The trade effects of the Rana Plaza collapse

$\mathsf{Pamina}\ \mathsf{Koenig}^1$ and $\mathsf{Sandra}\ \mathsf{Poncet}^2$

Sustainability and Development Conference November 9-11 2018, Ann Harbor

¹University of Rouen & PSE ²PSE & University of Paris 1

Understanding the microeconomics of globalization

Emergence of global value chains

• Trade economists are interested in understanding 'global production arrangements' (Chor, 2018).

International regulation of multinationals' activity

- Individuals care about the quality content of goods.
- Activists gather information about foreign production processes.

Activism and globalization

What do we know about the effects of campaigns / boycotts ?

 \Rightarrow There is no global assessment of the impact of activism.

 \Rightarrow We focus on an event which generated massive consumer mobilization against unethical firms sourcing in Bangladesh: the Rana Plaza collapse (April 2013).

Building hosted clothing factories working for multinational firms.

What we do

• Measure the impact of activism on disaggregated bilateral trade flows:

Main shock in perceived quality of clothing made in Bangladesh: Did it affect demand ?

• We compare import flows of countries having been differently exposed to the news of the collapse

Proxy for the amount of information received by consumers: origin country of firms named as 'guilty' by NGOs and the media after the disaster.

What we do

- Montly hs4 clothing imports (50 products), Comtrade, 2010-2016
- Before/ after the shock, OECD importing countries
- Difference-in-difference on 'treated' countries versus others
- DD on non-textile products
- DD on textile, from non-BGD origins
- DDD on textile, BGD vs. other origins, before/after
- Interact with intensity of activism to disentangle demand effect from strategy of firm / production capacities

Table: List of 32 brands linked to the Rana Plaza Building

Countries of origin	Brands
Belgium	C&A
Canada	Loblaw
Germany	Guldenpfennig, NKD, Kanz (Kids Fashion Group),
	Kik, Adler Modemarkte
Denmark	PWT (Texman), Mascot
Spain	Inditex, El Corte Ingles, Mango
France	Carrefour, Camaieu, Auchan
Great Britain	Bon Marche, Matalan, Grabalok Store 21, Premier Clothing
Ireland	Primark
Italy	Manifattura Corona, YesZee, Benetton, Kappa
Poland	LPP
Turkey	LC Waikiki
United States	J.C Penney, The Children's Place, Cato Fashions,
	Walmart, Iconix Lee Cooper, Ascena Retail

Source: Clean Clothes Campaign.

Table: Country of origin of firms associated with Rana incident

Countries with national brands present in the Rana Plaza^a:

Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Poland, Spain, Turkey, Great Britain, USA

Countries with firms signing the Accord (but not In Rana Plaza:)

Australia, Austria, Chili, Finland, Japan, Netherlands, Norway, Sweden, Switzerland and Hong Kong^i

Other OECD non-involved countries:

Czech republic, Estonia, Greece, Hungary, Iceland, Israel, Luxembourg, Latvia, Mexico, New Zealand, Portugal, Slovakia, Slovenia, South Korea

brands of countries with national sourcing from Rana Plaza taken List is from https://cleanclothes.org/safety/ranaplaza/rana-plaza-actual-and-potential-donors-listed-by-g7-country/view. The list of signatories is taken from http://bangladeshaccord.org/signatories/. a all firms present in the building signed the Accord. ¹ Hong Kong is not an OECD country, hence it is not included in the baseline regressions which are restricted to OECD importing countries.

Anything visible to the naked eye ?

Figure: Clothing imports from BGD : importers in or out of Rana Plaza

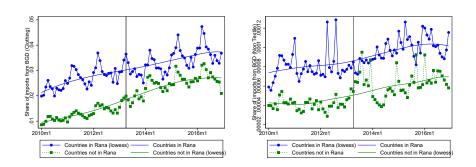


Table: Country-level Double difference: baseline

Explained variable	Ln import value of product k by OECD country i from Bangladesh in month m of year y (2010-2016)				
Products	HS4 k Clothing and Apparel				
	1	2	3	4	
In Rana country \times Post	-0.339 ^b	-0.326 ^b	-0.333 ^b		
	(0.154)	(0.148)	(0.147)		
In Rana country $ imes$ May-Dec 2013				-0.353ª	
				(0.119)	
In Rana country $ imes$ 2014				-0.331 ^b	
				(0.160)	
In Rana country $ imes$ 2015				-0.327 ^c	
				(0.163)	
In Rana country $ imes$ 2016				-0.329 ^c	
				(0.191)	
Ln Importer GDP ⁱ	0.315	-0.151	-0.177	-0.181	
. ,	(0.556)	(0.528)	(0.524)	(0.535)	
Ln Importer Population ⁱ	-5.423	-4.813	-4.711	-4.689	
y	(4.751)	(4.606)	(4.551)	(4.616)	
Ln Importer total apparel import ⁱ	()	1.046 ²	0.293	0.292	
· · · · · y///		(0.169)	(0.185)	(0.185)	
Ln Importer product import ⁱ		()	0.732	0.732 ²	
r k,ym			(0.066)	(0.066)	
Observations	82,091	82,091	82,091	82,091	
R-squared	0.88	0.88	0.88	0.88	
Product-period Fixed effects	Yes	Yes	Yes	Yes	
Importer-product-month Fixed effects	Yes	Yes	Yes	Yes	

Heteroskedasticity-robust standard errors clustered using two-way clustering at the importing country level and at the product level appear in parentheses. ^a, ^b and ^c indicate significance at the 1%, 5% and 10% confidence levels. Period corresponds to a year-month combination. Clothing and Apparel is defined as products from HS2 between 61 and 63.

Take-away 1/2

- Countries whose firms were pointed to be in the Rana Plaza exhibit a lower level of imports after the shock, compared to other OECD importers.
- No such evolution for non-textile imports
- No such evolution for other textile origins
- Results hold in triple-difference.

Take-away 2/2

Is it demand ? Firm strategy ? Production capacities ?

- The number of NGO campaigns published in the importing country about BGD ...
- ... increases the negative effect on imports
- This is consistent with the demand channel

Table: Intensity of NGO activism in the importing country

Explained variable	Ln import value of product k by OECD country i				
	from country j in month m of year y (2010-2016)				
Products		HS4 k Clothing and Apparel			
	1	2	3	4	
In Rana \times Post \times BGD	-0.381 ^b	-0.267	-0.389 ^b	-0.283 ^c	
	(0.163)	(0.161)	(0.155)	(0.158)	
In Rana \times Post \times BGD \times 0/1 NGO campaign on BGD textile	0.092				
	(0.167)				
In Rana \times Post \times BGD \times Nb NGO campaigns on BGD textile		-0.004ª			
		(0.001)			
In Rana $ imes$ Post $ imes$ BGD $ imes$ 0/1 NGOs campaign on			0.129		
home textile retailers in BGD			(0.181)		
In Rana \times Post \times BGD \times Nb of local NGOs campaigns on				-0.009ª	
home textile retailers in BGD				(0.002)	
Observations	4,274,140	4,274,140	4,274,140	4,274,140	
R-squared	0.88	0.88	0.88	0.88	
Importer-Product-period Fixed effect	Yes	Yes	Yes	Yes	
Exporter-Product-period Fixed effect	Yes	Yes	Yes	Yes	
Importer-Exporter-Product-month Fixed effect	Yes	Yes	Yes	Yes	

Heteroskedasticity-robust standard errors clustered using two-way clustering at the importing county level and at the product level appear in parentheses. ^a, ^b and ^c indicate significance at the 1%, 5% and 10% confidence levels. Period corresponds to a year-month combination.