

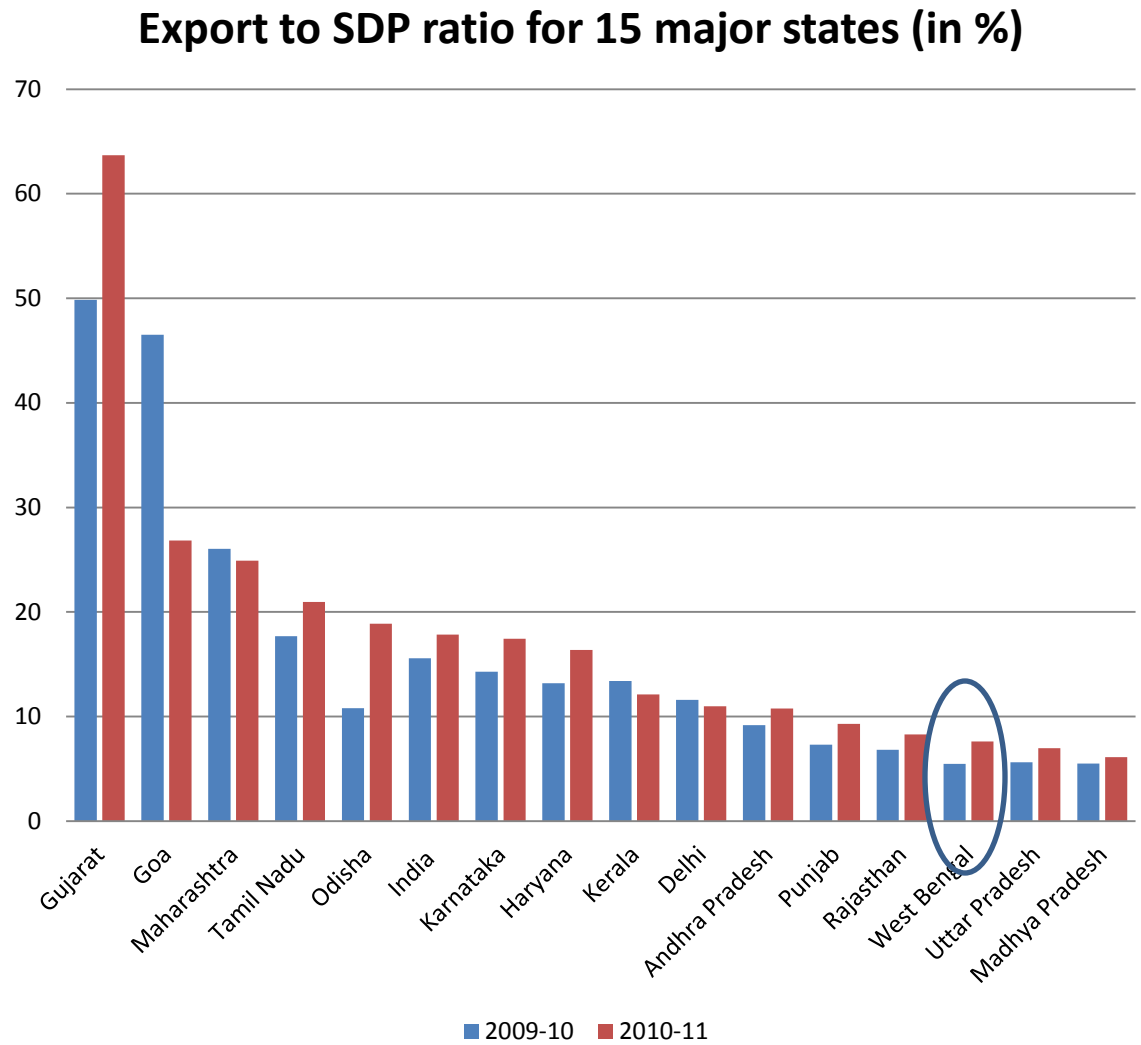
Pattern of International Trade through West Bengal: Some Evidence from Port-Level Data

Parthapratim Pal

IIM Calcutta

Position of West Bengal in India's Trade

- State level export data are collected by DGCIS based on the “origin of exports” but it is not published
- Economic Survey 2011-12 reported these data
- It showed that by total volume of exports, West Bengal rank 8th among the top 15 exporting states of India in 2010-11
- By Exports to State Domestic Product (SDP) ratio, West Bengal ranks 15th and 13th respectively in 2009-10 and 2010-11 among the top 15 exporting states of India.



Source: Economic Survey 2011

Availability of port specific data

- Port specific trade data are now available from DGCIS. These are in public domain but are paid data
- Port specific trade data show that relative importance of exports through the ports of West Bengal is declining in India's total exports.
- For example, in 2003-04 exports through the ports of West Bengal accounted for more than 6 percent of India's total exports.
- But the same share declined to around 3.4 percent in 2009-10 before recovering to just above 4 percent in 2012-13.
- It is a matter of concern that this decline took place in spite of India's growing trade with East and South East Asia during the same period.
- This study uses port level trade data from DGCIS to analyse patterns of trade through the different geographic areas of West Bengal. As state level trade data are not available from DGCIS, this study uses the port-specific data to understand the pattern of trade through West Bengal
- As these data have not been available before, I have not come across any similar works on West Bengal and international trade

Mode-wise Decomposition of exports

- Mode-wise decomposition of exports through the ports of West Bengal shows that Kolkata seaport alone accounts for more than 50 percent of total exports through this state. In some years, share of Kolkata sea port was more than 66 percent of total exports through West Bengal
- In comparison, Kolkata airport has a much lower share. Depending on the year, Kolkata airport has a share of 9.5-15 percent of total exports through this state.
- Land ports, which include both land customs stations (LCS) and rail ports, account for about 18- 20 percent of the total exports.
- Exports through rail ports in West Bengal are low and declining. Over the past few years, it only accounted for about 1 percent of the total exports through this state.
- West Bengal presently has five SEZs and among them Falta and Manikanchan SEZs are involved in merchandise trade .
- Exports through these two SEZs are on the rise and Manikanchan SEZ has shown significant growth in exports in the recent years. From about US\$ 120 million in 2005-06, Manikanchan's average export for the period 2010-11 to 2012-13 has grown to around US\$ 1800 million. Falta has shown much more modest increase in exports.
- Average export from the Falta SEZ for the period 2006-7 to 2012-13 has varied between US\$ 150 million and US\$ 300 million. Since 2009-10, these virtual ports consistently account for more than 15 percent of total exports through West Bengal.

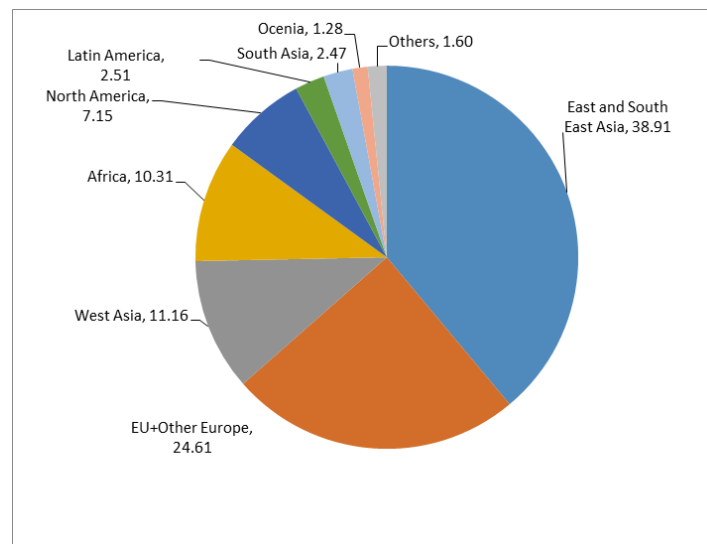
Direction of Trade...1

- All the land ports almost exclusively trade with Bangladesh. Although DGCIS data indicate that small amounts of exports destined for other countries also pass through these ports, for all practical purposes these ports are Bangladesh-specific.
- Among the ports that are not Bangladesh specific, Manikanchan SEZ is the least diversified port. Data for the last 4 years (2009-10 to 2012-13) show that more than 99 percent of exports from Manikanchan go to three countries, viz. United Arab Emirates (72.15%), Singapore (14.8%) and Hong Kong (12.2%). Imports by Manikanchan also show similar trends.
- Falta, on the other hand, is a multi-sector manufacturing SEZ and its export markets are much more diversified. Data for the period 2009-10 to 2012-13 show that during this period Falta SEZ has exported to 121 countries and imported from 68 different countries
- China plays a very important role as supplier of industrial inputs to this SEZ. This is also symptomatic of the larger national trend where China has emerged as the major source of industrial inputs for India.

Direction of Trade: Kolkata Sea Port

- Regional distribution of exports from Kolkata sea port shows that more than 50 percent of total exports go to other Asian countries. Among these, East Asia and ASEAN countries account for about 39 percent of total exports
- Imports by Kolkata sea port are much more than exports. Over the same period (2009-10 to 2012-13) Kolkata port has imported merchandise worth about US\$ 59 billion. This is about 2.8 times higher than the amount of exports that have gone through this port during the same period.

Direction of Exports from Kolkata Sea Port (in %) for 2009-10 to 2012-13



Top 10 source of imports for Kolkata Sea Port (aggregate for 2009-10 to 2012-13)

Rank	Country	Imports (in million US\$)	Share in total (%)
1	China	9794.57	16.63
2	Indonesia	5078.23	8.62
3	Australia	4653.71	7.90
4	Malaysia	3639.62	6.18
5	U S A	3153.71	5.35
6	Kuwait	3061.78	5.20
7	Saudi Arab	2359.69	4.01
8	Germany	2239.52	3.80
9	Japan	2154.68	3.66
10	UAE	1893.45	3.21
Subtotal		38028.96	64.56
Total		58903.90	100

Direction of Trade: Kolkata Airport

Top 10 destinations for exports from Kolkata Airport (aggregate for 2009-10 to 2012-13)

Rank	Country	Exports (in million US\$)	Share in total (%)
1	UAE	1519.48	33.32
2	Germany	372.53	8.17
3	Bangladesh	311.64	6.83
4	Singapore	273.90	6.01
5	UK	261.98	5.75
6	USA	258.46	5.67
7	Thailand	117.93	2.59
8	Italy	106.43	2.33
9	Spain	97.88	2.15
10	Hong Kong	97.64	2.14

Top 10 sources of Imports for Kolkata Airport (aggregate for 2009-10 to 2012-13)

Rank	COUNTRY	Value in million US\$	Share
1	Switzerland	7428.94	40.85
2	South Africa	2084.35	11.46
3	UAE	2010.07	11.05
4	China	1420.83	7.81
5	USA	866.27	4.76
6	Germany	605.77	3.33
7	Australia	557.46	3.07
8	Hong Kong	505.24	2.78
9	France	435.61	2.40
10	U K	244.02	1.34
Subtotal		16158.56	88.85
Total		18186.60	100.00

Imports by Kolkata airport show some startling patterns. For the period 2009-10 to 2012-13, Switzerland is the most important source of imports accounting for about 41 percent of total imports through this port. The importance of Switzerland, South Africa and UAE comes from the fact that a big proportion of imports through this port are of unwrought precious metals like gold and platinum. **For the period 2009-10 to 2012-13, these goods accounted for about 70 percent of total imports by the Kolkata airport.**

Skill and Technology intensity of exports through different ports of West Bengal

- In international trade literature, there is widespread recognition that the commodity composition of production and exports can have a significant bearing on the growth process of a country. A survey of the literature is given in the paper.
- There is a broad consensus that export sophistication is likely to act as a catalyst for broad-based economic growth in low income countries. This may happen because some products may yield greater knowledge spill overs, have a greater potential for backward and forward linkages, or offer an easier pathway toward other products with such characteristics.
- Theories of economic geography suggest that the production structure within a country can vary considerably and the economy may get spatially divided into an industrial 'core' and an agricultural 'periphery'. Clustering, economies of scale and agglomeration effects create small geographic clusters within a country where industrial activities get concentrated
- In this context, analysis of port specific disaggregated trade flow data of West Bengal can provide some important insights on production and export structure of the catchment area of the respective ports of this state.

Classification of exports

- For purposes of analysis, a database developed by UNCTAD will be used to classify the exports according to their skill and technology intensity .
- Following the UNCTAD database, products are classified into the following eight categories:
 - Non-fuel primary commodities,
 - Mineral fuels,
 - Resource-intensive manufactures,
 - Low skill- and technology-intensive manufactures,
 - Medium skill- and technology intensive manufactures,
 - High skill- and technology intensive manufactures,
 - Other Manufactured and
 - Unclassified products.
- Some modifications to the original UNCTAD classification were done in classifying the products. The original UNCTAD database left a number of commodities as ‘unclassified products’. This includes about 66 products at HS4 digit level spread over HS 32 to HS 96. In addition there is another HS4 digit product ‘laboratory chemicals’ (HS 9802) which was also left unclassified. These are all manufactured products and for this study, these products have been clubbed under the ‘Other Manufactured’ category.

Details of this database can be found in the study titled “Retooling Trade Policy in Developing Countries: Does Technology Intensity of Exports Matter for GDP Per Capita?” The study is one of Policy Issues in International Trade and Commodities studies published by the United Nations (UNCTAD/ITCD/TAB) and is available online at <http://www.unctad.info/en/Trade-Analysis-Branch/Data-And-Statistics/Other-Databases/>

Composition of Exports through some major ports of West Bengal (Sea+Air+SEZs) for the year 2011-12 (in percentage)

	Kolkata Air	Kolkata Sea	Manikanchan	Falta
Non-fuel primary commodities	2.85	21.72	0.00	16.90
Mineral fuels	17.03	9.66	0.00	5.46
Resource-intensive manufactures	35.30	17.30	3.30	22.10
Low skill- and technology-intensive manufactures	1.05	29.59	0.00	11.04
Medium skill- and technology intensive manufactures	3.36	7.81	0.00	5.35
High skill- and technology intensive manufactures	10.16	11.96	0.00	11.90
Other Manufactured	30.23	1.91	96.70	27.22
Unclassified products	0.02	0.05	0.00	0.02

- Manikanchan is a complete outlier. As it is an SEZ focussed exclusively on gems and jewellery, its major export items are various jewellery items including diamonds
- For Kolkata airport, most of the exports are of the category 'Resource-intensive manufactures'. This category is mostly made up of textiles, garments and leather products. Apart from these, more than 29 percent of all exports from Kolkata airport are jewellery items

Composition of Exports through some major ports of West Bengal (Sea+Air+SEZs) for the year 2011-12 (in percentage)

- The composition of exports through these four ports show that exports from Falta, Kolkata seaport and Kolkata airport are quite diversified.
- However, their export pattern is somewhat skewed towards lower value added items.
- Non-fuel primary goods, Mineral fuels and Resource intensive manufactures have high share in the export composition of each of these three ports.
- High technology and skill intensive products are exported through these ports but these categories are mostly dominated by the outputs of petrochemical firms operating in West Bengal and neighbouring states.
- The export pattern of these ports also reflects the existence of small engineering firms and industrial clusters of leather, textile and garments and chemicals around these ports.

Major items Exported through the eight land ports of West Bengal

Petrapole	Cotton, cotton yarns, woven fabrics, motor vehicles including motorcycles and tractors, wheat, rice, chemicals and tyres.
Mohedipur	Oil cakes, maize (corn), onions and garlic, spices, pepper, lac, pebbles and gravels, aromatic plants, fruits and slags
Ghojadanga	Cotton, Onion and garlics, pepper, grapes, apples, other fruits, spices, dates and tomato
Hili	Maize (corn), wheat and meslin, onions and garlic, tractors, grapes, fish, ball bearing, spices, fruits and rice
Ranaghat	Oil cakes, sugar and maize (corn)
Singabad	Maize, oil cakes, pebbles
Chengraban dha	Seeds, granite and stones, cement, textile and garments and wood products
TT Shed	Ashes and slags

Some observations from the data

- For these eight ports on aggregate, non-fuel primary commodities account for about 61 percent of total exports.
- But if exports through Petrapole are excluded from the list, then more than 98 percent of exports through the remaining seven ports are of non-fuel primary commodities.
- This finding has several important implications. On an operational level, this result may imply that creation and development of infrastructure related to exports of perishable goods should be a priority for these ports.
- However, from a policy perspective this raises some more serious questions.
 - First, most of the seven ports which only export agricultural and primary products are located away from Kolkata. This points towards a core-periphery type of industrialization in West Bengal where the industrial concentration is skewed towards Kolkata and its adjoining districts.
 - It may indicate that manufacturing in West Bengal is not only weak but it is also concentrated in a limited area in the southern part of the state. And it is possible that this is reflecting in the export pattern through the ports of West Bengal

It may not be the demand pattern of Bangladesh...

- It may be argued that the demand pattern of Bangladesh may be dictating the composition of exports from these ports.
- If import demand from Bangladesh is only for primary products then the ports of West Bengal will only be exporting those types of commodities to Bangladesh.
- However, this hypothesis is not supported by the export pattern of the top two ports of India in terms of their exports to Bangladesh.
- These two ports are Petrapole and Nhava Sheva sea port. As mentioned before, Petrapole is the Indian port with maximum amount exports to Bangladesh. For the period 2009-10 to 2011-12, Petrapole exported 16.4 percent of India's total exports to Bangladesh. The Nhava Sheva sea port is the second most important port and it exported 15.1 percent of India's total exports to Bangladesh during the same period.
- Export composition of Nhava Sheva sea port shows that at HS 2 digit level, among the top 10 export items from this port, only two are primary products and rest are all manufactured products of various skill intensity

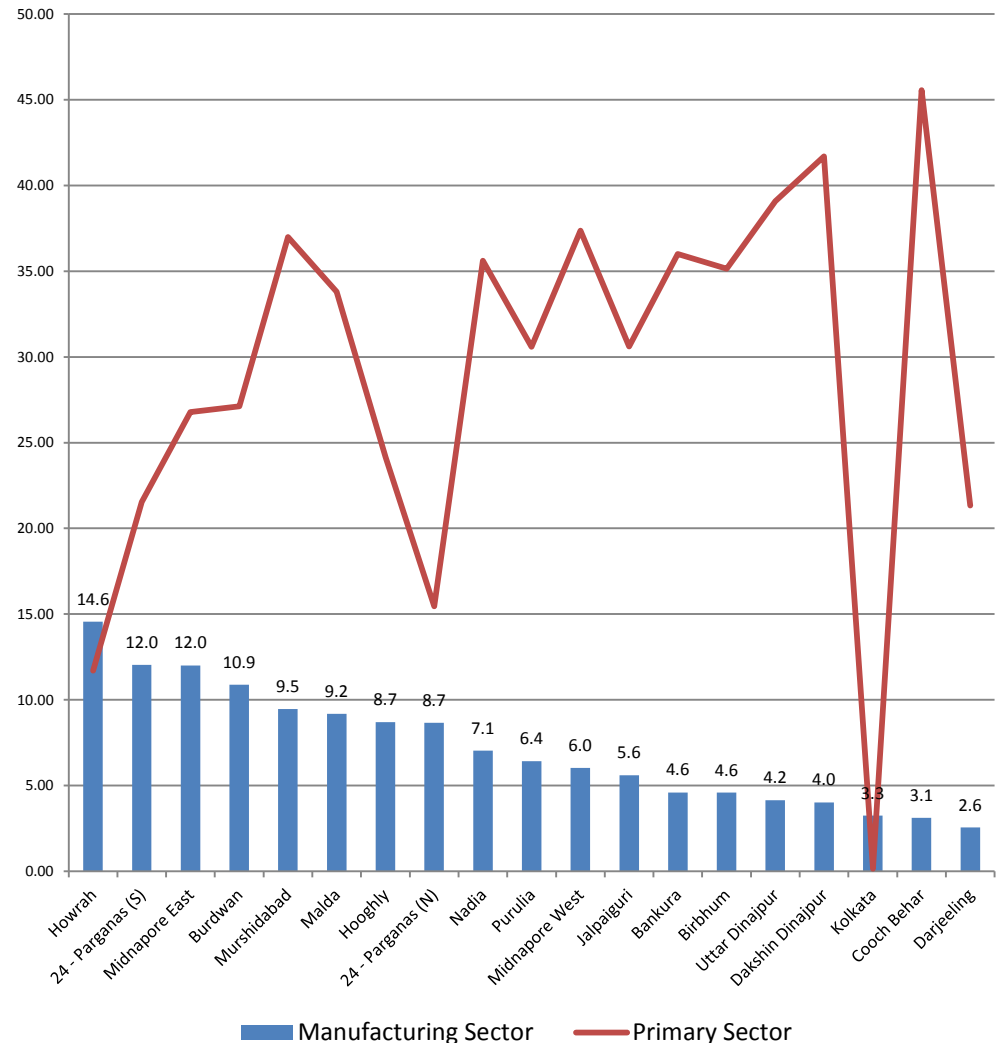
Top 10 Export Items at HS2 digit level from Nhava Sheva Sea to Bangladesh (aggregate for 2009-10 to 2011-12)

HS CODE	DESCRIPTION	EXPORTS (in million US\$)	Share (%)
52	Cotton	14260.90	27.74
87	Road vehicles and parts	11566.17	22.50
84	Machinery and mechanical appliances	3523.83	6.86
39	Plastics and articles thereof	3504.16	6.82
17	Sugars and sugar confectionery	2184.10	4.25
55	Man-made staple fibres	2118.27	4.12
85	Electrical machinery & equipments	2072.52	4.03
38	Miscellaneous chemical products	1537.98	2.99
30	Pharmaceutical products	1333.76	2.59
32	Dyeing, tanning colouring matter	1319.07	2.57

Concluding Observations

- A large number of ports of West Bengal are exporting the types of products which are not the most conducive for economic growth and development.
- As the literature on trade sophistication points out, exporting low-value added primary commodities do not generate very strong backward and forward linkages and the knowledge spillover benefits of such trade are also extremely limited.
- By locking into a production and export pattern with low share of manufacturing and high dependence on agriculture, many districts of West Bengal are possibly not following optimum development trajectories.
- What is important for the development of a region is that production, preferably of high value goods/services, should take place locally with its direct and indirect effects.
- Manufacturing activity in West Bengal is not only well below the national average it is totally skewed towards southern districts

Share of the Primary Sector and Manufacturing in the District Domestic Product (2009-10)



Source: Government of West Bengal (2011), Primary sector includes Agriculture & allied, and Mining & Quarrying

Thank you