How to Conduct Gender-based Analysis in a Trade Context - A Canadian Perspective

Presentation to Workshop on Gender Based Analysis of Trade Policies

March 2018

The Office of the Chief Economist, Global Affairs Canada
OUTLINE

• What we do
• What we have learned
• Areas/Ideas for further work
• Next steps – cooperation with others – international organizations
WHAT WE DO: CURRENT METHOD USED IN CANADA TO ESTIMATE GENDER IMPACTS ON JOBS OF TRADE AGREEMENTS

Computable General Equilibrium Model → Change in Output by Sector Due to Trade Agreement → Employment by Gender by Industry
WHAT WE HAVE LEARNED: RESULTS FOR A GENERIC AGREEMENT

Post Agreement Employment Change
(Level Change in Contracting/Expanding Sectors)

# of Jobs (Thousands)

<table>
<thead>
<tr>
<th>Contracting Sectors</th>
<th>Expanding Sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Female</td>
<td>Male Female</td>
</tr>
<tr>
<td>-6.1</td>
<td>17.7</td>
</tr>
<tr>
<td>-2.2</td>
<td>15.1</td>
</tr>
</tbody>
</table>
A SMALL NUMBER OF SECTORS ACCOUNT FOR THE MAJORITY OF THE IMPACTS

Contracting Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Male Employment</th>
<th>Female Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Vehicles and Parts</td>
<td>-6.3</td>
<td>-2</td>
</tr>
<tr>
<td>Chemical, Rubber, and Plastic Products</td>
<td>-7</td>
<td>-6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>-6.3</td>
<td>-2.0</td>
</tr>
</tbody>
</table>

Expanding Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Male Employment</th>
<th>Female Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Services</td>
<td>17.8</td>
<td>15.2</td>
</tr>
<tr>
<td>Trade</td>
<td>15.2</td>
<td>13.8</td>
</tr>
<tr>
<td>Construction</td>
<td>15.2</td>
<td>13.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17.8</td>
<td>15.2</td>
</tr>
<tr>
<td>Public Administration, Defense, Education, Health</td>
<td>15.2</td>
<td>13.8</td>
</tr>
<tr>
<td>Trade</td>
<td>15.2</td>
<td>13.8</td>
</tr>
</tbody>
</table>
WOMEN-OWNED BUSINESSES ARE UNDER-REPRESENTED IN TRADE

Share of SMEs that Export by Gender of Owner

<table>
<thead>
<tr>
<th>Gender of Owner</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority Male</td>
<td>12.9%</td>
</tr>
<tr>
<td>50/50</td>
<td>11.0%</td>
</tr>
<tr>
<td>Majority Female</td>
<td>8.4%</td>
</tr>
</tbody>
</table>

SMEs Overall: 11.8%

Data: Statistics Canada; Survey on Financing and Growth of SMEs, 2014
Source: Office of the Chief Economist, Global Affairs Canada
BUT, DOES NOT APPEAR TO BE LINKED TO EDUCATION OR EXPERIENCE OF THE OWNER

Share of SMEs Whose Owners Have...

- **at least a Bachelor's Degree**
  - Female SME Exporters: 52.3%
  - All SMEs: 38.5%

- **more than 10 years of management experience**
  - Female SME Exporters: 80.7%
  - All SMEs: 75.0%

Data: Statistics Canada; Survey on Financing and Growth of SMEs, 2014
Source: Office of the Chief Economist, Global Affairs Canada
SIZE OF BUSINESS AND SECTOR SEEM TO BE THE KEY FACTORS

Exporting SMEs by Gender and Enterprise Size

Female SMEs’ Share of Exporters by Industry
Communications

• Trade theory does not predict a long-term link between trade agreements and employment.
  
  – Trade results in a reallocation of resources between sectors, not a net increase in employment or unemployment levels.
  
  – Transitions are probably more important than levels, but not captured by models.

• “Contracting sectors” vs sectors “under pressure”.

• Cannot add-up results as changes are only proportional to output while we would expect productivity impacts, and we are not predicting net gain employment.

• Overall employment effects are small; contracting sectors represent 0.05% of total Canadian employment.
AREAS/IDEAS FOR FURTHER WORK: IMPROVING OUR METHODOLOGY ACROSS THREE DIMENSIONS RELATED TO JOBS

1. Marginal Effects
   - Gender proportions changing over time.
   - Can estimate how gender composition has been change and specifically with respect to trade.
   - Linking employment by gender data to input/output tables.
   - Use standard input/output model to estimate linkages changes in employment composition.

2. Within Industry Effects - Occupations
   - Within an industry, women and men often do different jobs.
   - Those jobs may be impacted differently by opportunities and pressures from trade.
   - Econometric estimation of industry by occupation by gender impacts of trade shocks.
   - Requires detailed census data with significant time lags.

3. Add Labour and Gender into CGE Model
   - Eliminates need to link from output to employment.
   - Allows for productivity differences.
   - Significant data requirements.
   - Also requires estimated elasticities.
Applying the Methodology Beyond Gender

- Work on gender impacts provides a framework for understanding impacts of trade and participation in trade for other groups of interest.

- Data issues are not as great for gender as each sex makes up roughly half the population (large samples to draw from) and data has been collected for some time across a number of sources:
  - Census, employment surveys, surveys of SMEs, linking administrative data.

- But, are looking to apply same/similar methodology to women and men in other groups of interest:
  - Visible minorities, immigrants, youth, Indigenous peoples, disabled, etc.

- Also looking at SMEs, but need a different lens.
Consultations must be broad and inclusive.
But, as with any policy, there will be trade-offs.
How to communicate when in process of negotiations.

Consider women’s roles as workers, entrepreneurs, consumers and beneficiaries of public services
• Involvement broad base of groups in trade.
• Ownership of SMEs by groups of interest.
• SME participation in trade more generally.

Better understand who is impacted.
Best practices in adjustment policies.
Do firms of all sizes take advantage of trade agreements?

Prices of goods and services passed on to consumers.
Impact on level of competition and rents.

Understand Gains

Understanding Gains
Impacts and Adjustments
Inclusiveness
Consultations and Communication
NEXT STEPS ON DATA ANALYSIS

• We are at early stage in Canada.

• Interested to share experience and good practices.

  • Help us understand if the results we have found in Canada are unique to Canada or differ across levels of development, economic structure etc.
CONCLUSION

• Trade effects are not gender neutral.
  – Canadian experience and data supports this conclusion

• Iterative process; learning by doing.

• Further cooperation/collaboration in this area will help all of us better understand this issue which will be key to our inclusive and sustainable prosperity going forward.

• Canada is willing to participate in this process.

• Good disaggregated data and data analysis methodologies will help us conduct good gender-based analysis and in turn help us consider appropriate gender-related provisions in our trade agreements to enhance opportunities for all of our citizens.