

Export Growth in Bangladesh: Exploring the Data

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This project

What drives export growth in developing countries?

- Role of multinationals and access to foreign markets.
- Some dimensions of entrepreneurship:
 - ▶ Product innovation.
 - ▶ New firms, new markets, new industries.
 - ▶ Quality upgrading.
- Role of policy?

Bangladesh:

- Rapid growth in exports of textiles and apparel.
- Key concerns:
 - ▶ Is there room for more growth?
 - ▶ Pressing need for diversification?
- More broadly: learn about perspectives for export growth in this industry over the next years.

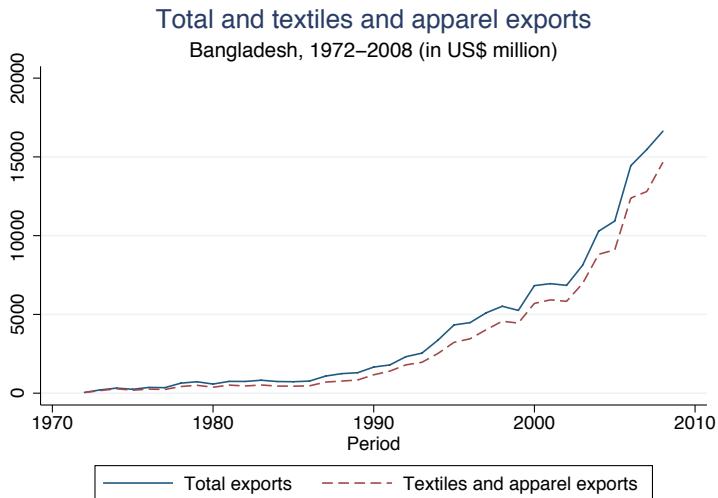
Exploring the data

Two main sources of data:

- COMTRADE: 4-digit SITC Rev. 2 industries, 1962-2008.
 - ▶ “Under Garments, Knitted or Crocheted of Wool” .
- Transactions-level data: HS 8-digit products, 2004/2005 - 2009/2010.
 - ▶ “Men’s or boys’ overcoats, raincoats, car-coats, capes, cloaks and similar articles made up of fabrics of headings 59.03, 59.06 or 59.07” .

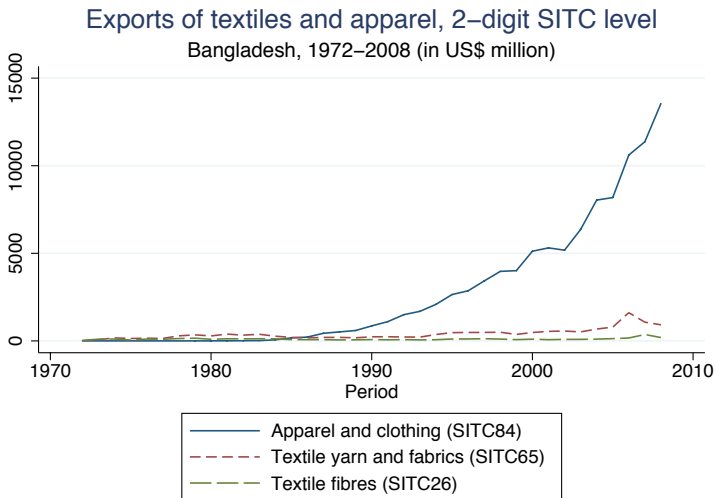
Aggregate trends

Strong growth of exports, led by textiles and apparel.



Aggregate trends

Engine of growth: apparel and clothing.

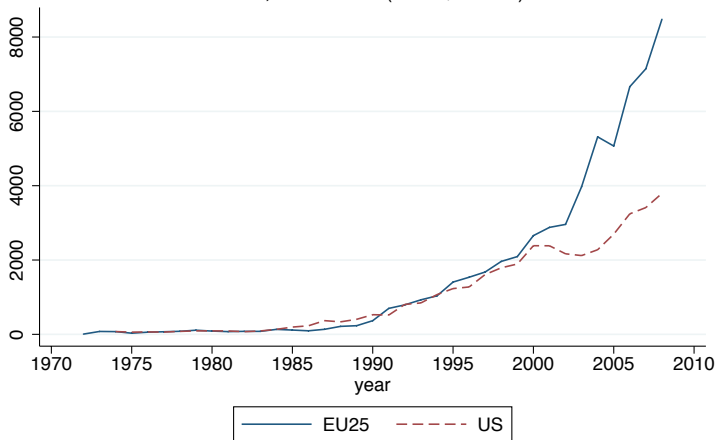


Aggregate trends

Markets: US and EU.

Exports of textile and apparel by market

BGD, 1972–2008 (in US\$ million)

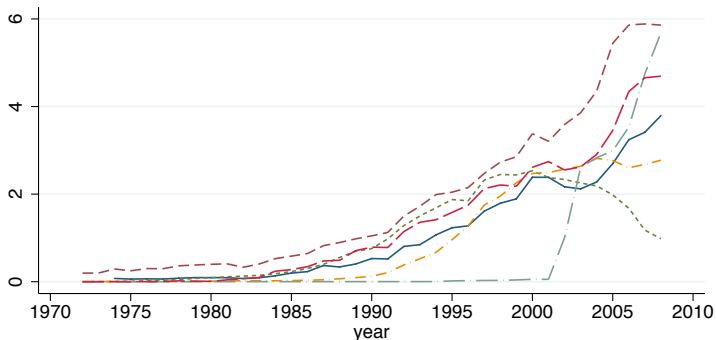


Aggregate trends

Strong competition (US).

Value of textile and apparel exports to the US

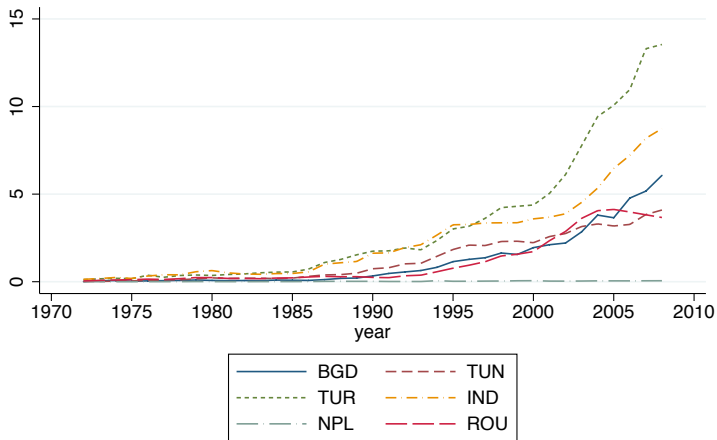
Selected countries



Aggregate trends

Strong competition (EU).

Value of textile and apparel exports to the EU25
Selected countries

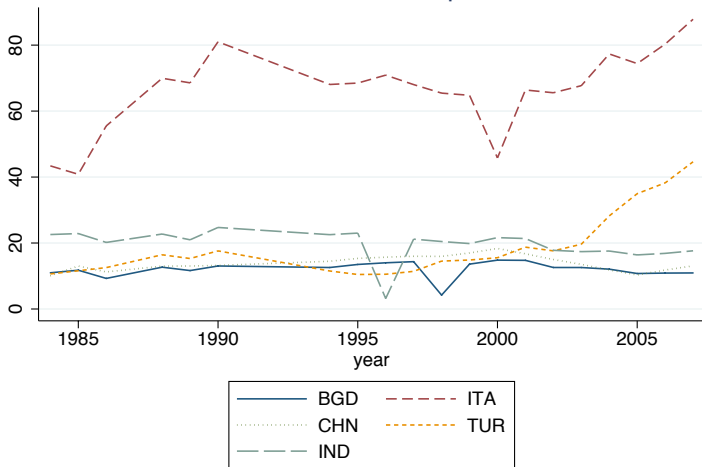


Aggregate trends

Low and stagnant unit values.

(“Trousers, Breeches, Etc. of Textile Fabrics”)

Unit values for SITC8423 exports to the US



Aggregate trends

Diversification and transformation at the industry level in the 80's and 90's

COMPOSITION OF TOP 10 4-DIGIT INDUSTRIES IN SITC84 EXPORT SECTOR
BANGLADESH, SELECTED YEARS

Ranking (by exports)	1974	1980	1984	1989	1994	2000	2004	2008
1	8420	8420	8441	8441	8441	8462	8451	8462
2	8481	8472	8435	8439	8462	8441	8462	8451
3	8472	8481	8423	8435	8439	8451	8423	8423
4	8471	8471	8431	8462	8435	8439	8439	8439
5			8439	8423	8429	8423	8441	8459
6			8421	8429	8423	8429	8459	8441
7			8424	8451	8451	8435	8429	8429
8			8451	8459	8459	8459	8435	8435
9			8462	8463	8484	8484	8463	8463
10			8443	8442	8424	8463	8484	8484
Nr of industries	< 8	< 8	15	20	26	28	28	28
Concentration	0.88	0.97	0.81	0.79	0.71	0.71	0.79	0.81

Notes: Measure of concentration is the share of first 5 industries in total exports of SITC84 sector. SITC8420 can include up to 5 industries. For 1974 and 1980 concentration is the share of the first 2 rankings.

Transactions-level data

What can we learn from micro data on exports?

- Daily transactions-level data at HS 8-digit disaggregation, 2004-2009.
- Destinations, weight, item value, mode of transport, etc.

Key margins:

- Entrants vs. incumbents.
- New products.
- New markets.
- Higher unit values.

Extensive and intensive margins

Entry is important...

Table: Firm turnover

Year	Entering	Continuing	Exiting	Total
2004				3,941
2005	995	3,189	752	4,184
2006	873	3,343	841	4,216
2007	1,637	3,477	739	5,114
2008	1,344	4,089	1,025	5,433
2009	1,393	4,274	1,159	5,667

Extensive and intensive margins

... and so is the intensive margin.

Table: Exports and exports per firm (US\$ M)

Year	Total exports	Av. exports per firm
2004	7,698	2.0
2005	9,909	2.4
2006	8,116	1.9
2007	12,414	2.4
2008	13,989	2.6
2009	14,518	2.6

+ 80%

+ 53%

Extensive and intensive margins

Growth decomposition: entry matters.

Table: Contribution to growth: continuing, entering and exiting firms (%)

Period	Export growth	Incumbents	Gross entry	Gross exit
2004-2009	74.9	49.2	66.1	-15.3

Extensive and intensive margins

How important are new exporters, new products and new markets by 2009?

Table: Share of sales: new products and entry margins, 2009 (%)

	Existing products	New products	Total
Incumbents	63.6	0.4	63.9
New exporters	35.9	0.1	36.1
Total	99.5	0.5	

Table: Share of sales: new products and markets, 2009 (%)

	Existing products	New products	Total
Existing markets	99.46	0.53	99.99
New markets	0.01	0.00	0.01
Total	99.5	0.5	

Unit values

Are unit values increasing?

Table: Weighted average unit values, 2004 vs. 2009 (US\$/Kg.)

	2004	2009
Mean	9.0	9.7
Std. Dev.	16.2	21.4
Max.	654.3	831.4
Min.	0.0	0.0
Percentiles		
10%	1.9	1.2
25%	4.9	3.9
50%	7.5	8.1
75%	10.0	11.5
90%	14.8	16.3

Preliminary thoughts

- Has the industry reached maturity?
- It seems to be stagnant in terms of products, destinations and unit values.

Idea 1

The “easy” expansion phase is over; subsequent growth should come from higher unit values associated to quality upgrading.

Idea 2

Export growth should come from diversification out of apparel and clothing.

Puzzle: Dynamic firms within a stagnant industry

- Entry seems to be important. What can we learn about entrants?
- Domestic producers that select into exporting?
- Are entrants born to export?

Cohorts analysis

- “Cohort”: group of exporters that reported positive exports for the first time.

Table: Cohorts: Number of exporters

Year	Cohort					
	2004	2005	2006	2007	2008	2009
2004	3941					
2005	3189	995				
2006	2784	638	794			
2007	2577	575	549	1413		
2008	2365	493	449	977	1149	
2009	2158	453	393	806	733	1124

Cohorts analysis

- Exit rates are relatively low for young firms.

Table: Cohorts: Exporter survival rate

Age	Bangladesh	Colombia
1 yr old	0.69	0.33
2 yr old	0.85	0.74
3 yr old	0.89	0.88
4 yr old	0.92	0.94
5 yr old	0.91	0.95

Cohorts analysis

- Growth is slow... but see 2007.

Table: Cohorts: Value of exports (US\$ billion)

Year	Cohort					
	2004	2005	2006	2007	2008	2009
2004	7.7					
2005	8.8	1.1				
2006	7.2	0.7	0.2			
2007	9.8	1.2	1.0	0.5		
2008	9.9	1.3	1.2	1.3	0.4	
2009	9.3	1.3	1.2	1.6	0.8	0.4

Cohorts analysis

- Firms grow larger as they grow older.

Table: Cohorts: Exports per firm (US\$ million)

Year	Cohort					
	2004	2005	2006	2007	2008	2009
2004	2.0					
2005	2.8	1.1				
2006	2.6	1.0	0.3			
2007	3.8	2.0	1.8	0.4		
2008	4.2	2.6	2.6	1.3	0.3	
2009	4.3	2.8	3.1	1.9	1.1	0.3

Dynamics for individual firms

- Aggregates mask dynamics for individual firms.
 - ▶ New products and markets are important for individual firms.

Table: New products/markets for individual survivors

Share of 2009 sales (%)	
New products	New markets
17.2	21.1

Product dynamics for individual firms

- Entrants tend to export fewer products, but add products as they mature.

Table: Transition between number of products, 2004–2009

		2009											
		0	1	2	3	4	5	6	7	8	9	10	10+
2004	0	0.0	36.8	17.7	11.1	7.3	5.5	4.3	2.9	2.7	1.8	2.1	7.9
	1	66.9	12.6	8.1	4.0	2.1	2.0	0.9	0.8	0.1	0.4	0.6	1.4
	2	48.9	13.1	13.0	8.7	5.1	2.4	2.4	1.9	1.1	0.6	0.2	2.6
	3	43.3	12.0	9.2	9.6	7.4	5.2	3.4	3.0	2.2	1.2	1.2	2.4
	4	40.0	6.6	10.3	10.0	6.9	6.0	5.7	4.0	1.1	1.4	1.4	6.6
	5	41.2	6.1	8.2	8.6	4.1	5.7	3.7	2.5	4.1	5.7	2.5	7.8
	6	32.3	5.4	8.6	7.0	8.1	6.5	7.5	2.2	6.5	2.2	3.2	10.8
	7	29.4	5.2	8.1	7.4	5.2	6.6	4.4	8.1	5.2	2.9	2.2	15.4
	8	34.7	5.7	4.0	8.1	3.2	9.7	5.7	4.0	4.8	2.4	4.8	12.9
	9	36.2	4.3	2.1	8.5	1.1	4.3	5.3	8.5	6.4	6.4	3.2	13.8
	10	33.0	8.5	6.6	3.8	2.8	9.4	1.9	4.7	3.8	3.8	2.8	18.9
10+	27.1	3.9	2.3	4.4	5.4	4.2	3.7	4.1	4.4	4.9	3.7	32.1	

Unit values dynamics for individual firms

- Conditional on surviving, a firm's unit value is likely to transit to a higher bin.

Table: Transition between unit-value bins, 2004–2009

		2009											
		0	1	2	3	4	5	6	7	8	9	10	
2004	0	0.0	13.9	11.6	8.0	7.0	8.1	10.5	9.3	8.7	6.4	16.6	100.0
	1	51.8	37.7	6.4	1.9	0.6	0.0	0.0	0.3	0.3	0.0	1.1	48.2
	2	60.5	3.9	16.4	9.3	3.2	1.6	1.3	1.3	0.6	0.0	1.9	35.7
	3	59.1	1.2	1.2	9.8	12.1	7.2	3.2	2.9	0.3	0.9	2.3	38.6
	4	45.4	0.5	0.7	1.1	5.9	13.5	12.8	9.4	4.7	2.9	3.1	52.3
	5	41.3	0.5	0.2	0.4	2.1	7.2	12.7	12.6	9.9	6.0	7.0	55.4
	6	37.0	0.5	0.5	0.2	2.1	5.3	8.9	14.6	10.7	8.8	11.4	54.4
	7	36.4	0.3	0.3	1.0	1.0	3.5	5.4	8.6	13.4	11.2	18.8	52.1
	8	36.2	0.5	0.0	1.1	1.1	2.2	2.7	8.1	13.5	8.1	26.5	48.1
	9	39.0	0.8	1.7	0.0	0.8	2.5	3.4	5.1	7.6	4.2	34.7	39.0
	10	47.9	2.1	1.3	0.8	1.1	0.8	0.8	0.5	1.8	1.8	41.1	41.1

Conclusions

- Apparel and textiles exporting industry appears stagnant, but individual firms show some interesting dynamics.
- Policies that facilitate the emergence of new exporters seem important. Do existing policies hinder this?
- Key: labor markets, cost of setting up a firm, export-processing zones.

Where do we go from here?

- Room for further analysis: changes in composition across markets, technological sophistication of export basket.
- New sectors: Pharmaceuticals?
- Systematic comparison with countries for which similar data are available (Costa Rica, Colombia, China).
- Combine with establishment-level data.