Employment Protection and Firm-provided Training in Dual Labour Markets

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Motivation

- Acemoglu and Pischke (1999) emphasised that the non-competitive labour markets and firing restrictions (as EPL) generate rents that are an increasing function of worker training; stricter EPL might therefore foster incentives for firms to increase training.
- However, in dual labour markets with different degrees of EPL for permanent and temporary workers, there is an incentive for firms to substitute temporary for permanent workers by using a sequence of temporary contracts (Cahuc et al., 2016).
- Literature shows that workers in temporary contracts enjoy less training.

Institutional Context

- Before the Fornero Reform, employees in firms with more than 15 employees had the right, in the case of a dismissal declared unfair by a court of law, to ask for reinstatement (and receive all foregone wages plus health and social security contributions) or receive a monetary compensation.
- In firms below the threshold, it was (and still is) up to the employer to decide whether to reinstate the worker (without paying foregone wages) or pay a smaller monetary compensation.
- The Fornero Reform (July 2012) limited the possibility for workers in firms with more than 15 employees to opt between reinstatement and a monetary compensation to a set of well-defined cases (e.g., discriminatory firing) and reduced the amount of the monetary compensation.
- We focus on the number of trained workers that increased (diminished) for firms just above the threshold; about 1.5 additional workers (i.e. an about 50% increase in the number of trained workers) for firms just above the threshold (i.e. firms in the 16-25 range).

Identification

- We identify the effect of EPL on firm training by comparing the change in the number of trained workers below the threshold (i.e. firms in the range 5-15 employees in our baseline specification) pre and post the Fornero reform of EPL, we test of our main identification assumptions.
- The parametric implementation:

  \[ y_{it} = \alpha_0 + \alpha_1 \text{post}_{it} + \alpha_2 \text{above}_{it} + \alpha_3 \text{above}_{it} \times \text{post}_{it} + \alpha_4 f(E_{it} - 15) + \alpha_5 \text{year}_{it} + \beta' \text{X}_{it} + \epsilon_{it}, \] (1)

- A1. We need the continuity assumption in the forcing variable in RDDs.
- A2. The effect of the confounding policies in the case of no treatment is constant over time. This allows us to interpret \( \alpha_3 \) as the local treatment effect of relaxing EPL in firms subject to the confounding policies.
- A3. The effect of EPL at the threshold cannot depend on the confounding policies. With the three As, \( \alpha_3 \) measures the causal effect of relaxing EPL in a neighborhood of the cut-off.

Data

- Data from a survey conducted by INAPP (formerly ISFOL), the National Institute for the Evaluation of Public Policies, namely ISFOL-RIL survey.
- We focus on the number of workers who received some training for the years 2010 and 2015, about 24,000 and 30,000 firms, respectively.

Results

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<th>(3)</th>
<th>(4)</th>
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<tbody>
<tr>
<td>post</td>
<td>0.391***</td>
<td>0.486***</td>
<td>-3.013***</td>
<td>-3.557***</td>
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<td></td>
<td>(0.092)</td>
<td>(0.092)</td>
<td>(0.629)</td>
<td>(0.725)</td>
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<tr>
<td>above</td>
<td>0.089***</td>
<td>0.025</td>
<td>-0.656**</td>
<td>-0.484</td>
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<td>(0.032)</td>
<td>(0.051)</td>
<td>(0.265)</td>
<td>(0.433)</td>
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<tr>
<td>post \times above</td>
<td>-0.104**</td>
<td>-0.135*</td>
<td>0.504</td>
<td>1.735**</td>
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<td>(0.149)</td>
<td>(0.075)</td>
<td>(0.612)</td>
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<tr>
<td>Polynomial</td>
<td>Linear</td>
<td>Quadratic</td>
<td>Linear</td>
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<tr>
<td>Reg. \times year</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Observations</td>
<td>10,724</td>
<td>10,724</td>
<td>16,508</td>
<td>16,508</td>
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<tr>
<td>R-squared</td>
<td>0.197</td>
<td>0.205</td>
<td>0.727</td>
<td>0.728</td>
</tr>
</tbody>
</table>

Sample of firms with more than 5 and less than 26 employees, we trim the data by dropping from the analysis those firms that experienced an year-on-year growth rate of employees larger (smaller) than the 95 (5) percentile; we restrict the sample to active firms.

Threats and Robustness

- We test of our main identification assumptions.
- Use the panel component of the dataset, about 5,700 obs;
- Quadratic polynomial in employment;
- Heaping: excludes multiple of 5s (of firm size);
- Donut: excludes 14, 15, 16;
- Fake cut-off set at firm size equal to 10 and 20;
- Include the polynomial * post interactions.

Mechanisms

- We find evidence that the number of trained workers increased (diminished) following the reform (using the same identification approach).
- This seems entirely driven by a substitution effect: the number of permanent increases by the same amount at the cutoff after the reform.

Conclusions