Stay or Go? Place-Based Unemployment Benefits and Internal Migration*

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Abstract

Place-based welfare programs face a fundamental tension: while they provide a social safety net in distressed areas, they may inadvertently discourage labor mobility by "locking" workers into weak local labor markets. This paper investigates the consequences of removing such incentives by studying the geographical equalization of unemployment insurance (UI) duration in Italy. We leverage a reform that phased out a place-based UI scheme characterized by significantly longer benefit durations in the economically disadvantaged South. Using a difference-in-differences framework based on age and region of dismissal, we find that a one-day reduction in potential UI duration decreases actual benefit receipt by 0.54 days and shortens non-employment spells by 0.4 days. Crucially, the reform acted as a catalyst for labor reallocation: lower UI generosity significantly increased the probability of workers migrating from the South to high-employment regions in the Center-North. Despite the increased haste in finding work, we detect no decline in job match quality, suggesting that the gains from moving to a more productive labor market offset the reduction in search selectivity. Our results show that generous UI hampers workers' reallocation and therefore productivity with net welfare losses.

Keywords: unemployment insurance duration; labor mobility; job reallocation; migration

***JEL* codes:** J63; J64; H55; R23

*The views expressed in this paper are those of the authors only and should not be attributed to the Bank of Italy nor to the Eurosystem.

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1 Introduction

Significant geographic disparities in economic performance are a persistent feature of nearly all developed economies. To mitigate these gaps and prevent "brain drain" from lagging regions, governments frequently employ place-based policies that target resources toward underperforming areas (Kline and Moretti, 2013; Bartik, 2020b). While these programs aim to provide a social safety net and stimulate local recovery, they create a fundamental policy tension: by providing more generous benefits in distressed areas, they may inadvertently discourage labor mobility, "locking" workers into weak local labor markets and perpetuating the very disparities they intend to solve (Moretti, 2024; Bartik, 2020a).

This paper investigates the consequences of equalizing place-based policies on internal migration and labor market outcomes. Specifically, we ask: what happens to migration patterns and job search efficiency when the geographical "top-up" of a welfare program is removed? We explore this question by leveraging a unique reform in Italy—a country defined by a stark and persistent socio-economic divide between its industrial Center-North and its economically disadvantaged South. Italy's regional disparities are among the highest in the OECD: GDP per capita in the Center-North is over €14,700 higher than in the South, and the employment rate for young adults (ages 25–34) is consistently nearly 30 percentage points higher in the North. Historically, Italian public policy addressed this gap through the *Mobilità* system, an unemployment insurance (UI) scheme that provided significantly longer benefit durations for workers terminated in the South. Between 2012 and 2017, a major legislative reform phased out the *Mobilità* program, progressively eliminating these geographical differences and equalizing UI duration across the country.

To guide our empirical analysis, we develop a two-region random search model where unemployed workers face exogenous market frictions and geographically heterogeneous wage distributions. In this framework, the place-based UI program in the South creates a spatial lock-in effect: by increasing the value of remaining unemployed in a low-opportunity region, it raises workers' reservation wages and reduces the relative net gain of migrating to high-productivity areas. Our model predicts that equalizing benefit du-

rations triggers three primary responses. First, it reduces the value of unemployment in the South, lowering reservation wages and shortening non-employment spells. Second, it facilitates labor reallocation toward the more productive Center-North. Third, the impact on job match quality is theoretically ambiguous: while lower reservation wages exert downward pressure on accepted wages, the transition to a superior regional labor market can offset this loss.

Using linked employer-employee data and a difference-in-differences framework, we identify the causal effect of this equalization on labor market trajectories. First, we find that the reform effectively decreased the number of days of benefit receipt proportionately to the drop in potential duration. For each day of decrease in potential UI duration, actual receipt decreased by 0.54 days among workers younger than 40 years and by slightly more among older workers, providing evidence of the reform's mechanical effect.

Second, we show that the 12-month decrease in potential UI duration among younger Southern workers reduced the time they spent non-employed by approximately 146 days. We find a similar, but delayed, effect for workers aged 40 to 49, who experienced a phased 18-month drop in potential duration between 2014 and 2016. These results likely reflect non-linear search responses to different starting levels of generosity. Furthermore, we find that lowering the potential *Mobilità* duration increased the cumulative number of years young workers are employed post-dismissal.

Third, the reform significantly increased the probability of migrating to a different macro-area. Younger workers facing a 12-month drop in potential UI duration were almost 80% more likely to migrate to the Center-North than their counterparts in the North who experienced no change. For workers aged 40 to 49, the reform increased migration rates by roughly 50%, largely driven by movement toward destination regions characterized by higher employment rates. This migration effect is concentrated in the first year post-termination and disappears in the second year, potentially indicating crowding-out effects among job hunters in the Center-North.

Fourth, we assess the impact on job match quality. We find that decreasing the potential UI duration did not substantially change the quality of the first job match post-employment. Specifically, we do not detect statistically significant impacts on wages, the

likelihood of permanent employment, or work schedules. Moreover, workers under 40 years old were more likely to stay in the same macro-sector following the reform, suggesting that shorter UI periods led to jobs that were qualitatively similar to those held pre-termination, despite the increased haste in search.

Our paper makes several contributions to the literature. First, to our knowledge, this is the first study to causally estimate the impact of a decrease in local UI generosity on internal migration using a rigorous quasi-experimental design. While previous research on welfare-based migration has explored the link between benefits and mobility, the lack of quasi-experimental variation has often left results statistically insignificant or unable to disentangle UI effects from local labor market conditions (Enchautegui, 1997; De Giorgi and Pellizzari, 2009; Tatsiramos, 2009; Day and Winer, 2011). Causal estimates in this field are rare, with existing studies in the US yielding conflicting evidence on how UI generosity affects interstate mobility (McKinnish, 2005; Nunn et al., 2018). Our evidence reveals that place-based equalization unlocks latent mobility when incentives for spatial lock-in are removed, encouraging labor reallocation toward regions with stronger economic conditions.

Second, we contribute to the literature on UI design and labor market outcomes. While UI provides vital consumption smoothing (Gruber, 1997; Ganong and Noel, 2019), it can generate distortions by de-intensifying search behavior (Meyer, 1990; Lalive et al., 2006; Card et al., 2007; Krueger and Mueller, 2010; DellaVigna et al., 2017; Marinescu and Skandalis, 2021). We contribute to the scarcer research on decreasing potential UI duration, such as the Missouri reform analyzed by Johnston and Mas (2018) and Karahan et al. (2025). We also contribute to the mixed evidence on match quality (Card et al., 2007; Nekoei and Weber, 2017), suggesting that regional reallocation can mitigate the negative wage effects typically associated with shorter search durations.

Third, we contribute to the literature on place-based policies and economic efficiency. Prior works have questioned the efficiency of transfers to less productive local economies (Moretti, 2024; Ehrlich and Seidel, 2018). While place-based hiring subsidies can increase local employment (Busso et al., 2013; Ciani et al., 2025), the net effects are often debated due to the potential relocation of economic activity (Lu et al., 2019). We examine UI as a

form of place-based policy—a variation that has been understudied—and show that removing geographical ”top-ups” can reduce the behavioral distortions that ”keep” workers in disadvantaged regions.

2 Institutional Background

The generosity of a UI program is determined by two features. First, the UI potential duration, which is defined as the maximum number of months that an unemployed worker is eligible to receive UI payments following an involuntary layoff. The second measure of generosity is the UI replacement rate, a measure of the share of previous labor earnings that are disbursed to the dismissed workers as unemployment benefits. The higher the potential UI duration and the higher the proportion of previous labor earnings that are replaced through the UI system, the more generous the system. In this work, we exploit variation in the first dimension, the potential UI duration, to study the impact of changing UI generosity on non-employment spells, migration between local labor markets, and future job quality.

2.1 Unemployment Insurance in Italy and the *Mobilità* Program

In Italy, between 1991 and 2016, there were two different UI systems for workers, depending on the type of involuntary layoff. Workers who were part of a *mass* layoff, for example due to deep economic reasons or wide structural transformations of a firm's activities, were enrolled in the *Mobilità* program. The *Mobilità* program provided unemployed workers affected by mass layoffs or layoffs related to macroeconomic downturns with UI, as well as some re-employment services and benefits, both to the worker and to the re-employing firm. For example, firms hiring unemployed workers in the *Mobilità* program could benefit from hiring subsidies. Another key feature of the *Mobilità* program is that workers who were receiving these benefits could get temporary or part-time jobs, which did not count towards the *Mobilità* potential duration and provided similar economic advantages to employers. Specifically, workers could start these contracts and

return to the Mobilit'lists for a period that was, including benefits receipts and time on these contracts, at most double the one they were originally entitled to (Paggiaro and Trivellato, 2002). The firm could, alternatively, offer a permanent contract at the end of the one-year temporary employment, providing the employer with the highest economic advantage. Brunello and Miniaci (1997), Paggiaro and Trivellato (2002), and Paggiaro et al. (2009) describe the design of the *Mobilità* program in detail and empirically evaluate some of its characteristics.

The second UI system is the more traditional one, and it applies to workers losing their jobs individually.

To estimate the effect of unemployment insurance generosity on internal migration, we focus on the *Mobilità* program and the evolution of its generosity levels before (up to 2014) and after (in 2015 and 2016) the reform. Starting in 1991, the generosity of the *Mobilità* program was tied to geographical and demographic factors so that workers whose hazard rates outside of non-employment were considered lower, as defined by the location of their dismissal or age at dismissal, were eligible for more maximum months of payments. In particular, older workers located in the South benefited from the longest possible duration of *Mobilità* payments (i.e., 48 months).

In the *Mobilità* program, there were different generosity groups based on the age of workers at dismissal (i.e., up to 39 years old, 40-49, and 50+ years old)[1] and the geographical location of dismissal (the Center-North and South macro-regions).[2] The initial generosity level and its progressive reduction following the reform depended on the age-geography groups. For example, while workers below 40 years old terminated in the North-Central macro-region experienced no change in potential duration, which remained at 12 months, their counterparts in the South saw their potential duration of benefits halve from 24 to 12 months, and match their counterparts in the Center-North starting in 2015.

The geographical difference for workers aged 40-49 and 50+ decreased, but remained,

[1]Because of the type of terminations covered by the *Mobilità* program, well known mechanisms of manipulation of dismissal timing around the age of the workers (Citino et al., 2020) are substantially less likely in this setting.

[2]Out of the 20 Italian regions, 8 are in the North, 5 in the Center (hence, 13 are in the Center-North macro-region), and 7 in the South.

in 2015 and 2016, and disappeared starting in 2017. Before the reform, workers aged 40 or more dismissed in the South could benefit from 12 more months of *Mobilità* payments compared to their Center-Northern counterparts. Between 2015 and 2016, this gap was halved, and in 2017 it was eliminated.

Hence, by 2017, the reform had equalized the differences in *Mobilità* potential duration across the two macro-areas. Notably, no age or geographical differences in the *level* of *Mobilità* benefits existed or changed over time. The only variation in the program's generosity was in the potential duration of the benefits, and it was that variation that the reform altered.

Starting in 2017, the *Mobilità* program merged with the traditional unemployment insurance program, and all Italian workers became part of a unique unemployment insurance program called ASPI.

Table 1 summarizes the *Mobilità* benefits duration by the relevant age-geography subgroups, that is, by the age at dismissal and by the macro-region where the dismissing firm is located. The table also reports the changes introduced by the reform.

Table 1: The Structure of the Program over Time: Maximum duration (months) of eligibility for the *Mobilità* unemployment insurance program by age and geography

		1991 to Dec 31 2014	Jan 1-Dec 31 2015	Jan 1-Dec 31 2016	From Jan 1 2017 (trad. UI)
Center-North	Up to 39 yo	12	12	12	10
	B/w 40 and 49 yo	24	18	12	10
	B/w 50 and 55 yo	36	24	18	12
	55+ yo	36	24	18	16
South	Up to 39 yo	24	12	12	10
	B/w 40 and 49 yo	36	24	18	10
	B/w 50 and 55 yo	48	36	24	12
	55+ yo	48	36	24	16

3 Theoretical Framework

To guide our empirical investigation, we develop a two-region random search model. The model illustrates how regional heterogeneity in potential benefit duration (PBD) influ-

ences a worker's reservation wage, job-finding hazard, and internal migration patterns.

3.1 Baseline Model: Two-Region Search with Market Frictions

Consider an unemployed worker in a simple economy with two regions: $r \in \{S, N\}$. The labor market is characterized by exogenous job arrival rates λ^r and wage distributions $F^r(w)$. We assume $\lambda^N > \lambda^S$ and that F^N first-order stochastically dominates F^S, representing the superior economic conditions in the Center-North.

Workers receive unemployment benefits depending on the remaining PBD, $\tau \in \{0, 1, \ldots, T^r\}$. The benefit flow is $b(\tau; T^r) = b \cdot \mathbb{1}\{1 \leq \tau \leq T^r\}$. We define $\delta^r \in [0, 1)$ as the region-specific job separation probability. The value of holding a job with wage w in region r is:

$$W^r(w) = \frac{w + \beta\delta^r U^r(0)}{1 - \beta(1 - \delta^r)} \tag{1}$$

If a worker terminated in the South (S) accepts a job in the North (N), they incur a one-time migration cost $m \geq 0$. The value of unemployment $U^r(\tau)$ for a worker currently in region r is:

$$\begin{aligned} U^r(\tau) = b(\tau) + \beta\Big[&\lambda^r \mathbb{E}_{w\sim F^r} \max\{W^r(w), U^r(\tau - 1)\} \\ &+\lambda^{r'} \mathbb{E}_{w\sim F^{r'}} \max\{W^{r'}(w) - m, U^r(\tau - 1)\} \\ &+(1 - \lambda^r - \lambda^{r'})U^r(\tau - 1)\Big] \end{aligned} \tag{2}$$

Reservation wages equate the value of a job to the value of continuing search. The local reservation wage $\bar{w}^r(\tau)$ satisfies $W^r(\bar{w}^r) = U^r(\tau - 1)$, while the migration reservation wage satisfies $W_S^N(\bar{w}_S^N) - m = U^S(\tau - 1)$.

Prediction 1: Hazard Rates and Duration. A reduction in T^S (the reform) reduces the continuation value $U^S(\tau - 1)$. This lowers both reservation wages ($\bar{w}^S \downarrow$ and $\bar{w}_S^N \downarrow$), which increases the job-finding hazard $h^r(\tau) = \lambda^r[1 - F^r(\bar{w}^r)] + \lambda^{r'}[1 - F^{r'}(\bar{w}^{r'})]$ and shortens expected non-employment duration.

Prediction 2: Migration Patterns. As $U^S(\tau - 1)$ falls, the migration acceptance condition $W^N(w) - m \geq U^S(\tau - 1)$ becomes easier to satisfy. Consequently, the share of workers migrating from the South to the North rises following the cut in PBD.

Prediction 3: Job Match Quality. The impact on job match quality, measured by accepted wages in this framework, is theoretically ambiguous due to two competing mechanisms. On one hand, the reduction in T^S lowers reservation wages, compelling workers to accept lower wage draws from any given distribution (the "search-haste" effect). On the other hand, the reform induces a shift from F^S to the superior F^N distribution (the "reallocation" effect). If the regional productivity gain compensates for the lower selectivity, the net effect on accepted wages and match quality can be null or positive.

3.2 Extension 1: Heterogeneity by Ability

We consider ability $a \in \{H, L\}$, which affects the wage distribution such that F^r_H first-order stochastically dominates F^r_L. Because high-ability workers draw higher-paying offers in expectation, they maintain higher reservation wages: $U^r_H(\tau) > U^r_L(\tau)$ and $\bar{w}^r_H(\tau) > \bar{w}^r_L(\tau)$.

As the reform lowers $U^S_a(\tau)$ for all types, the migration acceptance condition relaxes more for groups whose wage distributions are shifted further to the right. Consequently, the model predicts a larger migration response among high-ability workers, as a larger density of their potential Northern offers falls above the new, lower reservation wage.

3.3 Extension 2: Endogenous Search Allocation

We extend the model by allowing workers to allocate a share of search effort $p \in [0, 1]$ to the South and $(1 - p)$ to the North. Arrival rates are determined by a concave technology $\lambda^S(p, \theta^S)$ and $\lambda^N(1 - p, \theta^N)$. The worker chooses p to equalize the marginal returns to search effort:

$$\frac{\partial \lambda^S}{\partial p} E_S(U^S) = \frac{\partial \lambda^N}{\partial (1 - p)} E_N(U^S) \tag{3}$$

where $E_r(U^S)$ is the expected positive surplus from region r. A reduction in T^S lowers U^S, which increases both surplus terms. However, because Northern offers are stochastically larger, the surplus in the North increases relatively more. To restore the first-order condition, workers reduce p, directing more effort toward the North. This endogenous reallocation reinforces the baseline prediction that migration from the South to the North rises following the reform.

4 Data

We use matched employer–employee administrative data from the Italian Social Security Archives (INPS) covering the years 2011 to 2019.[3] The dataset contains a representative sample of firms as well as the universe of multinational companies operating in Italy. For all firms in the sample, we observe their entire workforce and track workers over time, including those who change jobs or move across firms.[4] We refer to these data as the *employment relationships archive*.

In a separate archive, INPS records information on workers who have ever received unemployment benefits under the *Mobilità* program. We refer to these data as the *Mobilità archive*. This archive reports the date of layoff as well as the start and end dates of benefit receipt, which we use to reconstruct the total duration of unemployment benefits in days.

We highlight two important features of the data. First, the same worker may experience multiple *Mobilità* spells over their lifetime. Individuals with more than one spell account for 3.1% of the total 465,339 workers who received this unemployment benefit during the period under analysis. Second, both the employment relationships archive and the *Mobilità* archive report the layoff date, but inconsistencies arise between the two sources (in 20.4% of cases). To address this, we retain only cases in which the two dates coincide (79.6% of cases) or differ by no more than 30 days (6.1% of cases), discarding records with discrepancies larger than 30 days.

The employment relationships archive provides detailed information on job contracts,

[3] We select the period 2011–2019 to avoid contamination from the Great Recession and the COVID pandemic.

[4] We do not observe job spells in the public sector or self-employment.

including annual labor earnings, the number of weeks worked (both raw and in full-time equivalent terms), contract type (permanent, temporary, or seasonal), work schedule (full-time or part-time), and a broad occupational classification (blue-collar, white-collar, manager, apprentice, or other). Crucially for our purposes of studying internal migration, the data also contain information on the municipality of work, which allows to track workers' location over time.

The dataset also contains demographic information on workers—gender, year of birth, migrant status, and province of residence—as well as detailed firm-level information. For all firms, we observe the sector of activity along with the dates of establishment and, when applicable, closure.

From these data, we make a number of sample selections to construct a cross-section of *Mobilità* workers. First, in the longitudinal data, we retain one observation per worker per year, corresponding to the *Mobilità*-related employment spell in the year of layoff or to the spell with the largest annual earnings in other years. In addition, there are cases where workers are employed as apprentices, executives, or with temporary contracts before entering the *Mobilità* program, and are therefore ineligible by law. We are conservative and drop cases in which workers hold such contracts or occupations in the year *before* entering *Mobilità* (17.4% of workers).

After this initial data cleaning, we keep observations in the year of dismissal and compute outcomes in the three years following the layoff. Specifically, we record the total days of unemployment benefit receipt, the duration of non-employment,[5] a dummy for working in a different macro-area, in a region characterized by a higher employment rate, in jobs with higher wage or higher firm wage premia,[6] or in a different two-digit sector than the one of dismissal, and the cumulative years in employment.

[5]Non-employment in the private sector. As explained above, workers may be self-employed or employed in the public sector, but we do not observe those spells.

[6]As explained later, the firm wage premia are derived from AKM (Abowd et al., 1999) two-way fixed effects regressions on the full INPS data.

4.1 Summary Statistics

Table 2 reports descriptive statistics on *Mobilità* workers (column 3), and compares them to the average employee who does not experience a layoff and to laid-off workers in the ordinary UI program. Workers entering *Mobilità* differ substantially from both continuously employed workers and those laid off under ordinary unemployment benefits. They are on average around 46 years old, almost ten years older than ordinary unemployed workers, and display a lower share of women (31%) and migrants (9%). Their employment conditions before displacement also stand out: by construction, they held permanent contracts, while among ordinary laid-off workers, only about 70% did. Moreover, they tend to come from more traditional industrial settings—69% were employed in manufacturing and only 21% in services—whereas ordinary unemployed workers are much more concentrated in services.

Pre-layoff labor market attachment is also stronger for *Mobilità* recipients. They worked about 42 weeks per year, compared with 30 among the ordinary unemployed, and earned annual earnings close to €23,000—well above the €14,000 average of other laid-off workers and roughly comparable to the non-laid-off employees. Their firms are older and much larger on average. This is not surprising, in that, for firms with more than 15 employees, workers who got collectively dismissed would enroll automatically in the *Mobilità* program, while for smaller firms, enrollment was voluntary (Paggiaro et al., 2009).[7] The descriptive statistics overall suggest that *Mobilità* primarily covered workers from established industrial firms rather than smaller, more volatile service-sector employers. Overall, the profile of *Mobilità* workers reflects the scheme's original intent to protect long-tenured, permanent employees in large industrial firms facing restructuring or closure.

[7] Paggiaro et al. (2009) suggests that it was common for eligible workers in small firms to enroll in the lists.

Table 2: Summary statistics of worker characteristics

	(1)	(2)	(3)	(4)	(5)	(6)
	Not laid off		Laid off, ordinary UB		Laid off, Mobilità	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Age	39.79	10.52	37.52	10.75	46.36	9.64
Female	0.39	0.49	0.36	0.48	0.31	0.46
Migrant	0.12	0.32	0.19	0.39	0.09	0.29
Center-North	0.75	0.44	0.59	0.49	0.75	0.43
Annual earnings	24494.59	21137.76	13897.87	14177.01	23206.65	15386.16
Weekly wage	568.80	416.69	436.79	329.12	534.50	320.00
Weeks	40.13	15.62	30.14	16.96	41.55	14.63
Blue-collar	0.47	0.50	0.61	0.49	0.59	0.49
White-collar	0.35	0.48	0.20	0.40	0.37	0.48
Part-time	0.20	0.40	0.29	0.46	0.10	0.29
Permanent	0.82	0.38	0.69	0.46	1.00	0.00
Temporary	0.17	0.37	0.29	0.45	0.00	0.00
Seasonal	0.01	0.11	0.02	0.13	0.00	0.00
Industry excl. construction	0.33	0.47	0.17	0.37	0.69	0.46
Construction	0.04	0.19	0.13	0.33	0.04	0.20
KIS	0.12	0.33	0.07	0.26	0.06	0.24
Other services	0.42	0.49	0.51	0.50	0.21	0.41
Age of firm	18.43	13.78	12.37	11.19	20.35	14.58
Firm size (median)	5.00	6454.27	7.00	1357.17	34.00	5183.31
N. workers	10,241,577		1,705,422		279,218	
N. observations	45,969,644		2,118,471		280,445	

Notes. The table reports means and standard deviations between 2011 and 2016 of employed workers that are not laid off (columns 1 and 2); laid-off workers under ordinary unemployment benefits (columns 3 and 4); laid-off workers under the *Mobilità* program (columns 5 and 6).

5 Empirical evidence

5.1 Empirical strategy

We exploit the unique features of the *Mobilità* policy described in Table 1, and examine the effects of its reform using the event-study specification below.

$$y_{i,t+3} = \sum_{k \neq 2014} \beta_k T_i \times \mathbf{1}\{t = k\} + \mathbf{x}'_{it}\delta + \psi_j + \eta_t + \epsilon_{it}, \tag{4}$$

where i indexes individuals and $t = \{2011, ..., 2016\}$ the year of layoff.[8] T_i is a treatment dummy equal to 1 if the mass layoff happened in the South and 0 otherwise. We interact the treatment indicator with the dummies for the year of layoff ($\sum \mathbf{1}\{t = k\}$), where we exclude the dummy for 2014 as the pre-reform year, considering that the reform came into effect in January 2015. $y_{i,t+3}$ are the dependent variables measured three years after the layoff or, in some instances, as the cumulative outcomes over the three years following the layoff.[9] The regressions include the fixed effects of firms where the mass layoff took place, ψ_j, dismissal year fixed effects, η_t, and individual-level covariates, $\mathbf{x}_{it}$, which contain a quadratic polynomial in age and dummies for females and migrants. ϵ_{it} is the error term, which we cluster at the firm of layoff level.

We estimate equation (4) separately for the different age groups, measured at the time of layoff, that are differentially affected by the reform: under 40, 40-49 and 50+ workers (Table 1).[10]

The parameters of interest are the $\beta_k's$, which capture the change in outcomes for workers laid off in the South compared to those laid off in the North. Depending on the age group, the workers dismissed in the North are either not treated (the younger ones) or treated to a smaller extent (the older ones), which changes the interpretation of the difference-in-differences from a pure treatment-control comparison to a treatment-dose response.

We make the standard key identifying assumption in our difference-in-differences framework: outcomes of interest would have followed parallel trends across treated and control groups in the absence of the reform. This ensures that observed differences between groups over time can be attributed to the treatment rather than to pre-existing differences or contemporaneous changes.

This assumption requires that no confounding shocks coincide with the reform to differentially affect treated and control groups, that subjects do not anticipate and respond to

[8] We choose 2011 as the starting year to avoid potential contamination from the Great Recession.

[9] We provide robustness to the choice of the lag, by showing the effects at 1- and 2-year lags. However, we do not go beyond three years, as this would imply measuring outcomes during the year of the pandemic for workers laid off in 2016.

[10] We group 50-54 and 55+ workers together as they have the same changes in *Mobilità* potential duration and to improve precision.

the reform before implementation, and that group compositions remain stable over time without differential changes that independently affect outcomes.

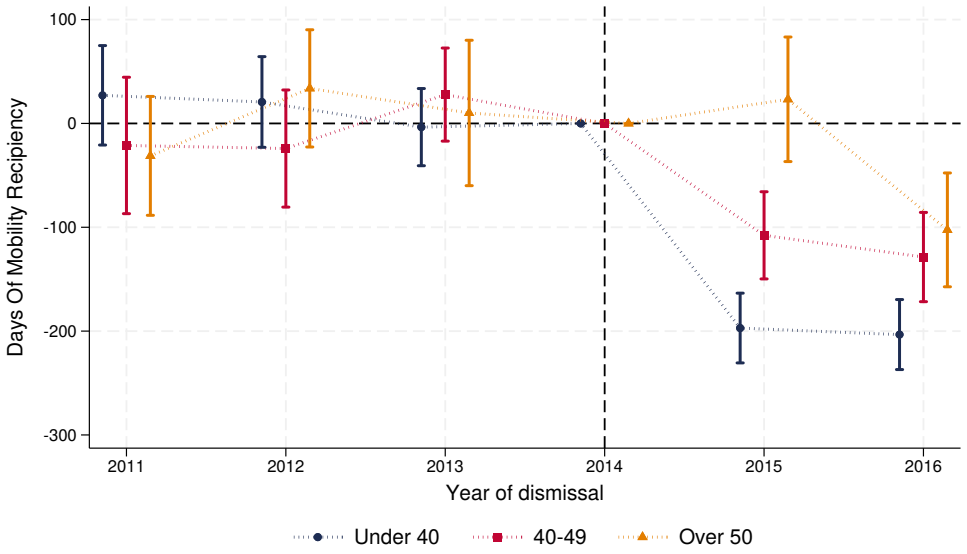
We employ the event study method to assess these assumptions by plotting differential effects between treated and control groups before policy implementation, providing evidence on both parallel pre-trends and the absence of anticipatory responses. We also examine whether compositional changes between groups might differentially affect outcomes, ruling out self-selection patterns. Sections 5.2 and 5.3 provide comprehensive diagnostics that indicate that the parallel trends assumption likely is satisfied in our context.

5.2 Results

Changes in benefit duration We begin our empirical investigation by examining whether the reform, by decreasing potential UI duration, also decreased *actual* duration of the unemployment benefit receipt. For each dismissed worker in our sample, we compute the total days of *Mobilità* receipt in the three years following the dismissal and use this as the outcome in equation (4). Figure 1 displays the results by age group. Younger workers (below 40 years old) laid off in the South witness an average reduction in benefit duration of around 200 days in 2015 and 2016, or by 54% of the 12-month (365-day) decrease determined by the reform. This effect is similar in magnitude to what Johnston and Mas (2018) found in the US. Workers aged 40-49 dismissed in the South experienced a reduction in potential benefit duration that was 180 days (six months) *larger* than that of workers in the same age group dismissed in the Center-North. For this age category, the event study results suggest an average *actual* reduction in benefit duration between 107 and 129 days in 2015 and 2016, respectively. For workers aged 50 or more, the reform had two components: in 2015, workers in both areas faced a uniform 12 month cut; in 2016, those in the South experienced and additional six-month reduction relative to the Center-North. Our estimates mirror those changes. Workers laid off in 2015 show no regional difference in benefit duration, while those laid off in 2016 in the South saw an effective reduction of 102 days. Overall, the results indicate that the reform substantially affected UI benefit

duration and functioned as intended.

Figure 1: Duration in days of *Mobilità* receipt by age group, event study estimates



Notes. The figure reports event–study coefficients from equation (4) showing the effect of the 2015 reform on the total number of days of *Mobilità* benefit receipt within three years after the layoff. Each point corresponds to a layoff year relative to the 2014 pre-reform baseline. Separate estimates are shown by age group. All regressions include firm fixed effects, year fixed effects, a quadratic in age, and indicators for female and migrant status. Standard errors are clustered at the firm of layoff level.

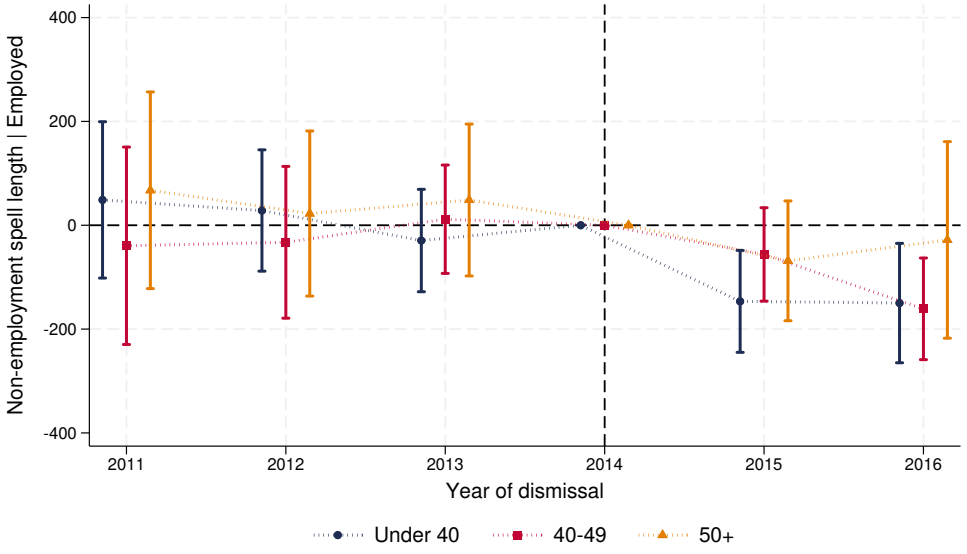
Changes in non-employment duration A long-standing question in the UI literature is whether UI benefits reduce workers' search effort and ultimately extend the periods of unemployment. Conversely, we seek to understand whether cutting UI benefits helps workers exit unemployment more quickly. To answer this question, we estimate equation (4) using the duration of non-employment spells as outcome, conditional on finding a first job within three years.[11]

We show the results on finding *any* jobs in Figure 2. Among workers younger than 40 years old laid off in either 2015 or 2016, shortening UI benefits by 12 months reduces their nonemployment spell by around 150 days. Interestingly, the results are highly age-dependent. For the middle-aged group (40-49), the effects differ slightly. Workers in that age bracket who experienced mass layoffs in 2015 faced 6 *additional* months of UI benefit

[11]Note that our definition of unemployment is non-employment, which can include any activities outside formal employment in the private sector. Similar practices are used in many other papers employing comparable European administrative databases.

reduction when terminated in the South rather than in the Center-North. Yet this did not induce them to find jobs faster—the effect is relatively small and statistically insignificant. However, when focusing on terminations in 2016, although the absolute reduction in UI benefits was the same in both regions, workers spent 150 fewer days unemployed if dismissed by Southern firms. While these results may appear counterintuitive at first glance, they are, to some extent, reasonable. Older workers are more likely to seek permanent jobs, while vacancies are limited. For workers laid off in 2015, they may have believed that UI benefits would still suffice to find a permanent job. However, by 2016, benefits had been cut to a point where they were more inclined to accept temporary contract jobs first. Appendix Figures 4a and 4b support this interpretation, showing that the effects for middle-aged workers stem entirely from finding temporary contract jobs. For workers older than 50, there is essentially no effect.

Figure 2: Non-employment duration in days by age group, event-study estimates



Notes. The figure displays event–study estimates from equation (4) for the effect of the reform on the duration of non-employment spells, defined as periods without private-sector employment, in the three years after layoff. Separate estimates are reported by age group. The sample includes only individuals who found a job within three years. Firm and year fixed effects and individual controls are included. Standard errors are clustered at the firm of layoff level.

Changes in internal migration rates The Southern labor market has historically experienced lower employment rates. So, does cutting UI benefits induce (young) workers to

find jobs more quickly? This leads to our key research question: Does equalizing benefits between two regions of different levels of economic development induce internal migration?

Given that the *Mobilità* program was originally designed to compensate for the weaker economy in the South, a natural question is whether its equalization induces workers in the South to seek job opportunities in Northern regions. To address this, we estimate our main regression model (4) on the probability of finding a job in a different macro-region. Specifically, if a worker was originally laid off in the South (Center-North), what is the probability of that worker being employed in a Center or Northern (Southern) region?

Figure 3 shows the results. For workers laid off in 2015, the policy increases the probability of moving. This is particularly true for younger workers, with a 5.5 percentage points increase, or by 79% relative to a baseline mean in the control group of 7.0%. Workers in their 40s also experience a moderate increase of around 2.5 percentage points (50% of the mean in the control group). The older group exhibits a small and statistically insignificant effect, which is not suprising given the literature on migration. In fact, the age-specific pattern is consistent with the fact that younger workers are more willing to relocate, as they may not yet be constrained by large moving costs, such as homeownership or family constraints. Moreover, they are likely to have a longer period in the future to capitalize on the investment of moving.

One natural question is whether this mobility pattern is primarily driven by movement to the Center-North. Appendix Figure 1 plots the average mobility rates from Center-North to South and from South to Center-North over the years among workers laid off in 2015 and 2016.[12] It suggests that the estimates in Figure 3 are driven by a combination of a moderate decrease in mobility from North to South and a clear jump in mobility from South to North.

Are workers genuinely moving for better economic opportunities? To investigate this, we apply our event studies to explore whether workers move to regions with higher employment rates, which tend to be regions in the Center-North. As shown in Appendix Figure 3, the coefficients are nearly identical to those found in Figure 3, confirming that

[12]The migration rates in the Figure are residualized by firm of layoff and calendar years fixed effects.

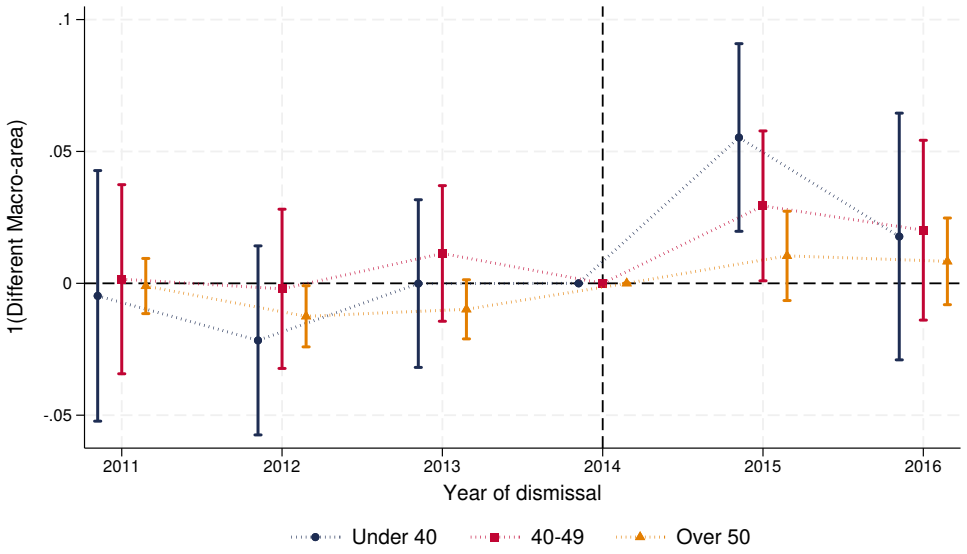
workers are indeed moving towards regions characterized by more job opportunities. But who are these younger workers moving to the Center-North? In particular, we seek to understand whether high-ability workers are more likely to move. To answer this question, we first compute a measure of worker ability using worker fixed effects from an AKM model (Abowd et al., 1999) using the entire INPS sample.[13] We then conduct a heterogeneous analysis based on whether the worker has above- or below-median ability. Appendix Figure 2 shows the results for the under-40 age group, and suggests that the effects are driven by high-ability workers, which is again a consistent finding in the migration literature.

The event-study estimates in Figure 3 indicate that workers laid off in 2016 are not significantly more likely to migrate, which appears somewhat puzzling at first glance. However, this is reasonable from a dynamic perspective. While workers laid off in 2015 were able to find jobs in the Center-North, vacancies in the area are limited, and they may have started to become scarce over time, especially with a consistent flow of workers from mass layoffs. While the best workers in the 2015 cohort had already secured jobs in the Center-North, the remaining workers in that cohort had to compete with the new wave of workers laid off in 2016, making the job market in the Center-North much more competitive for the 2016 cohort. Faced with increasingly limited job opportunities in the Center- North, workers laid off in 2016 appear to have adapted differently: rather than relocating, they found jobs more quickly in local Southern labor markets, as evidenced by Figure 2 discussed earlier.

The results suggest that equalizing UI benefits may cause short-term internal migration or spillover effects due to geographical disparities in employment opportunities. However, such effects may stabilize relatively quickly as competition in the stronger local labor markets intensifies. It would also be interesting to explore how South-to-North migration may cause "crowding out" effects among regular job hunters in the North, but this is beyond the scope of this paper.

[13]The AKM model is essentially a two-way fixed effects regression model in which we regress log wages on worker and firm fixed effects, along with basic time-varying characteristics such as age squared and time fixed effects. We use worker fixed effects as a measure of worker ability, similar to Card et al. (2013).

Figure 3: Probability of working in a different macro-region post-layoff by age group, event-study estimates



Notes. The figure presents event–study coefficients from equation (4) showing how the reform affected the probability that workers are re-employed in a different macro-area than the one of dismissal. Each point measures the change relative to the 2014 pre-reform baseline for each age group. The specification includes firm and year fixed effects and a quadratic in age, as well as gender and migrant controls. Standard errors are clustered at the firm of layoff level.

Job quality out of non-employment (monetary) We have established that decreasing potential UI duration and geographically equalizing it led workers to find their first job more quickly after mass layoffs, with younger workers more likely to move to the Center-North. A natural concern is whether shorter UI durations force workers to accept lower-quality jobs as a result of the quicker job search. We address this question by examining relative wages and firm quality at the new job compared to those at the original firms before the mass layoff.

Figure 4a suggests that cutting UI benefits does not have a statistically significant effect on the probability of finding higher-wage jobs relative to pre-layoff positions. In other words, workers were not forced to accept wage cuts in response to shorter UI durations. One might wonder whether workers maintained wage levels by accepting positions at lower-quality firms that pay compensating differentials. To test this, we calculate firm wage fixed effects using an AKM model with the entire INPS sample, as described above, and use these as a measure of firm quality (similar to Card et al., 2013). Figure 4b shows

the results. Again, equalizing UI benefits does not induce workers to move to lower-quality firms. These null effects suggest that shortening UI benefits does not adversely affect the monetary aspect of the next job match, at least along the dimensions of wages and firm quality.

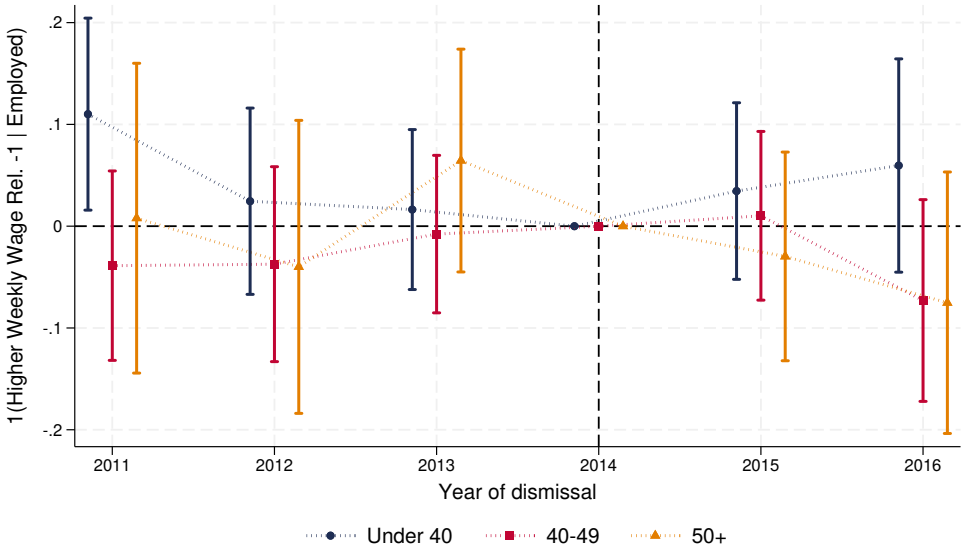
Job quality out of non-employment (non-monetary) Beyond wages and firm quality, we examine other dimensions of match quality. Specifically, we investigate whether workers stay employed longer (suggesting better matches) and whether they switch sectors to find jobs (potentially indicating worse matches or adjustment costs). Using the richness of our dataset, we explore these two aspects of job quality in Figures 5a and 5b.

Figure 5a shows that equalizing UI benefits induces younger workers dismissed in the South to stay employed approximately 0.2 years longer. Combined with our previous findings that these workers find jobs faster, this suggests that the policy leads younger workers to secure not only quicker but also more stable employment. To some extent, this indicates that workers are not simply accepting any available (unsatisfying) job with potentially higher separation rates, but rather finding reasonable matches. We also explored the effects separately on temporary and permanent contract employment duration, but these results are underpowered and show no statistically significant effects. Similarly, middle-aged workers laid off in 2016 not only find jobs faster but also stay employed longer, though this effect is only marginally statistically significant. Not surprisingly, there is essentially no effect on older workers.

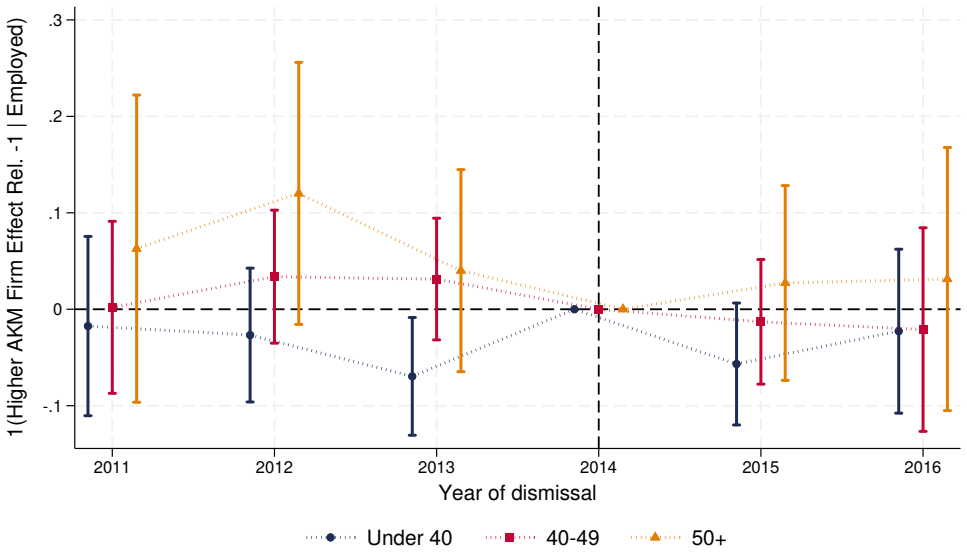
Figure 5b shows that younger Southern workers are less likely to switch sectors, though this effect is only statistically significant for workers laid off in 2015. This pattern may suggest that younger workers who migrate to the Center-North are able to find jobs within their original sectors, avoiding the costs of sectoral mismatch. Alternatively, it could indicate that geographic mobility substitutes for sectoral mobility: workers move to regions with better opportunities in their existing sectors rather than staying local and switching sectors.

Figure 4: Job quality out of non-employment (monetary)

(a) Probability of having higher wages than before layoff



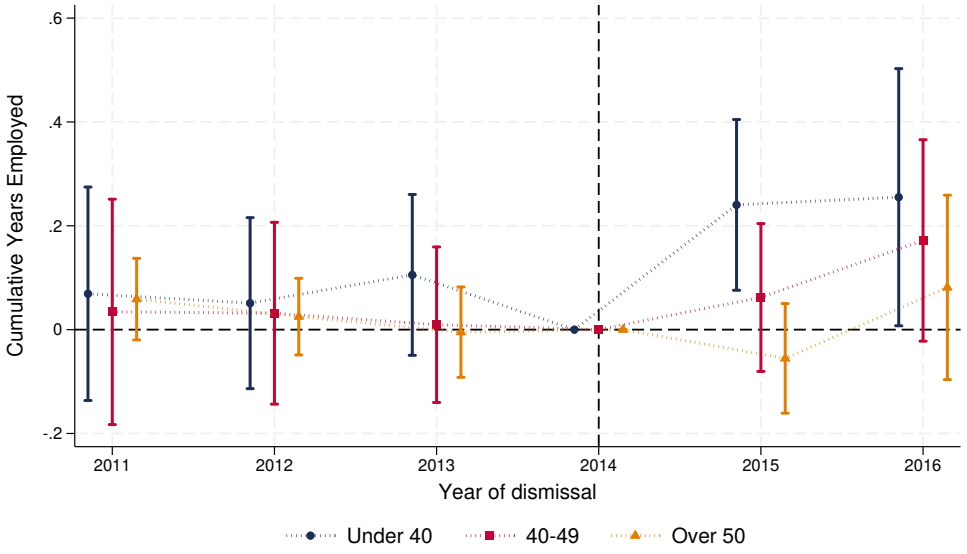
(b) Probability of working in a higher-wage premium firm than before layoff



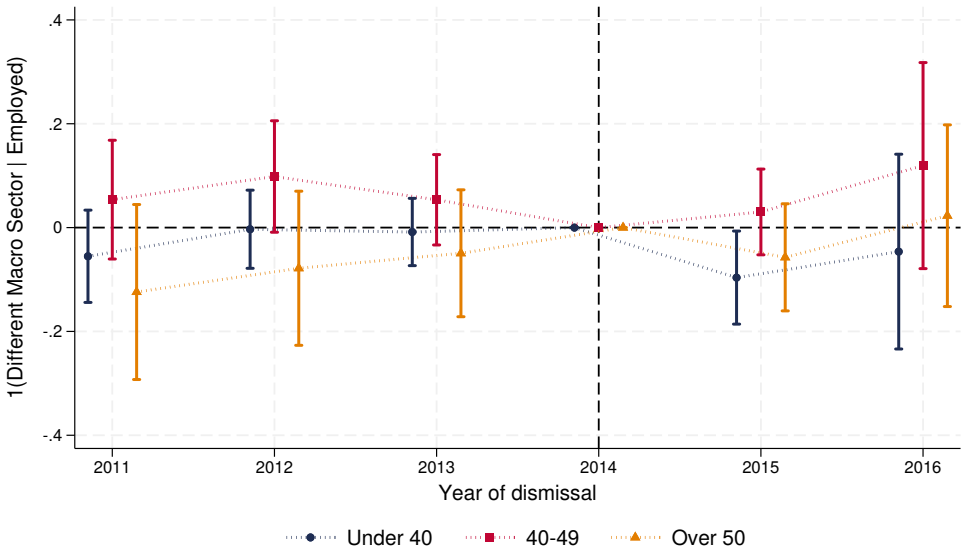
Notes. The figure shows event–study estimates from equation (4) on two monetary dimensions of post-layoff job quality. Panel (a) reports the effect of the reform on the probability that the weekly wage in the first job after the *Mobilità* spell exceeds the pre-layoff wage. Panel (b) shows the effect on the probability that the re-employing firm has a higher wage premium, as measured by firm fixed effects from an AKM model. Outcomes are measured within three years after dismissal. All regressions include firm and year fixed effects, a quadratic in age, and controls for gender and migrant status. Standard errors are clustered at the firm of layoff level.

Figure 5: Job quality out of non-employment (non-monetary)

(a) Are they more likely to stay employed?



(b) Are they more likely to switch sectors?



Notes. The figure reports event–study estimates from equation (4) for two non-monetary outcomes after a *Mobilità* spell. Panel (a) shows the effect of the reform on cumulative years of employment in the three years following dismissal. Panel (b) shows the effect on the probability of switching two-digit sector between the pre- and post-layoff jobs. Each specification includes firm and year fixed effects and individual-level covariates. Standard errors are clustered at the firm of layoff level.

5.3 Robustness and Discussion

The previous analyses rely on the implicit assumption that the policies do not affect the selection of laid-off workers. To verify this assumption, we implement the following difference-in-differences specification, examining outcomes before and after the policy changes:

$$y_{i,t-2} = \beta\ T_i \times \mathbf{1}\{t \geq 2015\} + \mathbf{x}'_{it}\delta + \psi_j + \eta_t + \epsilon_{it}, \tag{5}$$

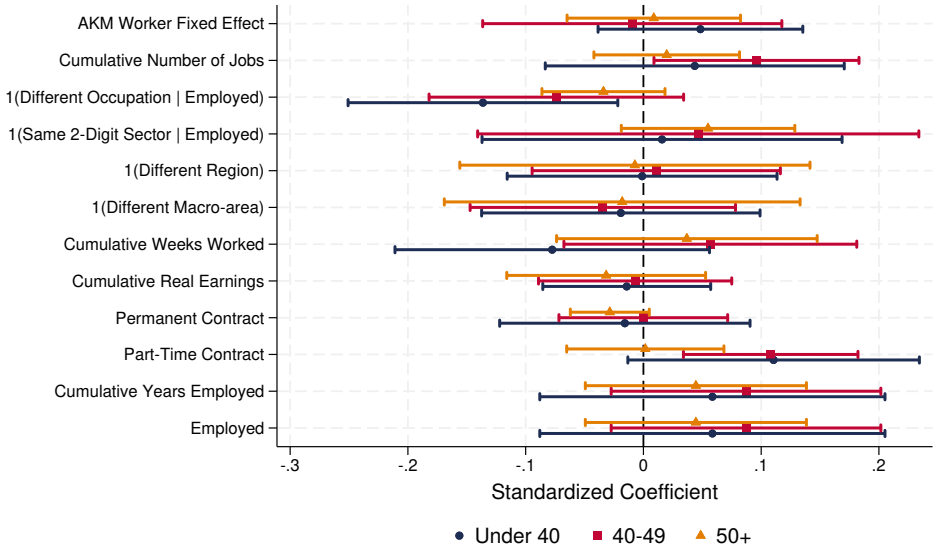
where $y_{i,t-2}$ denotes a worker's outcome two years *before* the layoff year. The right-hand side of the equation is similar to that of Equation 4, except here we interact T_i with a dummy variable for *post*, rather than yearly variables. Under the presence of selection, we would expect β to be statistically different from zero. Specifically, we estimate this specification for two sets of outcomes: workers' basic employment characteristics and various features of the firms that laid off each worker. We report standardized coefficients for both sets of outcomes to better compare the magnitude of the effects across variables.

Figure 6a demonstrates that the policy does not alter a wide range of workers' pre-layoff employment records, including the cumulative number of jobs, occupational or sectoral mobility, work location, employment duration, earnings, and wage contracts. Even in the isolated instances where the effects are statistically significant, they are economically small (less than 15% of a standard deviation). This evidence generally implies that workers laid off after the reform are not systematically different in their baseline characteristics relative to workers laid off before the reform. Next, we consider over-time changes in the composition of firms. Figure 6b indicates that the policy does not have differential effects across firms with varying characteristics, including firm wage premiums (estimated from AKM wage regressions), firm size and age, and industry sectors. Together, these results support our assumption that the policy does not induce selection among laid-off workers in terms of worker or firm characteristics.

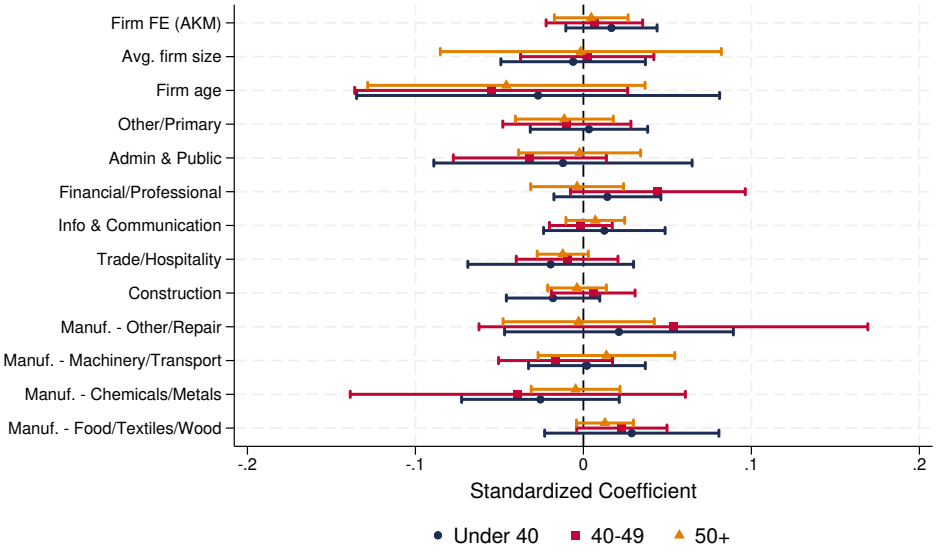
As additional robustness checks, we consider heterogeneity by firm size. Firms with more than 15 employees could automatically enroll workers they laid off in mass in the Mobilità program, while workers could *choose* to enroll in the program if they worked in

Figure 6: Placebo Regression Results

(a) Worker characteristics



(b) Firm characteristics



Notes. The figure presents placebo estimates from the difference-in-differences specification in equation (5), which tests whether the 2015 reform affected the composition of laid-off workers and firms prior to its implementation. The dependent variables measure outcomes two years before the layoff. Panel (a) reports standardized coefficients for pre-layoff worker characteristics, including cumulative number of jobs, occupational and sectoral mobility, work location, employment duration, earnings, and wage contracts. Panel (b) shows results for firm-level characteristics such as wage premia estimated from AKM regressions, firm size, firm age, and industry sector. Each regression includes firm and year fixed effects, a quadratic in age, and controls for gender and migrant status. Standard errors are clustered at the firm of layoff level.

smaller firms (Paggiaro et al., 2009).[14]. In our sample of workers in Mobilità, less than 10% were laid off by firms with fewer than 15 employees, preventing enough precision of the estimates. Hence, we consider heterogeneous effects by firm above and below the median size of 104 employees. This evidence does not indicate substantially different patterns in the outcomes between firms above and below the median size. In Appendix Figure 5, we show that the statistical significance of the effect on migration appears to be concentrated among larger firms, even if the pattern for smaller firms is similar.

6 Conclusion

This paper has examined how equalizing the generosity of unemployment insurance across local labor markets affects the behavior and reallocation of unemployed workers in Italy. By leveraging detailed administrative data and a difference-in-differences design across age-geography groups, we provide causal evidence on how place-based heterogeneity in UI generosity shapes labor market dynamics. To this end, we exploit a reform that progressively reduced the maximum duration of the *Mobilità* program, initially more generous in the South and among older workers.

Our findings indicate that a 30-day cut in potential UI duration leads to a reduction of roughly 15 days in benefit receipt and 12 days of a day in non-employment, implying a strong behavioral response. The results suggest that generous UI benefits slow down reemployment by reducing search intensity and by discouraging mobility out of weaker local labor markets. In fact, the reform's geographical equalization of potential UI duration induced a significant rise in migration from the South to the Center-North, especially among younger and higher-ability workers, who are more flexible and responsive to incentives, and who have the most to gain from "moving-to-opportunity". This reallocation channel is quantitatively important: following a 12-month reduction in potential benefit duration, younger Southern workers were almost 80% more likely to relocate to regions with higher employment rates. By contrast, older workers, for whom moving costs and

[14]In Italy, the firm size threshold of 15 workers is used in other labor market regulations and reforms, like regarding employment protections. However, for the context of Mobilità, informed evidence indicates that most eligible workers in smaller firms would voluntarily enroll.(Paggiaro et al., 2009)

reemployment frictions are higher, and with a shorter period ahead to reap the benefits, display almost null responses.

Importantly, we find no evidence that the shorter UI duration worsened the reemployment outcomes following periods in *Mobilità*. Wages, firm quality, and employment stability remain unchanged or slightly improved, and younger workers are less likely to change sectors, indicating that their new jobs are not of inferior quality. These results rule out the concern that shorter UI spells merely push workers into poorer matches. Instead, they point to efficiency gains: faster transitions, higher employment stability, and improved geographic allocation of labor without evident losses in match quality.

Overall, our results suggest that excessively generous, geographically differentiated UI systems may hinder labor reallocation and perpetuate regional inequalities. Equalizing UI potential duration across space reduces moral hazard distortions, promotes mobility toward productive areas, and improves aggregate efficiency. These findings have broad policy implications beyond Italy. In countries where unemployment protection is regionally differentiated, aligning benefits across areas may enhance both individual outcomes and macroeconomic performance. More broadly, the results highlight that well-designed national safety net policies can sustain risk sharing without undermining spatial efficiency. Future work could extend this analysis to general equilibrium effects—such as crowding out or local wage adjustments—to fully quantify the welfare trade-offs of geographically differentiated social insurance.

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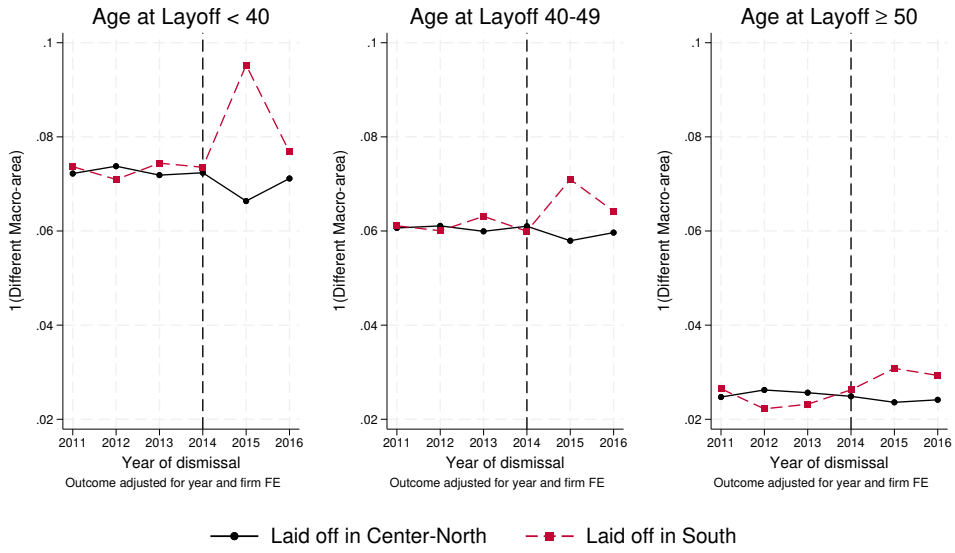
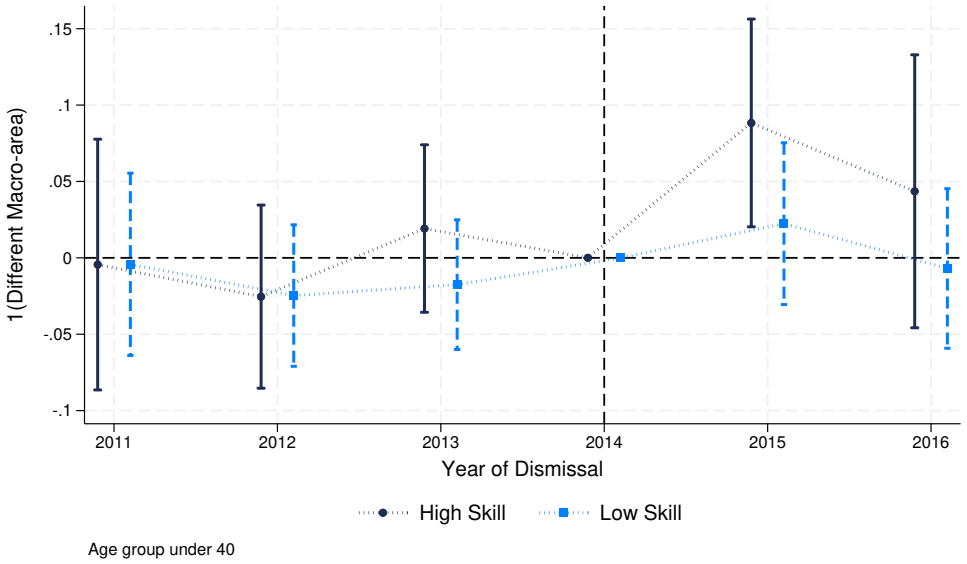
Appendix A Figures and Tables

Appendix Figure 1: Average Migration Rate over Time



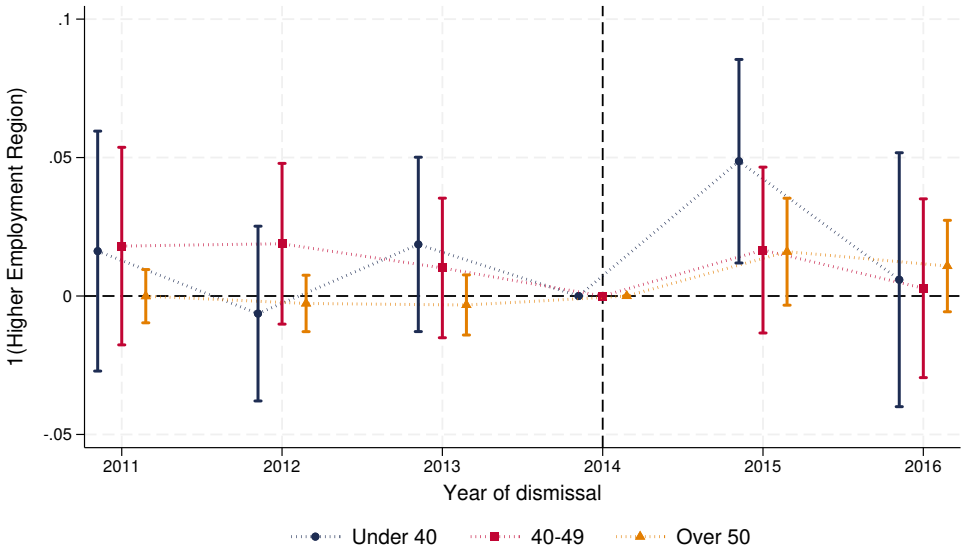
Notes. The figure plots the average share of *Mobilità* recipients who are re-employed in a different macro-area by year of layoff and age group. Migration rates are residualized for firm-of-layoff and year fixed effects. Each panel distinguishes movements from the South to the Center-North and from the Center-North to the South.

Appendix Figure 2: Heterogeneous Analysis by Workers' Skill



Notes. The figure presents event–study coefficients from equation (4) estimated separately for under-40 workers below and above the median of the skill distribution, where skill is proxied by individual fixed effects from an AKM wage regression. The outcome is the probability of re-employment in a different macro-area within three years. Firm and year fixed effects and worker-level controls are included. Standard errors are clustered at the firm of layoff level.

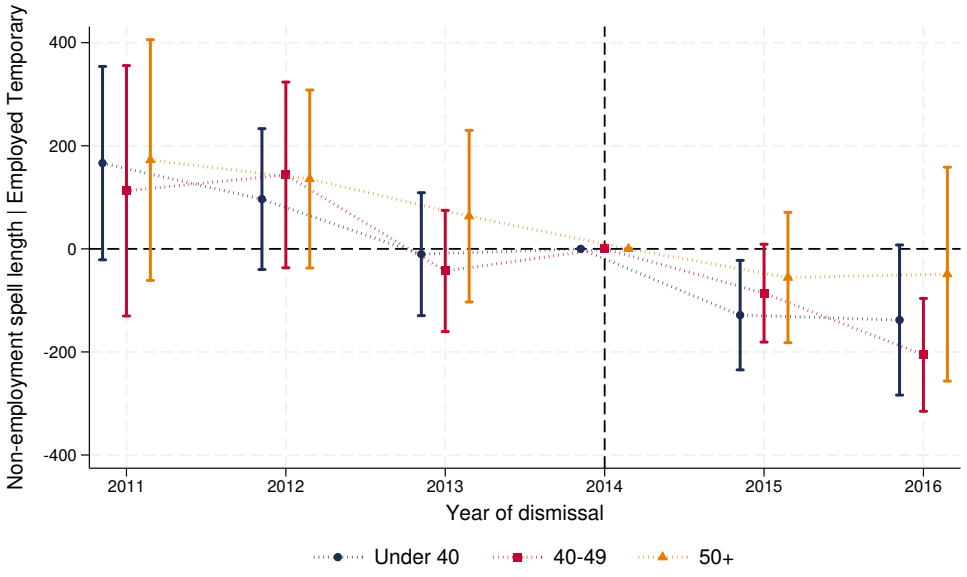
Appendix Figure 3: What Regions are They Moving to?



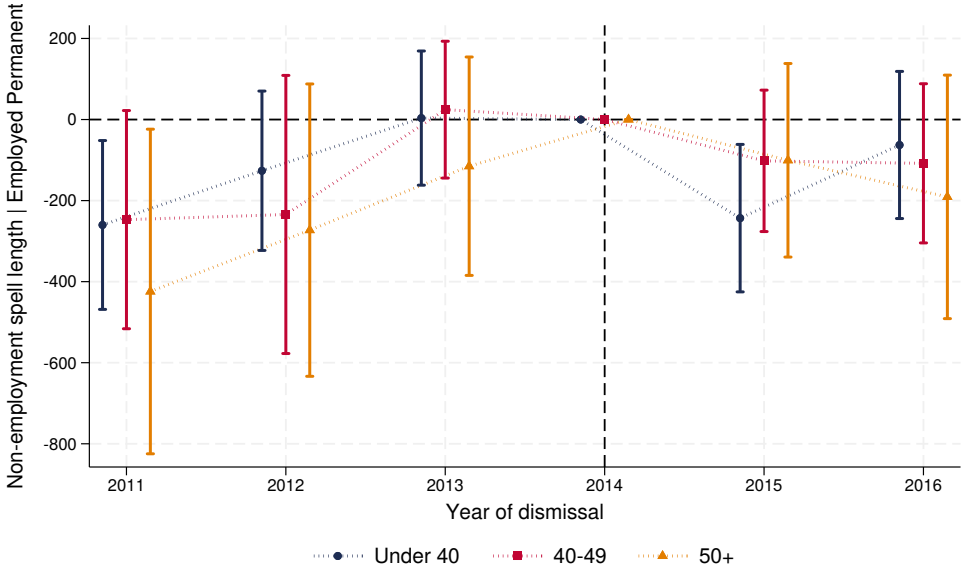
Notes. The figure shows event–study estimates from equation (4) for the probability that workers move to a region with an employment rate higher than that of their region of layoff. Separate estimates are shown by age group. All regressions include firm and year fixed effects, a quadratic in age, and gender and migrant controls. Standard errors are clustered at the firm of layoff level.

Appendix Figure 4: The Effect on Non-employment Duration

(a) Conditional on Temporary Contracts

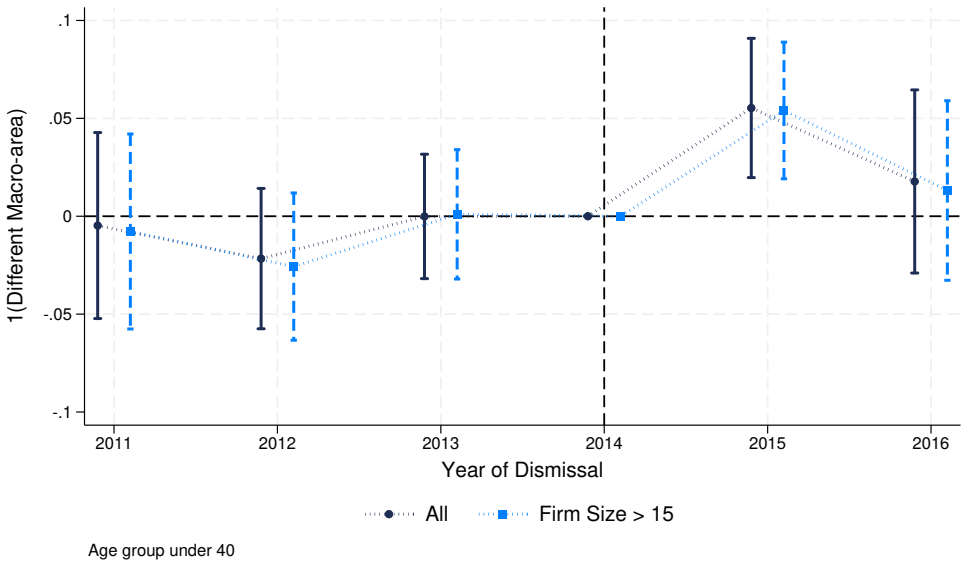


(b) Conditional on Permanent Contracts



Notes. The figure reports event–study estimates from equation (4) examining the impact of the reform on non-employment duration, conditional on the type of contract obtained after re-employment. Panel (a) focuses on workers rehired under temporary contracts, while panel (b) focuses on those rehired under permanent contracts. The dependent variable measures the total number of non-employment days in the three years following dismissal. All regressions include firm and year fixed effects and individual covariates. Standard errors are clustered at the firm of layoff level.

Appendix Figure 5: Heterogeneous Effects on Migration by Firm Size



Notes. The figure presents event–study coefficients from equation (4) estimated separately for under-40 workers that were employed in firms below and above the median of the firm size distribution at the time of layoff. The outcome is the probability of re-employment in a different macro-area within three years. Firm and year fixed effects and worker-level controls are included. Standard errors are clustered at the firm of layoff level.