

Remote work, real effects: The impact of telework on Brazil's sectoral structure

Topic: Input-output Analysis for Policy Making (1)

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The growing adoption of teleworking has reshaped labor market dynamics and sectoral interdependencies. This study examines the systemic impact of teleworkers on the Brazilian economy, focusing on their contributions to employment, income flows, and sectoral demand. Using input-output analysis, we estimate type I multipliers to assess the broader economic effects of teleworkers in knowledge-intensive service industries (KIS). In addition, we apply the hypothetical extraction method to assess the role of teleworkers in sectoral structures, comparing telework-intensive industries with key economic sectors. The analysis is based on the Brazilian input-output matrix, estimated from the Resource and Use Tables (TRU) of the System of National Accounts (SCN). Household consumption is included using data from the Household Budget Survey (POF), disaggregated by income level, while household income is derived from the National Continuous Household Sample Survey (PNAD-C), which identifies teleworkers and their income. The results indicate that teleworkers generate positive employment and income spillovers, especially in professional, scientific and technical services. While telework-intensive sectors show higher employment multipliers, technology-driven industries show lower indirect job creation, likely due to productivity-driven processes. The extraction analysis also shows that the consumption effects of teleworkers are more pronounced than their direct labor contributions, with higher-income teleworkers having the largest economic impact. Compared to key economic sectors, telework-intensive industries show greater sensitivity to the removal of teleworkers, reinforcing their dependence on demand-driven interactions. These findings suggest that teleworkers influence economic activity not by driving core production chains, but through their role in revenue flows and service-based transactions. As telework continues to be concentrated in knowledge-intensive sectors, understanding its implications for sectoral resilience, labor market transformation, and economic policy will be critical to shaping the future of work.

KEYWORDS: Telework. Remote Work. Hypothetical extraction method. Knowledge-intensive services (KIS).