# Can Trade Policy Change Gender Inequality? Evidence from Chile

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# Why Gender Gap?

- Achieving gender equality and empowering all women and girls by 2030 is one of the sustainable development goals laid out in the UN Millennium Development Goals

- "Closing the gender gap in employment could raise long-term gross domestic product per capita by nearly 20% on average across countries."

$\rightarrow$ Indermit Gill (Chief Economist, World Bank): Opinion Piece, DevEX (24th January, 2024)

# Why Gender Gap?

- Labour force participation gaps are huge in the context of emerging market economies (ILO, 2018)
- At the global level, 75% of men participate in the labour market compared to 48.5% of women
  - For Latin American countries, the number is similar: 80% of men compared to 47% of women aged 15 and older
  - In terms of the pay gap, women earn from 49 to 68 cents for every dollar a man makes; for Chile – it is 58 cents
- For OECD countries, the employment gap varies between 15-25% with the pay gap between 4-40% (OECD, 2018)

# Why Chile?

▶ Three features drive our choice:
  - ▶ Developing nation with severe gender employment gap – in 2020, the labour force participation gap in Chile was at 33.2% (INE, 2022);
  - ▶ Diverse manufacturing sector; and
    - ▶ wearing apparel
    - ▶ rubber and plastics
    - ▶ basic metals
    - ▶ motor vehicles
  - ▶ Following the debt crisis of 1980s, a lot of Latin American countries adopted the export-led development strategy by signing new economic cooperation and trade agreements and Chile was the leader among them
    - ▶ by 2012, Chile became the country with the highest number of FTAs signed in Latin America, which makes it an ideal candidate to study the impact of a trade shock (Dingemans and Ross, 2012)

# Why Trade?

- ▶ Global market participation of developing countries have increased significantly since 1990s
- ▶ Imperative to study whether and how such trade policy changes can contribute toward enhancing gender convergence in employment
- ▶ Understanding which categories of labour is favoured the most through which kind of activities have both real and policy implications

# Chile's Free Trade Agreements (FTAs)

- After returning to democracy in the beginning of the 1990s, Chile was the first country to aggressively start signing Economic Cooperation Agreements (ACEs) and/or trade agreements

- Chile signed its first FTA with Canada in 1996 which entered into force on July 1997; a few concerns
  - first, it was signed in the same year when Chile entered into a economic partnership agreement with MERCOSUR
  - second, tariffs on a significant number of products for this FTA were not immediately dropped to zero for some reason, but were done around 2003-04

- Chile signed its second and first major **FTA with Mexico in 1998 which entered into effect by August 1999**
  - commercial and diplomatic relationship changed dramatically due to this FTA as the tariff drop reached 98.3% of the traded items between Chile and Mexico

# Chile's Trade with Mexico and Others

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| Panel A: Tariffs | Tariffs with Mexico | | Tariffs for Exports to Other Countries | | | | | |
| | Exports to Mexico | Imports from Mexico | Latin America | US | Canada | EU27 | Asia | World |
| 1995–1998 | *13.91* | 11.00 | 13.57 | 0.00 | 2.50 | 3.09 | 3.70 | 10.56 |
| 1999–2007 | *0.00* | 6.00 | 9.78 | 0.00 | 0.00 | 0.01 | 3.85 | 6.78 |
| Panel B: Trade Values | Trade with Mexico | | Exports to Other Countries | | | | | |
| | Exports to Mexico | Imports from Mexico | Latin America | US | Canada | EU27 | Asia | World |
| 1995–1998 | 2,786 | 9,708 | 25,778 | 19,017 | 1,650 | 36,059 | 39,555 | 114,898 |
| 1999–2007 | 8,444 | 6,162 | 33,804 | 25,068 | 3,207 | 33,732 | 35,759 | 132,157 |
| Growth | *203%* | −37% | 31% | 32% | 94% | 5% | −10% | 15% |

Notes: In Panel A, numbers represent median weighted tariffs across all manufacturing sectors. In Panel B, numbers represent real median trade values (deflated using yearly Wholesale Price Index of the manufacturing sector) in '000 USD. For Canada, the values are for the periods 1995–1997 and 1998–2007; for others it is as mentioned.

# What do we do?

- Do firms reorganize gender composition of their employment in response to a trade shock?
  - use novel data on gender composition of employment across several occupational groups for Chilean manufacturing firms for 1995–2007, a developing country with low gender equality, and utilize the 1999 Chile-Mexico FTA as the quasi-natural shock
- Results
  - share of female white-collar workers increased by 8.8% for exporters due to the FTA or complete elimination of tariffs
  - due to higher use of technology and non-productive tasks; correction of discrimination
  - around 2.6% and 5.7% of the labour and total factor productivity increase due to the FTA can be attributed to the reduced gender-gap in white-collar employment

# Literature and Contribution

- Import Competition (Black and Spitz-Oener, 2010; Hakobyan and McLaren, 2016; Mansour et al., 2022)
    - results are mixed – (Black and Spitz-Oener, 2010) show increased employment for US firms, while (Mansour et al., 2022) show drop in employment for Peruvian firms
- Export participation
    - reduction in gap for white-collar jobs for German firms (Bonfiglioli and De Pace, 2021)
    - reduction in gap for blue-collar jobs for Mexican firms (Juhn et al., 2014)
    - increase in gender gap in employment for US firms (Sauré and Zoabi, 2014)

      $\rightarrow$ **We show that increased export market opportunities can induce a reallocation of white-collar workers towards more female employees reducing overall gender employment gap**

# Data – 1

Encuesta Nacional Industrial Anual (ENIA) for 1995–2007

- Establishment level panel data on Chilean manufacturing firms
- Disaggregated details on overall employment of firms in seven occupational subcategories
    - Owner
    - CEO
    - Skilled Workers
    - Administrative Workers
    - Unskilled Workers
    - Service Workers
    - Commissioned Workers
- Further sub-divided into male and female workers
- Granular details on firms' expenses in production and non-production tasks such as investments in machinery, technical assistance, patent expenses, advertisement, etc

Extensively used by (Pavcnik, 2002; Levinsohn and Petrin, 2003; Alvarez and López, 2005; Fernandes and Paunov, 2012) and others.

# Data – 2

### ADUANA (Customs-level) for 1995–2007

- ▶ Firm level customs information Chilean manufacturing firms
    - ▶ Exports (value)
    - ▶ Exports (quantity)
    - ▶ product (HS 6-code)
    - ▶ destination of export
- ▶ Customs records are at the firm level, while the manufacturing survey (or the ENIA dataset) is collected at the plant level
- ▶ Problematic: if a large number of firms are multi-plant
- ▶ Around 90% of the Chilean manufacturing firms are single-plant firms (Pavcnik, 2002)

Used by (Brambilla et al., 2022; Macedoni and Weinberger, 2022)

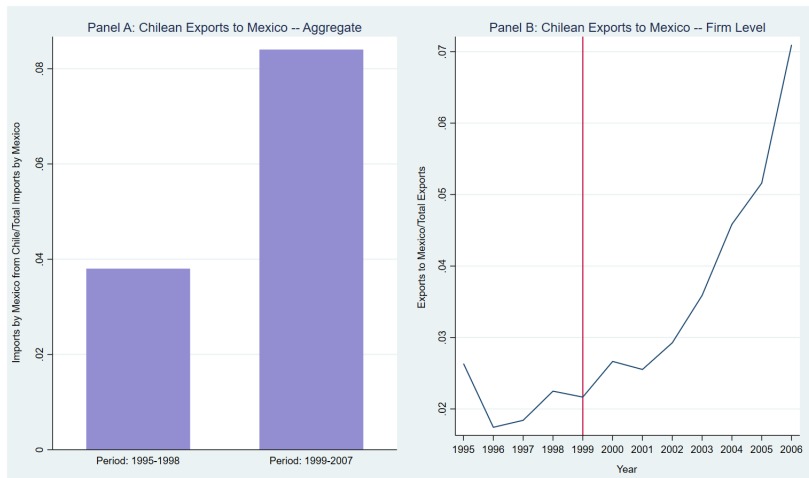# Stylized Facts 1 – FTA Effects on Trade



Figure: Chilean Exports to Mexico, Chilean Manufacturing Firms, 1995–2007

# Stylized Facts 2 – White-collar Women Workers



Figure: Share of Female White-collar Workers, Chilean Manufacturing Firms, 1995–2007
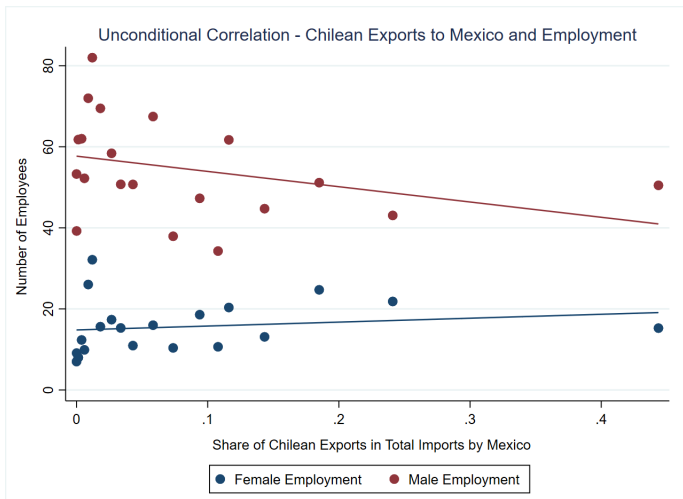
# Stylized Facts 3 – An Unconditional Correlation



Figure: Chile-Mexico FTA and Gender Composition of Employment, Chilean Manufacturing Firms, 1995–2007

# Empirical Setting

Use a long-difference framework over the period 1995–2007, where we use changes between the periods 1995–1998 and 1999–2007 for both our outcome and variable of interest.

$$
\begin{aligned}
\Delta y_{ij,95-07} &= \beta_1 \left( \Delta \textit{Tariffs}_{j,95-07}^{Chile-Mexico} \times \textit{Exporter}_i \right) + \beta_2 \, \Delta \textit{Tariffs}_{j,95-07}^{Chile-Mexico} \\
&+ \delta_j^s + \Delta \epsilon_{ij,95-07}
\end{aligned} \tag{1}
$$

- $y_{ij,95-07}$ represents our outcome variable of interest for firm $i$ in sector $j$ between the period 1995–1998 and 1999–2007.

- assumes several outcomes of interests, such as share of female white-collar workers, absolute number of female white-collar workers, share of female blue-collar workers etc.

  - **Owner + CEO + Skilled – White-collar Workers**
  - **Unskilled + Service – Blue-collar Workers**

- $y$ is the difference in the average, say share of female white-collar workers in total (male + female) white-collar workers for firm $i$ between the period 1995–1998 and 1999–2007.

# Identifying Assumptions – Endogeneity

- *No Reverse Causality* – Employment of a firm such as the female share of white-collar workers did not influence the Chile-Mexico FTA or the drop in tariffs through any kind of lobbying
- *No Pre-trends* – i.e., the exporters and non-exporters are not on differential trends with respect to overall employment outcomes

# Endogeneity of the Trade Policy Change

|  | $\Delta\,Tariff_{jt}$ | | |
|---|---|---|---|
|  | (1) | (2) | (3) |
| Total Employment$_{it-1}$ | 0.084 | | |
|  | (0.075) | | |
| Female Employment$_{it-1}$ | | 0.053 | |
|  | | (0.131) | |
| Female White-Collar Workers$_{it-1}$ | | | −0.374 |
|  | | | (0.299) |
| R-Square | 0.85 | 0.85 | 0.85 |
| N | 41,757 | 42,250 | 42,250 |
| Firm FE | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes |
| State FE×Year FE | Yes | Yes | Yes |
| State FE×Industry FE (2-digit) | Yes | Yes | Yes |

Notes: $\Delta\,Tariff_{jt}$ is the dependent variable. This is the yearly change in tariffs at the industry level. These tariffs are faced by Chilean exporters while exporting to Mexico. These are estimated at 4-digit industry level. Firm controls include ownership dummy and size (natural logarithm of real gross value-added). Standard errors in parentheses are clustered at 4-digit industry level. Intercepts are not reported. *,**,*** denotes 10%, 5%, and 1% level of significance, respectively.

# Pre-trends: Differences between Exporters to Mexico and Other exporters

| | Total Employment (1) | Female Employment (2) | Share of Female White-Collar Workers (3) |
|---|---|---|---|
| $D_{1995} \times$ Mexico Exporter$_i$ | 0.021 | −0.044 | −0.011 |
| | (0.018) | (0.076) | (0.009) |
| $D_{1996} \times$ Mexico Exporter$_i$ | −0.017 | −0.037 | −0.004 |
| | (0.013) | (0.041) | (0.003) |
| $D_{1997} \times$ Mexico Exporter$_i$ | −0.003 | 0.004 | 0.0002 |
| | (0.009) | (0.021) | (0.003) |
| $D_{1998} \times$ Mexico Exporter$_i$ | 0.007 | 0.015 | 0.001 |
| | (0.009) | (0.024) | (0.003) |
| | | | |
| R-Square | 0.96 | 0.93 | 0.77 |
| N | 162,469 | 162,715 | 162,715 |
| Firm FE | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes |
| Industry FE (2-digit)×Year FE | Yes | Yes | Yes |
| State FE×Year FE | Yes | Yes | Yes |
| State FE×Industry FE (2-digit) | Yes | Yes | Yes |

Notes: Columns (1) – (3) use total employment, the share of female employment (in total employment), and the share of female white-collar workers in total white-collar workers as the dependent variables, respectively. Mexico Exporter$_i$ is a exporter dummy for firms exporting to Mexico. It takes a value of 1 if a firm's average exports across 1995–1998 is greater than zero. $D_{1995}$, $D_{1996}$, $D_{1997}$, $D_{1998}$ are year dummies. These dummies equal to 1 for the respective years. Firm controls include ownership dummy and size (natural logarithm of real gross value-added). Standard errors in parentheses are clustered at firm level. Intercepts are not reported. *,**,*** denotes 10%, 5%, and 1% level of significance, respectively.

# First Order Results

| | $\Delta$Exports | | | | $\Delta($Exports$/$Sales$)$ |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| $\Delta$Tariffs$_{95-07}$ | −0.147 | −0.143 | −0.088 | −0.143 | −0.016 |
| | (0.143) | (0.143) | (0.111) | (0.143) | (0.042) |
| $\Delta$Tariffs$_{95-07} \times$ Mexico Exporter$_i$ | | −0.123** | −0.106*** | | −0.040*** |
| | | (0.049) | (0.035) | | (0.012) |
| $\Delta$Tariffs$_{95-07} \times$ Mexico Exporter$_{Exante,i}$ | | | | −0.131*** | |
| | | | | (0.046) | |
| $\Delta$Tariffs$_{95-07} \times$ Mexico Exporter$_{New,i}$ | | | | −0.122*** | |
| | | | | (0.050) | |
| R-Square | 0.38 | 0.38 | 0.38 | 0.38 | 0.19 |
| N | 370,686 | 370,686 | 370,686 | 370,686 | 370,686 |
| Firm Controls | No | No | Yes | No | No |
| State FE$\times$Industry FE | Yes | Yes | Yes | Yes | Yes |

Notes: All the regressions are for the years 1995–2007. $\Delta$Tariffs$_{95-07}$ is the difference between the average tariffs of an industry (at the 4-digit level) between the years 1999–2007 and 1995–1998. Firm controls include a ownership dummy (domestic or foreign) and size (log value of real gross value-added). Standard errors in parentheses are clustered at the industry level (4-digit). Intercepts are not reported. *,**,*** denotes 10%, 5%, and 1% level of significance, respectively.

# Benchmark Results

| | Female Workers/Total (Female + Male) Workers | | | | | | | |
| | White-collar | | | | Blue-collar | | | |
| | | | New Exporters | Canada FTA | | | New Exporters | Canada FTA |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| $\Delta Tariffs_{95-07}^{Mexico}$ | −0.001** | 0.004*** | 0.0001* | 0.004*** | −0.00001 | 0.005*** | 0.002*** | 0.004*** |
| | (0.0007) | (0.001) | (0.0007) | (0.001) | (0.001) | (0.0006) | (0.001) | (0.001) |
| $\Delta Tariffs_{95-07}^{Mexico} \times Exporter_i$ | | −0.012*** | −0.016*** | −0.012*** | | −0.011*** | −0.015*** | −0.010*** |
| | | (0.001) | (0.002) | (0.002) | | (0.001) | (0.003) | (0.002) |
| $\Delta Tariffs_{95-07}^{Mexico} \times NewExporter_i$ | | | −0.011*** | | | | −0.011** | |
| | | | (0.002) | | | | (0.003) | |
| $\Delta Tariffs_{95-07}^{Canada}$ | | | | −0.005 | | | | 0.0002 |
| | | | | (0.0007) | | | | (0.001) |
| $\Delta Tariffs_{95-07}^{Canada} \times Exporter_i$ | | | | 0.0008 | | | | −0.001 |
| | | | | (0.002) | | | | (0.003) |
| R-Square | 0.04 | 0.10 | 0.15 | 0.10 | 0.03 | 0.08 | 0.013 | 0.08 |
| N | 62,477 | 62,477 | 62,477 | 62,477 | 62,477 | 62,477 | 62,477 | 62,477 |
| State FE×Industry FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

▶ Shows that the FTA (100% drop in tariffs due to the FTA) led to about 8.8% (= (0.012/0.137)*100) increase in the share of female white-collared workers

▶ Shows that the FTA (100% drop in tariffs due to the FTA) led to about 12% increase in the share of female blue-collared workers
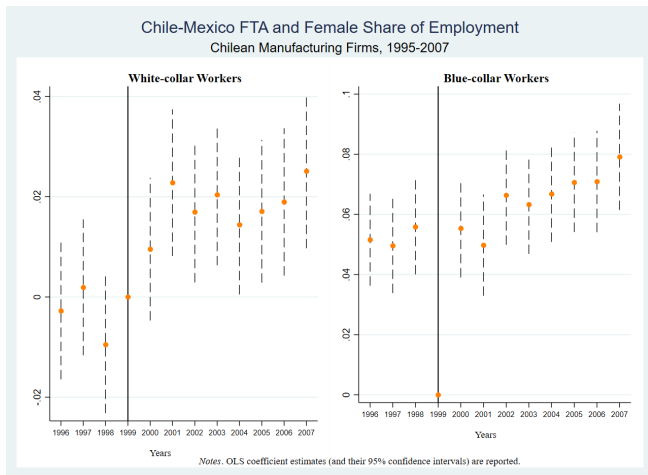
# Coefficient Plots



Figure: Chile-Mexico FTA and Female/Total Workers, Chilean Manufacturing Firms, 1995–2007

# Substitution Effect

| | White-collar | | | Blue-collar | |
|---|---|---|---|---|---|
| | Owner | CEO | Skilled Workers | Unskilled Workers | Services Workers |
| | (1) | (2) | (3) | (4) | (5) |
| **Panel A: Female Workers/Male Workers** | | | | | |
| $\Delta\, Tariffs_{95-07}^{Mexico} \times Exporter_i$ | −0.001 | −0.0001 | −0.017** | −0.051** | −0.001 |
| | (0.002) | (0.001) | (0.010) | (0.023) | (0.002) |
| $\Delta\, Tariffs_{95-07}^{Mexico}$ | 0.001 | 0.0006 | 0.003 | 0.019* | −0.001 |
| | (0.001) | (0.0009) | (0.005) | (0.010) | (0.001) |
| R-Square | 0.04 | 0.03 | 0.04 | 0.05 | 0.04 |
| **Panel B: Female** | | | | | |
| $\Delta\, Tariffs_{95-07}^{Mexico} \times Exporter_i$ | −0.005* | 0.007 | −0.136*** | −0.232 | −0.019** |
| | (0.003) | (0.005) | (0.052) | (0.162) | (0.009) |
| $\Delta\, Tariffs_{95-07}^{Mexico}$ | 0.005** | −0.006 | 0.011 | 0.016 | 0.0001 |
| | (0.002) | (0.004) | (0.019) | (0.111) | (0.005) |
| R-Square | 0.05 | 0.03 | 0.03 | 0.05 | 0.02 |
| **Panel C: Male** | | | | | |
| $\Delta\, Tariffs_{95-07}^{Mexico} \times Exporter_i$ | 0.002 | 0.042* | 0.271* | 0.546** | −0.032 |
| | (0.004) | (0.023) | (0.167) | (0.241) | (0.028) |
| $\Delta\, Tariffs_{95-07}^{Mexico}$ | 0.006 | −0.015 | 0.001 | −0.113 | 0.017* |
| | (0.004) | (0.013) | (0.119) | (0.127) | (0.010) |
| R-Square | 0.12 | 0.05 | 0.10 | 0.07 | 0.01 |
| N | 62,477 | 62,477 | 62,477 | 62,477 | 62,477 |
| State FE×Industry FE | Yes | Yes | Yes | Yes | Yes |

# What happened to total employment?

| | Female Workers/ Total Employment | | Absolute Employment | | |
|---|---|---|---|---|---|
| | White-Collar | Blue-Collar | Total | Male Share | Female Share |
| | (1) | (2) | (3) | (4) | (5) |
| $\Delta \text{Tariffs}_{95-07}^{Mexico} \times \text{Exporter}_i$ | −0.004*** | −0.008*** | −1.724*** | 0.017*** | −0.019*** |
| | (0.001) | (0.002) | (0.429) | (0.004) | (0.003) |
| $\Delta \text{Tariffs}_{95-07}^{Mexico}$ | 0.0008** | 0.003*** | 0.815** | −0.005** | 0.007*** |
| | (0.0004) | (0.001) | (0.337) | (0.002) | (0.002) |
| R-Square | 0.09 | 0.09 | 0.05 | 0.28 | 0.05 |
| N | 62,477 | 62,477 | 62,477 | 62,477 | 62,477 |
| State FE×Industry FE | Yes | Yes | Yes | Yes | Yes |

Notes: All the regressions are for the years 1995–2007. Columns (1) and (2) use the share of total female workers for white- and blue-collar categories in total employment; column (3) uses total employment; columns (4) and (5) use share of male and female employment in total employment of a firm as the dependent variable, respectively. All the dependent variables are expressed as the difference between the average for each firm between the years 1999–2007 and 1995–1998. $\Delta \text{Tariffs}_{95-07}^{Mexico}$ represents import tariffs on Chilean exports to Mexico. $\text{Exporter}_i$ is a exporter dummy. It takes a value of 1 if a firm's average exports across 1995–1998 is greater than zero. Standard errors in parentheses are clustered at the industry level (4-digit). Intercepts are not reported. *,**,*** denotes 10%, 5%, and 1% level of significance, respectively.

# Mechanism – Non-production Tasks & Discrimination

| | A: Non-production Tasks | | | |
| | Technical Assistance | | Patent | Publicity & |
| | Foreign | Domestic | Expenses | Advertising Expenses |
| | (1) | (2) | (3) | (4) |
| $\Delta Tariffs^{Mexico}_{95-07} \times Exporter_i$ | –0.056*** | –0.116*** | –0.120*** | –0.203*** |
| | (0.009) | (0.025) | (0.008) | (0.037) |
| $\Delta Tariffs^{Mexico}_{95-07}$ | 0.015 | 0.083*** | 0.075*** | 0.095 |
| | (0.012) | (0.024) | (0.011) | (0.059) |
| | | | | |
| R-Square | 0.09 | 0.20 | 0.19 | 0.17 |
| N | 60,003 | 45,008 | 45,872 | 46,776 |

| | B: Discrimination | | | |
| | Female White-collar Workers/ | | | |
| | Total White-collar Workers | | | |
| | Female Owner | | Female CEO | |
| | > 0 | = 0 | > 0 | = 0 |
| | (5) | (6) | (7) | (8) |
| $\Delta Tariffs^{Mexico}_{95-07} \times Exporter_i$ | 0.001 | –0.008** | –0.010*** | –0.001 |
| | (0.002) | (0.003) | (0.003) | (0.002) |
| $\Delta Tariffs^{Mexico}_{95-07}$ | –0.002 | 0.003* | 0.003** | –0.0005 |
| | (0.002) | (0.001) | (0.001) | (0.001) |
| | | | | |
| R-Square | 0.11 | 0.15 | 0.11 | 0.15 |
| N | 14,704 | 47,773 | 14,740 | 47,737 |
| State FE×Industry FE | Yes | Yes | Yes | Yes |

# Mechanism – Demand for Labour

| | Female White-collar Workers/Total White-collar Workers | | | |
| | Competitive Industries | Not-competitive Industries | High-tech Industries | Non High-tech Industries |
|---|---|---|---|---|
| $\Delta\,Tariffs_{95-07}^{Mexico} \times Exporter_i$ | −0.003** | −0.010*** | −0.004* | −0.008** |
| | (0.001) | (0.003) | (0.002) | (0.003) |
| $\Delta\,Tariffs_{95-07}^{Mexico}$ | 0.001** | 0.002 | 0.002* | 0.002* |
| | (0.0008) | (0.001) | (0.001) | (0.001) |
| | | | | |
| R-Square | 0.10 | 0.15 | 0.12 | 0.12 |
| N | 26,966 | 35,511 | 13,859 | 48,618 |
| State FE×Industry FE | Yes | Yes | Yes | Yes |

Notes: All the regressions are for the years 1995–2007. Dependent variable is the share of female white-collar workers. $\Delta\,Tariffs_{95-07}^{Mexico}$ represents import tariffs on Chilean exports to Mexico. $Exporter_i$ is a exporter dummy. It takes a value of 1 if a firm's average exports across 1995–1998 is greater than zero. Standard errors in parentheses are clustered at the industry level (4-digit). Intercepts are not reported. *,**,*** denotes 10%, 5%, and 1% level of significance, respectively.

# Other Mechanisms

- ▶ Female-intensive industries
  - ▶ similar effects across intensive and non-intensive industries
- ▶ Wages
  - ▶ data is only available at occupational level, but not gender divided: average wage of white-collar workers do not drop
- ▶ Labour Supply
  - ▶ does not only increase in Santiago; very similar effects across different regions
- ▶ Mechanisation of workforce
  - ▶ use of new machinery and value of goods produced by new machinery increased → both white- and blue-collar workers

# Productivity Effects of Reduced Gender Gap

| Panel A: Firm Performance | Total Sales | Total Imports | Value-Added | Raw Material Expenditure | Total Compensation |
|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) |
| $\Delta Tariffs_{95-07}^{Mexico} \times Exporter_i$ | −0.142*** | −0.155*** | −0.112*** | −0.133*** | −0.146*** |
| | (0.029) | (0.020) | (0.020) | (0.027) | (0.024) |
| $\Delta Tariffs_{95-07}^{Mexico}$ | 0.079*** | 0.054* | 0.053** | 0.108*** | 0.088*** |
| | (0.028) | (0.029) | (0.021) | (0.035) | (0.021) |
| N | 40,867 | 51,830 | 46,102 | 34,725 | 40,919 |

| Panel B: Productivity | Share of Women White-Collar Workers | Labour Productivity | | Total Factor Productivity | |
|---|---|---|---|---|---|
| | (6) | (7) | (8) | (9) | (10) |
| $\Delta Tariffs_{95-07}^{Mexico} \times Exporter_i$ | −0.012*** | −0.107*** | −0.100*** | −0.090*** | −0.076*** |
| | (0.003) | (0.018) | (0.005) | (0.022) | (0.023) |
| $\Delta Tariffs_{95-07}^{Mexico}$ | 0.004*** | 0.057*** | 0.054*** | 0.031** | 0.027** |
| | (0.001) | (0.019) | (0.007) | (0.012) | (0.012) |
| $\Delta Share\ of\ Women\ WC_i$ | | | 0.564*** | | 1.184*** |
| | | | (0.099) | | (0.237) |
| N | 62,477 | 41,384 | 41,384 | 55,643 | 55,643 |
| State FE×Industry FE | Yes | Yes | Yes | Yes | Yes |

# Concluding Remarks

- Exploiting the 1999 Chile-Mexico FTA as a quasi-natural experiment and studying its impact on the gender employment gap in Chilean manufacturing firms, we show that share of female white-collar workers increased by 8.8% for exporters due to the FTA or complete elimination of tariffs
  - increase is due to a clear substitution effect from male to female white-collar workers, particularly in the skilled labour category
  - phenomenon is primarily caused due to increase in investments by an exporter in non-productive tasks that involve interactive skills
- About 2.6% of the labour productivity and 5.7% of TFP increase due to the FTA can be attributed to the reduced gender-gap in white-collar employment
- Findings has multiple relevant policy implications
  - emphasizing the role of globalisation in improving female labour force participation
  - optimum allocation of talents
  - improvements in employment gap can have long-run consequences

Thank you!