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DOES NATIONAL-LEVEL TRADE POLICIES IMPACT STATE-LEVEL EXPORTS? A CASE OF WEST BENGAL

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CONTEXT

- Number of FTAs signed and negotiated by India
- Regional differences in endowments and skills
- Recent Thrust on formulating State-level export strategies



OBJECTIVE

- Is to find the relationship between State-level exports and Central Government Trade Policies



SCOPE

- Geographical Region: West Bengal
- Products: HS six digit-level



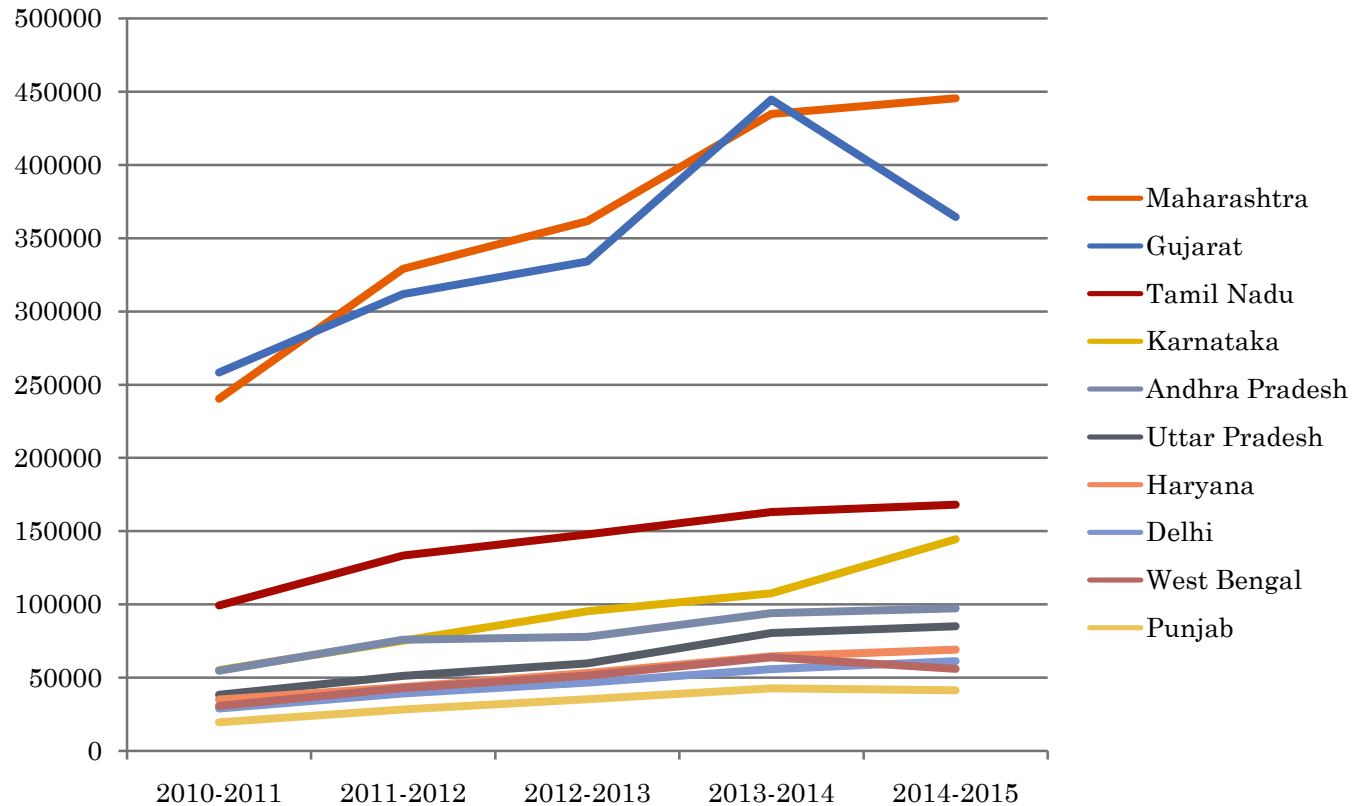
WEST BENGAL AND MAJOR EXPORTING STATES (IN RS. CRORES)

States/UTs	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Maharashtra	240337.8	329086.3	361460.2	434591	445349.7
Gujarat	258229.6	311746.7	334069.8	444477.8	364313.6
Tamil Nadu	99112.44	133312.4	147581.7	163008.7	168001.3
Karnataka	55165.28	75264.68	95301.81	107592.7	144410.6
Andhra Pradesh	54752.87	75880.85	77846.8	93860.34	97162.41
Uttar Pradesh	38214.81	51225.1	59546.32	80523.45	85034.43
Haryana	34905.63	43462.48	53077.36	64477.46	69061.76
Delhi	28894.27	39266.06	46632.99	55894.42	61273.79
West Bengal	30644.7	42788.92	51298.44	63731.95	55884.87
Punjab	19436.02	28256.37	35311.36	42729.58	41425.7
India	1136964	1465959	1634319	1905011	1897842

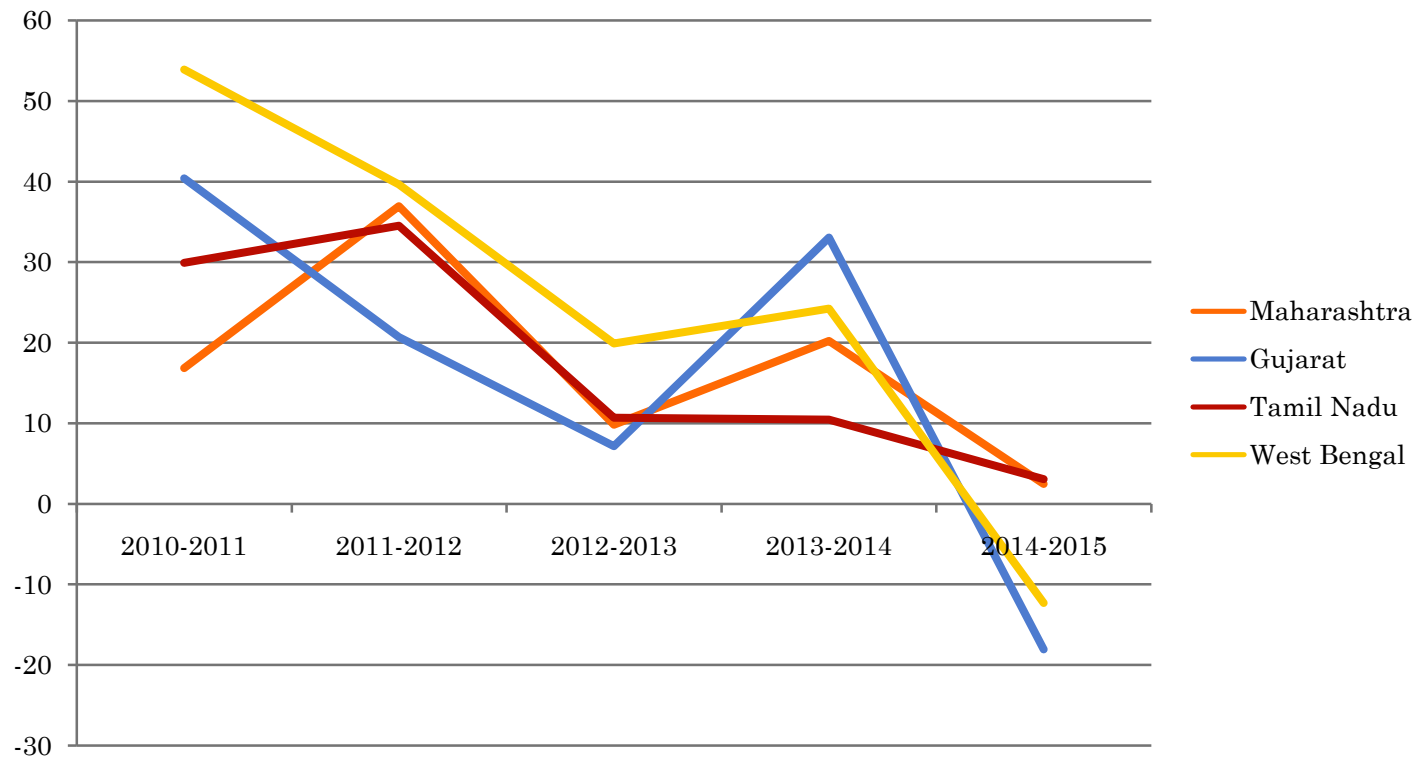
Source: DGCI&S



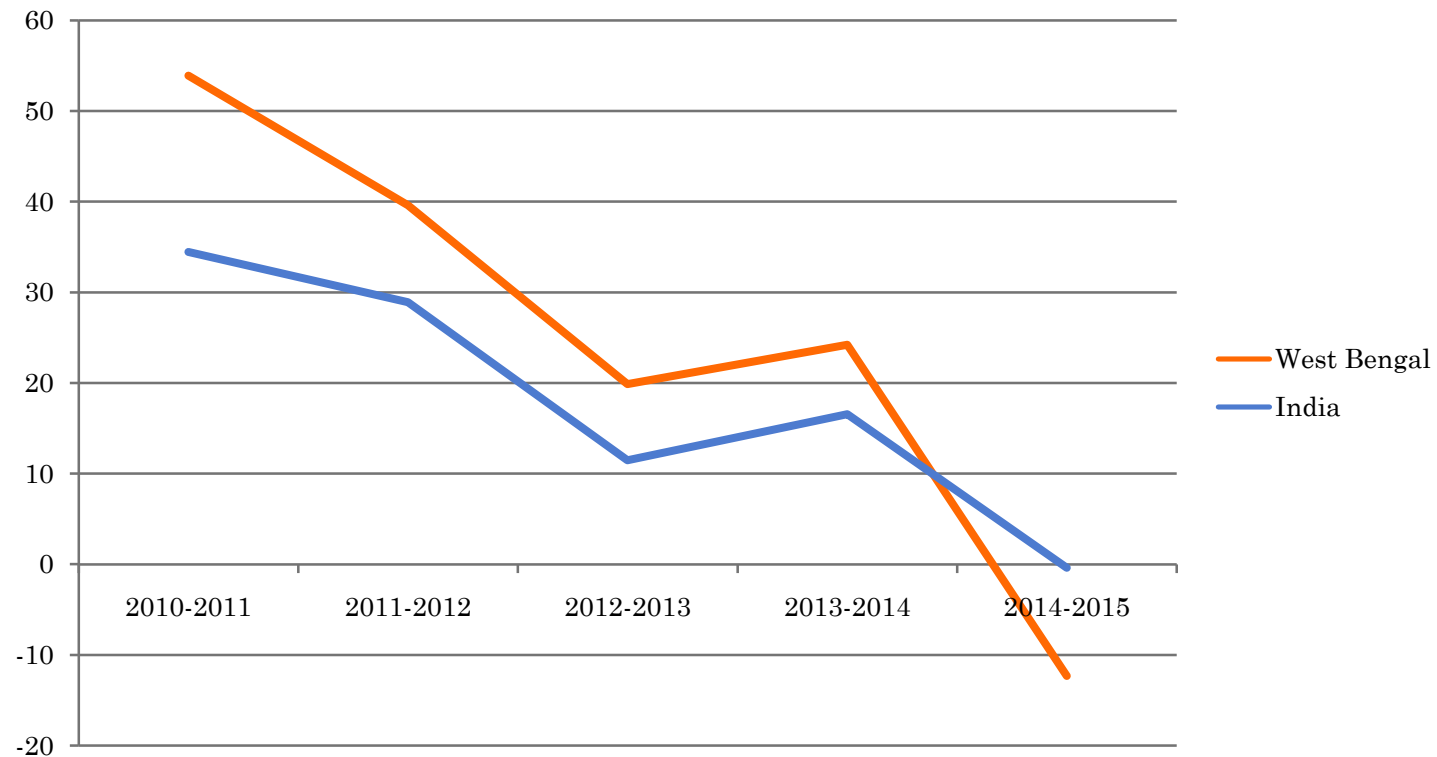
GRAPHICAL REPRESENTATION EXPORTS MAJOR STATES (IN RS. CRORES)



GROWTH OF EXPORTS



GROWTH OF EXPORTS: WEST BENGAL AND INDIA



THUS WEST BENGAL STARTED WITH A HIGH
GROWTH RATE IN EXPORTS BUT CONTRACTED
MORE THAN OTHER MAJOR STATES AND INDIA
IN RECENT TIMES



HENCE WILL A SHIFT TOWARDS MORE STATE-SPECIFIC EXPORT POLICY HELP WEST BENGAL VIS-A-VIS WHEN TRADE POLICY WAS MAINLY FORMULATED AT THE CENTRAL LEVEL?



TO ANSWER THIS QUESTION WE HAVE TO
FIRST LOOK AT WEST BENGAL'S EXPORT
UNDER SUCH REGIME AND THEN MAKE
CONJECTURES ABOUT THE FUTURE



PAST STUDIES

- Sinha Roy, Das and Das (2015): Looks at determinants of state-level exports (Physical infrastructure stock, GSDP)
- Most of the other related work in this area is reviewed in Sinha Roy, Das and Das (2015)
- Pal (2013): Mainly looks at pattern of trade through West Bengal and its skill and technology-intensity. West Bengal exports low-value added and resource intensive items with minimum linkage effects. Hence benefits from being closer to East Asia may have been over-emphasised.



TOP 20 EXPORT PRODUCTS FROM WEST BENGAL (SOURCE DGCI&S)

Rank	HS Code	Name of the Commodity	Exports in 2013-14 (INR)	Rank	HS Code	Name of the Commodity	Exports in 2013-14 (INR)
1	71131910	Unstudded Gold	65910600739	11	85414011	Solar Cells	11069710910
2	72023000	Ferro Silico Manganese	30200045191	12	73259910	Articles of Iron and Steel	10250287563
3	71023910	Cut Diamond	28311624262	13	10063090	Long Grained Para boiled Rice	8619393796
4	27101920	Aviation Turbine Fuel	26977127931	14	42022190	Articles of Leather (trunk, Suitcases etc.)	8311898481
5	39076090	Poly Ethylene Terephthalate	19837417962	15	73030030	Spun Pipe	8274498926
6	27101950	Fuel Oil	19099894269	16	85451100	Graphite Electrode	8085139336
7	42032910	Gloves for use of Industry	16243711407	17	71131930	Gold set with Diamonds	7611904619
8	03061719	Fish and Fish Products	13401007830	18	29022000	Benzene	7154471722
9	42023120	Wallets and Purse	13072986646	19	72021100	Ferro Manganese	6331678884
10	10063010	Para boiled Rice	12821263014	20	52010015	Cotton of Staple Length 28.5 mm	5991452822

POTENTIAL PRODUCTS FROM WEST BENGAL: METHOD

- They are produced in large quantities in West Bengal
- West Bengal has a production advantage in these products
- India has a Revealed Comparative Advantage in these products
- These products are not exported in large amounts from West Bengal



TOP AGRICULTURAL PRODUCTS WITH PRODUCTION ADVANTAGE

NIC code	Product description	Total output for West Bengal (in Rs. Lacs)	Total output for India(in Rs. Lacs)	Production Advantage
31	Inland Fish	1269955	3907041	6.199969038
11	Potato	645719	1878715	6.555892441
12	Betel leaves	575592	736661	14.90377303
11	Cauliflower	468368	961016	9.296206326
11	Jute	414164	468616	16.85793561
11	Paddy	2087657	15229844	2.614645703
11	Brinjal	379942	1390280	5.212717465
17	Meat	881906	7788849	2.15972358
31	Marine fish	453902	2820683	3.06942462
11	Cabbage	198325	717111	5.275215862
11	Other vegetables	379766	3093929	2.341288296
12	Tea	148410	599884	4.71894639
11	Okra	149495	831858	3.427888026
11	Tomato	180912	1796511	1.920819921
12	Pine Apple	53906	185071	5.55581649



Top Industrial Products Produced with Advantage in West Bengal

NIC code	Product description	Output for West Bengal (in Rs. Lacs)	Output for India(in Rs. Lacs)	Production Advantage
302	Manufacture of railway locomotives and rolling stock	283918	1010629	5.358588
151	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur	265024	1142863	4.423237
191	Manufacture of coke oven products	339462	1630156	3.972018
162	Manufacture of products of wood, cork, straw and plaiting materials	279582	1392750	3.828999
279	Manufacture of other electrical equipment	197894	1422871	2.652872
272	Manufacture of batteries and accumulators	187244	1600912	2.230949
241	Manufacture of basic iron and steel	5166013	47755392	2.063394
243	Casting of metals	606060	6059574	1.907755
329	Other manufacturing n.e.c. (not elsewhere classified)	79116	813754	1.854472
201	Manufacture of basic chemicals, fertilizer and nitrogen compounds, plastics and synthetic rubber in primary forms	1808356	20863045	1.653314
102	Processing and preserving of fish, crustaceans and molluscs	82170	1081978	1.448585
120	Manufacture of tobacco products	182952	2659033	1.312389
152	Manufacture of footwear	119999	1983528	1.153954
107	Manufacture of other food products	827733	15308858	1.031328
181	Printing and service activities related to printing	156555	2967691	1.00623

ACTUAL AND POTENTIAL PRODUCTS FOR EXPORT – AGRICULTURE

NIC code	Product description	Production Advantage	Status
31	Inland Fish	6.199969	Already Exporting
11	Potato	6.555892	Already Exporting
12	Betel leaves	14.90377	Already Exporting
11	Jute	16.85794	Already Exporting
17	Meat	2.159724	Already Exporting
31	Marine fish	3.069425	Already Exporting
12	tea	4.718946	Already Exporting
12	Papaya	3.749986	Already Exporting
12	Mango	1.302995	Already Exporting
12	dry chillies	1.783332	Already Exporting
14	Egg	1.478889	Already Exporting
11	Sesamum	2.288307	Already Exporting
14	Dung	1.380242	Potential
12	Pine Apple	5.555816	Potential; Lack of Continuity in Exports
12	Guava	2.599758	Potential; Lack of Continuity in Exports
12	Cashewnut	2.890637	Potential; Lack of Continuity in Exports
11	Green Peas	1.646704	Potential; Lack of Continuity in Exports
11	Brinjal	5.212717	Potential; Lack of Information on Exports
11	Okra	3.427888	Potential; Lack of Information on Exports
11	Arhar	2.160856	Potential; Lack of Information on Exports
12	Litchi	4.689055	Potential; Lack of Information on Exports



ACTUAL AND POTENTIAL PRODUCTS FOR EXPORT – INDUSTRY

NIC code	Product description	Production Advantage	Status
272	Manufacture of batteries and accumulators	2.23094882	Already Exporting
241	Manufacture of basic iron and steel	2.063394352	Already Exporting
102	Processing and preserving of fish, crustaceans and molluscs	1.4485851	Already Exporting
120	Manufacture of tobacco products	1.312389029	Already Exporting
152	Manufacture of footwear	1.153953871	Already Exporting
191	Manufacture of coke oven products	3.972017524	Potential; Lack of Information
329	Other manufacturing n.e.c.	1.854472265	Potential; Lack of Information
107	Manufacture of other food products	1.031327581	Potential; Lack of Information
151	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur	4.423236787	Potential; Lack of Continuity in Exports



MODEL

- Following Goldstein and Khan (1978)
- The export supply equation can be specified in log-linear form as

$$\log X_{it}^S = \beta_0 + \beta_1 \log(PX / P)_{it} + \beta_2 Y_{it}^* \dots\dots\dots(1)$$

$$\log X_{it}^S = \beta_0 + \beta_1 \log(PX / P)_{it} + \beta_2 Y_{it}^* + \beta_3 X_{it}^I \dots\dots(2)$$

$$\log X_{it}^S = \beta_0 + \beta_1 \log(PX / P)_{it} + \beta_2 Y_{it}^* + \beta_3 X_{it}^I + \beta_4 D_{1i} \dots\dots(3)$$



DATA

- Export from West Bengal (X^S): Source DGCI&S for the year 2009-10 to 2013-14
- Export Price (PX): EXIM Databank, MOC, GOI
- Domestic Price (P): WPI, Department of Economic Affairs, GOI
- Production Capacity (Y^*): GVA Source ASI
- Exports India: (X^I): EXIM Databank, MOC, GOI
- Policy Dummy (D): Focus Product Scheme, Trade Policy Document, 2009-14 (DGFT)



RESULTS

Dependent Var (LogXs)	OLS	OLS	OLS	OLS	IVREG
logPXP	0.06308**	0.06516**		0.064576**	0.42769**
logPX			0.033485**		
logWPI			-1.00686**		
FPS		0.433479**	0.383491**	0.435942**	0.534382**
2011				0.037091	
2012				0.122396	
2013				0.153535*	
2014				0.183365**	
Constant	14.19403**	14.00428**	19.01862**	13.90033**	13.68533**
No. of observations	15491	15491	15491	15491	14475
Prob>F	0.0000	0.0000	0.0000	0.0000	0.0000
R ²	0.0026	0.0078	0.0173	0.0083	

* Means significant at 5% and ** significant at 1%

FPS

- For diversifying the export basket or the type of commodities that are exported Focus Product Scheme was introduced in 2006.
- The main objective of this scheme is to incentivize export of certain products, which have high employment intensity and other advantages
- As per the FPS policy, exports of notified products to all countries shall be entitled for duty credit scrip equivalent to 2 -5 % of the value of exports for each licensing year. Duty credit scrip is a license to import commodities in a duty free manner for the scrip value (2-5% of exports)



FPS (...CONTD.)

- Additional benefit of 2% bonus, over and above the existing benefits of 5% / 2% under FPS, allowed for about 135 existing products, which had suffered due to recession in exports. Major sectors include all Handicrafts items, Silk Carpets, Toys and Sports Goods (all of which were earlier eligible for 5% benefits), Leather Products and Leather Footwear, Handloom Products and some of the Engineering Items including Bicycle parts and Grinding Media Balls (all of which were earlier eligible for 2% benefit).



FPS (...CONTD.)

- 256 new products added under FPS (at 8 digit level), which became entitled for benefits @ 2% of FOB value of exports to all markets. Major Sectors / Product Groups covered are Engineering, Electronics, Rubber & Rubber Products, Other Oil Meals, Finished Leather, Packaged Coconut Water and Coconut Shell worked items.
- Many of these products are exported from West Bengal



CONCLUSIONS

- West Bengal exports are significantly impacted by FPS
- Policies to boost trade may have impacted West Bengal Exports as seen from positive time dummy
- Potential for exports are substantial from the state
- More State-focussed trade policy might help exports provided infrastructure and business environment is congenial



FUTURE DIRECTIONS

- This work reports preliminary findings from an on-going study
- Problems of endogeneity would be addressed through Simultaneous equation approach, estimating the export demand and supply equations simultaneously
- Additionally, a variable reflecting India's FTA commitments with its trading partner would also be included to look at the impact of preferential access on State's export



THANK YOU

