

**Changing Pattern of U.S. Apparel Trade Post-2008:  
Implications for U.S. Cotton**

Maria Mutuc, Samarendu Mohanty, Jaime Malaga  
Graduate Student, Associate Professors  
Department of Agricultural and Applied Economics  
Texas Tech University  
Box 42132  
Lubbock, TX  
Contact Email: [maria.mutuc@ttu.edu](mailto:maria.mutuc@ttu.edu)

Roderick Rejesus  
Assistant Professor  
Department of Agricultural and Resource Economics  
North Carolina State University  
Box 8109  
Raleigh, NC 27695-8109

*Selected Poster prepared for presentation at the American Agricultural Economics  
Association Annual Meeting, Orlando, FL, July 27-29, 2008.*

*Copyright 2008 by Maria Mutuc, Samarendu Mohanty, Jaime Malaga and Roderick Rejesus. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

# Changing Pattern in U.S. Apparel Trade Post-2008: Implications for U.S. Cotton

Maria Mutuc, Samarendu Mohanty, Jaime Malaga and Roderick Rejesus\*

Department of Agricultural and Applied Economics, Box 42132, Texas Tech University, Lubbock, TX 79409-2132

\*Department of Agricultural and Resource Economics, North Carolina State University, Raleigh, NC 27695



## INTRODUCTION

In 1995, the Agreement on Textiles and Clothing (ATC) provided for the calculated liberalization of the textiles and apparel sectors over a 10-year period ending in 2005, except for some transitional safeguard measures that will expire on December 31, 2008. These safeguard measures allowed for import restrictions by the U.S. on certain categories of cotton apparel from China.

A number of empirical studies have been done to quantify and depict post-2008 trade patterns in the clothing sector but the implications for upstream sectors, particularly for the cotton industry, are still unclear. An overall increase in cotton apparel production post-2008 will increase demand for cotton. But with the shift of cotton clothing production from protected developed countries to previously constrained, developing countries, together with policies that favor domestic fiber producers with significant cotton production, the net effect of the safeguard measure expiration becomes an empirical question.

## OBJECTIVE

This study addresses this question in the context of the U.S. cotton industry. It provides a quantitative net impact of how the expiration of these safeguard quotas by the end of 2008 ultimately affect the U.S. cotton sector.

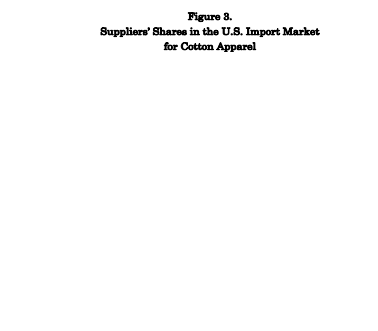
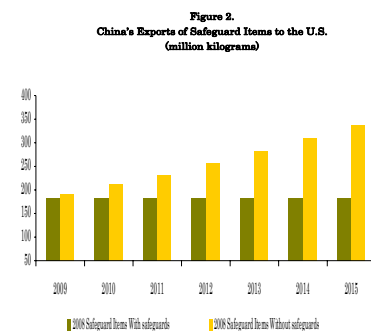
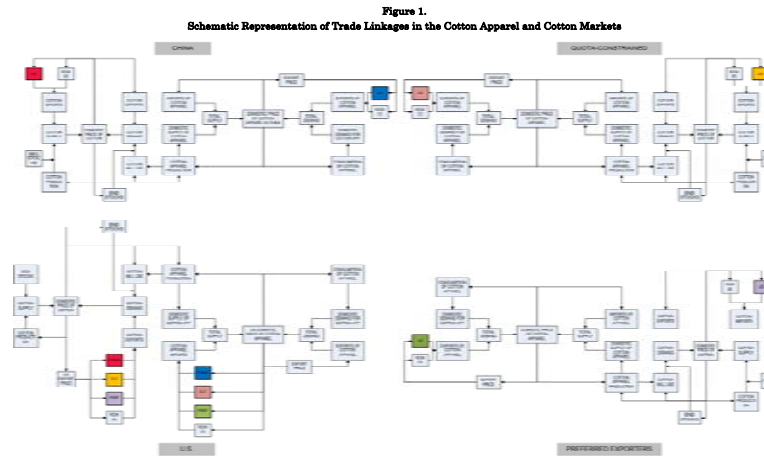
A shift in U.S. apparel trade in the presence of quotas to a free trade environment will alter market shares of different suppliers in its import market for cotton apparel away from preferred suppliers back to China. These shifts in market shares correspondingly translate to changes in the demand for U.S. cotton both domestically and internationally. These changes in price, trade, consumption, and production quantities are empirically estimated in this study.

## METHODS

Couched in a partial equilibrium (PE) framework that (a) vertically links the downstream cotton apparel sector to the upstream cotton sector; and (b) horizontally links the U.S. with its representative trading partners in both the cotton and cotton apparel sectors, a four-region, two-market structural econometric model is developed (Figure 1).

The regions include (1) China, (2) other quota-constrained exporters of cotton apparel to the U.S. (Bangladesh, Pakistan, India, Hongkong, and Taiwan), (3) preferred partners of the U.S. (Mexico, Canada, El Salvador, and Dominican Republic) and (4) the U.S. Each region is composed of two markets – cotton apparel and cotton. Markets are linked through cross-market price linkages. That is, resultant domestic prices for one market in a particular region determine the quantity supplied and demanded in the other market through cross-market prices. Each market across regions is linked through bilateral trade flows in that a region's exports in a particular partner market are equivalent to that partner region's imports in the same market. For example, U.S. imports of apparel from China are equivalent to China's exports of the same commodity to the U.S.

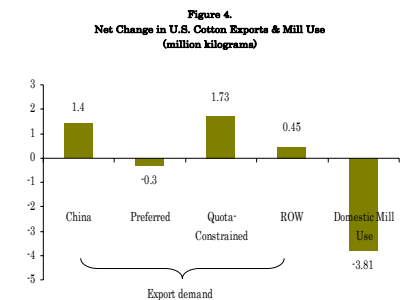
Using a 57-equation, annual econometric, partial equilibrium simulation model, all quotas are removed over 2009-2015 except for the safeguards. In the simulation, safeguards are taken out beginning 2009.



## RESULTS

With the expiration of the safeguards in 2008, an influx of cheap cotton apparel from China into the U.S. import market will lower domestic apparel prices by an annual average of \$ 0.25 per kilogram through 2015 (Figure 2). Faced with cheaper imports, annual domestic apparel production is projected to contract by 2.28 million kilograms. With this cutback, domestic cotton mill use is likely to be reduced by 3.8 million kilograms per year (Figure 4). Meanwhile, 6.4 million kilograms preferred countries' exports to the U.S. is projected to be displaced (by China) which is likely to dampen these apparel suppliers' demand for U.S. cotton by an annual average of 310,000 kilograms over the projection period.

On average, however, this decline in U.S. domestic mill use and export demand for U.S. cotton by preferred countries are estimated to be significantly offset by a net increase in the export demand for U.S. cotton traced to China and to other previously constrained countries. On the net, export demand for U.S. cotton is projected to rise by about 3.27 million kilograms per year – offsetting 84 percent of the decline in domestic mill use. This is likely to lead to lower cotton prices by less than \$0.01 per kilogram.



## CONCLUSIONS

- China to displace preferred country exports of cotton apparel into the U.S. (Figure 3).
- Quota-constrained countries will continue to struggle to maintain foothold in U.S. cotton apparel market.
- China to source more cotton from the U.S. as well as quota-constrained Asian countries.
- Overall stable demand for U.S. cotton even after safeguards expiration notwithstanding lower domestic mill use.
- Price impact on U.S. cotton is nil – less than \$0.01 per kilogram.