

Gendered Generational Renewal and Inequality in Latin America: Comparative Lessons from Brazil

This paper examines how gendered patterns of demographic and occupational renewal interact with inequality dynamics in Latin America, emphasizing Brazil as a central analytical case. Extending the notion of demographic metabolism, it conceptualizes gendered generational turnover as the process through which successive cohorts of women and men enter, circulate within, and exit the labor force under unequal institutional, technological, and welfare regimes. This analytical perspective combines insights from feminist economics, comparative demography, and labor studies to understand how gender differences in labor participation, occupational mobility, and access to new technologies contribute to persistent inequality despite significant educational and demographic transformations.

Over the past two decades, Latin America has undergone profound demographic and labor transformations, including declining fertility, population aging, and rising female educational attainment. However, these shifts have not translated into equal labor outcomes. The paper argues that gendered generational renewal must be understood not merely as a matter of cohort replacement but as a multi-dimensional process linking demographic metabolism, technological change, and institutional segmentation. Feminization of the labor force has occurred alongside the proliferation of precarious and low-paid occupations, reinforcing gendered patterns of vulnerability in the face of automation and digitalization.

By applying a gender lens to the concept of generational turnover, this study seeks to highlight how inequalities are reproduced at the intersection of demographic and technological transitions. Whereas younger female cohorts display unprecedented levels of education and formal participation, structural barriers such as care asymmetries, occupational segregation, and limited access to managerial and STEM fields continue to shape their trajectories. This framework situates gendered renewal within the broader dynamics of the Latin American welfare state — characterized by fragmentation, informality, and insufficient protection against economic shocks.

Empirically, the paper integrates national microdata from Brazil (RAIS 2002–2024, PNAD 2012–2024, and Population Censuses 2000–2022) with harmonized indicators for Argentina, Mexico, and Chile. This combination enables a comparative analysis of how demographic and labor transitions interact in distinct welfare and industrialization contexts. Indicators of gendered demographic replacement are constructed at both the occupational and regional levels, measuring how new female cohorts enter and replace — or complement — older male cohorts across sectors, firm sizes, and automation exposure profiles.

The analysis proceeds in three stages. First, descriptive demographic indicators trace the evolution of female participation and cohort replacement rates within

different age, skill, and sectoral groups. Second, multilevel regression models estimate the interaction between gender composition, firm characteristics (size, sector, technological intensity), and regional development indicators, assessing how these factors jointly influence wage inequality and occupational mobility. Third, comparative decomposition analyses evaluate differences in gendered renewal dynamics across the four countries, emphasizing institutional path-dependence and policy legacies.

This multi-scalar strategy captures both macro-demographic trends and micro-level employment structures, allowing the study to reveal how demographic renewal interacts with firm-level adaptation to automation and the digital economy. It also contributes methodologically by integrating demographic measures of cohort replacement with labor market models of segregation and wage dispersion, an approach rarely applied in Latin American contexts.

Preliminary results from Brazil indicate that while educational parity has significantly reduced entry barriers for younger women, occupational hierarchies and sectoral bottlenecks remain central to the reproduction of inequality. Women have increasingly entered health, education, and service occupations — sectors expanding in the wake of population aging and urbanization — yet remain underrepresented in high-productivity and digital-intensive fields. Within firms, patterns of generational renewal are uneven: younger women tend to replace older female cohorts in middle-skill jobs rather than entering managerial or technical positions traditionally occupied by men.

Furthermore, exposure to automation and algorithmic substitution disproportionately threatens female employment in administrative, clerical, and customer-service occupations. While the digital economy offers potential avenues for inclusion through remote and platform work, these forms of employment often reproduce pre-existing vulnerabilities related to informality, low wages, and limited career progression. The coexistence of educational gains and occupational stagnation reflects the persistence of institutional rigidities — notably, unequal access to training, gender bias in recruitment and promotion, and insufficient public investment in care infrastructure.

The comparative extension to Argentina, Mexico, and Chile suggests that similar structural asymmetries persist across national contexts, albeit mediated by distinct welfare regimes. Brazil and Mexico exhibit higher degrees of informality and weaker care policies, amplifying the gendered effects of automation. Chile and Argentina, while more advanced in educational attainment and formal employment rates, still reveal slow progress in integrating women into leadership and STEM-related occupations. These cross-country contrasts underscore the need for coordinated policies that link gender equality, technological adaptation, and demographic foresight.

By articulating gendered demographic renewal with occupational and technological transformations, the study contributes to understanding how the metabolism of the labor force in Latin America simultaneously incorporates and excludes women. It positions the region as a strategic empirical setting to analyze the coexistence of demographic aging, incomplete welfare systems, and persistent labor inequality. The findings demonstrate that demographic change alone does not guarantee inclusive growth; rather, its distributive effects depend on how societies reorganize work, care, and technological innovation.

The paper calls for integrated policy frameworks that combine demographic and labor planning, emphasizing lifelong learning, care infrastructure, and equal access to digital skills. Such strategies are crucial to ensuring that generational renewal becomes a mechanism for gender convergence rather than divergence. Beyond its regional scope, the study offers comparative insights into the global debate on the future of work and gender equality, highlighting Latin America's relevance as both a laboratory of demographic transition and a frontier of inequality transformation.