

# Labour Mobility as a Response to Manufacturing Decline: an Empirical Analysis for Italy <sup>\*</sup>

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## Extendend Abstract

Globalization had a profound impact on advanced economies, driving down the prices of consumer goods and production inputs while simultaneously contributing to job losses in certain sectors (Dorn and Levell, 2024). As noted by Vu et al. (2021), this process accelerated the decline of manufacturing employment, particularly in low-tech industries, since the 1990s. This decline has been primarily driven by competition from low-cost imports and advancements in automation. Fort et al. (2018) report that 75% of the 6.6 million U.S. manufacturing job losses between 1977 and 2012 resulted from plant closures, leading to mass layoffs. Individuals affected by plant closures often face diminished re-employment opportunities and reduced earning prospects, alongside worsening social conditions, including increased substance abuse, mental health issues, and declining fertility rates (Venkataramani et al., 2020; Pierce and Schott, 2020; Clainche and Lengagne, 2023; Autor et al., 2019). Beyond these economic and social consequences (Dorn and

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<sup>\*</sup> Within this paper, microdata on transfers of residence at municipal level are used. They are made available by the Italian National Institute of Statistics (ISTAT) to the authors after a specific authorization. The data processing and model estimation were carried out at the Laboratory for the Analysis of Elementary Data (ADELE) of ISTAT in Ancona, in compliance with the law regarding the protection of statistical confidentiality and the protection of personal data. The results and opinions expressed are the authors' own, they do not constitute official statistics and do not bind ISTAT in any way.

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Levell, 2024), plant closures may also lead to demographic shifts, as individuals reassess their residential choices in response to economic distress, a pattern observed also in the aftermath of natural disasters or political upheavals.

This paper examines whether severe industrial crises in local labor markets influence migration patterns. The analysis focuses on labor force mobility in Italy following plant closures and mass layoffs. Internal migration in Italy has historically followed a South-to-North pattern due to income and employment disparities. However, plant closures may intensify this trend by further reshaping labor demand.

Using a staggered difference-in-differences approach, this study investigates how manufacturing decline affected the internal mobility of Italy’s working-age population across local labor markets (LLMs) from 2000 to 2019.

The analysis relies on ISTAT microdata tracking residence transfers among Italian municipalities, aggregated at the LLM level. Labor demand shocks are identified by focusing on LLMs designated as areas of complex industrial crises by the Ministry of Economic Development, ensuring that the study captures broader local economic effects rather than firm-specific impacts. The study also explores heterogeneity in migration responses based on individual characteristics — such as gender, citizenship, and age — as well as LLM attributes, including urbanization levels, industrial intensity, and structural conditions.

Preliminary findings indicate a decrease in net migration following industrial crises, due to both reduced inflows from other Italian LLMs and increased outflows towards other LLMs. The results remain robust across different model specifications, alternative DiD estimators, and extended pre-treatment periods.

Both Italian and non-Italian citizens exhibit lower net migration, though the effect is apparently driven by increased outflows among foreign citizens. No significant gender differences are observed in migration propensity. Additionally, district-based local labor markets experience a net population decline twice as large as non-district local labor markets. The demographic response to industrial crises is significant in the center-north but not in the south.

These findings contrast with those of Ciani et al. (2019), who concluded that labor demand shocks had a limited impact on mobility across Italian LLMs due to strong family ties (Amior and Manning, 2015). Furthermore, recent research by Basso et al.

(2023) suggests that migration adjustments are more pronounced in response to positive shocks, as job creation attracts more inflows, whereas negative shocks primarily reduce inflows rather than increasing outflows.

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