



## RESEARCH BRIEF

January 2006

### Gender Dimensions of the Incidence of Tariff Liberalization

Reza C. Daniels

*This Research Brief summarizes the findings of a larger report, Gender Dimensions of the Incidence of Tariff Liberalization, prepared for the Greater Access to Trade Expansion (GATE) Project. The report evaluates how changes in South Africa's import tariffs affected male- and female-headed households during 1995, 2000, and 2004.*

Since joining the World Trade Organization (WTO) in 1995, South Africa has been revising many of its tariffs downwards. In many instances, the country has complied with, and often exceeded, WTO requirements for reducing tariffs. However, the effect of these reductions on households, particularly poor households, has not been examined in depth. This paper is an initial attempt to analyze the effects tariff liberalizations have had on poor male- and female-headed households and how these changes impact their consumption expenditures.

Consumption patterns differ significantly across household income categories, with poor households spending more of their income on tradable goods, such as food or beverages, as opposed to services. A growing body of literature confirms that resources, particularly income, in the hands of women are more likely to be channeled towards household expenditures that promote the welfare and well-being of other family members, such as food or health care.

Consequently, female-headed households may spend more of their income on food and clothing, goods which have seen tariff reductions in South Africa in recent years. As tariffs are reduced, it is possible that poorer households, often headed by women, may derive more benefit from tariff reductions as certain imported goods become cheaper.

Between 1995 and 2004, total tariff revenue declined from approximately 35 billion to 20 billion Rand. For poorer households, their tariff payment as a percent of total consumption fell from approximately 16 percent to 9 percent of total spending. Wealthier households experienced declines in the estimated tariff incidence from approximately 11 percent to a little over 5 percent.

Tariffs did not decline uniformly on all traded goods, and in some cases, actually rose. Of the ninety-six total commodities initially considered, tariffs increased on four of these between 1995 and 2000. Between 2000 and 2004 ten additional commodities experienced tariff increases. Between 1995 and 2000, tariffs rose on important food groups, such as grain and sugar. Between 2000 and 2004, oils and animal feeds were the only goods in the food group category where tariffs increased.

### KEY FINDINGS

**All households had absolute welfare gains between 1995, 2000, and 2004**, since all households are paying less for the tradable goods they consume. Poorer households experienced the greatest welfare gains, measured by the size of the reductions in total spending on tariffs. In general, the change in tariff incidence between 1995 and 2000 disproportionately benefited the very wealthy. However, between 2000 and 2004, the change in the tariff regime was largely pro-poor, irrespective of the gender of the household head.

**There are distinct spending differences between poorer and wealthier households.** Poorer households spend the majority of their income on tradable goods, while wealthier households spend more on non-tradable household services. Poorer households spend the largest portion of their budget on food. Thus reductions in tariff and non-tariff barriers, particularly for food, have the potential to benefit poor consumer's more than wealthy consumers.

**Female-headed households spend more on food** across the entire income distribution. This is statistically significant for the bottom 70 percent of the entire income distribution.

**Male-headed households spend more on tobacco and alcohol** across the entire income distribution. This is statistically significant for all but the wealthiest 10 percent of the income distribution.

**Female-headed households do not benefit as much from tariff reductions due to the range of goods these households consume.** Male-headed households have greater exposure to tariffs since the goods that they consume bear more tariffs.

**All households, except the wealthiest, paid a greater proportion of total tariffs collected in 2000 compared to 1995.** That is, the incidence of tariffs changed, even though the total tariff burden declined between the two periods. Although there were welfare improvements in the levels of spending on tariffs, the distribution of these tariffs actually worsened. In fact, between 1995 and 2000, all but the wealthiest households experienced an increase in their relative tariff burden.

## RECOMMENDATIONS

**Include an understanding of what goods the poor consume in discussions of trade and tariff negotiations.** It is clear that tariffs fall unequally upon different income groups with the poor bearing a greater burden of tariff payments as a proportion of their total consumption expenditures. Understanding what goods are consumed and produced by the poor should form an essential component of trade and tariff negotiations as economies move to harmonize trade regimes.

**Disseminate information about prices to consumers to aid in price reductions being passed from retailers to consumers.** Reducing tariffs on key items consumed by the poor has the potential to improve their livelihoods if these reductions are also passed onto consumers.

**Include a gender analysis of tariff incidence when designing transfers and programs to minimize the negative effects of changes in trade regimes on the poor.** The profile of consumption differs not only for poor and wealthy households, but also for male- and female-headed households. If female-headed households are less exposed to tariffs, they also gain less from reductions in tariff levels. The timing and sequencing of tariff revisions and the choice of which goods to liberalize has significant distributional consequences. Changes in tariff levels can be more or less progressive depending on the composition of these goods within the consumption profile of the poor.

**Conduct further analysis of the impact of trade liberalization upon changes in income brought by employment expansion or contraction in sectors that are exposed to greater liberalization.** Moreover, exploring how different households may adjust their consumption patterns in response to income and price changes may illuminate the net impact of liberalization on the poor. Finally, expanding gender analysis beyond headship to examine households with women and men contributing different shares of total income may highlight the different consumption choices that men and women make and the differential exposure of households to tariff changes.

### METHODOLOGY

Daniels applied a standard benefit incidence analysis to explore the incidence of liberalization on the poor. Typically, benefit incidence studies evaluate the impact on the distribution of living standards and poverty of some policy intervention (e.g. raising education expenditure or taxation levels). This paper treats regime changes in tariff levels analogously to such interventions.

The total incidence of tariffs on one group (e.g. the poorest expenditure decile) depends on two factors: the share of expenditure on tariffs by that group; and, the level of tariffs across the commodities consumed by that group. Benefit incidence will be greater as the government reduces tariffs in the commodities used more by a particular group. In traditional benefit incidence models, benefit incidence is measured by how much the income of a household would have to be raised if the household had to pay for a subsidized public service at full cost. In this case, the benefit incidence is the change in the amount paid by a household in tariffs.

Daniels plots the share of tariff revenue born by each household in a cumulative expenditure or Lorenz curve. Using this approach, he is able to simulate the distributional impact of changes in the tariff incidence between 1995, 2000, and 2004 for the same representative household. By evaluating how these curves are related to each other, it is possible to explore the relative gains (losses) across the expenditure distribution of the different tariff regimes for male- and female-headed households. Methodologically, the comparison of the three tariff regimes with a fixed expenditure distribution is equivalent to isolating the impact of the change in tariffs on the same set of households holding their preferences and consumption shares constant. Daniels used the South Africa Income and Expenditure Surveys and the Final Supply and Use Tables produced by Statistics South Africa for his analysis.

## **SELECTED BIBLIOGRAPHY**

Bourguignon, François., Luis Pereira da Silva, and Nicholas Stern. "Evaluating the Poverty Impact of Economic Policies: Some Analytical Challenges." The World Bank. Washington, D.C., 2002.

Buvinic, Mayra, and Geeta Rao Gupta. "Female-Headed Households and Female-Maintained Families: Are They Worth Targeting To Reduce Poverty in Developing Countries?" *Economic Development and Cultural Change*, 45(2) (1997): 259-280.

Demery, Lionel. *Benefit Incidence: A Practitioner's Guide*. The World Bank. Washington, D.C., 2000.

Hoddinott, John, Harold Alderman, and Lawrence Haddad. "Testing Competing Models of Intrahousehold Allocation" in *Intrahousehold Resource Allocation in Developing Countries: Models, Methods and Policy* edited by Lawrence Haddad, John Hoddinott, and Harold Alderman. Baltimore: Johns Hopkins University Press, 1997.

Statistics South Africa. "Income and Expenditure Survey." Pretoria: Government Printers: 2000.

---. "Final Supply and Use Tables 2000 (Report no. 04-04-01)." Pretoria: Government Printers: 2003.

Thomas, Duncan. "Intrahousehold Resource Allocation: An Inferential Approach." *Journal of Human Resources*, 25 (1990): 635-664.

Thomas, Duncan. "Incomes, Expenditures, and Health Outcomes: Evidence on Intrahousehold Resource Allocation" in *Intrahousehold Resource Allocation in Developing Countries: Models, Methods, and Policy* edited by Lawrence Haddad, John Hoddinott, and Harold Alderman. Baltimore: Johns Hopkins University Press, 1997.

## **ABOUT THE GREATER ACCESS TO TRADE EXPANSION (GATE) PROJECT**

The GATE Project, funded by USAID's Office of Women in Development and implemented by Development & Training Services, Inc. (dTS), works with eight USAID Missions to better integrate gender considerations into economic growth and trade-related programs in order to help expand areas of opportunity and mitigate the adverse effects of economic and trade expansion for poor women and men. This full report was produced for USAID/South Africa by the GATE Project. The report was prepared by Reza C. Daniels of the University of Cape Town (UCT) School of Economics and the Southern Africa Labour & Development Research Unit, a short-term dTS consultant.

To receive the full report, or for more information on other gender and trade-related research, please email [GATEProject@onlinedts.com](mailto:GATEProject@onlinedts.com) or call 703-465-9388.