

Parental Job Loss and the Role of Public Policies

Motivation

In the first two decades of the 21st century, Latin American countries experienced significant declines in absolute poverty and inequality (Gasparini et al., 2016, 2023). However, the region's long history of recurring macroeconomic crises (Lustig, 2000) and the recent impacts of the COVID-19 pandemic highlight the need to make these gains more sustainable (Amarante et al., 2024; CEPAL, 2021).

Macroeconomic shocks and the reduction in labor demand directly affect workers and households that rely on their labor income. Many middle-income households lack the resources to buffer these shocks and are therefore highly vulnerable to falling into poverty (Torche and Lopez-Calva, 2013; Vera-Cossio et al., 2023; Ferreira et al., 1999). Starting with Jacobson et al. (1993) for the US, the recent literature shows large and persistent effects of job displacement on employment and earnings for developed (Seim, 2019; Bertheau et al., 2023) and developing world (Britto et al., 2022). The severity and duration of these impacts depend on both macroeconomic conditions and individual worker characteristics. The effects are concentrated among older workers, women, and workers with less human capital (Verho, 2020; Couch and Placzek, 2010; Schmieder et al., 2023).

In response to these events, governments have implemented a range of programs to protect lower-income households from adverse consequences. In developing countries, these typically include unemployment insurance (UI), which primarily covers a large proportion of workers with a strong attachment to the formal labor market, and conditional cash transfers (CCTs), which are targeted to poor households with children (World Bank, 2015). While both forms of support can help stabilize income, they are designed to serve distinct populations. As a result, many middle-income but vulnerable households—who are not poor enough to qualify for CCTs and may lack access to stable formal employment—often fall outside the reach of existing safety nets (Fiszbein and Schady, 2009; Levy and Schady, 2013; Gentilini, 2022).

Understanding how different groups are affected by job displacement, and whether existing programs adequately support them, can inform the design of more inclusive social protection systems. If non-poor but vulnerable individuals are found to be inadequately protected, the results could motivate adjustments to eligibility criteria in existing policies or the introduction of complementary measures to address gaps in coverage.

Objective and Research questions

This project examines how job displacement affects employment and labor income trajectories in Uruguay, with a focus on differences between poor and non-poor but vulnerable individuals. Specifically, we compare how these groups recover from displacement shocks and evaluate the extent to which unemployment insurance (UI) and conditional cash transfers (CCTs) help buffer negative outcomes. Our goal is to understand whether some middle-income individuals — despite not being poor — remain economically vulnerable and fall outside the coverage of existing social protection programs, as they may qualify for neither UI nor CCTs. In doing so, we assess whether these individuals are not protected by the current safety net.

First, the project aims to contribute to the growing literature on the medium-term effects of adverse events on the labor market (Couch and Placzek, 2010; Bertheau et al., 2023; Britto et al., 2022). Furthermore, comparing UI and CCT allows us to analyze which of the two policies is more effective in providing coverage to vulnerable workers and minimizing the negative costs of the adverse event. We aim to answer the following research questions:

1. What is the effect of experiencing a job displacement on subsequent labor market trajectories, and how does the magnitude of this effect vary across different segments of the income distribution? This question aims to identify the effects of displacement, with particular attention to differences between poor and non-poor vulnerable workers.
2. Are AFAM-PE and UI effective in mitigating the negative effects of the shock, respectively for poor and non-poor but vulnerable workers? We analyze the effectiveness of each program in stabilizing income and employment outcomes in the short and medium term, with a particular focus on differences between poor and non-poor vulnerable workers.
3. Do the two instruments function as complementary components of the social safety net, or do gaps in coverage leave some vulnerable workers unprotected? This question focuses on whether non-poor vulnerable workers —who may not qualify for either program— are less protected than other groups and experience worse outcomes after displacement.

Methodology

Data

To implement our empirical strategy, we rely on two sources of administrative data from Uruguay: (i) labor histories from the Social Security Agency and (ii) administrative records covering the universe of applications to the AFAM-PE program. Both databases are merged using a unique identifier based on anonymised personal identification numbers.

(i) *Social security records.* From Social Security data, we recover labor market trajectories for the universe of formal workers in Uruguay from 1998 to 2022. The database includes, for each worker-firm pair, information on earnings, entry and exit dates, and several covariates. From this data, we could define the displacement events and the workers eligible for UI.

(ii) *AFAM-PE records.* This dataset contains the universe of applications to the AFAM-PE program between April 2005 (the program’s launch) and December 2019. It includes detailed information on household socio-economic status, the poverty score used to determine eligibility, and whether the application was approved.

Empirical Strategy

To estimate the effects of layoffs on workers’ income and employment, we will implement an event study following (Bertheau et al., 2023):

$$Y_{i,t} = \alpha_i + \lambda_t + \sum_{k=-5}^{k=5} \gamma_k(t = t_i^* + k) + \sum_{k=-5}^{k=5} \theta_k(t = t_i^* + k) \times Treat + \beta X_{i,t} + \epsilon_{i,t} \quad (1)$$

where $Y_{i,t}$ denotes yearly earnings or employment; $Treat$ is an indicator variable equal to one for displaced workers at the time of layoff (t_i^*) and zero for control workers selected through a matching procedure. θ_k captures the dynamic effects of displacement, comparing treated and control workers up to five years before and after the event t_i^* . We also include individual (α_i) and year (λ_t) fixed effects. In particular, we will compare outcomes across poor individuals—defined as those eligible for AFAM-PE—and non-poor but vulnerable individuals, identified based on their income level. This will allow us to assess heterogeneity in the effects of displacement across different segments of the vulnerable population.

To estimate the effects of UI and AFAM-PE policies, we will implement a Regression Discontinuity design exploiting discontinuities in program eligibility:¹

$$Y_{i,t} = \alpha + \beta D_i^{UI/AFAM} + f(Z_i) + \epsilon_i \quad (2)$$

where $D_i^{UI/AFAM}$ is a dummy equal to one if individual i is eligible UI or AFAM-PE ($Z_i > 0$). Eligibility is determined by Z_i , where the cutoff is standardized to $Z = 0$ (six months of tenure for UI, and a poverty score threshold for AFAM-PE).

By combining these two strategies, we will estimate both the causal effect of job displacement and the extent to which UI and AFAM-PE mitigate its negative consequences for different income groups.

¹Britto et al. (2022) and Gerard and Gonzaga (2021) use a similar strategy for the case of UI in Brazil, and Bergolo and Cruces (2021) implemented a RD strategy based on the AFAM-PE poverty score.

References

- Amarante, V., N. Lustig, and A. Vigorito (2024). El desafío de la desigualdad de ingresos en américa latina. *Revista de la CEPAL* (141), 159–178.
- Bergolo, M. and G. Cruces (2021). The anatomy of behavioral responses to social assistance when informal employment is high. *Journal of Public Economics* 193, 104313.
- Bertheau, A., E. M. Acabbi, C. Barceló, A. Gulyas, S. Lombardi, and R. Saggio (2023). The unequal consequences of job loss across countries. *American Economic Review: Insights* 5(3), 393–408.
- Britto, D. G., P. Pinotti, and B. Sampaio (2022). The effect of job loss and unemployment insurance on crime in brazil. *Econometrica* 90(4), 1393–1423.
- CEPAL, N. (2021). Estudio económico de américa latina y el caribe 2021: dinámica laboral y políticas de empleo para una recuperación sostenible e inclusiva más allá de la crisis del covid-19.
- Couch, K. A. and D. W. Placzek (2010). Earnings losses of displaced workers revisited. *American Economic Review* 100(1), 572–589.
- Ferreira, F. H., G. Prennushi, and M. Ravallion (1999). *Protecting the poor from macroeconomic shocks*, Volume 2160. World Bank Publications.
- Fiszbein, A. and N. R. Schady (2009). *Conditional cash transfers: reducing present and future poverty*. World Bank Publications.
- Gasparini, L., G. Cruces, and L. Tornarolli (2016). Chronicle of a deceleration foretold income inequality in latin america in the 2010s. *Revista de economía mundial* (43).
- Gasparini, L., M. E. Santos, and L. Tornarolli (2023). Poverty in latin america. In *Research Handbook on Measuring Poverty and Deprivation*, pp. 673–684. Edward Elgar Publishing.
- Gentilini, U. (2022). *Cash transfers in pandemic times: Evidence, practices, and implications from the largest scale up in history*. World Bank.
- Gerard, F. and G. Gonzaga (2021). Informal labor and the efficiency cost of social programs: Evidence from unemployment insurance in brazil. *American Economic Journal: Economic Policy* 13(3), 167–206.
- Jacobson, L. S., R. J. LaLonde, and D. G. Sullivan (1993). Earnings losses of displaced workers. *The American economic review*, 685–709.

- Levy, S. and N. Schady (2013). Latin america’s social policy challenge: Education, social insurance, redistribution. *Journal of Economic Perspectives* 27(2), 193–218.
- Lustig, N. (2000). Crises and the poor: Socially responsible macroeconomics. *Economía Journal* 1 (Fall 2000), 1–30.
- Schmieder, J. F., T. Von Wachter, and J. Heining (2023). The costs of job displacement over the business cycle and its sources: evidence from germany. *American Economic Review* 113(5), 1208–1254.
- Seim, D. (2019). On the incidence and effects of job displacement: Evidence from sweden. *Labour Economics* 57, 131–145.
- Torche, F. and L. F. Lopez-Calva (2013). Stability and vulnerability of the latin american middle class. *Oxford Development Studies* 41(4), 409–435.
- Vera-Cossio, D. A., B. Hoffmann, C. Pecha, J. Gallego, M. Stampini, D. Vargas, M. P. Medina, and E. Álvarez (2023). Re-thinking social protection: From poverty alleviation to building resilience in middle-income households.
- Verho, J. (2020). Economic crises and unemployment persistence: Analysis of job losses during the finnish recession of the 1990s. *Economica* 87(345), 190–216.
- World Bank (2015). *The state of social safety nets 2015*. The World Bank.