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RESEARCH BRIEF

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Has Trade Liberalization in South Africa Affected Men and Women Differently?

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This Research Brief summarizes the findings of a larger report, Has Trade Liberalization in South Africa Affected Men and Women Differently? *prepared for the Greater Access to Trade Expansion (GATE) Project. Using an applied general equilibrium and microsimulation model, the report examines how trade liberalization has affected men and women since 1994. The Brief presents the paper's key implications and recommendations.*

Reflecting its commitment to outward-oriented industrialization, the South African government hastened liberalizing its trade regime in 1994. Ad hoc surcharges were removed immediately and, in compliance with the World Trade Organization's Uruguay Round, the government established a five-year tariff reduction program in 1995. The program removed quantitative restrictions, phased-out export incentives, and reduced the number of tariff lines and applied rates. (See the USAID Research Brief "Gender Dimensions of the Incidence of Tariff Liberalization" which summarizes Reza Daniels' findings on the effects of these declines on male- and female-headed households.)

The benefits of recent growth in South Africa have been unequally distributed. While the heavier industrial and more advanced service sectors have experienced rapid expansion, agriculture and light manufacturing have contracted; thereby increasing the demand for skilled labor relative to unskilled labor. Skilled female workers have benefited from the growth of formal employment and have helped narrow the gender wage gap. However, the contraction of unskilled manufacturing labor led to a more pronounced informalization of the workforce. Furthermore, the growth of employment opportunities and the ending of Apartheid stimulated large increases in the work force, leading to falling real wages and rising levels of unemployment. The inability of the labor market to absorb this influx of workers, especially women, has left female-headed households disproportionately burdened by the rise of unemployment and poverty.

Thurlow uses a Computable General Equilibrium (CGE) model to determine the effects of recent trade liberalization on growth and poverty (See Box 1). A variety of simulations were conducted to explore the different facets of liberalization. Thurlow finds that lower tariffs in combination with a depreciating exchange rate enables exports to rise in South Africa. The net effect is an acceleration of both imports and exports. Falling import prices benefit import intensive investment; this accelerates capital accumulation and contributes to the rising capital-intensity of production. The consumables sector is severely hurt by falling tariffs and increased competition, but benefits from faster productivity growth, resulting in a decline that is less than expected. Higher economic growth benefits all sectors as domestic demand increases. Total factor productivity also rises,[i] attributed in part to liberalization and the changing skill composition of the labor force.

The simulations also estimate effects on labor markets. Increased import competition initially causes a slight decline in semi-skilled employment, but has little effect on unskilled labor. Longer-term effects from increased growth increases employment for all skill-groups, with the demand for higher skilled labor rising faster. From a gender perspective, women are most severely affected by import competition, especially in the textile and food sectors. However, when rising productivity and the spillovers from growth are included in the analysis, the growth rate in female employment almost doubles. Moreover, there is a pronounced decline in the gender wage gap, but this is driven by higher-skilled workers. These gains notwithstanding, manufacturing employment as a whole declines. Liberalization has therefore prompted and shaped many of the changes that have taken place in South Africa's labor markets over the last decade.

Liberalization causes overall poverty to decline, albeit only marginally. However, poverty amongst female-headed households is found to increase in the short-run, especially in urban areas. This result is driven by high and rising female unemployment, especially amongst urban Asian and Colored households and who were more likely to be engaged in the textiles sector. The findings indicate that trade liberalization benefits higher-income households, who are more endowed with capital and skills than lower-income households. Low-income households face considerable unemployment and are therefore disconnected from the main benefits of trade liberalization.

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[i] Total factor productivity refers to the quantity of output divided by the amount of all inputs used in production. The amount of all inputs used in production can be calculated in a number of ways. One way is to take a geometric-weighted average of the quantities of each of the inputs, where the weight on each input is its share in the total cost of production.

KEY FINDINGS

Trade reforms during the 1990's may have had little impact on South Africa's high levels of poverty. Employment and wages are the primary channel through which these reforms have affected poverty. With high levels of unemployment and inadequate human capital, poor households are less likely to benefit from liberalization.

Men and male-headed households are more likely to benefit from further liberalization. Female workers are more likely to be unemployed or unskilled, and hence experience smaller increases in factor incomes as a result of trade liberalization. Households that depend disproportionately on female income, particularly female-headed households, are less likely to benefit from the sectoral growth induced by trade liberalization.

Trade reforms have accelerated growth through trade-induced technological change. Firms invested more heavily in imported capital equipment and the demand for skilled labor increased. Consequently, the demand for unskilled labor fell. These changes increased productivity and spurred further growth.

In those sectors most affected by import-competition, trade reforms may have worsened income inequality in South Africa. The rise in capital and skill intensity of production, induced by trade liberalization, favors higher-income households. Key sectors adversely affected by tariff reductions were food and textiles which shed primarily female workers who moved into lower paying jobs in agriculture and services. As a result, income inequality between men and women at the lower end of the income distribution worsened.

THE CGE MODEL

Thurlow develops a dynamic CGE model which is linked to the 1993 social accounting matrix (SAM) that captures the differences between male and female headed households. The CGE model identifies 39 sectors/commodities and three geographic regions of South Africa: main coastal provinces, inland core industrial provinces, and the remaining provinces. Thus there are 117 productive activities in the model.

There are 18 different types of labor in each region. Labor is disaggregated into three skill levels, three population groups, and male and female workers. Labor is mobile within a region but not between regions. However, capital is mobile nationally.

A nested production system is employed. At the lower levels, a constant elasticity of substitution (CES) function is defined over all factors, while at the highest level, fixed-share intermediates are combined with factor value-added in a Leontief specification. Within labor demand, a worker's skill is assumed to be most important, followed by population group, and finally their gender. The model captures how the changes in the structure of growth caused by liberalization influences employment and wages among male and female workers.

Within sectors, production substitution exists between foreign and domestic markets. Profit maximization drives producers to sell in markets where they achieve the highest returns. The final ratio of imports to domestic goods is determined by the cost-minimization decision-making of domestic consumers, based on the relative price of imports and domestic goods, including relevant tariffs and taxes.

The model distinguishes between enterprises, the government, and households. Households are disaggregated across the three regions and within each region according to urban and rural areas, the population group and gender of the household head, and across national expenditure deciles. Income, expenditures, and savings within each group are determined, and real investment adjusts to equate savings and investment at equilibrium.

The model captures the four main transmission mechanisms between trade and poverty, but not all effects of liberalization on men and women: the effects of reforms on trade, productivity and growth; the impact of growth on employment, wages and household income; the effects of tariffs on relative prices and household expenditures; and, the effects of lower tariff revenues on government transfers. The model builds in trade-induced productivity gains (estimated by other studies), resulting in simulations that more accurately reflect reality.

Trade liberalization alone is not sufficient to address unemployment in the face of high levels of poverty and inequality – but must go hand-in-hand with other economic and social reforms to meet the needs of vulnerable workers and households. Specific measures need to be taken to address the prevailing gender inequalities if pro-poor and inclusive growth is to be fostered.

POLICY IMPLICATIONS

Expand and augment existing transfer systems to compensate poor households where workers have been shed from contracting sectors. Workers shed from the manufacturing sectors will likely require short term unemployment assistance and consumption transfers to lift them and their households out of poverty. Tailored transfers may be needed for those individuals with weaker labor market attachment or a more interrupted history of work.

Increase the use of active labor market policies and programs to overcome the mismatch between workforce skills and employer demands. Liberalization has prompted some sectors to expand while others decline, changing the skills demanded in the labor market. Active labor market policies include providing training and certification in new skills, ensuring access to job centers that act as clearing houses for workers and employers, and instituting incentives for firms that hire retrenched workers.

Focus on re-skilling and training initiatives for displaced textile and food sector workers, particularly women. The ending of the Multi-Fiber Arrangement hit the textile sector hard. Women workers, and particularly lower-skilled women workers, have been severely affected. Efforts to provide skills training for women, offer child-care, and transportation subsidies may be essential in enabling women to acquire new skills and be re-hired in other sectors.

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ABOUT THE GREATER ACCESS TO TRADE EXPANSION (GATE) PROJECT

The GATE Project, funded by USAID's Office of Women in Development (WID) 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 James Thurlow, a post-doctoral fellow in IFPRI's Development Strategies and Governance division and builds on earlier work undertaken for the Trade and Poverty Project funded by DFID and USAID through SEGA. http://www.saldru.uct.ac.za/saldru_trade&poverty.html

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