



# **THE EFFECT OF EPL ON THE INTERNAZIONALIZATION OF SMALL FIRMS**

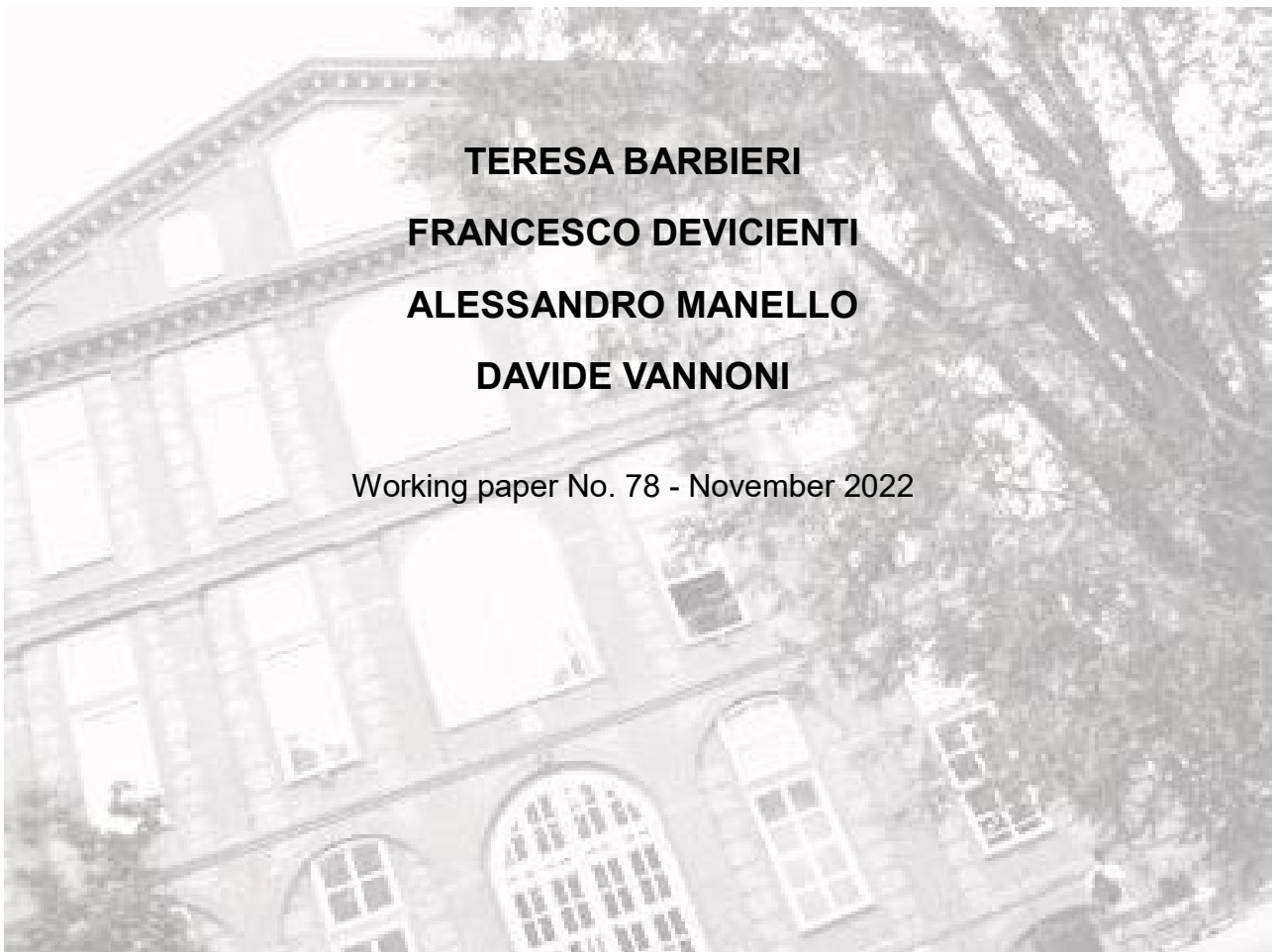
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# THE EFFECT OF EPL ON THE INTERNATIONALIZATION OF SMALL FIRMS

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## Abstract

A broad economic literature has evaluated the impact of employment protection legislation (EPL) on various firm-level outcomes. We complement this literature by studying the effect of a reduction in employment protection on the internationalization of small firms. Exploiting a comprehensive survey on Italian firms, we assess how small firms' engagement in international activities has been affected by the 2012 Labor Market Reform, the so-called "Fornero Law", that reduced firing costs for firms above the 15-employee threshold. Using a difference-in-differences identification strategy, we find a positive effect of EPL retrenchment on small firms' inward and outward FDI, whereas we cannot identify an effect on their exporting activities. The evidence we provide shows that increasing labor market flexibilization attracts foreign capital and encourages firms' outward investment. We document minor heterogeneous effects by geographic areas but no heterogeneity across different sectors of economic activity. Finally, the positive effect on internationalization is greater in firms with a higher level of volatility.

Keywords: EPL, internationalization, FDI, small firms, labor market reform, difference-in-differences  
JEL No. J08, J63, F16, F21

## 1. Introduction

In response to the 2008 economic crisis, the Italian Government decided to adopt austerity measures and embark on new waves of labor market reform. In 2012, Italy amended its labor code to reduce the amount and the uncertainty of firing costs for firms with more than 15 employees. In particular, the 2012 Labor Market Reform, the so-called Fornero Law, established that a firm could lay off an employee without the risk that a court would rule in favor of the worker's reinstatement, with the consequent reduction of the uncertainty about the final amount of foregone months of pay that are due to the worker.. One of the recurring statements of the Prime Minister and Labor Market Minister of the

time was that "The Government proposals for the reform of the Labour market aim at improving Italy's attractiveness to foreign investors"<sup>1</sup> .

According to extensive research on the relationship between labor market regulation and FDI, strict EPL might deter foreign investors. Several studies have argued that EPL hinders firms' ability to adjust production to changes in economic conditions, thus placing obstacles to FDI inflows (Nicoletti et al., 2003; Görg, 2005; Javorcik and Spatareanu, 2005; Kandilov and Senses, 2016, among others). Other barriers to FDI are the additional costs faced by multinationals when they invest abroad in certain countries compared to domestic firms, as argued by the liability of foreignness theory. Among them, a strict EPL that is different from the own country's legislative and administrative context (Zhou and Guillen, 2016), might represent an important deterrence factor to FDI. Finally, a strict EPL might also "anchor" potential outward investment by hampering firms' decision to relocate abroad (Dewit et al., 2009, 2019).

This article aims to assess how EPL affects firms' internationalization activities, including inward and outward FDI, by exploiting an exogenous change in firing regulation, the Italian 2012 Fornero Law. The reform reduced the employee's protections – in the case of unfair dismissal - for firms with more than 15 employees by removing the mandatory reinstatement clause and providing monetary compensation in lieu of reinstatement. EPL was left unchanged for firms with 15 or fewer employees for whom firing regulation does not prescribe compulsory reinstatement of wrongfully discharged employees. Thus, the features of the Fornero Reform allow us to use a difference-in-differences (DID) identification strategy, considering firms sized in the 16-50 employee range as the treated group and comparing them with smaller firms. We decided to restrict the analysis to firms with no more than 50 employees to improve the comparability of the two clusters of firms. In our analysis, we take advantage of the 2011 and 2015 waves of the MET survey on the Italian industry and investigate if the reduction of firing costs is affecting the firm's propensity to export, to offshore production activities (through

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<sup>1</sup>Necessità degli investimenti esteri. (April 6, 2012). Repubblica.it. Last access: July 7, 2022. <https://ricerca.repubblica.it/repubblica/archivio/repubblica/2012/04/06/necessita-degli-investimenti-esteri.html?ref=search>

greenfield investment or relocation), to undertake outward FDI (brownfield and portfolio investment), to engage general international trade activities (trade fairs abroad, trade deal for foreign markets, international agreements on research and technological programs) and, finally, to attract foreign investors (inward FDI).

Our results show that a lower EPL significantly increases small firms' propensity to engage in international economic activities. More specifically, we find evidence that the Fornero Reform increased firms' propensity to engage in general internationalization activities, to offshore and invest abroad. Our results also document that the reform increases Italian firms' attractiveness to foreign investors by increasing the probability that firms with more than 15 employees become affiliates of a foreign corporate group. The estimated effect of the reform on small firms' general internationalization activities is larger for firms located in the Northern Italian regions, whereas no differences emerge among firms operating in different sectors. Moreover, the reform's effect on small firms' propensity to engage in internationalization activities varies with the volatility of the firm's sector of activity. More specifically, firms operating in more volatile markets react more to the change in EPL. These results suggest that the channel through which the reform impacts the internationalization propensity is the reduction of the uncertainty of firing costs, which allows firms to be involved in riskier activities such as internationalization strategies. The results survive a set of sensitivity checks. Specifically, we restrict the analysis to the panel sample and include firm fixed effects to account for unobserved time-invariant heterogeneity. Moreover, we test the robustness of our results to a possible miscalculation of the threshold by running donut-hole regressions.

This article adds to the broad economic literature on the relationship between labor market regulation and FDI transactions by providing further empirical evidence on the effect of EPL retrenchment on firms' internationalization activities in a quasi-experimental setting. The vast majority of the existing studies use country-level data or focus on the relationship between ELP on trade and FDI activities by multinational enterprises (Görg, 2005; Dewit et al., 2009; Wood et al., 2016, among others). This paper differentiates from this literature by using a firm-level dataset describing a broad range of Italian firms'

internationalization activities and focusing on a sample of small-sized, rather than multinational (typically large) enterprises.

Our results also contribute to the vast literature evaluating EPL's impact on various firm-level outcomes in quasi-experimental settings. Previous literature has estimated the effect of EPL on productivity (Bassanini et al., 2009; Bjuggren, 2018), capital intensity (Cingano et al., 2016), firms' hiring (Ardito et al., 2019; Sestito and Viviano, 2018), firm-provided training (Bratti et al., 2021) and quality of job matches (Berton et al., 2017). As far as we know, this is the first study that exploits a natural experiment represented by a labor market reform to estimate the impact of EPL on firms' internationalization.

The paper is organized as follows. In Section 2, we provide a theoretical framework and review the empirical literature. In Section 3, we describe the institutional framework and present our identification strategy. In Section 4, we describe our data, the set of outcome variables, and sample selection. Section 5, 6 and 7 present the main results and the robustness checks. Section 8 investigates possible sectoral heterogeneity in responses to the reduction in firing costs. Section 9 concludes.

## **2. Theoretical framework and previous studies**

We briefly review some related literature to comprehend better the mechanisms that could link EPL, reduction in firing costs, and firms' internationalization activities.

Most of the literature on the topic focuses on countries' relative attractiveness to foreign investments from multinational enterprises (MNEs) that are more likely to locate in countries with flexible labor market regulations. Theoretical models on location decisions for an MNE (Haaland and Wooton, 2002; Haaland et al., 2003) show that the level of redundancy payments strongly affects the MNE location and investment decision, especially in an uncertain economic environment. Severance and lay-off payments represent for MNEs' potential costs they encounter if they decide to leave the country (Görg, 2005). Moreover, the liability of foreignness theory, introduced by Zaaher (1995), identifies different types of additional costs that are faced by multinational firms when they invest abroad. In particular, Zhou and Guillen (2016) highlight that governance costs associated with managing foreign employees

are one of the primary concerns of MNEs' managers. Governance costs grow with administrative distance and strongly depend on differences in bureaucratic patterns<sup>2</sup>. Moreover, empirical investigations using firm-level data have shown that greater flexibility in the host country is associated with larger FDI inflows (Javorcik & Spatareanu, 2005). In particular, a lower degree of flexibility in the host country's labor market relative to that in the investor's home acts as a deterrent to inward FDI (Nicoletti et al., 2003; Dewit et al., 2009). These results are partially questioned by Dewit et al. (2003, 2013), that posit the possibility that foreign investors might prefer countries with stronger EPL because of the positive effect of a stricter labor market regulation on labor commitment. Moreover, Wood et al. (2016), investigating South-eastern European countries, found that stronger EPL may positively affect job quality and workforce productivity, thus making countries with rigid labor markets more attractive to foreign investors not seeking fast profits but greater long-term returns.

A more limited body of literature addresses the effect of EPL on discouraging local firms' outward investment. Dewit et al. (2009) build a model in which a monopolist has to choose among different locations characterized by a different degree of employment protection. This model predicts that high firing cost reduces firms' propensity to relocate abroad, keeping them "anchored" at home. An empirical analysis using FDI data for OECD countries confirms the model prediction that a high domestic level of EPL discourages outward FDI (Dewit et al., 2009). The reduction in the propensity to relocate is particularly strong for large, labor-intensive, and highly productive firms (Kandilov and Senses., 2016; Dewit et al., 2019). Thus, a strict EPL may act as a barrier to exit for the most productive firms, preventing eroding of the national industrial base, but, at the same time, those firms are kept home, blocking them from engaging in profitable investment<sup>3</sup>.

However, the main literature on the relationship between EPL and FDI mainly focuses on MNEs' behaviours when considering potential production locations and potential host countries for FDI.

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<sup>2</sup> In this vein, Meziar (2002) reports evidence that foreign subsidiaries faced significantly more labor lawsuit judgments in US, both for local and central judicial levels.

<sup>3</sup> One interesting finding is that, among OECD countries, the type of labor hired abroad by MNEs is low-skilled for low-tech and labor-intensive manufacturing firms, but for high-tech manufacturing firms, the seek for cheap labor does not seem to be the driver for relocation (Dewit et al., 2019).

MNEs, typically large firms, are by definition involved in internationalization activities, are more likely to have footloose behaviours relative to small firms, and have different investment strategies. Thus, the mechanisms that link EPL and the internationalization propensity of small firms are likely to be different.

Moreover, risk considerations are pivotal for firms engaging in internationalization activities (Pennings & Sleuwaegen, 2000; Kohler & Kukharskyy, 2019). For example, the degree of policy uncertainty influences both decisions to enter international trade and investment levels (Handley & Limao, 2015; Canh et al., 2020). The uncertainty about dismissal costs might also represent a risk for the firms, especially in a climate of demand uncertainty where more flexibility is needed (Lecostey, 2012), and thus can strongly affect the decision of firms to engage in internationalization activities.

### **3. Institutional framework and identification strategy**

A broad labor market reform was implemented in Italy in 2012, the so-called Fornero Law, which reduced firing restrictions and firing costs for permanent contracts in the case of firms with more than 15 employees. Before the reform was introduced, dismissal procedures were regulated by Article 18 of the *Workers' Statute* (Law n. 300/70), which established that firms employing more than 15 employees, in the case of a dismissal declared unfair by the court, had the obligation to reinstate the worker and compensate her with forgone wages and social security contribution for the period between dismissal and the sentence. The unfairly dismissed employee had the right to choose a severance payment amounting to 15 months' salary instead of reinstatement, but the latter was the most frequent choice. For firms under the 15-employee threshold, in the case of unfair dismissal, it was up to the employer to choose between reinstatement and severance payments; compensation for wages lost during the period between dismissal and the sentence was not due to workers that chose reinstatement. Hence, firing costs were different for firms below and above 15 employees. In addition to higher *de jure* costs, firms with more than 15 employees had to take on additional higher *de facto* costs due to the very long average duration of labor trials in Italy (Bratti et al., 2021). In particular, for large firms, the severance payment could amount to a minimum of 5 months' salary established by the law, to a maximum that depended

on the often unpredictable and highly heterogeneous duration of the trials<sup>4</sup>. The Fornero Law limited *de facto and de jure* firing costs by narrowing the set of cases for which the unfairly dismissed worker could choose between reinstatement and monetary compensation. Thus, the reform reduced both the uncertainty and the expected level of firing costs for firms above the 15-employee threshold.

To provide evidence on the impact of EPL on firms' internationalization activities, we exploit the exogenous change in firing cost established by the Fornero Law. Some previous empirical studies that leverage Italian labor market reforms to identify the impact of EPL use Regression Discontinuity Design (RDD) strategies (e.g., Bolli and Kemper, 2017; Hijzen et al., 2017). However, this design presents potential threats to identification due to confounding policies that change discontinuously at the same threshold of the Fornero Law. Specifically, in Italy, we have the *Cassa Integrazione Guadagni Straordinaria* (CIGs) scheme<sup>5</sup> and the right to create works councils in the firm, the so called "*Rappresentanze sindacali aziendali*" (RSA). Some other scholars rely on a DID design to identify the impact of EPL on improving the quality of job matches (Berton et al., 2017), firms' hiring (Ardito et al., 2019), and fertility decisions (De Paola et al., 2021). However, if treated and control subjects were on different trends before the policy intervention, the DID does not identify the effect of interest. In order to overcome these limits, Bratti et al. (2021) identify the effect of the Fornero Law on firm-provided training by combining an RDD design with a DID setup. This design exploits the variation before and after the policy and just below and above the threshold (Grembi et al., 2016). However, threats to identification could arise in the case of an inadequate sample size.

In this paper, we use a DID approach to assess EPL's impact on firms' internationalization activities. Although we could have adopted a DID design combined with an RDD, we decided to rely on a standard DID design because the small sample size around the threshold would have limited statistical power to detect effects. We consider firms sized in the 16-50 employees' range as treated and firms with no more

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<sup>4</sup> According to Gianfreda and Vallanti (2017), the average labor trial duration was 850 days, with significant differences across regions.

<sup>5</sup> CIGs is a short-term working allowance. Firms above the 15-employee cut-off can activate the scheme in the extraordinary event of a reorganization of the production, severe economic crisis, or insolvency procedure.



than 15 employees as controls. We compare the internationalization propensity of firms on the two sides of the 15-employee threshold before and after the Fornero Law introduction. In particular, we estimate the following econometric model:

$$y_{it} = \gamma_0 + \gamma_1(\text{above}_{it} * \text{post}_t) + \gamma_2 \text{post}_t + \gamma_3 \text{above}_{it} + \mathbf{X}'_{it} \boldsymbol{\gamma} + \epsilon_{it} \quad (1)$$

where  $\text{above}_{it}$  is a dummy denoting whether firm  $i$  is in the treated group; it changes over  $t$  because we have firms that cross the 15-employee threshold between the pre-reform and post-reform period.  $\text{Post}_t$  is a dummy that takes value 1 for the period after the Fornero Law and 0 otherwise.  $\mathbf{X}'_{it}$  is a vector of time varying characteristics for firm  $i$  in year  $t$ : operating income, if the firm is involved in R&S activities, if the firms innovate, share of part-time workers<sup>6</sup>.  $Y_{it}$  represents the different indicators we use as proxies of firms' internationalization strategies. We also include region by year and sector by year fixed effect.

It is important to point out that in 2015 another labor reform was implemented, the so-called Jobs act, that further lowered firing costs. However, we decided to focus our analysis only on the Fornero reform's effect because the CIGs was amended in 2016. In particular, starting from 1 January 2016, firms are no more entitled to the wage allowance in the event of closure. The CIGs changes at the 15-employee cutoff, thus analyzing a period in which a confounding policy change could represent a potential threat to the identification of the effect of EPL.

#### 4. Data and sample selection

The data source for our analysis are the 2011 and 2015 waves of the MET survey on Italian firms. The complete MET database consists of 7 waves (2008; 2009; 2011; 2013; 2015; 2017; 2019) and each wave is made of roughly 25,000 cross-sectional observations. The survey also has a panel component that is consistent across two consecutive waves (e.g., 10,533 firms are followed from 2011 to 2013) but narrows as the distance among waves increases (5,844 firms are followed from 2011 to 2015, and only

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<sup>6</sup> Some controls might be considered outcome variables, pointing out an issue of bad controls. Therefore, we estimate different specifications, first excluding and then including the full set of time-varying variables.

298 firms are followed across all the seven waves). The MET survey provides a rich array of information on manufacturing and business service firms. One of the main advantages of the database is that provides information on a representative sample of any size class firms, even firms with less than 10 employees.

First, we employ the information on firms' affiliation to corporate groups to build our proxy of inward FDI. In particular, we classify a firm as a target of an FDI if the firm is part of a corporate group with a foreign parent company. Second, we exploit the section on firms' internationalization attitude to build our indicators on international economic activities, including trade, portfolio investment, and offshoring. Specifically, we use a question inquiring whether the firm has been involved in international activities in the last three years. Firms self-assess in which international activities have been involved in the previous three years: 1) Export; 2) Trade fairs; 3) Trade deals for foreign markets; 4) International agreements on research and technological programs; 5) Brownfield and foreign portfolio investment; 6) Offshoring, including greenfield investment and relocation; 7) Import.

Exploiting all this information, we build several different indicators of firms' involvement in international activities (Table 1). First, we compute the variable *Foreign Activities – exports and imports included*, a dummy that is equal to 1 if the firm declares to have undertaken at least one of the seven activities listed above in the previous three years, zero otherwise. Then we build the dummy *Foreign Activities – exports and imports excluded*, equal to 1 if the firm undertakes one of the previously listed activities, except exports and imports. *Foreign Activities – offshoring excluded* is a dummy built excluding from the list of activities imports and exports and offshoring. *Offshoring* is a dummy that takes the value of 1 if that firm declares to offshore its production activities; *Outward FDI* is a dummy coded 1 if the firm declares to have offshored (launching a greenfield investment or relocating) or launched a brownfield or a portfolio investment in a foreign firm in the previous three years, 0 otherwise. *Export Propensity* is a dummy equal to 1 if the firm has been an exporter in the previous three years, and finally, *Inward FDI* is coded 1 if the firm is an affiliate of a foreign corporate group, 0 otherwise.

**Table 1. Description of the dependent variables**

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<b>Variable</b>	<b>Description</b>
<i>Foreign Activities – exports and imports included</i>	dummy equal to 1 if the firm declares to have undertaken at least one of the following activities: 1) export; 2) trade fairs; 3) trade deal for foreign markets; 4) international agreements on research and technological programs; 5) brownfield and foreign portfolio investment; 6) offshoring (greenfield investment and relocation); 7) imports;
<i>Foreign Activities – exports and imports excluded</i>	dummy equal to 1 if the firm declares to have undertaken at least one of the following activities: 1) trade fairs; 2) trade deals for foreign markets; 3) international agreements on research and technological programs; 4) brownfield and foreign portfolio investment; 5) offshoring (greenfield investment and relocation);
<i>Foreign Activities – offshoring excluded</i>	dummy equal to 1 if the firm declares to have undertaken at least one of the following activities: 1) trade fairs; 2) trade deals for foreign markets; 3) international agreements on research and technological programs; 4) brownfield and foreign portfolio investment;
<i>Offshoring</i>	dummy equal to 1 if that firm declares to offshore its production activities through greenfield investment or relocation
<i>Outward FDI</i>	dummy equal to 1 if the firm declares to have offshored or launched a brownfield or a portfolio investment in a foreign firm
<i>Export propensity</i>	dummy equal to 1 if the firm is an exporter
<i>Inward FDI</i>	dummy is equal to 1 if the firm is an affiliate of a foreign corporate group

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To carry out our analysis, we use the 2011 wave of the MET survey for the pre-reform period and the 2015 wave for the post-reform period. We take the 2015 wave instead of 2013 because all our indicators refer to the previous three years; thus, the 2015 wave refers to the 2013-2015 period. If we had taken the 2013 wave, we would have had to deal with indicators covering the 2011-2013 interval, thus overlapping over the pre-reform period.

In order to ensure the comparability between the treated group (firms with more than 15 employees) with the untreated one (firms with at most 15 employees), we restrict our sample to firms with no more than 50 employees. Hence, we end up with a total sample of 41,286 firms, of which 22,054 are included in the 2011 wave and 19,232 in the 2015 wave. Moreover, we have a panel of 4,565 firms, 428 of which cross the 15-employee threshold across the two waves.

Table 2 shows the mean values of our key variables for both waves of the cross-sectional sample, whereas table 3 shows the same statistics for the panel subsample. The cross-section and the panel share very similar characteristics. On average, firms are very small (less than 10 employees), and international activities are not common with the exception of exports and imports. However, from 2011 to 2015, there is a sharp increase in the share of firms undertaking internationalization strategies.

**Table 2. Cross- sectional sample characteristics**

	wave 2011			wave 2015		
	under 15	above 15	Total	under 15	above 15	Total
	18,512	3,542	22,054	14,956	4,276	19,232
<b>No. of employees</b>	4.3	29.6	8.3	5.5	28.4	10.6
<b>Foreign Activities – exports and imports included</b>	17.2%	50.6%	22.6%	29.0%	58.4%	35.6%
<b>Foreign Activities - exports and imports excluded</b>	2.2%	7.5%	3.0%	8.3%	26.8%	12.4%
<b>Foreign Activities - offshoring excluded</b>	2.1%	7.3%	2.9%	8.0%	26.4%	12.1%
<b>Outward FDI</b>	0.2%	0.5%	0.2%	1.1%	3.7%	1.7%
<b>Offshoring</b>	0.1%	0.4%	0.2%	0.5%	1.7%	0.8%
<b>Exports Propensity</b>	15.2%	48.5%	20.5%	24.1%	53.3%	30.6%
<b>Inward FDI</b>	0.3%	1.9%	0.6%	0.6%	3.0%	1.2%

Note. Authors' elaborations on MET survey data.

**Table 3. Panel characteristics**

	2011			2015		
	under 15	above 15	Total	under 15	above 15	Total
	3,693	872	4,565	3,659	906	4,565
<b>No. of employees</b>	5.1	28.6	9.6	5.3	28.1	9.8
<b>Foreign Activities – exports and imports included</b>	19.9%	51.6%	26.0%	29.2%	59.8%	35.3%
<b>Foreign Activities - exports and imports excluded</b>	2.5%	7.1%	3.4%	6.6%	25.4%	10.3%
<b>Foreign Activities - offshoring excluded</b>	2.4%	7.0%	3.3%	6.5%	25.2%	10.2%
<b>Outward FDI</b>	0.2%	0.6%	0.3%	0.8%	2.9%	1.2%
<b>Offshoring</b>	0.2%	0.2%	0.2%	0.2%	1.5%	0.4%
<b>Export Propensity</b>	18.3%	50.0%	24.4%	24.5%	55.7%	30.7%
<b>Inward FDI</b>	0.5%	1.7%	0.7%	0.6%	2.5%	1.0%

Note. Authors' elaborations on MET survey data.

## 5. Results from a Difference-in-Differences approach

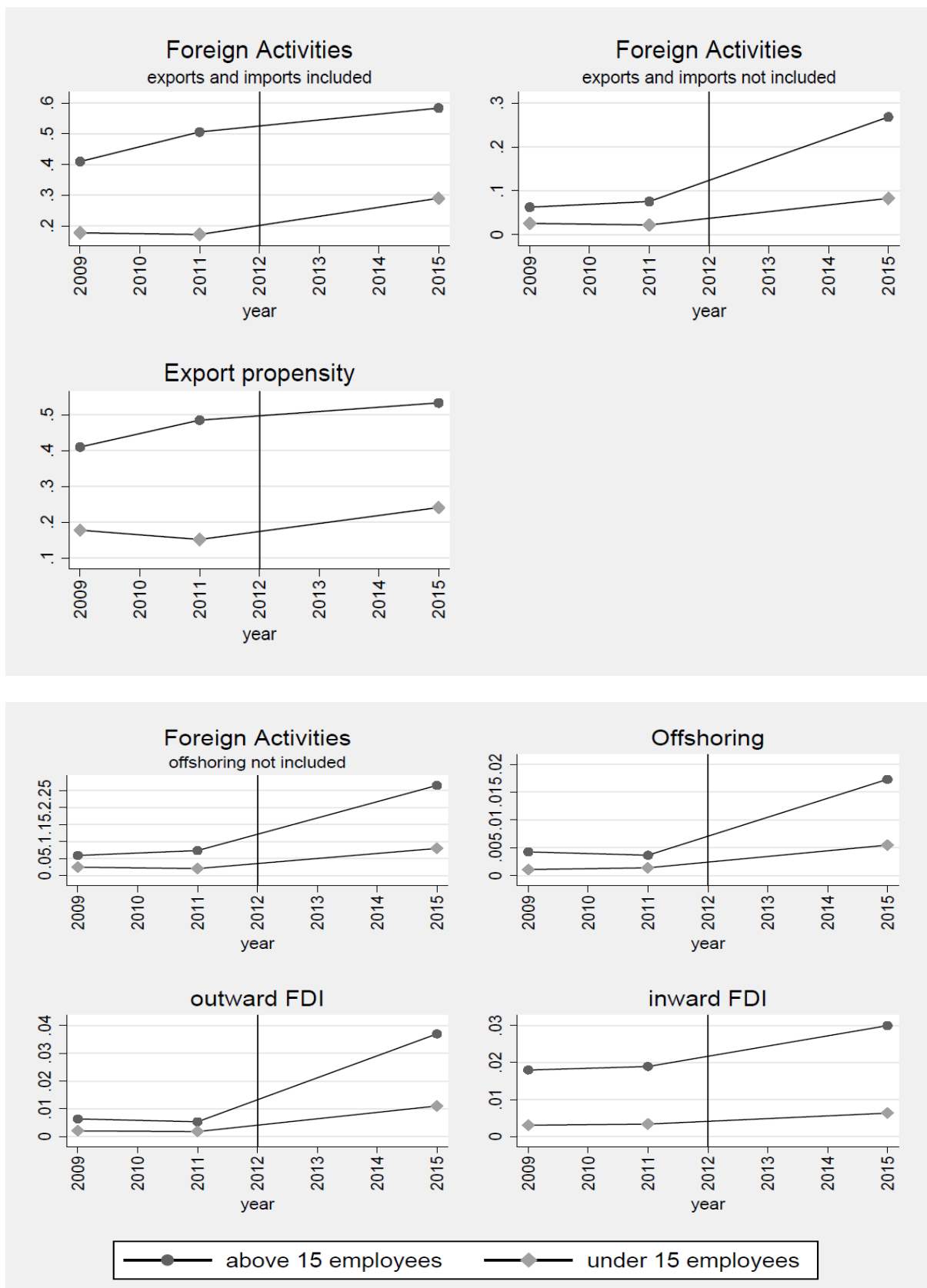
### 5.1 Test for prior trends

The parallel trend assumption is crucial in a difference-in-differences framework. This assumption requires that the outcome for the treated and the control group would have followed similar trends in the absence of treatment.

We begin by graphing the average outcomes over time for all our key variables of interest for treated and control firms for the cross-sectional sample. Figure 1 shows that, if we look at the variable *Foreign Activities - import and export included*, the two groups of firms were not heading in the same direction in the pre-policy period. This pattern also emerges for export propensity. When we exclude export and import propensity for the list of international activities, we can see that treated and untreated firms were trending similarly before treatment. Similar pre-policy trajectories also emerge for the offshoring propensity, the outward FDI propensity, and the inward FDI propensity. In the pre-reform period, firms sized from 16 to 50 employees exhibit a higher value for all our outcome variables, although the sizes of the gap between the two groups substantially differ (table 2). In particular, we can observe a pretty large difference in average values between the two clusters for *Foreign activities - export and import included* and *Export Propensity*. When we look at the other variables, we observe a relatively small gap between the two groups in the pre-treatment period (table 2). In the leadup to treatment, *Foreign Activities - export and import excluded*, *Offshoring*, and FDI propensity – both outward and inward – are particularly low for both clusters of firms. After the reform, if we exclude imports and exports, our outcome variables for the treated firms start growing at a higher rate.

Then, to further test for prior trends, we estimate DID using only pre-Fornero Law data (waves 2009 and 2011). In particular, we test whether firms below and above the 15-employee threshold already had differing trends in the pre-policy period. We interact the above 15-employee threshold indicator with the dummy *Y2011*, which equals 1 for 2011 and 0 for 2009.

**Figure1. Average trends for firms above and below the 15-employee threshold**



Note. Authors' elaborations on MET survey data

Tables 4a and 4b show results for the parallel trends test. Table 4a shows a statistically significant difference between trends for *Export Propensity* and for the three variables related to foreign activities.

Conversely, Table 4b. shows that *Offshoring*, *Outward FDI* and *Inward FDI* all display an insignificant coefficient for the interaction term (Table 4b), providing evidence supporting the hypothesis of parallel trends for the pre-policy period. However, even if *Activities - export and import excluded* and *Activities – offshoring excluded* present a statistically significant coefficient for the interaction term, Figure 1 provides suggestive evidence that the parallel trends assumption is still plausible for both variables. Thus, we decide to exclude from the following analyses only *Foreign activities - export and import included* and *Export Propensity* since the failure of both tests does not provide enough support for the parallel assumption.

**Table 4a. Parallel Trend for Pooled Cross-Section**

	(1) Export Propensity	(2) Foreign Activities Exp. and Imp. included	(3) Foreign Activities Exp. and Imp. not included	(4) Foreign Activities offshoring not included
Above*y2011	0.073*** (0.012)	0.074*** (0.012)	0.011* (0.006)	0.013** (0.006)
Observations	41738	41738	41738	41738
R <sup>2</sup>	0.145	0.142	0.036	0.035
Controls	Yes	Yes	Yes	Yes
Sector*Year f.e	Yes	Yes	Yes	Yes
Region*Year f.e	Yes	Yes	Yes	Yes

Robust standard errors in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

**Table 4b. Parallel Trend for Pooled Cross Section**

	(1) Offshoring	(2) outward FDI	(3) inward FDI
Above*y2011	-0.001 (0.002)	-0.002 (0.002)	-0.001 (0.003)
Observations	41738	41738	41738
R <sup>2</sup>	0.004	0.006	0.016
Controls	Yes	Yes	Yes
Sector*Year f.e	Yes	Yes	Yes
Region*Year f.e	Yes	Yes	Yes

Robust standard errors in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001



## 5.2 *Baseline results*

In this section, we assess whether the reform has had any impact on our set of firms' internationalization variables. For the baseline estimates we use a repeated cross-section of firms; firms are interviewed in 2011 and 2015 but outcome variables refer to a 3-year period (2009-2011 for the 2011 wave and 2013-2015 for the 2015 wave). Table 5a and Table 5b present baseline estimation results for the cross-sectional sample for the following set of dependent variables: *Foreign Activities – exports and imports excluded*; *Foreign Activities- offshoring excluded*; *Offshoring*; *Outward FDI*; *Inward FDI*. Because of the strong evidence against the hypothesis of parallel trends, we exclude from the DID analysis the following variables: *Foreign Activities- exports and imports included* and *Exports Propensity*. We estimate a positive impact of the reform on all our variables of interest. After the introduction of the Fornero Law, we estimate a 13 percentage point increase in the propensity of engagement in foreign activities (excluding exports and imports) for firms above the threshold compared to firms with no more than 15 employees (Table 5a; column 1). When we include our full set of controls, we estimate an effect of 11.4 percentage point increase (Table 5a; column 3). We estimate similar results when we exclude also offshoring from the foreign activities (Table 5a; columns 4 and 6).

Moreover, we find that the reform increased for firms with more than 15-employee the propensity to offshore by 1 percentage point (table 5b; columns 1, 2 and 3), the propensity to undertake outward FDI by 2.2 percentage points (by 2 percentage points when we control for time-varying characteristics, region by year and sector by year fixed effect), and the probability of attracting foreign investors (inward FDI) by 0.8 percentage points.

**Table 5a. Difference-in-differences estimates, baseline**

	(1)	(2)	(3)	(4)	(5)	(6)
	Foreign Activities Exp. and Imp. not included	Foreign Activities Exp. and Imp. not included	Foreign Activities Exp. and Imp. not included	Foreign Activities offshoring not included	Foreign Activities offshoring not included	Foreign Activities offshoring not included
Above	0.054*** (0.005)	0.019*** (0.004)	0.019*** (0.004)	0.053*** (0.005)	0.019*** (0.004)	0.019*** (0.004)
Post	0.061*** (0.003)	0.026*** (0.002)	0.066*** (0.013)	0.059*** (0.002)	0.025*** (0.002)	0.066*** (0.013)
Above*Post	0.133*** (0.009)	0.126*** (0.008)	0.114*** (0.008)	0.133*** (0.008)	0.126*** (0.008)	0.114*** (0.008)
<i>N</i>	41031	41031	41031	41031	41031	41031
controls	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes

Robust standard errors in parentheses

\* p&lt;0.05, \*\* p&lt;.01, \*\*\* p&lt;0.001

**Table 5b. Difference-in-differences estimates, baseline**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Offshoring	Offshoring	Offshoring	Outward FDI	Outward FDI	Outward FDI	Inward FDI	Inward FDI	Inward FDI
Above	0.002** (0.001)	0.000 (0.001)	-0.000 (0.001)	0.004*** (0.001)	-0.001 (0.001)	-0.001 (0.001)	0.016*** (0.002)	0.014*** (0.002)	0.012*** (0.002)
Post	0.004*** (0.001)	0.002** (0.001)	-0.004 (0.003)	0.009*** (0.001)	0.004*** (0.001)	0.001 (0.005)	0.003*** (0.001)	0.000 (0.001)	-0.001 (0.005)
Above*Post	0.010*** (0.002)	0.009*** (0.002)	0.009*** (0.002)	0.023*** (0.003)	0.021*** (0.003)	0.020*** (0.003)	0.008** (0.004)	0.007** (0.004)	0.008** (0.003)
<i>N</i>	41031	41031	41031	41031	41031	41031	41031	41031	41031
controls	NO	Yes	Yes	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes

Robust standard errors in parentheses

\* p&lt;0.05, \*\* p&lt;.01, \*\*\* p&lt;0.001

## 6. Geographical Macro-Area Heterogeneity

Italy is characterized by sizeable territorial heterogeneity in terms of firms' performance and productivity (Lasagni et al., 2015; Istat, 2019; Rungi & Biancalani, 2019; Deleidi et al., 2021). In this section, we analyze whether the effect of EPL differs according to the geographical macro-areas. To test whether there are statistically significant differences in the effect of EPL on firms' internationalization among macro-areas, we run regressions interacting the  $above_{it} * post_t$  term with the macro-area categorical variable (the three categories are: North, South, and Center). In particular, we run a model that includes interaction terms of all covariates with the macro-area variable, and the results for the interaction terms are reported in Table 6.

**Table 6. Heterogeneity by geographic area**

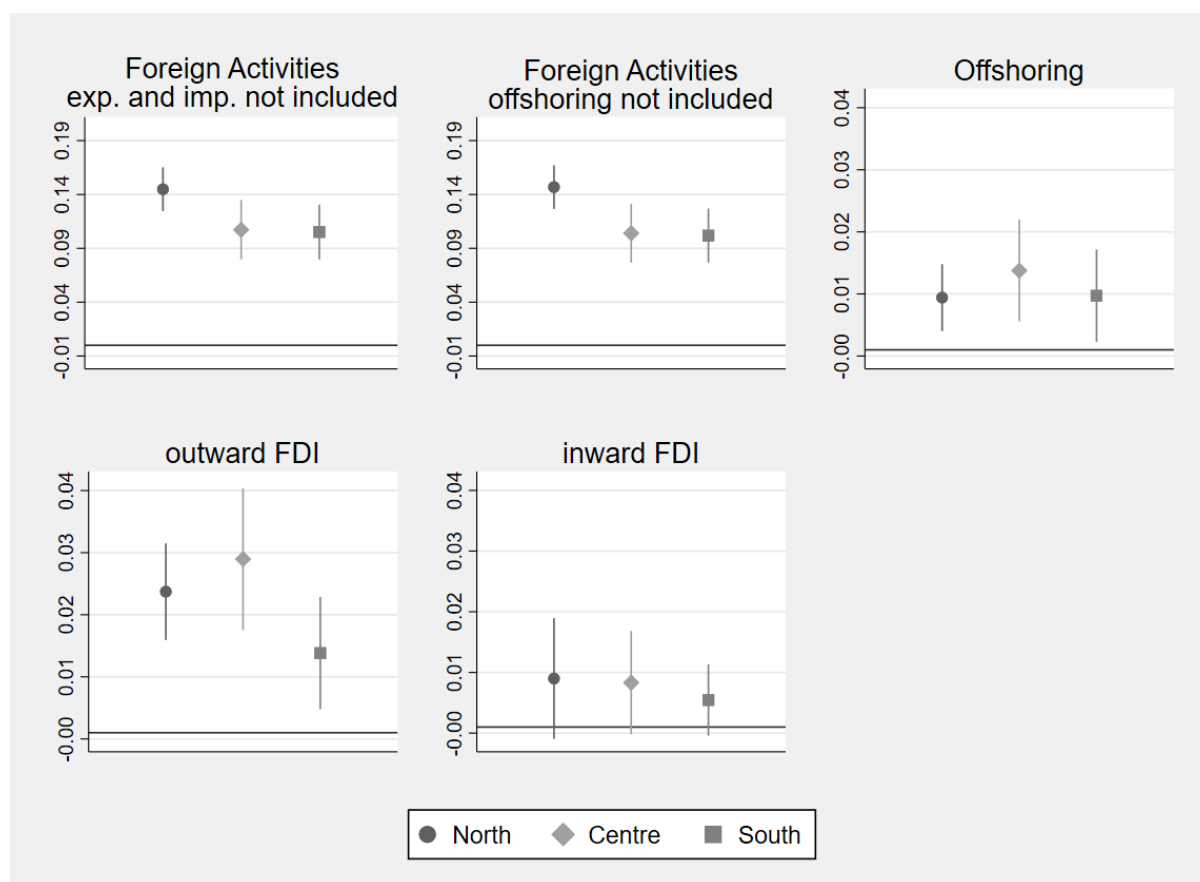
	(1)	(2)	(3)	(4)	(5)
	Foreign Activities Exp. and Imp. not included	Foreign Activities Offshoring not included	Offshoring	Outward FDI	Inward FDI
Above*Post	0.145*** (0.012)	0.147*** (0.012)	0.008** (0.003)	0.023*** (0.005)	0.008 (0.006)
Above*Post* Center	-0.038* (0.021)	-0.043** (0.021)	0.004 (0.006)	0.005 (0.008)	-0.001 (0.008)
Above*Post* South	-0.040** (0.020)	-0.045** (0.020)	0.000 (0.006)	-0.010 (0.007)	-0.004 (0.007)
<i>N</i>	41031	41031	41031	41031	41031

Robust standard errors in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

The effect of reducing the EPL on the propensity to undertake various internationalization activities for the Northern part of Italy (our base category) is given by the coefficient for the Above\*Post term, that is positive and statistically significant for all our set of internationalization indicators except for *Inward FDI*. Looking at the variables *Foreign Activities – exports and imports excluded* and *Foreign Activities – offshoring excluded*, the significant and negative coefficients show that the effect of the reduction of firing costs for firms above the 15-employee threshold is lower for firms in the South and the Center. We do not have statistically significant differences in the effect of interest among regional macro-areas for the other dependent variables. Figure 2 reports point estimates and confidence intervals derived from the model above for the effect of the reform for firms in each macro-area. These results are consistent with the hypothesis that firms in Northern Italy are more productive and thus are more likely to undertake foreign activities.

**Figure 2. Differential impact of the reform according to geographic area**



## 7. Robustness checks

In this section, to check the sensitivity of our baseline results, we carry out some robustness tests. A repeated cross-section design might lead to biased estimates if sample characteristics change before and after the treatment. Therefore, the first test is to restrict our estimates to the panel component of the dataset (4565 firms). The inclusion of firm fixed effects allows controlling for unobserved firm heterogeneity. However, the risk is that the reduction of sample size would endanger the precision of our estimates. Table 7a and Table 7b show that the estimated coefficients remain significant compared to pooled cross-section baseline estimates. The only exception is inward FDI, which shows a positive but not statistically significant coefficient when we control for region by year and sector by year fixed effects.

**Table 7a. Panel estimates**

	(1)	(2)	(3)	(4)	(5)	(6)
	Foreign Activities Exp. and Imp. not included	Foreign Activities Exp. and Imp. not included	Foreign Activities Exp. and Imp. not included	Foreign Activities offshoring not included	Foreign Activities offshoring not included	Foreign Activities offshoring not included
Above	-0.052** (0.021)	-0.053** (0.021)	-0.045** (0.021)	-0.053** (0.021)	-0.055*** (0.021)	-0.047** (0.021)
Post	0.038*** (0.005)	0.024*** (0.005)	0.048* (0.025)	0.038*** (0.004)	0.024*** (0.005)	0.051** (0.025)
Above*Post	0.164*** (0.017)	0.159*** (0.017)	0.139*** (0.017)	0.163*** (0.017)	0.158*** (0.017)	0.137*** (0.017)
<i>N</i>	9090	9090	9090	9090	9090	9090
firm f.e.	Yes	Yes	Yes	Yes	Yes	Yes
controls	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes

Standard errors clustered at the firm level in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

**Table 7b. Panel estimates**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Offshoring	Offshoring	Offshoring	Outward FDI	Outward FDI	Outward FDI	Inward FDI	Inward FDI	Inward FDI
Above	0.003 (0.006)	0.002 (0.006)	0.002 (0.006)	0.010 (0.009)	0.010 (0.009)	0.009 (0.009)	-0.005 (0.006)	-0.005 (0.006)	-0.002 (0.005)
Post	-0.000 (0.001)	-0.001 (0.001)	-0.008*** (0.003)	0.007*** (0.002)	0.005*** (0.002)	-0.001 (0.007)	0.001 (0.001)	-0.000 (0.001)	0.007 (0.005)
Above*Post	0.013*** (0.004)	0.013*** (0.004)	0.013*** (0.004)	0.015*** (0.006)	0.015*** (0.006)	0.014** (0.005)	0.008* (0.005)	0.008* (0.005)	0.006 (0.004)
<i>N</i>	9090	9090	9090	9090	9090	9090	9090	9090	9090
firm f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
controls	NO	Yes	Yes	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes

Standard errors clustered at the firm level in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

As a further robustness check, to have the same sample of treated and untreated firms before and after the intervention, we exclude from the panel firms that crossed the 15-employee threshold between 2011 and 2015. The exclusion of switching firms from the panel sample further reduces the sample size. Table 8a and Table 8b report panel fixed effects estimates for non-switchers. Results remain qualitatively the same with respect to the full panel sample.

**Table 8a. Panel estimates, non-switchers**

	(1)	(2)	(3)	(4)	(5)	(6)
	Foreign Activities Exp. and Imp. not included	Foreign Activities Exp. and Imp. not included	Foreign Activities Exp. and Imp. not included	Foreign Activities offshoring not included	Foreign Activities offshoring not included	Foreign Activities offshoring not included
Post	0.038*** (0.005)	0.025*** (0.005)	0.047* (0.025)	0.038*** (0.004)	0.026*** (0.005)	0.052** (0.025)
Above*Post	0.165*** (0.019)	0.161*** (0.019)	0.140*** (0.018)	0.163*** (0.019)	0.159*** (0.019)	0.138*** (0.018)
<i>N</i>	8242	8242	8242	8242	8242	8242
firm f.e.	Yes	Yes	Yes	Yes	Yes	Yes
controls	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes

Standard errors clustered at the firm level in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

**Table 8b. Panel estimates, non-switchers**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Offshoring	Offshoring	Offshoring	Outward FDI	Outward FDI	Outward FDI	Inward FDI	Inward FDI	Inward FDI
Post	-0.000 (0.001)	-0.001 (0.001)	-0.007** (0.003)	0.006*** (0.002)	0.004** (0.002)	-0.001 (0.007)	0.001 (0.001)	-0.000 (0.001)	0.006 (0.005)
Above*Post	0.012*** (0.004)	0.013*** (0.004)	0.012*** (0.004)	0.013** (0.006)	0.013** (0.006)	0.011* (0.006)	0.008* (0.005)	0.008* (0.005)	0.006 (0.004)
<i>N</i>	8242	8242	8242	8242	8242	8242	8242	8242	8242
firm f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
controls	NO	Yes	Yes	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes

Standard errors clustered at the firm level in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

Finally, we deal with measurement errors deriving from a potential erroneous threshold calculation.

Thus, we exclude from our sample firms sized in the 14-16 employee range (Table 9a and Table 9b).

Again, results remain qualitatively the same with respect to baseline estimates.

**Table 9a. Pooled cross-section donut-hole regression results**

	(1) Foreign Activities Exp. and Imp. not included	(2) Foreign Activities Exp. and Imp. not included	(3) Foreign Activities Exp. and Imp. not included	(4) Foreign Activities offshoring not included	(5) Foreign Activities offshoring not included	(6) Foreign Activities offshoring not included
Above	0.055*** (0.005)	0.020*** (0.005)	0.020*** (0.005)	0.054*** (0.005)	0.019*** (0.005)	0.019*** (0.004)
Post	0.056*** (0.002)	0.022*** (0.002)	0.061*** (0.013)	0.055*** (0.002)	0.021*** (0.002)	0.061*** (0.013)
Above*Post	0.139*** (0.009)	0.132*** (0.008)	0.120*** (0.008)	0.139*** (0.009)	0.133*** (0.008)	0.121*** (0.008)
<i>N</i>	39161	39161	39161	39161	39161	39161
firm f.e.	Yes	Yes	Yes	Yes	Yes	Yes
controls	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes

Standard errors clustered at the firm level in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

**Table 9b. Pooled cross-section donut-hole regression results**

	(1) Offshoring g	(2) Offshoring	(3) Offshoring	(4) Outward FDI	(5) Outward FDI	(6) Outward FDI	(7) Inward FDI	(8) Inward FDI	(9) Inward FDI
Above	0.003** (0.001)	0.000 (0.001)	0.000 (0.001)	0.003*** (0.001)	-0.001 (0.001)	-0.001 (0.001)	0.016*** (0.002)	0.015*** (0.002)	0.012*** (0.002)
Post	0.004*** (0.001)	0.002*** (0.001)	-0.002 (0.003)	0.009*** (0.001)	0.004*** (0.001)	0.002 (0.005)	0.003*** (0.001)	0.001 (0.001)	-0.002 (0.005)
Above*Post	0.009*** (0.002)	0.008*** (0.002)	0.007*** (0.002)	0.023*** (0.003)	0.022*** (0.003)	0.020*** (0.003)	0.008** (0.004)	0.007* (0.004)	0.008** (0.004)
<i>N</i>	39161	39161	39161	39161	39161	39161	39161	39161	39161
firm f.e.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
controls	NO	Yes	Yes	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes

Standard errors clustered at the firm level in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

## 8. Sectoral heterogeneity: innovation and volatility

In this section, we investigate whether the effect of reduced firing costs on internationalization strategies differs according to the characteristics of the sector in which the firms operate.

### 8.1 Sectoral innovation

First, we analyze the effect of the change in EPL in firms operating in sectors characterized by a different degree or type of innovation. Since innovation could represent one of the driver of firms' probability to relocate abroad (Pennings et al., 2000), we exploit the Pavitt taxonomy that classifies

sectors according to how technology is developed and used. In particular, the Pavitt taxonomy distinguishes 4 categories of sectors:

1. “*Science-based industries*” that rely on R&D (e.g., pharmaceuticals and electronics), where product innovation is essential and the degree of appropriability from patents is high;
2. “*Specialized suppliers industries*” that produce technology (machinery and equipment) utilized by other industries. Here, innovation stems from the tacit knowledge embodied in the labor force;
3. “*Scale Intensive industries*” characterized by large firms where scale economies are important (e.g., basic materials and automotive). Innovation derives from both internal and external sources;
4. “*Suppliers Dominated industries*”: traditional manufacturing sectors such as agriculture and textiles, where the sources of innovation are mainly external.

Firms are grouped in each category of the Pavitt taxonomy according to the main sector of activity. Since the MET survey does not provide this information at an adequate level of disaggregation, we match our data to the AIDA-BvD database that contains granular information on the NACE sector in which the firm operates. However, the AIDA-BvD database contains information only on Italian limited liability companies, that are required to deposit the balance sheet to the local Chamber of Commerce. Therefore, we cannot match half of the firms surveyed by the MET database, ending up with a sample of around 20,000 firms. We run the following model where the categorical variable for the Pavitt sector has been interacted with every covariate:

$$y_{it} = \gamma_0 + \gamma_1(above_{it} * post_t) + \gamma_2 post_t + \gamma_3 above_{it} + \gamma_4(above_{it} * post_t * pavitt_i) + \gamma_5(post_t * pavitt_i) + \gamma_6(above_{it} * pavitt_i) + \gamma_7 pavitt_i + \epsilon_{it} \quad (3)$$



**Table 10. Heterogeneity by Pavitt sector**

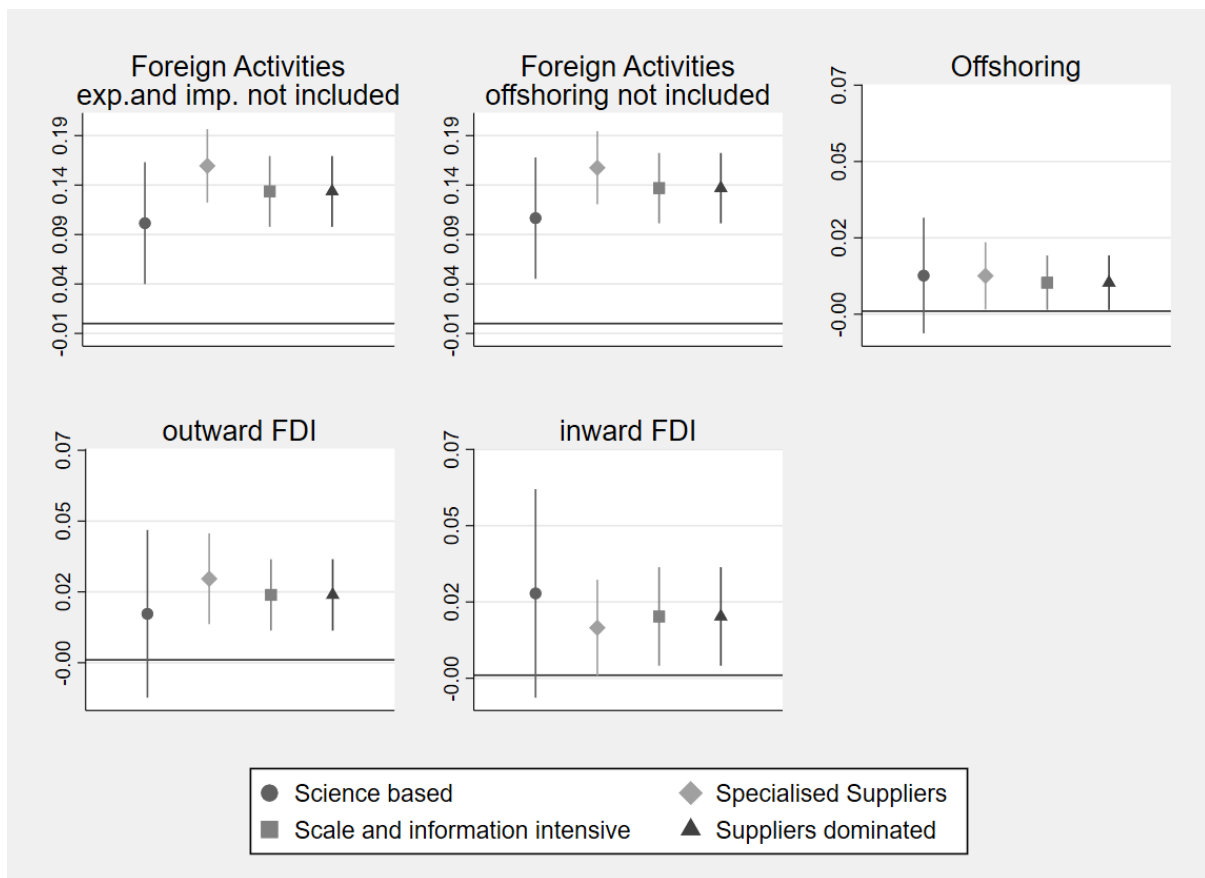
	(1) Foreign Activities Exp. and Imp. not included	(2) Foreign Activities offshoring not included	(3) Offshoring	(4) Outward FDI	(5) Inward FDI
Above*Post	0.102*** (0.037)	0.107*** (0.037)	0.012 (0.012)	0.016 (0.018)	0.027 (0.021)
Above*Post*Specialized Suppliers	0.058 (0.044)	0.051 (0.044)	-0.000 (0.013)	0.012 (0.020)	-0.011 (0.023)
Above*Post*Scale Intensive	0.032 (0.043)	0.030 (0.043)	-0.002 (0.013)	0.007 (0.020)	-0.008 (0.023)
Above*Post*Suppliers Dominated	-0.015 (0.040)	-0.019 (0.040)	-0.007 (0.012)	-0.003 (0.019)	-0.026 (0.021)
<i>N</i>	21719	21719	21719	21719	21719

Robust standard errors in parentheses

\* p&lt;0.05, \*\* p&lt;.01, \*\*\* p&lt;0.001

Table 10 reports estimation results from equation 3. We find no statistically significant differences between firms belonging to different Pavitt sectors, suggesting that firm innovation behavior is not a significant channel whereby EPL affects firms' internationalization propensity. Figure 3 reports point estimates and confidence intervals for the effect of EPL on our dependent variables for each Pavitt sector (the base category is *Science-based industries*).

**Figure 3. Differential impact of the reform according to Pavitt sector**



### 8.2 Differential impact of the reform on firms' internationalization on market volatility

In this subsection, we investigate a further potential driver of EPL's effect on small firms' internationalization propensity: the degree of volatility of the main sector of activity of the firm.

For firms operating in risky sectors, firing costs and severance payments may be crucially important (Haaland et al. 2003). In particular, firing costs might become more important as the uncertainty of the economic environment rises, hindering outward investment for firms operating in volatile sectors. For example, the level of uncertainty in the economic environment seems to negatively impact the probability of relocation (Pennings et al., 2000, Lampòn, 2020).

**Table 11a. Heterogeneity by sectoral volatility**

	(1)	(2)	(3)	(4)	(5)	(6)
	Foreign Activities Exp. and Imp. not included	Foreign Activities Exp. and Imp. not included	Foreign Activities Exp. and Imp. not included	Foreign Activities offshoring not included	Foreign Activities offshoring not included	Foreign Activities offshoring not included
Above*Post	0.075*** (0.020)	0.061*** (0.019)	0.055*** (0.019)	0.076*** (0.020)	0.063*** (0.019)	0.056*** (0.019)
Sales*Above*Post	0.230* (0.125)	0.286** (0.119)	0.256** (0.120)	0.222* (0.124)	0.277** (0.119)	0.249** (0.120)
<i>N</i>	23665	23528	23519	23665	23528	23519
controls	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes

Robust standard errors in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

Thus, we expect that reducing the uncertainty of firing costs resulting from the Fornero reform enabled firms to increase their engagement in risky activities such as internationalization. Consequently, firms operating in more volatile markets and belonging to the treatment group should react more to the reduction in the EPL. Following Devicienti et al. (2018), we measure market volatility using balance sheet information on sales from the AIDA-BvD matched with the MET survey<sup>7</sup>. In particular, we compute the volatility for each of the 3-digit NACE sectors, first computing the yearly value of the sales for every sector. We calculate the annual growth rates of sales for the pre-reform period 2004 – 2011; finally, for every sector, we compute the standard deviation of the growth rates. Then, we estimate the following specification:

$$y_{it} = \gamma_0 + \gamma_1(above_{it} * post_t) + \gamma_2 post_t + \gamma_3 above_{it} + \gamma_4(above_{it} * post_t * sales_i) + \gamma_5(post_t * sales_i) + \gamma_6(above_{it} * sales_i) + \epsilon_{it} \quad (4)$$

where the coefficient  $\gamma_4$  for the triple interaction term  $above_{it} * post_t * sales_i$  captures the effect of a change in EPL for firms operating in markets characterized by different levels of volatility. Thus, a positive value of  $\gamma_4$  would point out that firms with more than 15 employees operating in volatile markets have reacted more to the change in EPL. Results reported in tables 11a and 11b show that the coefficient for the triple interaction term is positive and statistically significant for *Foreign Activities* -

<sup>7</sup> From the AIDA-BvD we retrieve information on the 3-digit NACE sector and on the value of the firm's sales. Sales are deflated to real terms using the 2015 consumer price index.

*exports and imports excluded* and for *Foreign Activities – offshoring excluded* while is not statistically significant but still positive for the other dependent variables. The results seem to confirm our hypothesis that the response to the reform is stronger for firms operating in highly volatile sectors. The reason may be that a strict EPL could be a particularly strong deterrent for embarking on new activities in an uncertain economic scenario. Since the Fornero reform has reduced the level of firing costs and the uncertainty about their final amount, firing costs can be factored in with a more accurate degree of certainty, allowing firms to evaluate the expected investment more precisely and embark on riskier projects such as internationalization activities.

**Table 11b. Heterogeneity by sectoral volatility**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Offshoring	Offshoring	Offshoring	Outward FDI	Outward FDI	Outward FDI	Inward FDI	Inward FDI	Inward FDI
Above*Post	0.005 (0.007)	0.004 (0.007)	0.005 (0.007)	0.002 (0.012)	-0.000 (0.012)	0.000 (0.012)	-0.001 (0.009)	-0.003 (0.009)	-0.001 (0.009)
Sales*Above*Post	0.024 (0.045)	0.027 (0.044)	0.022 (0.045)	0.120 (0.079)	0.128 (0.078)	0.119 (0.079)	0.067 (0.059)	0.069 (0.059)	0.071 (0.060)
<i>N</i>	23519	23519	23519	23519	23519	23519	23519	23519	23519
controls	NO	Yes	Yes	NO	Yes	Yes	NO	Yes	Yes
Sector*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes
Region*Year f.e	NO	NO	Yes	NO	NO	Yes	NO	NO	Yes

Robust standard errors in parentheses

\* p<0.05, \*\* p<.01, \*\*\* p<0.001

## 9. Conclusion

In this paper, we estimate the impact of EPL on small firms' internationalization strategies by exploiting a labor market reform, the 2012 Fornero Law, that decreased dismissal costs for firms above the 15-employee threshold. Moreover, the reform reduced the uncertainty regarding the amount of firing costs by narrowing the set of cases for which dismissed workers could choose their reinstatement. Taking advantage of the 2011 and 2015 waves of the MET survey on the Italian industry, we employ a difference-in-differences identification strategy and compare the internationalization propensity of firms above the 15-employee threshold (but with no more than 50 employees) with that of firms below the threshold.

Reducing firing costs has been used by the government as a policy instrument to make Italy a more attractive location for foreign investment. Our core results (confirmed by a set of robustness checks)

suggest that the decrease in firing costs associated with the 2012 Italian EPL reform increased the attractiveness of Italian firms to foreign investors and the propensity of small firms to undertake internationalization activities, including outward FDI.

Therefore, concerning the positive effect of lower firing costs and their uncertainty on inward FDI, we confirm that a strict EPL is an effective deterrent to foreign investment (Nicoletti et al., 2003; Görg, 2005; Delbecque et al., 2014). A more flexible labor market allows firms to easily adjust their production in response to shocks or changes in economic conditions.

We also confirm that a high level of EPL hinders firms' outward FDI (Dewit et al., 2009; Dewit et al., 2019). The EPL reduction induced by the Fornero law increases the propensity to engage in internationalization activities, including offshoring and greenfield investment. According to our results, the transmission channel of the effect of a reduction in firing cost on outward investment could work through the reduction in the uncertainty of dismissal costs. Our results show that the impact of the reform is greater for firms operating in more volatile sectors, suggesting that the decrease in the uncertainty about the consequences of dismissals may have increased firms' propensity to undertake uncertain and risky internationalization strategies.

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