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# Labor Market Flexibility and Inward Foreign Direct Investment:

## Incentive or Outcome?

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# Labor Market Flexibility and Inward Foreign Direct Investment: Incentive or Outcome?[*]

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Abstract

Are inward FDI and its increase related to the domestic labor market conditions in the host economy? This is still an open question, as literature to date has provided mixed evidence. This paper empirically addresses this question by testing the debated relationship in both possible "causal" directions—i.e., testing (i) whether the host's labor market flexibility—or strictness—leads an increase in inward FDI and (ii) whether it follows inward FDI, using publicly accessible macro-level data. The first set of estimation shows that a host country with relaxed employment protection tends to attract more inward FDI, which is consistent with the findings in some recent studies. The analysis also indicates that this relationship should chiefly be the case in the "traditional" OECD members but may not apply to other countries. On the other hand, the second set of estimation indicates that increased inward FDI could result in loosened employment protection. This impact may not be immediately apparent but could be more significant in a longer time horizon.

*Keywords*: Foreign direct investment, Labor market flexibility, Labor conditions, Employment protection

*JEL classification*: F16, F21, F66, J80

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## 1. Introduction

Does foreign direct investment or FDI interact with labor conditions? How is the promotion of inward FDI related to the domestic labor market in the FDI host economy? As the labor impact of economic globalization has been of public debate and concerns, the question on the link between FDI and the host country's domestic labor market conditions has been of growing interest to both academics and public. The views on this issue vary. On the one hand, there are concerns about a possible "race to the bottom: countries may be competing to attract inward FDI by loosening their local labor market conditions and regulations. On the other hand, foreign investors or multinational enterprises may be more attracted to host countries with sounder social institutions and a compliance system including stricter labor market regulations or labor standards. There are also expectations for potential spillover: labor condition-conscious foreign investors or multinational enterprises will stimulate the host economy's local labor market, which may lead to an improvement in its domestic labor conditions.

Evidence in the literature on the FDI-labor relation has been mixed, too. Earlier studies have tended to identify no systematic relationship or find an association between FDI and higher or stricter labor conditions in the host country. For instance, Aggarwal (1995) finds no evidence for the concerned negative association between FDI and a variety of domestic labor conditions and standards. Rodrik (1996) also examines the relationship between domestic labor standards and FDI and finds a positive relationship between stricter labor standards and FDI inflows. Kucera (2002) focuses on the workers' rights of freedom of association and collective bargaining (or FACB rights) and finds that FDI is likely to flow more into countries with more protected FACB rights, whereas an extended test by Teitlebaum (2010) fails to find evidence on the relationship between larger FDI inflows and stricter FACB rights in the host countries. Neumayer and and de Soysa (2006) also examine the relationship but do not find significant relation between a country's FDI penetration and the strictness of FACB

rights in that country. Mosley and Uno (2007), however, find a positive relationship between inward FDI and strict(er) FACB rights for developing countries.[1] On the other hand, some recent empirical studies find an opposite association or evidence for a possible "race to the bottom." Olney (2013) examines the relation between domestic labor market conditions in 26 OECD countries measured as the OECD's indicator of employment protection regulation and US FDI measured as the aggregated sales of US affiliates in those host countries, and find that US FDI is larger to a host country with less strict employment protection regulations. The study also finds that the strictness of employment protection regulations in a host country is correlated with that in its neighboring countries, which is interpreted as a competition (or race) in labor conditions. Davies and Vadlamannati (2013) also finds similar evidence for a possible competition in labor conditions among FDI host economies from an empirical analysis using a composite labor-right index, provided by Mosley and Uno (2007), for a larger variety of countries. Javorcik and Spatareanu (2005) use firm-level data on new investment among 19 European countries and indices on labor market flexibility from the *Global Competitiveness Report*, and find that inward FDI is larger to a host economy in which labor market is more flexible than in the investor's home country. Dewit, Görg, and Montagna (2009) also obtain a similar finding from their estimation using the OECD employment protection indicators.[2]

It is thus still an open question whether inward FDI and its increase are related to the domestic labor market conditions in the host economy. This paper addresses this question by empirically investigating the debated relationship using the OECD's indicators of employment protection legislation as well as other publicly accessible macro-level data provided by international institutions and academic institutes. The first set of empirical analyses is designed to test whether relaxing the domestic labor market

[1] For a little more extended literature reviews of these earlier items, see Kamata (2014, 2018).
[2] Dewit, Görg and Montagna (2009) also find that FDI *outflow* is smaller from a source country with *stricter* employment protection regulations.

regulations by a FDI host country contribute to an increase in inward FDI to that country. The results of the estimation show that a host country with more flexible (or less strict) employment protection regulations tends to attract more inward FDI, and also indicate that this relationship should chiefly be the case in the "traditional" OECD members but may not necessarily apply to other countries. On the other hand, the second set of analyses is designed to test whether an increase in inward FDI leads to laxer (or stricter) labor market regulations in the host country. The results of the estimation indicates that increased inward FDI could also result in loosened employment protection, while this impact may not be immediately obviate but could be more significant in a longer time horizon.

This paper contributes to the empirical literature on the topic of FDI and domestic labor market conditions or standards by including in its sample a wider variety of countries than the existing studies, especially compared to the recent studies utilizing the same OECD's employment protection data and mainly focus on the OECD countries. Although the overall result of the analysis in this paper is consistent with the findings of those recent studies, the current paper also demonstrates potential heterogeneity between developed countries (or "traditional" OECD members) and developing or emerging economies in terms of the relationship between labor regulation flexibility and inward FDI. Another contribution of this paper is that, in contrast with the majority of the existing literature tests for the simultaneous association between labor conditions and FDI or the impact of the former on the latter, the current paper also examines the possibility of the reversed "causal" relationship by estimating the impact of a preceding increase in inward FDI on employment protection in a later time period(s).

The rest of the paper is organized as follows: The next section 2 explains the empirical approach and models for the analysis, and the following section 3 describes the data and their sources that are used for the analysis. Section 4 presents the results of the estimation, followed by the concluding section 5.

## 2. Empirical Models

### 2.1. Estimation 1: Impacts of Labor-market Conditions on Inward FDI

The first empirical test is on whether more flexible (or strict) labor-market regulations in a host country contribute to an increase in inward FDI to that country. For this first estimation, I employ the following empirical model, which is built on Olney (2013):

$$\ln(\text{iFDI})_{c,t} = \beta_1 \ln(\text{EP})_{c,t\text{-}1} + X_{c,t\text{-}1}\,\beta_2 + \lambda_c + \theta_t + \varepsilon_{c,t} \qquad (1.1)$$

In this equation, $\text{iFDI}_{c,t}$ is the stock of inward FDI to host country *c* in year *t*. $\text{EP}_{c,t}$ on the left-hand side is a measure of the domestic labor-market regulations in country *c* at year *t*, for which I employ the OECD's indicator of employment protection as described in the next section. $X_{c,t}$ is the vector of other controls that includes the following variables, which are all in natural logarithms, for country *c* in year *t*: real GDP, population,[3] trade costs, labor skill level, real wages, and the measures of overall political-right and civil-liberty conditions.[4] Note that the EP measure and the other control variables on the right-hand side of the equation are all lagged in one period, to examine whether labor-market regulations (and other factors) in a previous year *t*-1 affect inward FDI in the present year *t*. Equation (1.1) also includes dummies for host countries $\lambda_c$ that capture other time-invariant host-specific factors, year dummies $\theta_t$ that capture time-specific factors that are common across host countries, and random errors $\varepsilon_{c,t}$.

[3] Notice that including the natural log of real GDP and that of population is equivalent to including the log of a host country's real income level (GDP/cap).

[4] Following Olney (2013), I have also considered other specifications of Equation (1.1) that include a commercial tax rate and investment costs (in log) in the control variables $X_{c,t}$. However, those specifications significantly reduce the number of observations for estimation due to limitation in data availability. Moreover, the results of estimation with those alternative specifications have shown that these additional controls are not significant. Therefore, in the current paper I only consider the benchmark specification with the above-mentioned seven control variables, with which I can maintain as many observations as possible for estimation.

Equation (1.1) is first estimated using OLS regression. In addition, to address the issue of potential endogeneity of labor-market regulations, I also take an instrument-variable approach in estimating the equation. Following Besley and Burgess (2004) and Olney (2013), I use the unionization rate or labor-union density, which is defined as the share of union members in the total number of wage and salary earners. Governments may find the demand for protecting workers through regulations as the presence of labor unions declines, as argued by Olney (2013). On the other hand, unions cannot directly regulate or control the employment practices of multinational enterprises, and the union density is thus not likely to impact inward FDI directly.[5] By the same token, I also use collective-bargaining coverage, defined as the number of employees covered by collective agreements as the percentage of the total number of wage and salary earners, as the second instrument variable for employment-protection regulations.

Furthermore, as the stock of inward FDI on the left-hand side is persistent over time, I also employ a dynamic-panel approach in estimation. That is, following Olney (2013), I add the one-year lagged inward FDI stock on the left-hand side of Equation (1.1) and estimate the first-differenced equation, which is presented as Equation (1.2) below:

$$\Delta \ln(\text{iFDI})_{c,t} = \alpha \Delta \ln(\text{iFDI})_{c,t-1} + \beta_1 \Delta \ln(\text{EP})_{c,t-1} + \Delta \text{X}_{c,t-1} \beta_2 + \Delta \theta_t + \Delta \varepsilon_{c,t} \qquad (1.2)$$

Equation (1.2) is estimated using the Arellano-Bond generalized method of moment (GMM).

### 2.2. Estimation 2: Impacts of Inward FDI on Host's Labor-market Conditions

The second empirical test is on whether an increase in inward FDI results in laxer (or stricter) labor-market regulations in the host country. For this estimation, I use the following empirical model:

[5] Olney (2013) argues that labor unions are more common in the sectors with less inward FDI typically, so that the union density is unlikely to directly affect FDI.

$$EP_{c,t} = \sigma_1 \ln(iFDI)_{c,t-L} + S_{c,t-1}\,\sigma_2 + \psi_c + \eta_t + \zeta_{c,t} \qquad (2.1)$$

$EP_{c,t}$ and $iFDI_{c,t}$ are an employment-protection indicator and inward FDI stock in host country *c* in year *t*, respectively, as in the previous Equation (1.1). In estimation, I use the inward FDI stock as of one through four prior year to the present time *t* (*t*-*L*, $L \in [1, 4]$), considering possible time lag for labor-market regulations to adjust. $S_{c,t}$ is the vector of other control variables on host country *c* in year *t*, which includes real GDP per capita, industry employment share in the total employment, manufacturing value-added share in GDP, and the measures of overall political-right and civil-liberty conditions. $S_{c,t}$ also includes labor-union density and collective-bargaining coverage, as they are used as instruments for employment protection regulations in the first estimation. These control variables are all in the values as of one previous year (*t*-1). In addition, the equation includes host-country dummies $\psi_c$ and year dummies $\eta_t$; and $\zeta_{c,t}$ is the random-error term.

I consider two specifications in estimating Equation (2.1) (as well as its dynamic-panel version Equation (2.2) presented below). The first specification is the log-linear form in which all the variables in the equation except for the country and year dummies are log-scaled, in a manner analogous to the first empirical model. The second specification has only inward FDI stock and GDP per capita in logarithmic scale but the other variables in natural scale. The reason for this second specification is that the dependent variable EP as well as all the explanatory variables except for the stock of FDI and GDP per capita are either integer scores (EP and political-right and civil-liberty indexes) or percentages between zero and one (industry employment share, manufacturing value-added share, union density, and collective-bargaining coverage).

Equation (2.1) is first estimated using OLS regression. Moreover, since the employment protection index EP exhibits some persistency for many countries, in this second estimation I also take a dynamic-panel approach and estimate the following Equation (2.2) that is the first-differenced form of Equation (2.1) with the one-year

lagged EP index on its left-hand side, using the Arellano-Bond GMM:

$$\Delta EP_{c,t} = \delta \Delta EP_{c,t-1} + \sigma_1 \Delta \ln(iFDI)_{c,t-L} + \Delta S_{c,t-1} \sigma_2 + \Delta \eta_t + \Delta \zeta_{c,t} \qquad (2.2)$$

## 3. Data

For empirical analyses in the current paper, I construct a dataset by collecting country-level or macro-level data from publicly accessible sources or databases provided by international organizations or research institutes.

The variable on labor market conditions or employment regulations is one of the key variables in the current study. As the measure of labor market regulations, I use one of the OECD indicators of employment protection. The OECD's indicators are synthetic indicators that evaluate the strictness of employment protection regulations based on multiple factors such as notice periods and compensation to dismissals. The indicators express the evaluation in scores ranging from 0 to 6, with 0 indicating the least strict (most flexible) and 6 indicating the strictest. The indicators are provided for 72 countries including both OECD members and non-member countries. The indicators are available from year 1985 and the most recently toward 2015, while the number of data-available years varies across countries. I employ the "EPR_V1" indicator that measures the strictness of employment protection on individual dismissals of employees on regular contracts.[6]

Data on inward FDI are mainly sourced from the UNCTAD.[7] I use the stock of FDI rather than the flows, as FDI flows in data are fluctuating much, sometimes taking large negative values. To compute a real-valued measure of FDI, I use the shares of

[6] The ILO also provides a similar data on employment protection legislation (EPLex), which covers a little wider variety of countries than the OECD's data. However, because the ILO's data covers only the recent and short time periods (2009-2013), and also because for many countries the data are available only for one time period, I have given up using the ILO's data for the current analysis.

[7] *UNCTADSTAT*: https://unctadstat.unctad.org/EN/Index.html.

inward FDI stock in GDP sourced from the UNCTAD and multiply the shares to real GDP in constant 2010 US dollars that are sourced from the World Bank's *World Development Indicators* (WDI).[8]

Data for other control variables involved in the first and second empirical models and their sources are as follows. The real GDP are measured in constant 2010 US dollars and sourced from the WDI as mentioned above. Population is the total population also sourced from the WDI. Trade costs are measured as the inverse of "trade openness," i.e., the ratio of total trade to GDP sourced from the WDI. As the measure of labor skill level, I employ the human capital index in the Penn World Table (PWT) 9.0. The measure of real wages is computed by dividing total labor compensation, which is the share of labor compensation in GDP sourced from the PWT 9.0 multiplied to GDP in constant 2010 US dollars from the WDI, by the total economy-wide work hours, which is calculated as the product of the average annual hours worked by persons engaged and the number of persons engaged,[9] both sourced from the PWT 9.0. Industry employment share in the total employment and manufacturing value-added share in GDP are both from the WDI. As the measures of overall political-right and civil-liberty conditions in FDI host countries, I use the indexes on Political Rights (PR) and Civil Liberties (CL) provided by the Freedom House's annual survey *Freedom in the World* (FIW). The indexes rate the degree of overall freedom by scores ranging from 1 (freest) to 7 (least free / not free).

Finally, data on labor union (or trade union) density and collective bargaining coverage, which are used as instruments for employment protection regulations in the first estimation and are also included in the control variables in the second estimation, are sourced primarily from the OECD. The data are supplemented by the ILO's data for some countries and years for which the OECD data are unavailable.

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[8] WDI Database Archives: http://datatopics.worldbank.org/world-development-indicators/#archives.

[9] The PWT 9.0 records the number of persons engaged in millions, and I multiply one million (1,000,000) to the data in the PWT.

The constructed dataset covers 51 host countries for the years from 1985 to 2015. This data period is basically due to the availability of the OECD's employment protection indicators (EP), whereas the number of countries is limited due to the unavailability of some of the control variables other than the EP. Also note that the dataset is an "unbalanced panel": i.e., observations are not available for all the 51 countries in every year in the 31-year period. Table 1 presents the descriptive statistics of the variables contained in the dataset, and Table 2 shows the correlations between the variables.

## 4. Estimation Results

### 4.1. Results of Estimation 1

The first set of estimation is to test whether more flexible (or stricter) employment protection regulations in a host country promote inward FDI to the country, as described in Section 2.1. The empirical model specified by Equation (1.1), in which all the dummies are treated as fixed-effect terms, is estimated using the OLS regression (OLS-FE) and an instrument-variable approach through a two-stage least square (2SLS) regression with instruments for the employment protection measure (IV). The Arellano-Bond GMM (or simply the GMM) estimation of the dynamic-panel model specified by Equation (1.2) is also performed.

The results of the estimation are presented in Table 3. The first column of the table (after the very left column for the headings of the rows) shows the result of the OLS-FE, the second shows that of the IV, and the third shows the result of the GMM estimation. (Note that for the GMM the variables are all in the first-differenced form.) The coefficient estimate on the employment protection (EP) indicator is negative (-1.20) and statistically significant at the one-percent level in the OLS-FE estimation result, and this implies that a host country with more flexible (or less strict) employment

regulations has been likely to attract more inward FDI in the following year. The estimate indicates that the average effect of a *decrease* in the host country's EP indicator by one percent will be an increase in real inward FDI stock by 1.2 percent.[10] The IV estimation to address the issue of potential endogeneity in the EP gives a negative and significant estimate indicating an even greater impact, as shown in the second column. The result of the first-stage regression of the 2SLS estimation with the instruments for the EP indicator is presented in Table A1. The F-statistics exceeds 10, which indicates that the instruments should not be weak.[11] In addition, in the first-stage regression both of the two instruments, union density and collective-bargaining coverage, are estimated to have a negative and significant coefficient. This is consistent with the expectation since, as discussed in subsection 2.2, governments may react to a decrease in the unionization rate as well as the collective-bargaining coverage rate by strengthening labor protection regulations.[12, 13]

Finally, the result of the GMM estimation in the third column of Table 3 also indicates a negative and significant estimate for the coefficient on the EP-indicator term, which is consistent with the results from the other two estimation methods.

Regarding the estimated impacts of controls other than the EP indicator, the OLS estimation and IV estimation overall agree with the positive impact of real GDP and the negative impact of population, which should imply that a host country with a higher income level is more likely to attract inward FDI. The GMM estimation with a

[10] As shown in Table 1, the mean and standard deviation of the EP index are 2.20 and 0.835, respectively. If the EP index value decreased by one standard deviation from its mean, which is equivalent to a decrease by (0.835)/(2.2) ≃ 38 percent, the stock of inward FDI would increase by 46 percent.

[11] See Staiger and Stock (1997).

[12] Olney (2013) also obtains the coefficient estimate on union density that is negative and significant in terms of the impact on the employment protection regulations.

[13] I also perform the 2SLS estimation using only either one of the two instruments. The results are qualitatively the same as the one presented in Tables 3 and A1: i.e., the instrument (union density or collective-bargaining coverage) is estimated to affect negatively and significantly on the EP in the first-stage regression, and the instrumented EP is estimated to have a negative and significant coefficient in the second-stage regression for inward FDI. In both cases, the F-statistics of the first stage is above 10.

positive coefficient on population does not agree with this result, however. In addition, the estimation results by the three methods overall agree that the overall freedom regarding political rights and civil liberties in host countries contributes to an increase in inward FDI,[14] while the significance of the coefficient estimates vary across estimation methods. In terms of other variables (trade costs, labor skill levels, and real wages), the estimations do not obtain statistically significant coefficient estimates or do not agree in the signs of the coefficients, and thus the contributions of these factors to inward FDI are not clear.

*"Traditional" OECD Members vs. Other Countries*

Is the estimated impact of employment protection regulations on inward FDI a common trend among countries, or is it different across country groups? To address this question, I divide the sample countries in my dataset into two groups, the "traditional" OECD members and other countries, and examine whether the impact of employment protection regulations on inward FDI can differ between the two groups. The "traditional" OECD members are defined as those countries that had acceded to the OECD as of 1985, which is the first data year in the current dataset.[15] This separation is motivated by two reasons: one is because investors may have different motivations to FDI when the destination is a developed economy from when it is a developing or emerging economy; and another reason is because previous studies that use similar data on labor market regulations and obtain similar results primarily focus on the OECD countries. Table 4 lists the 24 "traditional" OECD members and other 27 countries in the current sample.

For this purpose, I extend Equation (1.1) by adding the interaction term

[14] Notice that a smaller score/value means a higher degree of freedom in the PR and CL indexes.

[15] Indeed, these members acceded to the OECD by early 1970s. The current members of the OECD that are not included in this "traditional" group are Mexico (joined in 1994) and other countries that joined after Mexico.

between the EP indicator and the dummy indicating the "traditional" OECD members (OECD24), as well as the analogous interaction terms with all of the other control variables, shown as the following Equation (1.3):

$$\ln(\text{iFDI})_{c,t} = \beta_1 \ln(\text{EP})_{c,t-1} + \beta_{12} \{\ln(\text{EP})_{c,t-1} \times \text{OECD24}\} + X_{c,t-1} \beta_2 + (X_{c,t-1} \times \text{OECD24}) \beta_{22} + \lambda_c + \theta_t + \varepsilon_{c,t} \quad (1.3)$$

The coefficient estimate on the interaction term between the EP indicator and the OECD24 dummy ($\beta_{12}$) will capture the potential difference in the impact of employment regulations for the "traditional" OECD members.

The results of the estimation of Equation (1.3) is presented in Table 5, in which the result of the OLS-FE estimation is shown in the first column following the variable headings and that of the IV (2SLS) estimation is in the second column. As indicated, estimation through both methods gives a coefficient estimate on the interaction term between the EP indicator and OECD24 dummy that is negative and significant both economically and statistically.[16] In contrast, the coefficient estimate on the EP indicator itself is negative but insignificant. This result implies that the effect of lax employment regulations on an increase in inward FDI is found for the "traditional" OECD members, whereas that effect or relationship is not clear for countries other than those traditional OECD countries. In other words, the result from the estimation with the whole sample in Table 3 is driven by these "traditional" OECD countries.[17,18]

[16] The OLS-FE estimate of the coefficient on the interaction term ($\beta_{12}$) nearly reaches the 10-percent significant level. The p-value of the estimate is 0.105.

[17] I also perform a similar exercise for the group of 30 OECD countries that acceded by the year 2000 and the group of other countries. The estimation result provides no evidence indicating difference in the tested effect of the employment regulations on inward FDI between those 30 OECD countries and other economies.

[18] Regarding the control variables other than the EP indicator, the result of the IV estimation in Table 5 indicates that the contributions of a *lower* labor skill level and more freedom in political rights (higher value in the PR index) to an increase in inward FDI are also significant only for the traditional OECD countries but not for other countries.

### 4.2. Results of Estimation 2

The second set of estimation is also performed to test whether an increase in inward FDI contributes to the host country's domestic employment protection regulations becoming laxer (or stricter). As described in Section 2.2, Equation (2.1) is estimated using OLS-FE regression and a dynamic-panel version of the model expressed as Equation (2.2) is estimated using the GMM. Also as described in Section 2.2, two specifications are applied to both equations (all variables are in log scale in one, and only the stock of inward FDI and real GDP per capita are in log scale in the other), and the inward FDI variable is lagged by 1 through 4 years in the estimation of both equations.

The results of the OLS estimation of Equation (2.1) are shown in Tables 6 and 7. Table 6 presents the results of the estimation with the first specification (or specification (1), with all variables in log scale), and Table 7 presents those with the second specification (or specification (2), with only inward FDI and real GDP/cap in log scale). In each table the first through fourth columns (except for the very left column for headings) show the results with the one- through four-year lagged values of inward FDI stock, respectively. For both specifications, the estimation gives a negative coefficient estimate for all the lagged inward FDI. The coefficient estimates for all lags are almost equal in size, and are statistically significant at the one-percent or at least five-percent level. These results imply that an increase in inward FDI in an earlier period is likely to result in laxer (or less strict) employment protection regulations in later years. The estimated coefficient with specification (1) indicates that a one-percent increase in inward FDI stock will lower the value of the EP indicator by around 6 percent. This is equivalent to a decrease in the EP indicator by about 0.13 from its average value (2.20), which is consistent with the estimates for specification (2).

On the other hand, the results of the GMM estimation of the dynamic-panel model presented in Tables 8 and 9 indicate that this employment regulation loosening effect of an inward FDI increase may not emerge very soon but in a fair length of time.

The result of the estimation for specification (1) (Table 8) shows that the coefficient estimate on inward FDI is statistically significant (and negative) only for the two- or more-year lagged term (and the level of significance increases with a longer lag), and the result of the estimation for specification (2) (Table 9) shows that the coefficient estimate is negative and significant only for the 4-year lagged FDI but not significant for shorter lags.

Regarding the other factors than the stock of inward FDI, the estimation results agree only on the likelihood that a host country with a larger employment share in the industry sector will tighten its domestic employment protection regulations in a later year(s). The contributions of other variables are not evident.

Finally, analogously to the first set of estimation, I perform an exercise to examine possible difference in the impact of an increase in inward FDI on the strictness of employment protection regulations in the host country in a later year(s). In the same manner as what is done in the first estimation, I add to Equation (2.1) the interaction term between the lagged inward FDI stock and the dummy indicating the 24 "traditional" OECD countries, and estimate the resulted Equation (2.3) below to capture the difference in the impact as the estimated coefficient on the interaction term ($\sigma_{12}$).

$$EP_{c,t} = \sigma_1 \ln(iFDI)_{c,t-L} + \sigma_{12}\{\ln(iFDI)_{c,t-L} \times OECD24\} + S_{c,t-1}\sigma_2 + \psi_c + \eta_t + \zeta_{c,t} \qquad (2.3)$$

The result of the OLS-FE estimation of Equation (2.3) with specification (1) presented in Table 10 shows that the coefficient estimate on the interaction term is positive but not statistically significant for all the 1- through 4-year lagged terms. This implies that the employment regulation loosening impact of an inward FDI increase could be a little weaker for the "traditional" OECD members but unclear. On the other hand, the estimation result for specification (2) presented in Table 11 indicates that the coefficient estimate on the term is positive and statistically significant at the 5-percent (or at least 10-percent) level for every lagged term, but that the size of the positive coefficient is tiny compared to that on the (uninteracted) inward FDI stock. These

results imply that it should be a common tendency for both developed and developing countries that an increase in inward FDI stock may result in laxer (less strict) employment protection regulations in the host country in a later year, and that the impact could be weaker for the "traditional" OECD members but just marginally or negligibly.

## 5. Conclusion

Are inward FDI and its increase related to the domestic labor market conditions in the host economy? This is still an open question, as literature on this topic to date has provided mixed evidence: some studies indicate that an increase in inward FDI is associated with looser labor market conditions or regulations in the host country, some have rather found a correlation with stricter labor-market conditions, while others have found no systematic relationship between FDI and the host's labor-market conditions. This paper, using publicly accessible macro-level data, empirically addresses this question by testing the debated relationship between inward FDI and the host country's domestic labor conditions in both possible "causal" directions: i.e., testing (i) whether the domestic labor market flexibility—or strictness—in a host economy leads an increase in inward FDI to that country, and (ii) whether the labor market flexibility/strictness in an economy follows an increase in inward FDI to that country. The results of the first set of estimation to test the hypothesis (i) show that a host country with relaxed employment protection tends to attract more inward FDI, which is consistent with the findings in some recent studies. Moreover, the extended analysis indicates that this relationship between more flexible employment protection and FDI increases should chiefly be the case in the "traditional" OECD members but may not apply to other countries, which has not been detected by the previous studies that examine the relationship between employment regulations and inward FDI. On the

other hand, the results of the second set of estimation to test the hypothesis (ii) indicate that an increase in inward FDI could also result in loosened employment protection, while this impact may not be immediately obviate but could be more significant in a longer time horizon.

What brings the difference between the traditional developed economies and developing/emerging economies in the contribution of more flexible employment regulations to an increase in inward FDI, which is indicated by the first set of analyses, is not immediately clear. It may be because, as Davies and Vadlamannati (2013) point out, OECD countries tend to compete with each other in terms of labor-right laws whereas non-OECD countries do in terms of labor-right practices[19] (recall that the EP index used in the current study captures the strictness of rules and regulations on employment protection). It may also be due to difference in investors/multinationals and their motivations for FDI to those host countries, while it is hard to examine further in the current study that focuses on aggregate inward FDI and host countries' labor and economic conditions. It should thus be worthwhile to analyze the relationship between labor conditions and FDI in a bilateral context between the source and host economies of FDI, which will be a possible extension of the study.

[19] Although they do not directly test the relationship between labor conditions and FDI, Davies and Vadlamannati (2013) examine the spatial correlation of domestic labor-right conditions (mainly in terms of FACB rights) among neighboring countries.

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Table 1. Summary Statistics of Variables

| Variable | # obs. | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| EP | 834 | 2.20 | 0.835 | 0.26 | 5 |
| ln(iFDI) | 834 | 25.4 | 1.38 | 21.38 | 29.17 |
| ln(real GDP) | 834 | 27.0 | 1.33 | 22.24 | 30.39 |
| ln(Population) | 834 | 16.8 | 1.37 | 12.55 | 20.95 |
| ln(trade costs) | 834 | 0.434 | 0.521 | -1.25 | 1.831 |
| ln(skill level) | 834 | 1.11 | 0.154 | 0.587 | 1.317 |
| ln(real wages) | 834 | 2.99 | 0.763 | -0.4049 | 4.169 |
| industry employment share | 715 | 0.264 | 0.055 | 0.1204 | 0.4354 |
| manufacturing V.A. share | 724 | 0.163 | 0.046 | 0.0476 | 0.2913 |
| PR index | 834 | 1.26 | 0.749 | 1 | 6 |
| CL index | 834 | 1.53 | 0.868 | 1 | 5 |
| union density | 749 | 0.326 | 0.205 | 0.034 | 0.8887 |
| collective-bargaining coverage | 777 | 0.579 | 0.306 | 0.014 | 1 |

Notes: The summary statistics are based on the observations included in the dataset constructed and used for the estimation. EP denotes the OECD indicator of employment protection, and iFDI denotes the stock of inward FDI, as indicated in the main text.

Table 2. Correlations between the Variables

| | ln(EP) | ln(iFDI) | ln(rGDP) | ln(pop.) | ln(tr.cst.) | ln(sk.lv.) | ln(r.wg.) | ln(PR) | ln(CL) | ln(u.d.) | ln(cb.cv.) | ln(i.e.s.) | ln(m.v.s.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ln(EP) | 1.000 | | | | | | | | | | | | |
| ln(iFDI) | -0.464 | 1.000 | | | | | | | | | | | |
| ln(real GDP) | -0.397 | 0.730 | 1.000 | | | | | | | | | | |
| ln(population) | -0.267 | 0.565 | 0.885 | 1.000 | | | | | | | | | |
| ln(trade costs) | -0.340 | 0.152 | 0.650 | 0.672 | 1.000 | | | | | | | | |
| ln(skill level) | -0.372 | 0.248 | 0.110 | -0.139 | -0.154 | 1.000 | | | | | | | |
| ln(real wages) | -0.229 | 0.326 | 0.236 | -0.226 | -0.033 | 0.439 | 1.000 | | | | | | |
| ln(PR index) | 0.142 | -0.118 | 0.034 | 0.331 | 0.168 | -0.518 | -0.621 | 1.000 | | | | | |
| ln(CL index) | 0.185 | -0.155 | 0.163 | 0.466 | 0.311 | -0.503 | -0.608 | 0.738 | 1.000 | | | | |
| ln(union density) | 0.125 | -0.258 | -0.270 | -0.478 | -0.123 | 0.124 | 0.465 | -0.261 | -0.289 | 1.000 | | | |
| ln(collective-brg. coverage) | 0.334 | -0.018 | -0.110 | -0.371 | -0.157 | 0.041 | 0.646 | -0.516 | -0.444 | 0.591 | 1.000 | | |
| ln(industry employ. share) | 0.331 | -0.328 | -0.073 | 0.107 | 0.024 | -0.008 | -0.318 | -0.068 | 0.181 | -0.079 | 0.009 | 1.000 | |
| ln(manufactur-ing v.a. share) | 0.174 | -0.285 | -0.024 | 0.153 | -0.045 | -0.087 | -0.372 | 0.171 | 0.317 | -0.111 | -0.263 | 0.615 | 1.000 |

Notes: The variable correlations are based on the observations included in the dataset constructed and used for the estimation. EP denotes the OECD indicator of employment protection, and iFDI denotes the stock of inward FDI, as indicated in the main text.

Table 3. Results of Estimation 1: Impact of Employment Protection on Inward FDI

| *Dependent variable:* iFDI stock, real | (1) OLS-FE | (2) IV | (3) GMM |
|---|---|---|---|
| EP | -1.20*** | -3.47*** | -0.457** |
| | (.435) | (.574) | (.197) |
| Real GDP | 0.433 | 0.439* | 0.030 |
| | (.619) | (.255) | (.216) |
| Population | -1.46 | -1.03* | 1.08** |
| | (.781) | (.574) | (.497) |
| Trade costs | -0.265 | 0.208 | -0.085 |
| | (.178) | (.194) | (.108) |
| Labor skill level | -1.04 | -3.95*** | 0.739 |
| | (2.08) | (.952) | (.731) |
| Real wages | -0.032 | 0.403* | 0.078 |
| | (.350) | (.232) | (.213) |
| PR | -0.364* | -0.158 | -0.023 |
| | (.184) | (.113) | (.064) |
| CL | -0.063 | 0.042 | -0.105** |
| | (.124) | (.061) | (.051) |
| iFDI stock, lagged | | | 0.749*** |
| | | | (.046) |
| Country dummies | Yes | Yes | (suppressed) |
| Year dummies | Yes | Yes | Yes |
| $R^2$, within (overall) | .877 (.006) | .867 (.176) | |
| No. of observations | 833 | 714 | 780 |

Notes: The notations of the variables and estimation methods are as explained in the main text. The standard error (the clustered for the OLS-FE estimation) is reported in parentheses below each coefficient estimate. All the explanatory variables are of that in one previous year (lagged). The variables for the GMM estimation are all first-differenced. *, **, and *** indicate the significance at the level of 10%, 5%, and 1%, respectively.

Table 4. List of Sample Countries, “Traditional” OECD Members vs. Other Countries

| “Traditional” OECD Members (24 countries) | Other countries (27 countries) |
|---|---|
| Australia | Argentina |
| Austria | Brazil |
| Belgium | Barbados |
| Canada | Chile |
| Switzerland | Colombia |
| Germany | Costa Rica |
| Denmark | Czech Republic |
| Spain | Ecuador |
| Finland | Estonia |
| France | Hungary |
| United Kingdom | Indonesia |
| Greece | India |
| Ireland | Israel |
| Iceland | Jamaica |
| Italy | South Korea |
| Japan | Lithuania |
| Luxemburg | Latvia |
| Netherlands | Mexico |
| Norway | Malaysia |
| New Zealand | Peru |
| Portugal | Poland |
| Sweden | Russia |
| Turkey | Slovakia |
| United States | Slovenia |
| | Thailand |
| | Uruguay |
| | South Africa |

Notes: The “traditional” OECD members are the countries that had acceded to the OECD by 1985, the first year in the current dataset.

Table 5. Estimation 1, Results of Estimation with Interaction Terms with a Dummy for the "Traditional" OECD Members

| *Dependent variable:* iFDI stock, real | (1) OLS-FE | (2) IV |
|---|---|---|
| EP | -0.290 | -0.414 |
| | (.375) | (.958) |
| EP * OECD24 | -1.09 | -4.40*** |
| | (.658) | (.978) |
| Real GDP | 0.585 | 0.256 |
| | (.373) | (.613) |
| Real GDP * OECD24 | -0.365 | 0.127 |
| | (.749) | (.649) |
| Population | 0.157 | 1.12 |
| | (1.03) | (1.37) |
| Population * OECD24 | -1.47 | -1.65 |
| | (1.58) | (1.50) |
| Trade costs | 0.027 | 0.109 |
| | (.225) | (.313) |
| Trade costs * OECD24 | -0.180 | 0.383 |
| | (.311) | (.317) |
| Labor skill level | -1.48 | -0.707 |
| | (2.56) | (1.90) |
| Labor skill * OECD24 | -0.397 | -5.06** |
| | (3.07) | (2.01) |
| Real wages | 0.362 | 0.454 |
| | (.339) | (.486) |
| Real wages * OECD24 | -0.520 | 0.215 |
| | (.602) | (.528) |
| PR | -0.245 | 0.183 |
| | (.267) | (.173) |
| PR * OECD24 | 0.093 | -0.520** |
| | (.372) | (.213) |
| CL | -0.137 | 0.026 |
| | (.138) | (.147) |
| CL * OECD24 | 0.130 | 0.054 |
| | (.190) | (.155) |
| Country dummies | Yes | Yes |
| Year dummies | Yes | Yes |
| $R^2$, within (overall) | .883 (.039) | .903 (.007) |
| No. of observations | 833 | 714 |

Notes: OECD24 indicates the dummy indicating 24 "traditional" OECD members. The notations of other variables and estimation methods are as explained in the main text. The standard error (the clustered for the OLS-FE estimation) is reported in parentheses below each coefficient estimate. All the explanatory variables are of that in one previous year (lagged). *, **, and *** indicate the significance at the level of 10%, 5%, and 1%, respectively.

Table 6. Estimation 2: Impact of Inward FDI Increase on Employment Protection, Result of OLS-FE Estimation, Specification (1)

| *Dependent variable:* ln(EP) | 1-year lag | 2-year lag | 3-year lag | 4-year lag |
|---|---|---|---|---|
| ln(iFDI stock, real) | -0.059** (.025) | -0.062*** (.021) | -0.061*** (.018) | -0.054*** (.019) |
| ln(real GDP/cap) | -0.022 (.112) | -0.009 (.107) | -0.002 (.104) | -0.011 (.101) |
| ln(industry emp. share) | 0.206* (.106) | 0.207* (1.05) | 0.204* (.107) | 0.197* (.111) |
| ln(mfg. v.a. share in GDP) | -0.241*** (.084) | -0.247*** (.080) | -0.254*** (.077) | -0.265*** (.078) |
| ln(PR) | 0.009 (.030) | 0.006 (.029) | 0.003 (.029) | 0.005 (.028) |
| ln(CL) | -0.002 (.025) | 0.001 (.024) | 0.003 (.023) | 0.001 (.023) |
| ln(union density) | -0.011 (.059) | -0.008 (.059) | -0.014 (.060) | -0.020 (.064) |
| ln(col.bgrn. coverage) | -0.016 (.082) | -0.017 (.087) | -0.020 (.093) | -0.024 (.101) |
| Country dummies | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| $R^2$, within | 0.331 | 0.337 | 0.338 | 0.331 |
| No. of observations | 591 | 589 | 587 | 585 |

Notes: The notations of the variables are as explained in the main text. The clustered standard error is reported in parentheses below each coefficient estimate. *, **, and *** indicate the significance at the level of 10%, 5%, and 1%, respectively.

Table 7. Estimation 2: Impact of Inward FDI Increase on Employment Protection, Result of OLS-FE Estimation, Specification (2)

| *Dependent variable:* EP | 1-year lag | 2-year lag | 3-year lag | 4-year lag |
|---|---|---|---|---|
| ln(iFDI stock, real) | -0.131*** | -0.137*** | -0.139*** | -0.126*** |
| | (.036) | (.033) | (.032) | (.037) |
| ln(real GDP/cap) | -0.273 | -0.240 | -0.206 | -0.219 |
| | (.217) | (.204) | (.201) | (.193) |
| industry emplymnt. share | 2.88*** | 2.87*** | 2.87*** | 2.84** |
| | (1.04) | (1.04) | (1.05) | (1.08) |
| manufg. v.a. share in GDP | -1.98* | -2.14** | -2.29** | -2.43** |
| | (1.04) | (1.02) | (.988) | (.997) |
| PR | 0.021 | 0.015 | 0.011 | 0.013 |
| | (.027) | (.027) | (.028) | (.029) |
| CL | -0.009 | -0.000 | 0.004 | 0.002 |
| | (.030) | (.030) | (.029) | (.031) |
| union density | -0.159 | -0.159 | -0.206 | -0.250 |
| | (.343) | (.384) | (.400) | (.443) |
| colctv.Bgrn. coverage | 0.027 | 0.006 | -0.015 | -0.058 |
| | (.376) | (.389) | (.410) | (.435) |
| Country dummies | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| $R^2$, within | 0.342 | 0.348 | 0.352 | 0.346 |
| No. of observations | 591 | 589 | 587 | 585 |

Notes: The notations of the variables are as explained in the main text. The clustered standard error is reported in parentheses below each coefficient estimate. *, **, and *** indicate the significance at the level of 10%, 5%, and 1%, respectively.

Table 8. Estimation 2: Impact of Inward FDI Increase on Employment Protection, Result of Dynamic-panel GMM Estimation, Specification (1)

| *Dependent variable:* ln(EP) | 1-year lag | 2-year lag | 3-year lag | 4-year lag |
|---|---|---|---|---|
| ln(iFDI stock, real) | 0.008<br>(.011) | -0.017*<br>(.009) | -0.015**<br>(.007) | -0.024**<br>(.009) |
| ln(real GDP/cap) | -0.011<br>(.068) | 0.022<br>(.071) | 0.023<br>(.070) | 0.036<br>(.068) |
| ln(industry emp. share) | 0.142<br>(.104) | 0.126<br>(.102) | 0.129<br>(.101) | 0.130<br>(.097) |
| ln(mfg. v.a. share in GDP) | -0.083<br>(.056) | -0.073<br>(.051) | -0.080<br>(.052) | -0.077<br>(.049) |
| ln(PR) | -0.017<br>(.014) | -0.014<br>(.012) | -0.016<br>(.012) | -0.018<br>(.012) |
| ln(CL) | -0.005<br>(.007) | 0.000<br>(.007) | 0.000<br>(.006) | 0.001<br>(.006) |
| ln(union density) | 0.031<br>(.037) | 0.027<br>(.039) | 0.026<br>(.039) | 0.026<br>(.039) |
| ln(col.bgrn. coverage) | 0.035<br>(.023) | 0.036<br>(.022) | 0.039*<br>(.023) | 0.040*<br>(.023) |
| ln(EP), lagged | 0.682***<br>(.088) | 0.667***<br>(.087) | 0.657***<br>(.085) | 0.655***<br>(.084) |
| Country dummies | (suppressed) | (suppressed) | (suppressed) | (suppressed) |
| Year dummies | Yes | Yes | Yes | Yes |
| No. of observations | 508 | 506 | 504 | 502 |

Notes: The notations of the variables are as explained in the main text. The variables are all first-differenced. The standard error is reported in parentheses below each coefficient estimate. *, **, and *** indicate the significance at the level of 10%, 5%, and 1%, respectively.

Table 9. Estimation 2: Impact of Inward FDI Increase on Employment Protection, Result of Dynamic-panel GMM Estimation, Specification (2)

| *Dependent variable:* EP | 1-year lag | 2-year lag | 3-year lag | 4-year lag |
|---|---|---|---|---|
| ln(iFDI stock, real) | 0.037<br>(.032) | -0.036<br>(.024) | -0.028<br>(.018) | -0.048**<br>(.024) |
| ln(real GDP/cap) | -0.132<br>(.187) | -0.059<br>(.190) | -0.064<br>(.182) | -0.029<br>(.175) |
| industry emplymnt. share | 2.17**<br>(.940) | 1.96**<br>(.851) | 2.03**<br>(.867) | 2.01**<br>(.819) |
| manufg. v.a. share in GDP | -0.075<br>(.536) | 0.015<br>(.521) | -0.063<br>(.560) | -0.103<br>(.556) |
| PR | -0.003<br>(.016) | -0.001<br>(.014) | -0.004<br>(.014) | -0.008<br>(.014) |
| CL | -0.010<br>(.016) | -0.002<br>(.018) | 0.001<br>(.016) | 0.003<br>(.014) |
| union density | 0.424*<br>(.246) | 0.274<br>(.280) | 0.286<br>(.263) | 0.243<br>(.263) |
| colctv.Bgrn. coverage | 0.243<br>(.220) | 0.266<br>(.214) | 0.271<br>(.221) | 0.292<br>(.223) |
| ln(EP), lagged | 0.737***<br>(.188) | 0.713***<br>(.188) | 0.707***<br>(.189) | 0.703***<br>(.190) |
| Country dummies | (suppressed) | (suppressed) | (suppressed) | (suppressed) |
| Year dummies | Yes | Yes | Yes | Yes |
| No. of observations | 508 | 506 | 504 | 502 |

Notes: The notations of the variables are as explained in the main text. The variables are all first-differenced. The standard error is reported in parentheses below each coefficient estimate. *, **, and *** indicate the significance at the level of 10%, 5%, and 1%, respectively.

Table 10. Estimation 2, Result of OLS-FE Estimation with Interaction Term with a Dummy for the "Traditional" OECD Members, Specification (1)

| *Dependent variable:* ln(EP) | 1-year lag | 2-year lag | 3-year lag | 4-year lag |
|---|---|---|---|---|
| ln(iFDI stock, real) | -0.085*** | -0.084*** | -0.084*** | -0.074*** |
| | (.029) | (.026) | (.024) | (.024) |
| ln(iFDI) * OECD24 | 0.031 | 0.026 | 0.026 | 0.024 |
| | (.020) | (.020) | (.018) | (.017) |
| ln(real GDP/cap) | 0.031 | 0.038 | 0.053 | 0.041 |
| | (.113) | (.104) | (.097) | (.093) |
| ln(industry emp. share) | 0.195** | 0.199** | 0.197** | 0.193* |
| | (.093) | (.095) | (.098) | (.104) |
| ln(mfg. v.a. share in GDP) | -0.223** | -0.232*** | -0.237*** | -0.249*** |
| | (.084) | (.081) | (.080) | (.081) |
| ln(PR) | -0.006 | -0.010 | -0.012 | -0.009 |
| | (.033) | (.034) | (.033) | (.033) |
| ln(CL) | -0.008 | -0.005 | -0.003 | -0.006 |
| | (.024) | (.023) | (.022) | (.021) |
| ln(union density) | -0.028 | -0.023 | -0.030 | -0.035 |
| | (.060) | (.059) | (.059) | (.063) |
| ln(col.bgrn. coverage) | -0.015 | -0.016 | -0.018 | -0.022 |
| | (.082) | (.086) | (.093) | (.100) |
| Country dummies | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| $R^2$, within | 0.340 | 0.344 | 0.346 | 0.338 |
| No. of observations | 591 | 589 | 587 | 585 |

Notes: OECD24 indicates the dummy indicating 24 "traditional" OECD members. The notations of other variables are as explained in the main text. The clustered standard error is reported in parentheses below each coefficient estimate. *, **, and *** indicate the significance at the level of 10%, 5%, and 1%, respectively.

Table 11. Estimation 2, Result of OLS-FE Estimation with Interaction Term with a Dummy for the "Traditional" OECD Members, Specification (2)

| *Dependent variable:* EP | 1-year lag | 2-year lag | 3-year lag | 4-year lag |
|---|---|---|---|---|
| ln(iFDI stock, real) | -0.202*** | -0.197*** | -0.198*** | -0.178*** |
| | (.044) | (.043) | (.043) | (.046) |
| ln(iFDI) * OECD24 | 0.082*** | 0.074** | 0.071** | 0.068** |
| | (.037) | (.036) | (.035) | (.036) |
| ln(real GDP/cap) | -0.101 | -0.077 | -0.028 | -0.044 |
| | (.223) | (.208) | (.200) | (.197) |
| industry emplymnt. share | 2.72*** | 2.76*** | 2.76*** | 2.78*** |
| | (.902) | (.921) | (.942) | (.996) |
| manufg. v.a. share in GDP | -1.63 | -1.83* | -1.95* | -2.11** |
| | (1.04) | (1.04) | (1.02) | (1.04) |
| PR | 0.007 | 0.001 | -0.001 | 0.002 |
| | (.027) | (.028) | (.029) | (.030) |
| CL | -0.019 | -0.009 | -0.005 | -0.008 |
| | (.028) | (.028) | (.027) | (.029) |
| union density | -0.234 | -0.193 | -0.231 | -0.257 |
| | (.351) | (.382) | (.403) | (.454) |
| colctv.bgrn. coverage | -0.010 | -0.038 | -0.053 | -0.093 |
| | (.364) | (.377) | (.396) | (.420) |
| Country dummies | Yes | Yes | Yes | Yes |
| Year dummies | Yes | Yes | Yes | Yes |
| $R^2$, within | 0.356 | 0.360 | 0.364 | 0.357 |
| No. of observations | 591 | 589 | 587 | 585 |

Notes: OECD24 indicates the dummy indicating 24 "traditional" OECD members. The notations of the variables are as explained in the main text. The clustered standard error is reported in parentheses below each coefficient estimate. *, **, and *** indicate the significance at the level of 10%, 5%, and 1%, respectively.

Table A1. Estimation 1, Result of the First-stage Regression of the IV (2SLS) Estimation

| *Dependent variable:* EP indicator | |
|---|---|
| *Instrument variables:* | |
| union density | -0.118*** (.023) |
| collective-bargaining coverage | -0.077*** (.022) |
| *Control variables:* | |
| real GDP | -0.182*** (.053) |
| population | 0.384*** (.114) |
| trade costs | 0.266*** (.028) |
| labor skill level | -1.06*** (.142) |
| real wages | 0.052 (.047) |
| PR | 0.006 (.024) |
| CL | -0.009 (.013) |
| Country dummies | Yes |
| Year dummies | Yes |
| $R^2$, within (overall) | .399 (.036) |
| No. of observations | 714 |
| F-statistics | 10.99 |

Notes: The notations of the variables are as explained in the main text. All variables are in logarithmic scale. The standard error (the clustered for the OLS-FE estimation) is reported in parentheses below each coefficient estimate. *, **, and *** indicate the significance at the level of 10%, 5%, and 1%, respectively.