Ladies First?
Firm-level Evidence on the Labor Impacts of the East Asian Crisis

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In adjusting to a crisis, do employers place the burden disproportionately on female employees?

- Concern that women are more vulnerable than men, particularly in a crisis
- Previous studies – using household or labor force surveys – find evidence that women’s employment adjusts more
- Here – use firm level data
  - Indonesia’s Census of Manufacturing
  - Panel, 1993-2001
  - Minimum of 20 employees
  - (Use Sakernas household surveys for full spectrum of manufacturing workers too)
Distinguish between 2 mechanisms that cannot be examined with household data

- **Sorting**: Sectors differed in the extent to which they were hit by the crisis. Given women’s employment also varies by sector, were women disproportionately employed in sectors hit harder or less hard by the crisis?

- **Differential treatment**: Given a firm had to adjust, were female employees more likely to be let go than male employees within the same firm?
  - This is the channel that underpins concerns of discrimination
Do find evidence of differential treatment within firms

\[ \Delta q_{it} = \Delta q^{+}_{it} - \Delta q^{-}_{it} + \Delta q^{+}_{it-1} + \Delta q^{-}_{it-1} \Delta q^{-}_{it} + \Delta q^{-}_{it} \Delta q^{-}_{it-1} + \Delta q^{-}_{it-1} \]

Where allow for positive and negative labor adjustment separately to test for possible asymmetry in adjustment in the share of female employees in a firm.

- Firms that were hit and adjusted, were likely to shed more women than men (blue collar workers)
- Some mitigation in that women were also more likely to see wages fall (still impacted, but more likely to trade off wages for employment).
But sorting *favored* female employees

\[ \Delta y_{it} = \Delta y_{t-1}\delta + \gamma_{t-1} * \text{Crisis}_{t-1}\delta + \gamma_{t-1} * \Delta y_{t-1}\delta + \Delta y_{t-1}\delta * (\Delta y_{t-1}\delta * \Delta y_{t}) + \Delta y_{t-1}\delta * \Delta y_{t-1}\delta * (\Delta y_{t-1}\delta) + \Delta y_{t-1}\delta * \Delta y_{t-1}\delta * (\Delta y_{t-1}\delta) + \Delta y_{t-1}\delta * \Delta y_{t-1}\delta * (\Delta y_{t-1}\delta) \]

- E.g. Firms that exported employed more women – and were generally less hurt by the crisis (less likely to exit and less likely to shed workers)

Gender composition and share of output exported
Differential treatment and sorting worked in opposite directions

- Aggregate numbers underestimate true gender dimensions of adjustment to crisis
- Important to distinguish the 2 channels
  - Won’t necessarily work in opposite directions
- Importance of using firm data
  - Allow for test of differential treatment that cannot be addressed with household data
  - Control for heterogeneity across firms in their adjustment: where you work matters for your vulnerability to shocks
Policy implications

- Direct and indirect ways to protect vulnerable groups
  - Look for evidence of differential treatment
  - Look at where vulnerable groups are concentrated.
- Enacted minimum wages to protect workers – expected to disproportionately help women whose wages are low
  - Found did reduce gender wage gaps in manufacturing – but effect varied by education
    - Gender gap closed for workers who completed at least junior high school, yet exacerbated for workers who did not complete primary school.
    - Changes in gender wage gaps were accompanied by changes in relative employment prospects in the opposite direction.
      - The employment prospects of men who did not finish primary school deteriorated relative to those of women; whereas the employment prospects of men who attended secondary school improved relative to those of women.