Labor Market Shocks and Mobility Evidence from Administrative Data During the Pandemic

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During crises, labor markets can experience profound transformations able to alter traditional employment paradigms with lasting implications for the broader economy, (Aaronson et al., 2021; Salvanes et al., 2024). From the demand side this can accelerate shifts toward new forms of work, prompting greater flexibility and leading companies to reevaluate how they manage workers, activities, and workplaces. Instead, from the worker's point of view, this can affect how individuals seek new employment and evaluate their current positions, potentially reshaping broader labor market dynamics. As a result, not only can the labor market be restructured, but workers' perceptions of job flexibility and the nature of their work may also be reshaped with long-lasting consequences in how they act in the labor market, (Mas and Pallais, 2017; Barrero et al., 2021). In this context, we explore how workers' mobility changes in response to adverse labor market shocks, exploiting a variation that, within the Italian context, has yet to be examined: mandatory sectoral closures of economic activities during Covid-19. As one of the first epicenters of the crisis, Italy faced stringent government-imposed lockdowns and business restrictions, creating a dichotomous economic landscape where some sectors were forcibly shut down (non-essential activities) while others continued to operate (essential activities). In this paper, we exploit this variation, and using a difference-in-differences framework, we try to understand how these shocks impacted Italy's labor market, particularly in terms of worker mobility and career paths across different sectors and occupations.

To identify the causal impact of sectoral shutdowns, we compare individuals employed in non-essential sectors in February 2020 to those in essential sectors. Our analysis relies on a detailed administrative dataset covering a broad range of active, new, and terminated contracts, sourced from the *Comunicazioni Obbligatorie*, the mandatory reports firms submit about their workforce. The extensive and representative sample allows us to analyze labor market trends before and after the pandemic for workers employed in essential and non-essential sectors. We decompose labor market flows—Employment to Employment (EE), Employment to Unemployment (EU), and Unemployment to Employment (UE)—by age, gender, education level, occupation, and geographical region. Several works have already shown how labor mobility can also be affected by occupational attributes; occupations can differ in terms of workload, exposure to stress, and task-specific constraints, potentially leading to heterogeneous mobility patterns, (Giuntella et al., 2019; Giuntella and Mazzonna, 2015; Gihleb et al., 2022; Mazzonna and Peracchi, 2017). For

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this reason, beyond the sectoral dimension, we investigate how occupational characteristics shaped mobility responses to these shocks. To explore these dimensions, we integrate measures of occupational burdens by leveraging Job Exposure Matrices from (Kroll, 2011), which provide standardized indices on working conditions. Specifically, we examine two indices: the Physical Job Index (OPI) and the Psychosocial Job Index (OSI). The OPI measures physical burdens related to ergonomic stress and environmental exposure, while the OSI captures mental and social stressors, including time pressure and cognitive demands. Both indices range from 1 to 10, where higher values indicate greater occupational burdens.

Results show that forced shutdowns significantly increased transitions from employment to unemployment and reduced re-employment possibilities, with the adverse effects being particularly strong for occupations with high-burden characteristics. Workers in physically or mentally demanding occupations faced additional constraints to mobility, likely because they offered fewer remote-work options and entailed more significant risks or stress during the pandemic. For example, physically intensive occupations, such as construction or manual labor, were more susceptible to employment disruptions. In contrast, occupations with high psychosocial burdens, such as nursing or customer-facing roles, experienced heightened job insecurity due to elevated stress and exposure risks. These findings offer new insights into how crises affect labor market dynamics, highlighting the importance of occupational characteristics in shaping labor market adjustments to economic shocks.

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