Long-term Labor Market Adjustment to Transitory Shocks: Worker Impact and Firm Channels

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Overview

- Motivation: Economic crisis can have negative workers LM outcomes but
  - the magnitude and duration of the losses depends on underlying adjustment mechanisms and safety net
  - lot of attention to displaced workers, little knowledge about the impact on continuing workers (and firms)

- This Paper: Long-term effects of firm demand shocks arising from the Great Recession on firms and workers using extremely rich data for Brazil and Ecuador
  - Employees of the most affected companies
    - worked fewer months after the crisis, but only experienced wage adjustment in Brazil
    - losses concentrated among low-skilled as well initial firm adjustment
    - mitigating role of informality and lack of competition in Brazil
    - safety net provides limited income smoothing in Brazil
  - Harder-hit firms experienced
    - persistent drop in revenues, wage bill*, profit rates (not in Ecuador), input demand (except for capital in Brazil), and productivity
    - increased firm exit in Brazil
    - changes in occupational structure favoring skilled labor in Brazil

Workers' Empirical Strategy

$$y_{ijt} = \beta_t shock_{j2008} + \gamma_1 X_{i2007} + \gamma_2 X_{j2007} + \delta_{rt} + \delta_{st} + \epsilon_{ijt} \quad (1)$$

- $shock_{j2008}$ foreign demand shock based on changes in real gdp between 2007 and 2008 of destination countries where firm j exports to
- all workers are treated, what matters is the intensity!

Does this specification allow isolating the effect of the external demand shock from other factors such as aggregate shocks (e.g., credit crisis?) or trends? Why not use event study using as control group non-tradable firms?

$$y_{ijt} = \sum_{t-t_0}^{t+T} \beta_t shock_{jt} \times nontrade_{jt} + X_{ijt}\Omega + \epsilon_{ijt} \quad (2)$$

- you could refine the control group using matching, estimate (2) separately as for instance in Kline et al (2019, QJE)

Workers' Results

- Less working time in both countries and wage losses in Brazil
  - "a worker whose firm experienced a 10pp larger shock worked in the formal sector fewer 2.1 months" is this 2.1 months per year? overall? I think it would be nice to give a sense of foregone working time and income to give a stronger policy message
  - if 2.1 months is per year, naive calculations would imply that a harder-hit worker losses roughly 1.5 years of working time in a 8 years period!
- Losses concentrated among low-educated (wage) workers
  - you have also info on occupation it is the same for blue collar/white collar/managers? you could also use the worker FE from the AKM model and see the heterogeneity across unobserved ability
  - if all points to the same direction, it could be some indication of labor hoarding with its particular policy implications as it may be inefficient (Haegele, 2021, mimeo)

Workers' Results (cont'd)

- Negative effects mitigated by "lack of competition" either measured by HHI index based on employment shares, stated-owned firms, high-wage firms

- The conclusion given in this section is that the results are contrary to the cleansing hypothesis. But is this really the case?
  - concentration based on employment shares (why not sales?)
    - higher concentration may just reflect the existence of a large firm (which may face fierce competition by smaller firms or in international markets)

    - larger companies may be more productive, have better access to credit, etc., which may enable them to better cope with negative shocks

  - AKM firm FE embed firm-level productivity (Card et al., 2018, JOLE)

  - if this heterogeneity analysis reflects productivity rather than lack of competition, then more productive firms cope better with shocks and protect employment to a greater extent would imply that more productive firms capture larger shares of employment, which in turn could improve productivity in the Olley-Pakes sense

Workers' Results (cont'd)

- Losses are driven by adjustments at the initial firm
  - how much of the comparison of stayers vs movers is between firms rather than within firms? your variable of interest is time varying, could you include firm FE and compare workers from the same firm?
  - how many workers move? if not a mover, the value of the dependent variable in for instance months in other firm is zero? is the lack of significance because of few movers or because no effect?
  - Selection into staying vs moving may play a role (Friedrich et al. 2019, NBER) if stayers have, for instance, less outside options and reallocation is not an option
  - Could you say something about the timing of the movement? This would provide a better understanding of the role of reallocation to mitigate losses, as one might think that those who move quickly are those who have more outside options

Firms' Empirical Strategy

$$y_{jt} = \theta_t shock_{j2008} + \gamma Z_{j2007} + \delta_{rt} + \delta_{st} + \epsilon_{jt} \quad (3)$$

- same as with the worker-level analysis, why not event study?
- this approach allows an indirect inference to be made about the potential pass-through. But, are the firms in the worker-level analysis and here the same?

Could you implement a proper pass-through analysis in the spirit of Juhn et al. (2018, JOLE), Maibom and Vejlin (2021, IZA)

$$\Delta_x y_{ijt} = \Delta_x fp_{ijt} + X_{ijt}\Omega + \epsilon_{ijt} \quad (4)$$

- Δ reflects changes in variables at any horizon x
- fp refers to firm performance: sales, profits, productivity
- use the shock as an IV to changes in fp
- one-to-one map between firm shock and worker impact

Firms' Results

- Why at the firm-level you observe drop in skilled employment but there is not negative effects for high-skilled individuals in the worker-level analysis?
  - The increase in percentages used to talk about occupation restructuring is due to lower losses of skilled labor relative to unskilled labor, could it be called occupation restructuring or is it simply labor hoarding, as skilled labor is more valuable?
  - An interesting angle to give a more nuanced picture of the occupational restructuring process could be to break down employment into job creation and destruction by type of labor force as well as their firm-level wage adjustment
- Somehow I miss the parallel heterogeneity analysis related to lack of competition in the firm-level approach to give a clear-cut answer on whether the findings reflect lack of competition or productivity advantages

Food for Thought

- Did you think about looking at spillover effects? Firms are rather large, negative shocks may spread out over the local LM worsening opportunities which in turn may affect your results through GE effects (see Gathmann et al 2020, JEEA)

- Could you investigate whether firms adjust their export portfolio?

- When talking about lack of competition a claim is that the results do not fit normal economic mechanisms. How monopsony models fit here?

- Deeper investigation of stayers vs movers: Wage adjustment in exchange of keeping employment is a type of within-firm insurance mechanism $\rightarrow$ is it better to keep your job in exchange for wage cuts or lose your job and move somewhere else? the relative wage loss here is what may matter

- How unemployment insurance interact with levels of informality? Are complements or substitutes in terms of insurance mechanisms against job loss?