what the government is



hoping to achieve (i.e., about \$300 billion). Even if we assume a growth rate of only 20% per annum, the counterfactuals are still high at \$287 billion for 2010-11 and \$345 billion for 2011-12. The spike in growth rate in 2010-11 and the first half of 2011H2 is not unique to India either. A similar trend can be observed in other major exporting countries from the developing world.¹¹

That the Indian export sector is not insulated from the negative demand shocks emanating from the world economy is evident from Figure 1, which depicts a comparison of India's annual growth rates of exports with that of the world for the period 1993-2010. The co-movement of the two series suggests that the fluctuation in India's export growth rate is strongly tied to cycles in the world demand. The correlation coefficient between the annual growth rates of exports for India and the world is as high as 0.94. It is beyond doubt that the sustainability of India's ongoing export recovery and prospects for further growth are strongly contingent on the trends in world demand.

2.3 Export Surge: An Artefact of Over-Invoicing?

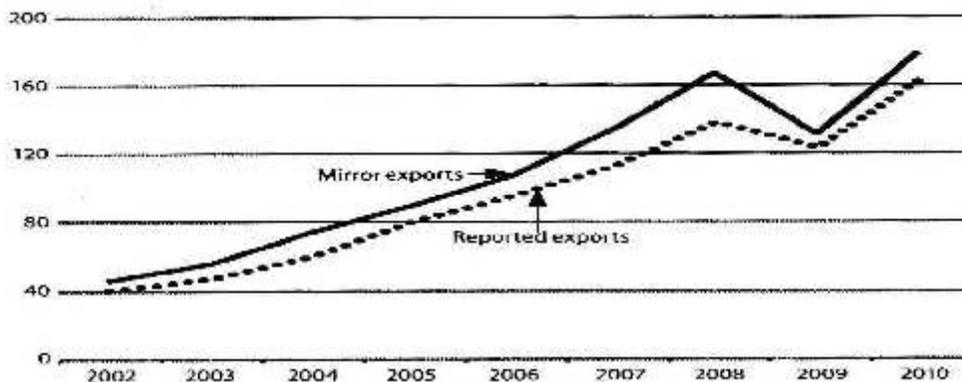
The high monthly growth figures during the first half of 2011-12 have been greeted with cynicism by some commentators in the business media, who speculate that this may reflect over-invoiced exports to ship black money back into the country.¹² For one thing, given the slowdown in Europe and the United States, the exceptionally high Indian growth rates appeared "too good to be true" at the outset. Providing further fodder to the sceptics, some newspapers reported a sudden export surge to Bahamas, a tax haven, from a modest \$2.2 million in 2008-09 to \$2.2 billion in 2010-11. In this section, we assess the reliability of India's officially reported data by comparing it with the mirror statistics.

Figure 2 shows two different time series on export values (\$ billion), one based on "reported data" and the other based on "mirror data". The mirror export values shown in the figure is what the world as a whole had reported to the International Monetary Fund (IMF) as imports from India. For any country, its reported data does not match perfectly with the mirror data for many reasons. In general, the mirror export values would exceed the own country reported values because imports are inclusive of cost insurance and freight (cif), while exports are recorded on a free on board (fob) basis. As expected, India's mirror export values are always higher than its reported values and the two series almost always move together. In 2010, for example, the reported value of India's exports was \$223 billion, while the mirror exports value was \$243 billion.

Note that all countries do not report trade data to the IMP (or to the UN) for all the years. Therefore, in order to derive the value of aggregate world imports (and exports), the IMP uses estimated/ extrapolated data for the non-reporting countries. Alternatively, the mirror statistics may be obtained by aggregating the import values of only those countries that had reported the data (that is, by excluding the estimated/extrapolated values pertaining to the non-reporting countries). However, while doing so, it is important to keep in mind that the number of reporting countries varies from year to year. In order to make sure that the values are strictly comparable over time, the mirror statistics should be derived using data from a consistent set of reporting countries.

We notice that a set of 113 countries had consistently reported import data to the UN for every year in the period 2002-10. Using the import data reported by these countries, we construct India's mirror export series for the period 2002 through 2010. The aggregate mirror export values, obtained this way, are then compared with the aggregate export values reported by India to the same set of 113 partner countries (Figure 3). Again, the mirror export values are higher than the reported values, but move in the same direction. It is clear then that India's official export figures are real, not an artefact of over-invoicing.

Figure 3: Performance of India's Merchandise Exports (2002-10) Values (\$ billion)





1. “Reported Exports” are aggregate exports to 113 countries as reported by India.
2. “Mirror Exports” are the aggregate imports from India reported by 113 countries.
3. 113 countries have reported import data consistently during 2002-10.

Source: Author’s estimation using Comtrade-WITS database.

Table 3 reports the growth rates of exports using reported as well as mirror data for different periods and years. It is evident that, except for the year 2009 the growth rates generated by the two series are very similar. The reported data shows a negative growth rate of 7% in 2009, while the mirror data shows a much higher rate of decline with a negative growth rate of 22% for the same year. Observing Figures 2 and 3, the year 2008 immediately catches the eye with its large gap between the mirror and reported values. This relatively large difference in the base year value is responsible for the observed difference in the growth rates based on reported versus mirror data in 2009.

Table 3: Average Annual Growth Rates of Exports (\$ billion)

	Reported Data		Mirror Data	
	India	World	India	World
1993-2001	8.6	5.9	7.5	6.2
2002-08	24.3	16.3	26.4	16.3
2002-10	20.3	11.0	20.3	11.0
2009	-7.0	-22.9	-22.1	-23.1
2010	35.1	20.6	38.6	20.7

1. Growth rates are calculated using semi-logarithmic regressions.
2. Figures in parentheses are the growth rates of aggregate exports to a set of 113 countries that have consistently reported import data during 2002-10.

Source: Direction of Trade Statistics (IMF) and Comtrade-WITS.

Referring to the recent export trends, a popular business newspaper observed that "an amazing surge in India's exports to the Bahamas has stoked the lingering suspicion that a slice of the country's trades is sham transactions done to bring back money stashed in secret accounts with offshore banks". According to this report, India's reported data on exports, no way matches the data on Bahamas' global imports, which was \$2.8 billion in 2010.

A careful examination of data from various sources, however, reveals that the reported anomaly has been mainly caused by partial reporting of data by the statistical agencies in the Bahamas. While the reported value of imports of the Bahamas from the world as a whole in 2010 was indeed \$2.8 billion, the IMP's estimation, based on the partner country records, puts the value at a much higher \$12 billion. As per the data from the UN-Comtrade, the aggregate export to Bahamas from a set of reported countries stands at \$10 billion in 2010.

The IMP's data manual states that the Bahamas does not report "oil products imported and exported on foreign client's accounts that do not add to the wealth or material resources of the country ... ", This information on the scope and coverage of the Bahamas' official data holds the key in understanding the reported anomaly. For petroleum products (HS 27) contributes to 92% of India's exports to the Bahamas in 2010 (and 95% in 2009) and much of these imports from India would not have been reported by Bahamas.

It is very likely that the Bahamas has been used as a transshipment point for other destinations, especially in petroleum products.¹⁸ While the Bahamas did not report any export of petroleum products in 2010, other countries have reported petroleum imports worth \$1.5 billion from the Bahamas. Similarly, the partner countries have reported petroleum exports worth \$4.4 billion to the Bahamas in 2010, while the latter did not report any such imports. Indeed, these values on world exports and imports, based on partner country records, understate the true extent of Bahamas' trade since not all partners have reported data in 2010. The bottom line is that India's export surge to Bahamas is real and that the argument of over invoicing is flimsy.

Commodity Composition

Having established that the official export data are reliable, the discussion in the remaining part of the paper is solely based on the reported data. In the present section, we use disaggregated data to analyze changes in the commodity structure of exports.



According to the Heckscher-Ohlin model of trade, a country would specialize and export the products that use its relatively abundant resources intensively. Thus, for example, a country with abundant supply of labour has a comparative advantage in labour-intensive products. Viewed thus, it is appropriate to classify traded products according to factor intensities. To that end, we use the factor intensity classification of the International Trade Centre (ITC), adapted by Hinloopen and van Marrewijk (2008), which distinguishes between five broad factor-intensity categories at the 3-digit level of Standard International Trade Classification (SITC).²⁰ However, as explained below, we make a slight modification to this classification, but report the results according to both the original ITC classification as well as the modified classification.

Table 4 reports the commodity composition of exports, according to factor intensity classification, for selected years (1993, 2002 and 2010). Both the original and modified classifications show a consistent increase in the shares of human capital and technology-intensive products and a consistent decline in the shares of natural resource and unskilled labour-intensive products. According to the original classification, the share of primary products increased significantly from 22% in 2002 to 32% in 2010, which, at first sight, may appear surprising. A closer look at the data reveals that the increasing share of primary products is explained by the rapid export growth of "refined petroleum products" (SITC 334), which, as per the original ITC classification, is included in the "primary" category. The share of SITC 334 in India's total exports increased from 1.8% in 1993 to 4.5% in 2002 and to a hefty 17% in 2010.

Table 4: Export Composition according to Factor-Intensity Classifications
(% shares of total exports)

	Original ITC Classification			Modified Classification		
	1993	2002	2010	1993	2002	2010
Primary	24.9	22.0	32.5	23.1	17.5	15.5
Natural resource-intensive	21.8	19.5	16.1	21.8	19.5	16.1
Unskilled labour-intensive	29.8	26.3	14.8	29.8	26.3	14.8
Capital-intensive of which	23.6	32.1	36.4	25.4	36.6	53.5
Human capital-intensive	13.4	15.2	17.0	13.4	15.2	17.0
Technology-intensive	10.2	16.9	19.4	10.2	16.9	19.4
Refined petroleum (SITC 334)	-	-	-	1.8	4.5	17.1
Unclassified (5)	0.0	0.0	0.2	0.0	0.0	0.2
Total	100	100	100	100	100	100

1. In the modified classification, the constituents of capital-intensive category are human capital-intensive products, technology-intensive products and SITC 334; in the original classification, SITC 334 is part of the primary category. Source: Author's estimation using Comtrade-WITS database.

Since petroleum refining is a highly capital-intensive process, it is appropriate to include this product in the capital-intensive, rather than primary, category. Accordingly, we define the capital-intensive category as consisting of human capital-intensive products, technology-intensive products and SITC 334. Thus, according to our modified classification, the share of primary category is obtained by subtracting the share of SITC 334 from the original primary category.

Table 5 shows the changes in the shares of exports across nine major product groups disaggregated at the 1-digit SITC level. Consistent with the observations made above, the table displays a steady shift in the composition of exports in favour of relatively capital-intensive "mineral fuels and lubricants" (SITC 3), "chemical products" (SITC 5) and "machinery and transport equipments" (SITC 7). By contrast, it is evident that, the traditional agriculture and labour-intensive sectors such as "food and live animals" (SITC 0), "manufactured materials" (SITC 6) and "miscellaneous manufactured articles" (SITC 8) are losing their prominence. The combined share of traditional sectors (SITC 0, 6 and 8) declined from 76% in 1993 to 48% in 2010. As noted earlier, the remarkable increase in the SITC share 3 from 20% in 1993 to 17% in 2010 has been driven by refined petroleum products.

Table 5: Composition of Exports across 1-Digit Level, SITC
(% shares of total exports)

SITC Codes	Product Groups	1993	2002	2010
0	Food and live animals	15.2	11.6	7.0
1	Beverages and tobacco	0.7	0.5	0.5
2	Crude materials, inedible, export fuels	5.5	4.0	6.2
3	Mineral fuels and lubricants	2.2	4.6	16.9



4	Animal and vegetable oils	0.5	0.3	0.4
5	Chemical products	7.4	11.5	11.9
6	Manufactured goods classified chiefly by materials	40.9	38.2	28.4
7	Machinery and transport equipment	6.8	8.5	14.6
8	Miscellaneous manufactured articles	19.2	18.4	12.2
9	Commodities and transaction not classified according to kind	1.6	2.4	2.0

Source: Author's estimation using Comtrade-WITS database.

A further disaggregated profile of exports, according to the HS nomenclature, is shown in Tables 6 and 7. These tables report the export shares for the different "sections" of commodities as well as for the major 2-digit groups within each section. The major 2-digit groups have been identified as those having at least 1% of the total national export value either in 2010 or in 2002. For convenience, we have grouped the 21 sections into two broad groups, namely, capital-intensive category and traditional category. The capital-intensive category comprises five sections: mineral products, chemical products, base metals and products, machinery and transport equipment. The remaining sections constitute what is referred to as the traditional category.

The export shares of capital-intensive and traditional categories are shown in Tables 6 and 7, respectively. It can be seen that the share of the capital-intensive category steadily increased, at the cost of the traditional category, from about 26% in 1993 to 56% in 2010. The decline in the share of the traditional category is reflected across all the major 2-digit groups. Compared to 1993, all the five sections within the capital-intensive category show higher export shares in 2010. Between 2002 and 2010, the share of chemical products remained constant while the shares of the remaining four sections increased significantly, with the increase being particularly pronounced in mineral products and transport equipment.

Table 6: Composition of Exports across 'Sections' and Major 2-Digit Groups, Capital-Intensive Category (% Shares), HS Classification

Sections	2-digit Codes	Descriptions	1993	2002	2010
V	(25-27)	Mineral products	5.7	7.6	21.3
	25	Salt, sulphur, earths and stone	1.2	1.0	0.5
	26	Ores, slag and ash	2.3	1.9	3.2
	27	Mineral fuels, mineral oils; bituminous substances; waxes	2.3	4.8	17.6
VI	(28-38)	Chemical products	7.2	10.3	10.2
	28	Inorganic chemicals	0.7	0.8	1.1
	29	Organic chemicals	1.9	4.1	4.0
	30	Pharmaceutical products	1.9	2.6	2.8
	32	Tanning or dyeing extracts	1.4	1.2	0.7
XV	(72-83)	Base metals and products	6.4	7.6	10.1
	72	Iron and steel	3.1	3.0	3.2
	73	Articles of iron or steel	1.6	2.2	2.9
	74	Copper and articles there of	0.2	0.7	2.5
XVI	(84-85)	Machinery	4.5	6.3	7.8
	84	Nuclear reactors, boilers, machinery, etc	2.9	3.5	3.8
	85	Electrical machinery and equipments	1.6	2.8	4.0
XVII	(86-89)	Transport equipments	2.7	2.5	7.0
	87	Vehicles other than railway or tramway rolling-stock	2.5	2.1	4.3
	89	Ships, boats and floating structure	0.0	0.1	2.0
Total			26.5	34.3	56.4

For each section, shares of only the major 2-digit codes are reported.

Source: Author's estimation using Comtrade-WITS database.



Geographical Direction

Table 7 and Table 8 presents the data pertaining to the geographical direction of India's exports. These report the shares of different geographical regions and of the major countries. The major countries have been identified as those having at least 1% of the total national export value either in 2010 or in 2002. Based on India's export growth performance over the years, it is convenient to club the different market regions into two broad groups. The first group is that of the "traditional markets" comprising Australia and New Zealand, Europe, Japan and North America (Table 7). The remaining group, for want of a better term, is referred to as "emerging markets", which include south and Central America, the Caribbean and the various regions of Asia and Africa (Table 8).

Table 7: Geographical Direction of Exports, Traditional Regions (1993, 2002 and 2010)

Region	Countries	% Shares of Total Exports			Trade Intensity		
		1993	2002	2010	1993	2002	2010
	Japan	8.1	3.7	2.2	1.5	0.8	0.6
North America		19.6	22.7	11.5	0.9	1.0	0.7
	Canada	1.1	1.4	0.5	0.3	0.4	0.2
	United States	18.5	21.3	11.0	1.1	1.1	0.8
Eastern Europe		4.6	5.6	4.0	1.8	0.9	0.5
	Belgium	3.8	3.3	2.3	1.2	1.1	1.0
	Russia	3.0	1.5	0.6	3.3	1.9	0.5
Northern Europe		7.8	6.2	4.0	0.8	0.6	0.6
	United Kingdom	6.4	4.9	3.0	1.2	0.9	0.8
Southern Europe		4.3	4.9	4.2	0.6	0.6	0.6
	Italy	2.8	2.6	1.9	0.8	0.7	0.6
	Spain	1.0	1.5	1.1	0.5	0.6	0.5
Western Europe		17.2	9.2	8.7	0.7	0.5	0.5
	France	2.3	2.1	2.3	0.4	0.4	0.6
	Germany	7.1	4.2	2.8	0.8	0.6	0.4
Netherlands		2.4	2.0	3.1	0.7	0.6	0.9
Oceania		1.3	1.2	0.9	0.9	0.8	0.6
	Australia	1.1	1.0	0.8	1.0	0.9	0.6
Total		62.9	53.5	35.5	0.9	0.7	0.6

Source: Author's estimation using Comtrade-WITS database.

the major countries within the group. The emerging markets, shown in Table 8, account for nearly two-thirds of exports in 2010. India's export shares to most of the countries in this group increased over the years (Bangladesh, Hong Kong and Thailand being the major exceptions), with the increase being particularly pronounced for the UAE and China.

The geographical pattern of exports remains broadly the same even if we exclude petroleum exports (HS 27) from the total. The shift of India's export destination from the traditional markets to the emerging markets is in line with changes in the overall pattern of world demand. It may be noted that, the share of world exports going to the traditional markets declined from 73% in 2002 to 62% in 2010.



Table 8: Geographical Direction of Exports, Emerging Regions (1993, 2002 and 2010)

	% Shares of Total Exports			Trade Intensity		
	1993	2002	2010	1993	2002	2010
Central Asia	0.0	0.2	0.1	0.4	1.7	0.5
Eastern Asia (excluding Japan)	8.3	9.6	14.5	1.0	1.0	1.0
China	1.3	3.1	8.1	0.4	0.8	1.0
Hong Kong	5.8	4.8	4.4	1.8	1.4	1.2
South Korea	1.0	1.3	1.7	0.5	0.6	0.7
South-eastern Asia	7.9	9.3	10.9	1.3	1.7	1.7
Indonesia	1.1	1.6	2.1	1.7	3.4	2.2
Malaysia	1.1	1.5	1.7	1.0	1.2	1.3
Philippines	0.3	1.0	0.4	0.5	1.6	0.7
Singapore	3.5	2.8	4.2	1.6	1.6	2.4
Thailand	1.7	1.5	1.0	1.5	1.7	1.0
Vietnam	0.1	0.6	1.2	1.0	2.3	1.8
Southern Asia	5.0	6.0	6.3	3.9	5.1	2.6
Bangladesh	2.0	2.1	1.4	23.6	21.8	8.3
Iran	0.7	1.0	1.2	2.0	4.1	3.5
Pakistan	0.3	0.4	1.0	1.3	2.9	5.3
Sri Lanka	1.3	1.7	1.5	14.9	26.6	21.8
Western Asia	11.0	12.8	19.9	3.1	4.4	5.0
Israel	0.6	1.2	1.3	1.3	2.8	3.6
Saudi Arabia	2.4	1.9	2.1	2.6	3.3	3.1
Turkey	0.5	0.7	1.1	0.8	1.2	1.1
UAE	5.4	6.4	12.7	9.8	10.2	14.0
Eastern Africa	1.7	1.6	2.6	4.8	7.2	8.2
Middle Africa	0.1	0.2	0.5	0.7	1.9	2.1
Northern Africa	1.0	1.3	1.8	0.9	1.5	1.5
Southern Africa	0.2	1.0	1.8	0.4	2.4	3.3
South Africa	0.2	1.0	1.7	0.4	2.4	3.3
Western Africa	0.9	2.1	1.7	1.6	5.0	2.6
Nigeria	0.6	1.0	0.9	2.9	5.6	3.5
South America	0.7	1.4	2.7	0.3	0.7	0.8
Brazil	0.3	0.7	1.7	0.4	0.9	1.3
Caribbean	0.1	0.3	1.1	0.1	0.5	2.3
Central America	0.4	0.8	0.5	0.1	0.3	0.2
Total	37.1	46.5	64.5	1.4	1.7	1.8

Source: Author's estimates using Comtrade-WITS database

Conclusions

The commodity composition of exports underwent consistent changes in favour of capital and skill-intensive products. The share of these products in India's export basket more than doubled from about 25% in 1993 to nearly 54% in 2010 while the share of unskilled labour-intensive products halved from 30% to 15%. The lack of dynamism in labour-intensive manufacturing is a matter of concern because it is this sector that holds the potential to absorb the large pools of surplus labour from India's agriculture sector.³² The experience of the successful east Asian countries showed that export-led industrialization based initially on labour-intensive industries is crucial for sustained employment generation and poverty reduction. India seems to be skipping this important intermediate stage of industrialization and moving directly to the next stage based on capital- and skill intensive industries. This is an anomaly given the fact that India's true comparative advantage lies in semi-skilled labour-intensive activities. Due to its idiosyncratic specialization, India has been locked out of the vertically integrated global supply chains in many manufacturing Industries.³³

The fluctuation in India's export growth rate had been strongly tied to cycles in world demand. Consistent with the trends in world exports, the first decade of reforms was characterized by a moderate export growth from India while the second decade



witnessed a high growth. What is in store for the next decade is hard to predict given the uncertain state of affairs in the world economy. In the short to medium term, the question of sustaining the current export growth looms large with the US economy in the doldrums and the Europe's debt crisis continuing to escalate. According to the IMF'S latest "World Economic Outlook", the growth rate of world output started to decelerate on a broad front in mid-2011 and this slow growth is expected to continue into 2012 and 2013. It has also been projected that the growth rate of world merchandise exports would slow down considerably from about 20% in 2010 to 7% in 2012.³⁴ At this stage, it can be said with reasonable certainty that India's export growth will moderate considerably in the immediate future.

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