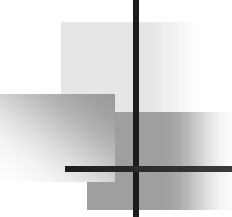


Dealing with Diversity: Analyzing the Consequences of textile quota abolition



Will Martin, Vlad Manole and
Dominique Van Der Mensbrugghe
World Bank
June 2004

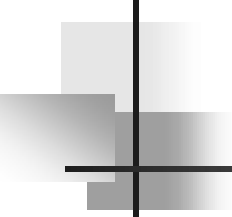


Key Issues

- ATC Quotas to be abolished in one fell swoop
- What are the effects of the quotas?
- How restricted are exports?
- What will be the impact of abolition?
- Focus on Pakistan, which has a very different product mix from competitors like China.

What are the effects of quotas?

- Reduce the quantity, raise the price of imports into the restricting markets
- Generate quota rents-- given to exporting governments, then to exporting firms
- Depress prices on world markets
- Cause misallocation of resources
 - Too little employment in poor country textiles/clothing
- Inefficient processing reduces demand for textiles and fibres

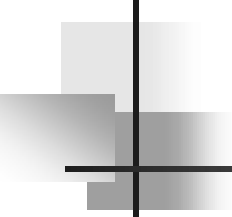


Effects on individual suppliers

- Impact varies between exporters
 - Some gain from restrictions on other exporters—high prices in restricted markets
 - Efficient exporters with limited quotas loose
 - Can't use resources efficiently
 - Forced to export to low-price residual mkts
 - Not much benefit from quota rents
- Pakistan: 50% of textiles to unrestricted mkts

How to assess quota effects?

- When exporting, have to consider the cost of using up the quotas
 - Opportunity cost if have been allocated quota
 - Direct cost if need to buy a quota
- Effect is just like an export tax, except that quota prices vary a great deal
 - Also a dynamic problem-restrict expansion of goods where countries raise productivity



Sources of Quota Prices

-China: www.chinaquota.com

-Hong Kong: tdc-link.tdc.org.hk

-Pakistan: www.epb.gov.pk/epb

-Taiwan: home.kimo.com.tw/ctquota

-India:

garments.indiaexcite.com/port_links/export_quota2.htm

-Bangladesh, Indonesia: Communication from
Texwatch.com

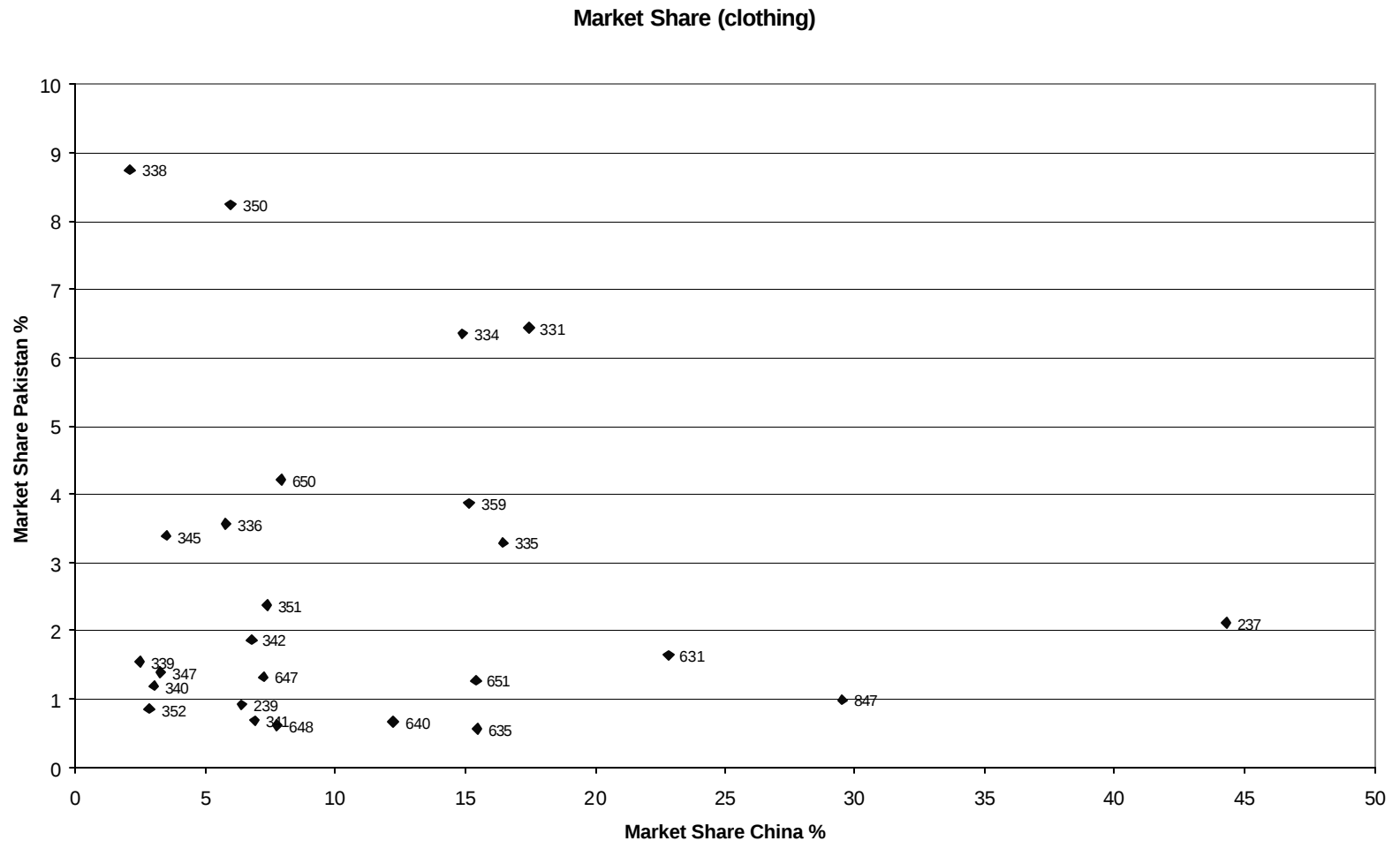
Average export tax equivalents

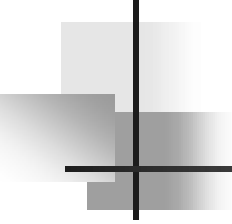
	Pakistan	China	Hong Kong	India	Bangladesh
To USA	%	%	%	%	%
Textiles	10	20	0	3	0
Clothing.	10	36	2	8	20
To EU					
Textiles	9	1	2	20	0
Clothing	9	54	12	20	0

Must allow for differences between countries' products

- When we allow for differences in product mix, increase in competition falls
- Large gains from increases in exports of textiles to growing exporters of apparel
- And improvements in cotton prices from a more efficient processing sector
- But short-term impact on clothing likely negative unless domestic policies reformed

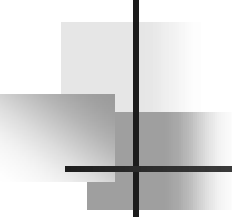
China's and Pakistan's Market Shares in the US Market for Clothing





Strong Product Differences

- Can not be handled in the model
- But we have more disaggregated information on products and price shocks
- The challenge is to use this while maintaining the essential GE features of the model



Different product mix relative to Pakistan

- Standard CGE analysis for an aggregate sector

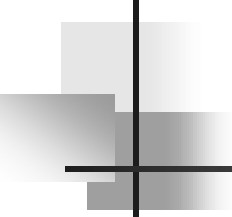
$$Dq_P = -s (1 - S_P) p_P + s \sum_{\substack{j=1 \\ j \neq P}}^n S_j p_j$$

No allowance for different product mix

To correct for product differences

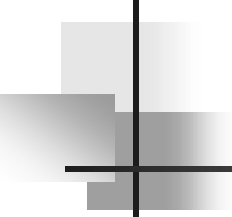
$$s \left(\sum_{\substack{j=1 \\ j \neq P}}^n S_j p_j + \sum_{k=1}^s W_P^k \sum_{\substack{j=1 \\ j \neq P}}^n S_j (p_j^k - p_j) + \sum_{k=1}^s W_P^k \sum_{\substack{j=1 \\ j \neq P}}^n p_j (S_j^k - S_j) + \sum_{k=1}^s W_P^k \sum_{\substack{j=1 \\ j \neq P}}^n (S_j^k - S_j) (p_j^k - p_j) \right)$$

- First Term – Average Effect
- Second Term - Export Tax Correlation
- Third Term - Share Correlation
- Fourth Term - Interaction



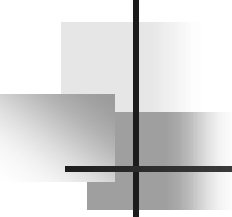
A Quantitative Evaluation

- We have used the LINKAGE model, which is based on the GTAP database of the global economy.
- Experiments:
 - the abolition of the quotas against Pakistan's exports of textiles and clothing
 - the abolition of these quotas against all developing countries
 - quota abolition and a 20 percent productivity improvement in the textile sector for Pakistan
 - quota abolition and a 20 percent productivity improvement in the T & C sectors for Pakistan



Short-run simulation impacts

	<u>Abolish Quotas</u>		Productivity
	Pakistan	All	↑ 20%
<u>Output</u>			
Textiles	8	7	14
Clothing	40	-11	1
<u>Exports</u>			
Textiles	10	17	26
Clothing	63	-17	-1



Simulation results

Productivity

¥ 20%

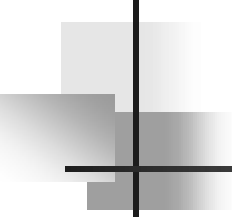
	<u>Abolish Quotas</u>	
	Pakistan	All
Unskilled wages %	3.7	0.9
Skilled wages %	3.1	0.5
Real Income %	0.4	-0.4
\$m	231	-248

Short-run simulation impacts -with adjustment for heterogeneity

	<u>Abolish Quotas</u>		Productivity
	Pakistan	All	↑ 20%
<u>Output</u>			
Textiles	8	7	13
Clothing	40	-11	-1
<u>Exports</u>			
Textiles	10	16	24
Clothing	63	-17	0

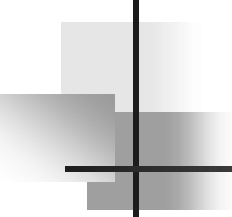
Simulation results - with adjustment for heterogeneity

	<u>Abolish Quotas</u>		Productivity
	Pakistan	All	¥ 20%
Unskilled wages %	3.7	0.7	2.1
Skilled wages %	3.1	0.3	1.8
Real Income %	0.4	-0.5	0.2
\$m	231	-280	132



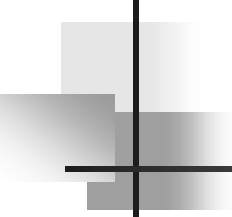
What drives the results?

- Abolition of Pakistan's quotas expands output, employment and wages
- Prices fall in industrial countries, rise in other markets— loss of quota rents
- Abolition of other countries' quotas increases competition in final-good mkts
 - but creates opportunities for textiles/fibres in a globalizing industry



Summary of effects

- Textile sector will almost certainly gain
 - Abolition of Pakistan's own quotas valuable
 - Also increased opportunities to supply textile intermediates to expanding exporters
- Clothing sector will have greater opportunities, but increased competition
 - Output and exports will fall without reforms
- Other light manufactures will also gain
 - New opportunities as other suppliers move into textiles/clothing



Key Points

- Accounting for differences between the composition of Pakistan's export mix and that of her major competitors do not change the overall pattern - Pakistan suffers small static welfare losses even after making these adjustments. But in many cases, it may be extremely important.