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Abstract

Recent studies have identified the tendency of host countries with flexible labor markets or lax employment protection to attract more foreign direct investment (FDI). However, most such studies have examined the relationship between the strictness of labor regulations in individual countries and their aggregated inward FDI. This study investigates the extent to which FDI is attracted by labor market flexibility, with a focus on host countries' institutional flexibility in employment adjustment and their *relative* flexibility compared to investor firms' home countries, through an empirical analysis using a unique dataset constructed with bilateral data on FDI between a large number of both developed and developing countries and various indicators concerning labor market regulations in those countries. The result suggests the following: (i) what primarily matters is the (absolute) flexibility in the host country, that is, a country with a greater degree of flexibility in labor regulations or employment adjustment tends to draw larger FDI inflow; (ii) the impact of a host country's relative flexibility compared to the FDI source country may be secondary, particularly in the case of the stock of FDI; and (iii) there is some evidence of the "anchorage effect" of a source country's labor market regulations, which implies that *in*flexibility in employment adjustment or strict labor regulations could discourage outward FDI from the country.

Keywords: Foreign direct investment, Labor market flexibility, Labor regulations, Employment adjustment

JEL classification: F16, F21, F23, F66, J80

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1. Introduction

The impact of economic globalization on domestic labor conditions in countries engaged in trade and/or foreign direct investment (FDI) has been debated intensively, particularly from the perspective of or concerns about its possible negative impacts on domestic labor conditions (e.g., a "race to the bottom" in the context of deteriorating labor conditions to attract the investment of multinationals seeking opportunities to reduce labor costs). However, as there is a growing demand for present-day multinational enterprises to be socially responsible (or "ethical"), lax labor standards in host countries might discourage investment from such multinationals.

Thus, the question rises whether local labor conditions in countries matter for FDI. If the answer is positive, it remains to be seen in what way and to what degree. Though these questions have been repeatedly examined in the literature, a consensus is yet to be reached for an answer. Relatively early pieces of empirical work in this domain (e.g., Aggarwal (1995), Rodrik (1996), Kucera (2002), Neumayer & de Soysa (2006), Mosley & Uno (2007), and Teitlebaum (2010)) have investigated the relationship between local labor standards, including rights to freedom of association and collective bargaining (FACB rights), in host countries and FDI into such countries, and most of them have failed to identify a systematic relationship between them, at least in a manner that is considered negative among the public. In contrast, recent studies such as Javorcik & Spatareanu (2005), Davies & Vadlamannati (2013), Olney (2013), and Kamata (2020) have examined the relationship between the employment-related legislation of host countries and their inward FDI, and have pointed toward the tendency that the more a host country has lax regulations on employment protection, the larger is the volume of inward FDI it attracts. Dewit et al. (2009) and Dewit et al. (2013) have focused on the employment protection legislation of the source countries of FDI and highlighted the possibility of an "anchorage effect" of the source's domestic labor protection: that is, strict labor regulations in investors' home country can hinder outward FDI from the

country.

This study aims to provide new (or at least additional) empirical evidence on the relationship between FDI and domestic labor conditions by examining labor market flexibility in both FDI host and source countries with bilateral data on FDI between a large number of countries. Especially for host countries, their individual labor market flexibility per se (or "absolute" flexibility) as well as *relative* flexibility—that is, to what degree the host country's labor market is flexible compared to its FDI partner (the source country)—are considered. This research focuses on flexibility in employment adjustment, which should be important to firms considering or making FDI for possible relocation and/or reallocation of business activities in response to changes in the conditions of markets and economy. To this end, various sources of information are consulted to collect various indicators of labor market flexibility in both FDI host and source countries. By also adding information on the countries' other economic and institutional conditions, a rich dataset covering about 150 countries and spanning the period from 1995 onward is compiled, whereas a subset covering years between 2003 and 2019 is actually used for analysis due to the availability of the variables of interest. Using (the subset of) this dataset, an empirical model of the determination of bilateral FDI is estimated. The results indicate the following: First, labor market flexibility in a host country in the absolute sense should be important for inward FDI, and a greater degree of flexibility in employment adjustment attracts larger FDI in the host country. Second, in contrast to absolute flexibility, relative labor-market flexibility between a host and a source country may be minor or secondary in terms of the impact on FDI volume, particularly in the case of the stock of FDI. Third, there is also evidence of the "anchorage effect" of labor market *in*flexibility in an FDI source: outward FDI tends to be smaller when the source country protects employment more strictly.

This study contributes to the literature on the topic of FDI and labor market or labor conditions in the following ways: First, it examines the significance (or

insignificance) of not only a host country's (individual or absolute) labor-market flexibility but also the relative flexibility between the host and source countries of FDI, which has been little explored to date. Most existing studies focus on a country's labor-market conditions and the aggregated inward (or outward) FDI in/from the country, partially because, unlike trade data, bilateral FDI data are not widely available in a readily usable form. Though a few studies have used data on a certain country or group of countries that record FDI partners to trace bilateral FDI flows, this method limits the number and variety of countries in a sample. This study takes advantage of bilateral FDI data sourced from the OECD's unique database from which bilateral FDI between a large number and wide variety of countries can be tracked. Second, this study introduces varieties into the indicators of labor market institutions. The existing studies on this topic almost solely rely on the OECD's Indicators of Employment Protection Legislation. Though these indicators are well-recognized (and indeed this study also uses the OECD data as one of the labor-institution indicators), the range of country coverage tends to be limited. By consulting other sources of information for alternative labor-institution variables, this study includes a wider variety of countries in its analysis, and also evaluates labor-market flexibility in the countries based on various indicators.

This study also relates to the gravity-type analyses of FDI. Studies such as Head & Ries (2005, 2008), Hoshi & Kiyota (2019), and Greaney & Kiyota (2020) use a gravity model of bilateral FDI for the purpose of prediction and counterfactual analysis. Other studies such as Kimino, Saal, & Driffield (2007), Blonigen & Piger (2014), Kahouli & Maktouf (2015), Román, Bengoa, & Sánchez-Robles (2016), and Frenkel & Walter (2019) examine the impact(s) of a certain factor(s) on FDI. This study is more directly related to the latter group of studies as it examines the effect of a particular factor—labor market flexibility—on FDI between countries.

The remainder of the paper proceeds as follows. Section 2 presents the hypotheses about the relationship between FDI and labor-market flexibility in host and

source countries and describes the empirical model of the study. Section 3 describes the data and their sources used for the analysis. Section 4 presents the results of estimation with the stock of FDI as the benchmark, and Section 5 extends the analysis to FDI flows. Section 6 concludes the paper with a discussion of the empirical findings.

2. Empirical Model

2.1. Hypotheses

In this study, labor market flexibility is considered from the perspective of flexibility in employment adjustment (i.e., flexibility in employing and dismissing workers). Local labor market flexibility in both host and source countries, as well as the relative flexibility between the host market and the source market, are expected to affect FDI between the two countries in the following ways: First, a host country with a higher degree of labor market flexibility is expected to attract larger inward FDI, as investor firms can make employment adjustment to potential shocks to their business more flexibly or with lower costs. Second, outward FDI is expected to be greater from a source country with a higher degree of labor market flexibility, as investor firms can more flexibly make employment adjustments in their home country in the context of the relocation/reallocation of their business activities to a foreign country. This is the reverse view of the "anchorage effect" of stricter labor protection in source countries proposed by Dewit et al. (2009, 2013), suggesting that a lower degree of labor market flexibility in a source country discourages its outward FDI, as investor firms are demanded greater costs for employment adjustment associated with business re(al)location. Finally, a host with a higher degree of relative labor market flexibility compared to a source country is expected to attract larger inward FDI from that source, as investor firms in the source country expect employment adjustment required in business to be easier or with lower costs in the host country than that in their home.

These are the three hypotheses to be tested in the following empirical analysis.

2.2. Specification

To test the hypotheses presented above, the following empirical model (equation) of the determination of FDI is considered:

$$\begin{aligned}\ln(\mathrm{iFDI}_{ijt}) = {} & \beta_1 \mathrm{LF}_{i,t\text{-}1} + \beta_2 \mathrm{LF}_{j,t\text{-}1} + \beta_3 \mathrm{RLF}_{ij,t\text{-}1} \\ & + \gamma_1 \ln(\mathrm{GDPpc}_{it}) + \gamma_2 \ln(\mathrm{GDPpc}_{jt}) + \gamma_3 \ln(\mathrm{Population}_{it}) + \gamma_4 \ln(\mathrm{Population}_{jt}) \\ & + \mathrm{X}_{i,t\text{-}1}\cdot\delta + \eta\, \mathrm{IIA}_{ij,t\text{-}1} + \theta_i + \lambda_j + \sigma_{ij} + \mu_t + \varepsilon_{ijt}\,. \qquad (1)\end{aligned}$$

The variable on the left-hand side of the equation, iFDI_{ijt}, indicates *inward* FDI *to a host country i from a source country j* in a year *t*. The primary measure of this is the stock of inward FDI in the host *i* from source *j*; while the equation is also used to examine the flow of inward FDI, as described in Section 5.

The variables LF_i and LF_j on the right-hand side is an indicator of labor market flexibility in a host *i* and source *j*, respectively. As explained in the next section, four different indicators of the degree of flexibility in employment adjustment are used and the equation estimated with each of those four indicators. Another variable of labor market flexibility RLF_{ij} is the *relative* flexibility in the host *i* to source *j* defined as the ratio of the *i*'s index to *j*'s, or $\mathrm{LF}_i/\mathrm{LF}_j$. These three variables are of the main interest in testing the hypotheses. In addition, these variables are lagged by one period to examine the impact on inward FDI in a certain year *t* of the labor-market flexibility in the host and source countries as of the preceding year *t*-1.

The rest of the variables on the right-hand side of the equation is to control for other potential factors that might affect FDI to a host *i* to source *j*. The per-capita GDP (GDPpc) and populations of the host *i* and source *j* (in a current year *t*) are included to control for the sizes of the economies of both countries, as commonly done in the empirical literature on bilateral FDI. X_i is the vector of a set of economic and institutional factors in the host country *i*, and based on but extended from Kamata

(2020), it includes the following indicators: labor skill level, real wage, business entry cost, the indexes of political rights and civil liberties, and the five indexes of competitiveness (economic performance, government efficiency, business legislation, business efficiency, and infrastructure). These variables in the vector X_i are also lagged by one year to see their impacts as of the year preceding FDI. In addition, the equation includes a dummy variable $IIA_{ij,t-1}$ that takes the value one (and zero otherwise) if both host *i* and source *j* are the members of a common international investment agreement, which is either a bilateral investment treaty (BIT) or a treaty with investment provisions (TIP), as of the year preceding FDI (*t*-1). The equation also includes dummies θ_i, λ_j, and σ_{ij} to control for other unobservable time-invariant host-specific, source-specific, and host-source pair-specific factors, as well as a set of year dummies μ_t to capture time-specific shocks common to all countries. Finally, ε_{ijt} indicates idiosyncratic errors.

Before the estimation, the equation is reconsidered based on a couple of points. The first is the scale of FDI. As with many other macroeconomic variables, FDI values are heavily skewed in terms of the distribution toward small values. A conventional approach commonly employed in literature is to use the natural logarithm of the original value in estimating a linear model, as proposed in Equation (1). However, as also frequently pointed out, logarithmic transformation drops observations with the value of zero, which can cause a bias in estimation especially when the sample contains a number of such zero-valued observations. This actually applies to bilateral FDI as a considerable number of country pairs have no FDI with each other, at least in a certain year(s). Thus, an alternative approach is employed based on Frenkel and Walter (2019), which uses the hyperbolic sine (HS) transformation of the original value of bilateral FDI. As explained in their paper, this method transforms zero to zero, and the transformed value well approximates the natural logarithm of the original value when the original value is positive.[1] The second point of reconsideration is the measure of relative labor

[1] See Section 4 and Figure 3 in Frenkel and Walter (2019).

market flexibility of a host country compared to a source country (RLF_{ijt}). To test the hypothesis, the estimation aims to examine whether inward FDI is larger when the labor market is more flexible in the host country than in the source *and* when the degree of the relative flexibility of the host to the source is greater. However, the impact of the relative flexibility, which is defined as the ratio of a flexibility indicator for the host to that for the source, could be different when the labor market is more flexible rather in the source country than the host. Therefore, to distinguish the former case (which is of interest to this study) from the latter, a dummy variable indicating if the host is more flexible than the source in its labor market (taking the value one) or not (zero) is created, and the interaction term of this dummy and the relative flexibility indicator is added.[2] The equation is thus modified from the above-presented (1) to the following (2), which is to be actually estimated.

$$\begin{aligned} iFDI^{h}_{ijt} = {} & \beta_1 LF_{i,t-1} + \beta_2 LF_{j,t-1} + \beta_3 RLF_{ij,t-1} + \beta_4 RLF_{ij,t-1} \times D_{ij,t-1} \\ & + \gamma_1 \ln(GDPpc_{it}) + \gamma_2 \ln(GDPpc_{jt}) + \gamma_3 \ln(Population_{it}) + \gamma_4 \ln(Population_{jt}) \\ & + X_{i,t-1} \cdot \delta + \eta\, IIA_{ij,t-1} + \theta_i + \lambda_j + \sigma_{ij} + \mu_t + \varepsilon_{ijt}\,, \end{aligned} \tag{2}$$

where $iFDI^{h}_{ijt}$ is the HS-transformed value of inward FDI that is defined as $iFDI^{h}_{ijt} = \ln[iFDI_{ijt} + (iFDI^{2}_{ijt} + 1)^{0.5}]$; and $D_{ijt} = 1$ if the value of LF_{it} indicates a higher degree of flexibility than that of LF_{jt} (and $D_{ijt} = 0$ otherwise).

3. Data

This section describes the data and their sources used for estimating Equation (2).

Bilateral FDI data are sourced from the OECD's *International Direct Investment Statistics*. For each of the stock and flow measures of FDI, data on the "total

[2] As a smaller value indicates a higher degree of flexibility in some labor-market indicators whereas the opposite applies to the others, the dummy for each indicator is created to indicate that the labor market is more flexible in the host than in the source. Section 4 describes this in further details.

FDI by partner" in the millions of US dollars are used. In the datasets, "reporters" are only OECD member countries whereas "partners," in principle, span countries in the whole world. Therefore, the inward FDI data have been used for OECD host countries, whereas for non-OECD host countries, the outward FDI data reported by the OECD members as the source countries are used. This way bilateral FDI data between the pairs of a wide variety of countries are collected.[3] The FDI data, which span the period from 1985 through 2020, comprise a combination of two sets of data. One set is based on the third edition of the OECD's Benchmark Definition of Foreign Direct Investment (BMD3), and the data are available for the years 1985 through 2013. The other set of data is based on the fourth edition (BMD4) and span the years from 2005 to 2020. The two sets overlap for the period between 2005 and 2020. In most cases, the data are reported only in either set (data are missing in another set) or the data reported in the two sets agree. However, for a few cases, the data are reported in both sets with discrepancy, and for those cases, the ones with the larger value are considered. Moreover, the cases for which negative FDI value is reported are omitted (i.e., treat them as missing), as done by Hoshi and Kiyota (2019).

For the measure of labor-market flexibility in countries, four different indicators from three different sources are employed. An advantage of sourcing the indicators from multiple sources is that it affords a larger variety in FDI host and source countries with more data-available years in the sample. The first indicator is sourced from the OECD Indicators of Employment Protection.[4] These are synthetic indicators evaluating the strictness of employment protection regulations based on multiple factors such as notice periods and compensation to dismissed employees, and are the most widely used in literature. In this study, "Version 1" is used, which measures the strictness of employment protection for individual dismissals of employees on regular

[3] It should be noted that even with this process, bilateral FDI data for the cases in which both host and source are non-OECD countries can not be collected.

[4] https://www.oecd.org/els/emp/oecdindicatorsofemploymentprotection.htm.

contracts, with scores ranging from 0 (the least strict or most flexible) to 6 (the strictest). The data span 72 countries including both OECD and non-OECD countries, for the years from 1985 to 2019. However, data are not available for all of those countries for the entire period.

The next two indicators are sourced from the *World Competitiveness Yearbooks* (WCY) published by the International Institute for Management Development (IMD). The yearbooks provide the ranking of countries in the context of business competitiveness based on indexes composed from the assessments of the countries in various aspects or "criteria." The criteria include hard statistics and survey responses, and the comprehensive score of competitiveness for each country is calculated by averaging the standardized values in the individual criteria, based on which the ranking of countries is generated.[5] The data are available for 63 countries from 1995 onward. From the WCY data, two indicators of flexibility in employment adjustment are employed in this study: labor regulations and redundancy costs. The indicator on labor regulations is based on a response to the survey question "Labor regulations do not hinder business activities," which is recorded in a converted score ranging from 0 (disagree) to 10 (agree). The indicator of redundancy costs is based on hard statistics and is defined as the number of weeks of salary. The labor regulations indicator spans all the 63 countries and years (up to 2020) covered in the WCY, whereas the coverage of the data on redundancy costs is limited to 62 countries from 2010 to 2019.

The fourth indicator of flexibility in employment adjustment is sourced from the *Global Competitiveness Reports* published by the World Economic Forum (WEF). In its reports, the WEF annually provides an index that measures the competitiveness of countries (the Global Competitiveness Index: GCI) based on its Executive Opinion Surveys.[6] From the individual components of the comprehensive GCI, the index of

[5] For detailed explanation of the ranking and the whole list of criteria, see https://www.imd.org/centers/world-competitiveness-center/rankings/world-competitiveness/.
[6] The WEF defines competitiveness as "the set of institutions, policies, and factors that determine the level of productivity of a country."

"Hiring and firing practices" is employed in this study. The index is a response to the survey question "In your country, to what extent do regulations allow for the flexible hiring and firing of workers?" based on a score ranging from 1 (not at all) to 7 (to a great extent). The data are available for 152 countries from 2006 to 2019.[7]

The data and the sources of the other controls in the to-be-estimated equation (2) are as follows. Per-capita GDP in millions of current US dollars[8] and populations in thousands for each country are sourced from the most recent version of the CEPII's gravity dataset (Conte et al., 2022). Labor skill level, real wage, and business entry cost in each host country are sourced from the Penn World Table (PWT) 10.0 (Feenstra et al., 2015). Labor skill level is measured with the human capital index. Real wage is computed as an average hourly wage by dividing total labor compensation (obtained by multiplying the share of labor compensation in GDP by the real GDP in constant 2017 US dollars) by the total economy-wide work hours (obtained by multiplying the average annual hours worked by persons engaged with the number of persons engaged). Business entry cost is measured with business start-up procedures as the percent of GNI per capita. The indexes on political rights and civil liberties are sourced from the Freedom House's annual survey *Freedom in the World* (FIW), and the original indexes are re-scaled in a way that the smallest value (one) indicates the least free and the largest value (seven) indicates the freest.[9] The indicators of a host country's economic performance, government efficiency, business legislation, business efficiency, and infrastructure are sourced from the WCY (described above). Economic performance, government efficiency, business efficiency, and infrastructure are the four major categories (or "sub-factors") that comprise a country's comprehensive competitiveness index, and business legislation is one of the five subcategories comprising the major

[7] Historic data on the GCI are collected through the World Bank's TCdata360 (https://tcdata360.worldbank.org/).

[8] The original data in the source are measured in thousands of dollars, and they have been converted on the scale of million dollars.

[9] This is opposite to how the original indexes are scaled (the least means freest and the largest means the least/not free).

category of government efficiency. All the five indexes are scored on a 0-to-100 scale. Finally, the dummy variable IIA_{ijt}, indicating whether or not a pair of FDI host and source countries have a common international investment agreement, is constructed using the information from the Electronic Database of Investment Treaties (EDIT, by Alschner et al., 2021),[10] which lists the information on about 3,900 IIAs such as the name, type (BIT or other IIA), dates of signature/entry in force/termination, member countries and parties, and so on, gathered from governmental websites and the UNCTAD's *International Investment Agreement Navigator.*[11]

The dataset constructed from these data sources covers a large number of FDI host and source countries and a long period equivalent to a quarter of a century. However, valid subsets for estimation include 45 to 53 host countries, 49 to 148 source countries, and 10 to 17 years between 2003 and 2019, depending on which labor-market flexibility indicator is used. Table 1 presents the summary statistics of the variables contained in the dataset, and Table 2 shows the correlations between the variables for the estimation with the OECD's Employment Protection indicator.[12]

4. Estimation Results

Table 3 presents the results of the estimation of Equation (2) for the stock of inward FDI in a host country from a source country with each of the four different indicators of flexibility in employment adjustment (LF) in the countries. The results are separately shown in the four columns (1) through (4) in the table.

[10] The EDIT website: https://edit.wti.org/document/investment-treaty/search.
[11] https://investmentpolicy.unctad.org/international-investment-agreements.
[12] I present the separate tables of variable correlations for the estimation with each of the other three labor market flexibility indicators, as valid observations differ across estimation. See Tables A1, A2, and A3 for those correlation matrices.

4.1. OECD Employment Protection Indicator

The result of the estimation using the OECD's Employment Protection indicator as the flexibility indicator is shown in column (1). The estimated coefficient on the indicator for the FDI host country is negative and significant economically and statistically. As a larger value of the indicator means a higher degree of strictness (i.e., a lower degree of flexibility), the negative coefficient implies that a host country with more flexible employment legislation tends to induce larger inward FDI. A *decrease* in the Employment Protection indicator score of the host country by one will increase FDI stock in the host by about 23.6%.[13] This result supports the first hypothesis described in Section 2. In contrast, the estimated coefficient on the indicator for the source country has a positive sign, which is counter to the expectation of the second hypothesis that labor market inflexibility or tightness in the source suppresses outward FDI. However, as the coefficient estimate is not statistically significant, the result does not provide evidence for the hypothesis anyway.

The estimated coefficients on the indicator for the host relative to that for the source (RLF_{ij}) and its interaction term with the "host is more flexible than the source" dummy (D_{ij}) are both statistically *in*significant. As a larger indicator value indicates stricter employment protection, in this estimation D_{ij} =1 when the host's indicator value is lower than the source's (i.e., $LF_i < LF_j$). The net estimated effect of the interacted relative host flexibility is negative (.048−.096 = -.048) as expected in the third hypothesis (i.e., larger FDI is induced to a host as the host's labor market is more flexible than the source's to a greater degree); however, this result is weak and unclear.

4.2. Labor Regulations

Column (2) of Table 3 shows the result of the estimation using the WCY index on labor

[13] The marginal impact on a HS-transformed variable can be approximated by $e^{\beta}-1$, according to Frenkel and Walter (2019) who refers to Aisbett et al. (2018) and Pence (2006). The marginal impact of the decrease in the indicator here is thus approximated to $e^{-0.269}-1 = -0.2359$.

regulations as the flexibility indicator. It should be first noted that a larger score in the index indicates a greater degree of flexibility (more favorable for business activities), and thus, in this estimation the "host more flex" dummy D_{ij} takes one when the index value is larger for the host than the source (D_{ij} =1 when $LF_i > LF_j$).

The coefficient estimate on the host's index is positive and significant, implying that a host with a greater degree of flexibility in labor regulations tends to attract larger inward FDI, which is consistent with the first hypothesis. An increase in the value of the indicator for the host by one standard deviation (1.43) increases FDI stock in the host by about 14.4%.[14] However, none of the estimated coefficients on other flexibility terms is significant, and their signs are all opposite to the expectations of the second and third hypotheses. Thus, the result of the estimation with this indicator highlights the significance of absolute flexibility in labor market in an FDI host country as also found in the case of the OECD Employment Protection indicator; however, it fails to provide evidence for the contributions of flexibility in a source country and the host's relative flexibility to the source.

4.3. Redundancy Costs

Column (3) of Table 3 shows the result of the estimation using the WCY indicator of redundancy costs. This indicator measures redundancy costs based on the number of weeks of salary, and a larger value indicates higher costs and a lower degree of flexibility. Thus, in this estimation, the dummy D_{ij} takes one when the indicator value is smaller for the host than that for the source (D_{ij} =1 when $LF_i < LF_j$). It should also be noted that, as the indicator values are highly skewed to lower values in distribution with many zeros, the HS-transformed value of the original value of the indicator is used in this estimation.

The coefficient on redundancy costs in the host is estimated to be zero, and the

[14] In the same manner, the marginal impact is approximated to $(e^{0.096} - 1)*1.43 = 0.1441$.

estimation fails to find evidence for the contribution of labor market flexibility in a host country, unlike the cases of the employment protection legislation and labor regulations. However, the coefficient estimates on other terms may be worth noting although they are not statistically significant. First, the estimated coefficient on redundancy costs in the source country is negative, implying that higher costs in a source tend to hinder outward FDI from the country. Although the marginal impact in this case is hard to approximate because the redundancy cost indicator is HS-transformed, a rough estimation of the impact of a 10% increase in redundancy costs in the source country will decrease outward FDI stock from the source to the average host country by about 0.7%.[15] Regarding the host-to-source relative costs, the positive net effect of the interacted term indicated by the estimation (.112−.025 = .087) implies that, when the costs in the host are lower than in the source, FDI tends to be larger when the costs in the source are closer to those in the hosts and, thus, lower. (The negative estimate on the non-interacted relative costs in the host might just indicate that larger FDI tends to be induced to a host with lower costs, as stated in the first hypothesis.) Although the evidence is weak, this estimation may be suggesting the discouraging effect, or "anchorage effect," of high redundancy costs in a source country on outward FDI from the source, considering that this indicator is the most direct measure of costs associated with the business relocation or moving-out from the original location (i.e., dismissal).

4.4. Hiring and Firing Practices

The last column (4) of Table 3 presents the result of the estimation using the index on hiring and firing practices from the GCI. Although it is based on survey responses, this index directly evaluates the degree of flexibility in employment adjustment. Similar to the WCY's index on labor regulations, a larger score in the index indicates a greater degree of flexibility, and in this estimation the dummy D_{ij} takes one when the index

[15] Applying the same method to approximate, $(e^{-0.072} - 1) = -0.06947$, and 10% of this is approximately -0.7 percent.

value is larger for the host than that for the source (D_{ij} =1 when $LF_i > LF_j$).

The result of this estimation clearly supports the first and second hypotheses. Both of the estimated coefficients on the host and the source's flexibility are positive and statistically significant, implying that larger FDI tends to be induced to a host with a greater degree of hiring-firing flexibility and from a source with a greater degree of flexibility. However, the estimated impact is greater for the flexibility in a host than that in a source: an increase in the score of the index by one standard deviation (0.80) in a host country will increase inward FDI stock in the host by about 13.4%, whereas the same increase in a source country will increase outward FDI stock from the source by about 7.9%.[16]

Regarding the host-to-source relative flexibility, the estimation provides no clear evidence, or at most only weak evidence, of its importance. First, the estimated coefficient on the dummy-*un*interacted RLF_{ij} is positive but statistically insignificant. Next, the estimate on the dummy-interacted relative flexibility term (RLF_{ij}*D_{ij}) is negative and significant, which implies that the impact is even weaker or less significant for the case where the host is more flexible than the source in terms of hiring-firing practices. Although the net effect for that case is positive (.194−.044 = .150) and consistent with the third hypothesis, the estimation fails to show strong evidence for the hypothesis.

4.5. Results regarding Employment Adjustment Flexibility: Summary

Overall findings regarding the impacts of employment adjustment flexibility in a host country and a source countries on FDI stock between the host and the source from the estimation results using the four flexibility indicators are as follows: First, the results provide clear evidence supporting the first hypothesis, i.e., the importance of the

[16] For the increase in the host's score, the approximated marginal impact is ($e^{0.155}$ −1)*0.80 = 0.1341, and the approximated impact of the increase in the source's score is ($e^{0.094}$ −1)*0.80 = 0.0788.

(absolute) flexibility in the host country. Second, although the evidence is weaker compared to the case of the flexibility in the host, the results provide evidence for the impact of the flexibility in the source country (the second hypothesis, or the FDI anchorage effect of the *in*flexibility in the source), especially for the indicators of redundancy costs and hiring-firing practices. Finally, in contrast to the host and source's absolute flexibility, the estimation results fail to provide clear evidence for the third hypothesis, which suggests that the host country's flexibility relative to the source country may not be as important as the host's absolute flexibility for the stock of FDI in the host country.[17] This insignificance of the labor market flexibility in the host country relative to that in the source country will be further discussed in the final section.

4.6. Other Controls

Finally, a briefly review of the estimation results in terms of the other factors is as follows: First, the estimated coefficients on per-capita GDP and populations of both host and source countries are positive and significant in most of the cases of estimation with the four different labor market flexibility indicators, while the income level and population of the host are more significant overall. This might indicate that the size of the economy of the host country is more important than that of the source for the volume of FDI. Second, the estimated coefficients on the labor skill level, real wage, and business entry costs[18] are significant in many cases (although the coefficient estimate on the real wage is significant only in a half of the four cases) with the signs

[17] To examine the sole impact of the host-to-source relative labor market flexibility, the estimation is performed only with the relative-flexibility terms (RLF_{ij} and $RLF_{ij}*D_{ij}$), excluding the host and source's absolute flexibility terms. The estimation results are as presented in Table A4, and do not differ from the benchmark estimation results in the sense that the coefficient estimates on the relative-flexibility terms are insignificant. Only exception is the estimated coefficients on the relative terms of the hiring-firing practices; however, it may be considered that these capture a part of the impact of the excluded term of the absolute flexibility in the host.

[18] Also for the business entry cost, the HS-transformed value of the original value of the variable is used as the observed values are highly skewed to small values in distribution and contain many zeros.

being relevant: higher labor skills, lower real wage, and lower business start-up costs in the host country contribute to larger inward FDI on average. Third, human-right conditions in the host country are not estimated to be significant, while the estimation with the indicators of redundancy costs and hiring-firing practices (in columns (3) and (4)) indicates that a better political-right situation in a host country might help attract inward FDI. Fourth, among the WCY's indexes on the economic and institutional factors of the host country, business legislation, business efficiency, and infrastructure are significant in most cases of the estimation; however, the signs of the coefficient estimate on business efficiency and infrastructure appear puzzling (higher scores in these factors are associated with smaller inward FDI?). Finally, the estimated coefficient on the common IIA dummy is positive and significant in all the four cases of the estimation, implying that having an investment agreement may contribute to larger FDI between countries.

5. Estimation for FDI Flows

In the literature on FDI empirics, it is conventional to use data on FDI stock rather than flows because FDI flows are extremely volatile (very sensitive to the case of a large-sized M&A deal, for instance) and thus noisy. However, FDI flows may reflect contemporaneous business responses to changes in economic and institutional conditions more directly, and are thus worth examining. Therefore, also for the purpose of a robustness check, the empirical model expressed as Equation (2) is re-estimated for FDI flows. The estimation results presented in Table 4 convey the same qualitative message for FDI flows as that for FDI stock overall. However, some noteworthy differences from the case of FDI stock are also found, as mentioned below.

First, the estimation result with the OECD Employment Protection indicator, which is presented in column (1) of the table, confirms the significance of the absolute

employment adjustment flexibility in the host country as in the estimation for the FDI stock. The size of the (negative) coefficient estimate is slightly larger than that in the result for FDI stock (-.322 compared to -.269). A striking difference from the estimation result for the case of FDI stock is found in the estimated coefficients on the relative flexibility terms (RLF_{ij} and $RLF_{ij}*D_{ij}$). In the results of the estimation for FDI flows, though the signs of the coefficients are the same as those in the estimation for FDI stock, both estimates are now statistically significant, at least at the 10% level. The estimated net effect of the host's flexibility relative to the source country is negative and larger in size than that estimated for FDI stock (.088−.199 = -.111, compared to −.048), implying that more FDI flows are induced to a host country with a larger degree of relative flexibility in employment adjustment when the host's employment protection is laxer than that of the source country, which is consistent with the third hypothesis. In contrast, the coefficient estimate on the dummy-uninteracted term RLF_{ij} is *positive* and significant. This might suggest that when the host country's employment protection is stricter than that of the source, FDI flows are larger as the *source* country has a greater degree of relative flexibility in employment protection (recall that the OECD indicator indicates a greater degree of strictness with a larger value). In other words, this result implies the significance of the source's relative flexibility in employment protection legislation when the source has laxer regulations than the host (or the "anchorage effect" in a relative sense).

The result of the estimation with the WCY's indicator of labor regulations (presented in column (2) of the table) is quite comparable to the result for FDI stock. Though the contribution of the absolute flexibility in labor regulations in the host country is evident, that of the other factors such as the absolute flexibility in the source country and the host's relative flexibility is not evident. In the case of FDI flows, however, the size and statistical significance of the positive coefficient estimate on the host's absolute flexibility term are smaller than those in the case of FDI stock, which

implies that the impact of the flexibility in the host's labor regulations may be smaller on FDI flows than on FDI stock.

The result of the estimation with the indicator of redundancy costs, which is shown in column (3) of the table, exhibits some striking differences from the case of FDI stock. One is that the estimated coefficient on the redundancy costs in the host country is negative and significant, unlike the estimation result for FDI stock where the estimated coefficient is null. This implies that lower redundancy costs in the host tend to induce FDI inflows, which is consistent with the first hypothesis. In contrast, the estimated "anchorage effect" of high redundancy costs in the source country is not evident for FDI outflows. Another striking difference from the estimation result for FDI stock is that the estimated coefficients on the two relative-flexibility terms—interacted and uninteracted with the "host is more flexible than the source" dummy—are both positive and statistically significant at the 10% level. Considering that (the original pre-HS-transformed value of) the redundancy costs is measured based on the number of weeks of salary and thus a larger number indicates larger costs, these positive coefficients indicate that *lower* relative redundancy costs in a *source* country (compared to a host) induce larger FDI flows from the source to the host, regardless of whether the (absolute) redundancy costs are larger in the host or in the source. This might imply the potential importance of relative flexibility in the source country for the case of FDI flows, which is also found in the estimation with the OECD employment protection indicator (especially for the case where the protection in the source is laxer or more flexible than in the host).

The estimation result with the index on hiring-firing practices is very similar to that for FDI stock. However, the estimated impact of the absolute flexibility in the host country is less significant than that for the case of FDI stock, both economically and statistically. In addition, the positive impact of the absolute flexibility in the source country, which is estimated to be significant in the case of FDI stock, is not evident for

FDI flows. Thus, the evidence of the contribution of flexibility in the hiring-firing practices in the host and source countries, which is strong for FDI stock, is much weaker for FDI flows.

To summarize the overall findings of the estimation for FDI flows, it can be concluded that (absolute) labor market flexibility in the host country is of primary significance to FDI flows as it is for FDI stock. Moreover, unlike the case of FDI stock, relative labor market flexibility is significant for FDI flows in the way in which relative flexibility in the *source* country (compared to the host) contributes to larger FDI flows from the source to the host (i.e., the "anchorage effect" in a relative sense), especially in terms of employment protection regulations and redundancy costs.[19]

Finally, the estimated coefficients on the control variables other than the labor market flexibility indicators are less significant for FDI flows than those in the estimation for FDI stock. A number of variables that are estimated to be significant for FDI stock have a less significant or insignificant coefficient estimate in the case of FDI flows. One possible reason for this is that the impacts of some of these factors emerge only in a long run (e.g., the effect of an investment agreement (IIA)), and they are thus evident for FDI stock but not necessarily for FDI flows.

6. Conclusion and Discussion

Recent studies have identified the tendency that host countries with flexible labor markets or lax employment protection attract more foreign direct investment (FDI). However, most such studies have examined the relationship between the strictness of labor regulations in individual countries and their aggregated inward FDI. This study investigates the extent to which FDI is attracted by labor market flexibility, with a focus on host countries' institutional flexibility in employment adjustment and their relative

[19] This contrast between the stock and flows of FDI in terms of the contribution of the relative flexibility will be further discussed in the next section.

flexibility compared to investor firms' home countries, through an empirical analysis using a unique dataset constructed with bilateral data on FDI between a large number of both developed and developing countries and various indicators concerning labor market regulations in those countries. The result suggests the following: (i) what primarily matters is the (absolute) flexibility in the host country, that is, a country with a greater degree of flexibility in labor regulations or employment adjustment tends to draw larger FDI inflow; (ii) the impact of a host country's relative flexibility compared to the FDI source country may be secondary, particularly in the case of the stock of FDI; and (iii) there is some evidence of the "anchorage effect" of a source country's labor market regulations, which implies that inflexibility in employment adjustment or strict labor regulations could discourage outward FDI from the country.

To conclude, here is a brief discussion on the implications of the estimation result regarding the host-to-source relative flexibility in employment adjustment. Inconsistent with the third hypothesis, it is found that the estimated contribution of the relative labor-market flexibility is overall insignificant. It is especially evident in the case of the stock of FDI in which the estimated impact of the relative flexibility is insignificant or unclear with all four indicators. This, combined with the empirical result that the absolute labor-market flexibility in the host country is of primary importance, should indicate that investing firms compare a foreign location with a set of other possible foreign locations, rather than comparing a foreign location to the home country. This may especially be the case in long-run decision-making in the context of overseas business startup or expansion that should be reflected in FDI stock. On the other hand, in the case of FDI flows, the relative flexibility is estimated to be significant for two of the four indicators—the employment protection legislation and redundancy costs, which measure difficulty in dismissal. Considering that the impact of relative flexibility is also found in the manner of the "anchorage effect" of the source country's labor market (i.e., labor market inflexibility or strict employment protection in a country discourages FDI

outflows from the country), this result concerning the flows of FDI might indicate that, for their short-run decision-making, such as one-shot or temporary business expansion or relocation, investing firms compare a candidate destination to their home in terms of barriers to employment adjustment.

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Table 1. Summary Statistics of Variables

Variable	# obs.	Mean	Std. Dev.	Min	Max
year	158,732	2011.55	4.74	2003	2019
$iFDI^{h}_{ijt}$, stock	158,732	1.85	3.14	0	14.37
$iFDI^{h}_{ijt}$, flow	143,929	1.05	2.21	0	13.59
(*OECD Employment Protection Indicator*)					
LF_{it}	89,498	2.24	0.767	0.09	4.58
LF_{jt}	74,395	2.19	0.788	0.09	4.58
RLF_{ijt}	18,784	1.91	4.42	0.020	50.89
(*WCY Indicator of Labor Regulations*)					
LF_{it}	102,814	4.92	1.43	0.47	8.7
LF_{jt}	87,033	4.95	1.45	0.47	8.7
RLF_{ijt}	34,046	1.12	0.715	0.059	16.87
(*WCY Indicator of Redundancy Costs, HS-transformed*)					
LF_{it}	65,202	8.62	8.90	0	57.8
LF_{jt}	57,025	8.58	8.74	0	57.8
RLF_{ijt}	15,657	1.24	1.98	0	40.41
(*GCI Index on Hiring and Firing Practices*)					
LF_{it}	119,508	3.76	0.796	1.37	6.11
LF_{jt}	105,467	3.77	0.806	1.37	6.11
RLF_{ijt}	86,446	1.05	0.327	0.241	3.99
$\ln(GDPpc_{it})$	157,089	2.42	1.48	-2.23	5.19
$\ln(GDPpc_{jt})$	146,193	2.38	1.52	-2.23	5.19
$\ln(Population_{it})$	158,198	9.10	1.85	2.88	14.16
$\ln(Population_{jt})$	151,925	8.73	2.17	1.50	14.16
$Labor\_skill_{it}$	140,623	2.93	0.642	1.10	4.35
$Real\_wage_{it}$	105,484	25.03	12.24	0.243	56.84
$Entry\_csts^{h}_{it}$ #	158,732	2.62	1.58	0	8.03
$Political\_rights_{it}$	157,768	5.68	1.87	1	7
$Civil\_liberties_{it}$	157,768	5.67	1.66	1	7
$Economic\_performance_{it}$	102,568	51.76	8.60	9.5475	82.69
$Government\_efficiency_{it}$	102,568	51.15	8.92	21.06	74.83
$Business\_legislation_{it}$	102,568	53.44	10.26	0	79.57
$Business\_efficiency_{it}$	102,568	52.39	10.35	18.3	75.93
$Infrastructure_{it}$	102,568	55.63	19.67	0	100
IIA_{ijt}	158,732	0.665	0.472	0	1

Business entry cost is in the HS-transformed value of the original value.

Notes: The summary statistics are based on the observations that are included in the dataset and used for any version of the estimation in the paper.

Table 2. Correlations between the Variables for the Estimation of the Impact of Employment Protection (LF, RLF) on FDI Stock

(N = 17,496)

	$iFDI^h_{ijt}$	$LF_{i,t-1}$	$LF_{j,t-1}$	$RLF_{ij,t-1}$	$\ln(GDPpc_{it})$	$\ln(GDPpc_{jt})$	$\ln(Pop_{it})$	$\ln(Pop_{jt})$	$Lab\_skill_{i,t-1}$	$Rl\_wage_{i,t-1}$	$Ent\_cost_{i,t-1}$	$Pol\_righ_{i,t-1}$	$Civ\_lib_{i,t-1}$	$Econ\_pf_{i,t-1}$	$Gov\_eff_{i,t-1}$	$Bus\_leg_{i,t-1}$	$Bus\_eff_{i,t-1}$	$Infra_{i,t-1}$	$IIA_{ij,t-1}$
$iFDI^h_{ijt}$	1																		
$LF_{i,t-1}$	-0.109	1																	
$LF_{j,t-1}$	-0.146	0.009	1																
$RLF_{ij,t-1}$	0.173	0.147	-0.520	1															
$\ln(GDPpc_{it})$	0.156	-0.363	-0.017	-0.046	1														
$\ln(GDPpc_{jt})$	0.550	-0.017	-0.306	0.151	0.006	1													
$\ln(Pop_{it})$	0.221	0.015	0.020	-0.001	-0.423	0.02	1												
$\ln(Pop_{jt})$	0.225	-0.008	0.005	0.301	0.040	-0.30	-0.009	1											
$Lab\_skill_{i,t-1}$	0.073	-0.411	-0.024	-0.059	0.615	-0.01	-0.291	0.008	1										
$Rl\_wage_{i,t-1}$	0.226	-0.342	-0.016	-0.045	0.905	0.01	-0.274	0.025	0.521	1									
$Ent\_cost_{i,t-1}$	-0.032	0.444	0.028	0.063	-0.548	-0.01	0.394	0.001	-0.493	-0.506	1								
$Pol\_righ_{i,t-1}$	0.031	-0.178	-0.003	-0.021	0.558	-0.02	-0.448	0.043	0.471	0.487	-0.275	1							
$Civ\_lib_{i,t-1}$	0.072	-0.227	-0.008	-0.029	0.656	-0.02	-0.478	0.033	0.533	0.591	-0.426	0.909	1						
$Econ\_pf_{i,t-1}$	0.227	-0.198	0.054	-0.033	0.234	0.01	0.227	0.056	0.147	0.289	-0.118	0.069	0.13	1					
$Gov\_eff_{i,t-1}$	0.085	-0.111	0.041	-0.011	0.291	0.04	-0.125	0.071	0.205	0.271	-0.260	0.091	0.15	0.666	1				
$Bus\_leg_{i,t-1}$	0.112	-0.219	0.039	-0.028	0.451	0.02	-0.207	0.077	0.216	0.430	-0.382	0.289	0.35	0.648	0.829	1			
$Bus\_eff_{i,t-1}$	0.148	-0.257	0.038	-0.035	0.464	0.02	-0.076	0.065	0.235	0.475	-0.326	0.203	0.26	0.718	0.880	0.882	1		
$Infra_{i,t-1}$	0.176	-0.394	-0.031	-0.049	0.822	0.04	-0.201	0.034	0.634	0.804	-0.535	0.421	0.50	0.295	0.314	0.449	0.485	1	
$IIA_{ij,t-1}$	0.014	0.246	0.253	-0.199	-0.106	-0.06	-0.085	-0.086	-0.072	-0.072	0.152	-0.040	-0.05	-0.109	-0.117	-0.150	-0.147	-0.113	1

Notes: The variable correlations are based on the observations that are included in the dataset and used for the estimation of the empirical equation (2) for FDI stock with the OECD Employment Protection indicator as the labor market flexibility indicator. The values of the variables on FDI stock and business entry costs are HS-transformed from the original values.

Table 3. Results of Estimation: Impact of Labor Market Flexibility on FDI Stock

Dependent variable = Inward FDI Stock in host *i* from source *j*, HS-transformed

	(1) Employment Protection	(2) Labor Regulations	(3) Redundancy Costs #	(4) Hiring-Firing Practices
$LF_{i,t-1}$	-0.269**	0.096***	0.000	0.155***
	(0.127)	(0.020)	(0.035)	(0.043)
$LF_{j,t-1}$	0.075	-0.012	-0.072	0.094**
	(0.130)	(0.022)	(0.058)	(0.046)
$RLF_{ij,t-1}$	0.048	-0.011	-0.025	0.194
	(0.042)	(0.048)	(0.077)	(0.142)
$RLF_{ij,t-1}*D_{ij,t-1}$	-0.096	-0.032	0.112	-0.044**
	(0.125)	(0.029)	(0.090)	(0.022)
$\ln(GDPpc_{it})$	0.806***	0.609***	0.811***	0.455***
	(0.148)	(0.094)	(0.141)	(0.073)
$\ln(GDPpc_{jt})$	0.690***	0.895***	0.760***	0.097*
	(0.157)	(0.107)	(0.153)	(0.053)
$\ln(Population_{it})$	2.34***	1.47***	0.515	2.21***
	(0.855)	(0.555)	(0.815)	(0.507)
$\ln(Population_{jt})$	0.980	0.784**	2.13***	0.089
	(0.872)	(0.389)	(0.608)	(0.185)
$Labor\_skill_{i,t-1}$	2.31***	0.722***	-0.002	0.948***
	(0.540)	(0.171)	(0.228)	(0.184)
$Real\_wage_{i,t-1}$	-0.024	-0.024**	0.006	-0.033***
	(0.015)	(0.011)	(0.015)	(0.007)
$Entry\_csts^{h}_{i,t-1}$ #	-0.153***	-0.158***	-0.065**	-0.097***
	(0.034)	(0.028)	(0.030)	(0.017)
$Political\_rights_{i,t-1}$	0.017	0.007	0.090**	0.066***
	(0.055)	(0.028)	(0.041)	(0.023)
$Civil\_liberties_{i,t-1}$	0.103	0.019	-0.071	-0.037
	(0.066)	(0.045)	(0.065)	(0.035)
$Economic\_performance_{i,t-1}$	0.011**	0.006	0.013**	0.001
	(0.004)	(0.003)	(0.006)	(0.002)
$Government\_efficiency_{i,t-1}$	-0.003	-0.001	-0.026***	-0.008**
	(0.007)	(0.006)	(0.008)	(0.004)
$Business\_legislation_{i,t-1}$	0.015***	0.006	0.038***	0.014***
	(0.005)	(0.004)	(0.006)	(0.003)
$Business\_efficiency_{i,t-1}$	-0.004	-0.011***	-0.022***	-0.010***
	(0.005)	(0.004)	(0.006)	(0.003)
$Infrastructure_{i,t-1}$	-0.015***	-0.012***	-0.011***	-0.013***
	(0.005)	(0.003)	(0.004)	(0.002)
$IIA_{ij,t-1}$	0.403***	0.258**	0.132*	0.240***
	(0.155)	(0.104)	(0.079)	(0.074)
i-/*j*-dummies	yes			
ij-dummies	yes			
t-dummies	yes			
N	16,971	30,778	13,689	52,547
Adjusted R^2	0.937	0.934	0.948	0.952
No. of host countries	45	53	52	52
No. of source countries	50	62	49	148
No. of host-source pairs	1,841	2,658	1,963	5,413
No. of years	17	17	10	14

The indicators of redundancy costs and business entry cost are in the HS-transformed value of the original value.

Notes: The variables are as explained in the main text. Standard errors reported in parentheses are clustered by country pair. *, **, and *** indicate the significance at the 10%, 5%, and 1% levels, respectively.

Table 4. Results of Estimation: Impact of Labor Market Flexibility on FDI Flows

Dependent variable = FDI Inflow to host *i* from source *j*, HS-transformed

	(1) Employment Protection	(2) Labor Regulations	(3) Redundancy Costs #	(4) Hiring-Firing Practices
$LF_{i,t-1}$	-0.322***	0.033*	-0.102**	0.066*
	(0.123)	(0.019)	(0.041)	(0.039)
$LF_{j,t-1}$	0.150	-0.028	-0.022	0.007
	(0.117)	(0.020)	(0.061)	(0.038)
$RLF_{ij,t-1}$	0.088***	-0.061	0.149*	0.155
	(0.024)	(0.048)	(0.085)	(0.138)
$RLF_{ij,t-1}*D_{ij,t-1}$	-0.199*	0.016	0.192*	-0.039*
	(0.111)	(0.032)	(0.102)	(0.020)
$\ln(GDPpc_{it})$	0.297**	0.231***	0.120	0.025
	(0.146)	(0.077)	(0.151)	(0.056)
$\ln(GDPpc_{jt})$	0.776***	0.853***	0.681***	0.171***
	(0.155)	(0.086)	(0.139)	(0.038)
$\ln(Population_{it})$	-0.201	0.377	-1.27*	0.557**
	(0.699)	(0.374)	(0.685)	(0.255)
$\ln(Population_{jt})$	1.39*	0.946***	1.30***	0.234**
	(0.741)	(0.254)	(0.468)	(0.104)
$Labor\_skill_{i,t-1}$	0.251	0.156	-0.104	0.157
	(0.412)	(0.160)	(0.336)	(0.143)
$Real\_wage_{i,t-1}$	-0.021	-0.040***	0.002	-0.015***
	(0.013)	(0.010)	(0.015)	(0.005)
$Entry\_csts^{h}_{i,t-1}$ #	-0.069*	-0.100***	-0.030	-0.059***
	(0.036)	(0.024)	(0.037)	(0.014)
$Political\_rights_{i,t-1}$	0.104*	0.056**	0.053	0.043**
	(0.057)	(0.028)	(0.049)	(0.021)
$Civil\_liberties_{i,t-1}$	0.058	0.044	0.011	-0.036
	(0.052)	(0.036)	(0.052)	(0.025)
$Economic\_performance_{i,t-1}$	0.011**	0.002	0.014**	-0.000
	(0.005)	(0.004)	(0.006)	(0.002)
$Government\_efficiency_{i,t-1}$	0.015**	0.017***	0.006	0.010***
	(0.007)	(0.005)	(0.009)	(0.003)
$Business\_legislation_{i,t-1}$	-0.008	-0.008**	0.010	-0.006***
	(0.005)	(0.004)	(0.007)	(0.002)
$Business\_efficiency_{i,t-1}$	-0.002	-0.002	-0.003	-0.000
	(0.005)	(0.004)	(0.006)	(0.002)
$Infrastructure_{i,t-1}$	-0.007*	-0.005*	0.003	0.001
	(0.004)	(0.003)	(0.004)	(0.002)
$IIA_{ij,t-1}$	-0.028	0.033	0.031	0.085
	(0.155)	(0.073)	(0.073)	(0.057)
i-/*j*-dummies	yes			
ij-dummies	yes			
t-dummies	yes			
N	13,024	24,688	10,763	45,541
Adjusted R^2	0.864	0.870	0.883	0.907
No. of host countries	45	53	52	52
No. of source countries	50	62	49	148
No. of host-source pairs	1,781	2,610	1,852	5,405
No. of years	17	17	10	14

The indicators of redundancy costs and business entry cost are in the HS-transformed value of the original value.

Notes: The variables are as explained in the main text. Standard errors reported in parentheses are clustered by country pair. *, **, and *** indicate the significance at the 10%, 5%, and 1% levels, respectively.

Table A1. Correlations between the Variables for the Estimation of the Impact of Labor Regulations (LF, RLF) on FDI Stock

(N = 30,815)

	$iFDI^{h}_{ijt}$	$LF_{i,t-1}$	$LF_{j,t-1}$	$RLF_{ij,t-1}$	$\ln(GDPpc_{it})$	$\ln(GDPpc_{jt})$	$\ln(Pop_{it})$	$\ln(Pop_{jt})$	$Lab\_skill_{i,t-1}$	$Rl\_wage_{i,t-1}$	$Ent\_cost_{i,t-1}$	$Pol\_righ_{i,t-1}$	$Civ\_lib_{i,t-1}$	$Econ\_pf_{i,t-1}$	$Gov\_eff_{i,t-1}$	$Bus\_leg_{i,t-1}$	$Bus\_eff_{i,t-1}$	$Infra_{i,t-1}$	$IIA_{ij,t-1}$
$iFDI^{h}_{ijt}$	1																		
$LF_{i,t-1}$	0.012	1																	
$LF_{j,t-1}$	0.089	0.013	1																
$RLF_{ij,t-1}$	-0.069	0.550	-0.660	1															
$\ln(GDPpc_{it})$	0.140	0.267	0.010	0.151	1														
$\ln(GDPpc_{jt})$	0.515	0.008	0.262	-0.151	-0.066	1													
$\ln(Pop_{it})$	0.206	-0.263	-0.004	-0.150	-0.500	0.049	1												
$\ln(Pop_{jt})$	0.157	0.022	-0.231	0.139	0.059	-0.444	-0.019	1											
$Lab\_skill_{i,t-1}$	0.111	0.254	0.027	0.127	0.694	-0.036	-0.386	0.037	1										
$Rl\_wage_{i,t-1}$	0.204	0.233	0.010	0.132	0.899	-0.053	-0.352	0.053	0.604	1									
$Ent\_cost_{i,t-1}$	-0.091	-0.321	-0.031	-0.156	-0.579	-0.011	0.380	-0.018	-0.545	-0.529	1								
$Pol\_righ_{i,t-1}$	-0.001	-0.123	-0.012	-0.047	0.517	-0.094	-0.439	0.054	0.430	0.524	-0.194	1							
$Civ\_lib_{i,t-1}$	0.039	-0.036	-0.009	-0.002	0.645	-0.089	-0.495	0.055	0.531	0.642	-0.351	0.924	1						
$Econ\_pf_{i,t-1}$	0.172	0.166	-0.009	0.103	0.249	0.001	0.119	0.017	0.170	0.284	-0.143	0.052	0.119	1					
$Gov\_eff_{i,t-1}$	0.036	0.395	-0.009	0.229	0.281	0.014	-0.181	0.016	0.215	0.257	-0.260	0.045	0.104	0.688	1				
$Bus\_leg_{i,t-1}$	0.055	0.475	-0.010	0.283	0.516	-0.037	-0.322	0.039	0.297	0.469	-0.403	0.271	0.360	0.651	0.820	1			
$Bus\_eff_{i,t-1}$	0.095	0.414	-0.007	0.243	0.460	-0.010	-0.132	0.029	0.244	0.461	-0.325	0.172	0.240	0.718	0.860	0.876	1		
$Infra_{i,t-1}$	0.173	0.405	0.029	0.215	0.820	-0.037	-0.263	0.049	0.668	0.805	-0.575	0.328	0.450	0.314	0.323	0.500	0.502	1	
$IIA_{ij,t-1}$	0.089	-0.056	-0.097	0.001	-0.012	-0.006	-0.076	-0.074	0.018	0.009	0.051	-0.005	0.006	-0.064	-0.068	-0.084	-0.098	-0.016	1

Notes: The variable correlations are based on the observations that are included in the dataset and used for the estimation of the empirical equation (2) for FDI stock with the WCY index on labor regulations as the labor market flexibility indicator. The values of the variables on FDI stock and business entry costs are HS-transformed from the original values.

Table A2. Correlations between the Variables for the Estimation of the Impact of Redundancy Costs (LF, RLF) on FDI Stock

(N = 13,757)

	$iFDI^{h}_{ijt}$	$LF_{i,t-1}$	$LF_{j,t-1}$	$RLF_{ij,t-1}$	$\ln(GDPpc_{it})$	$\ln(GDPpc_{jt})$	$\ln(Pop_{it})$	$\ln(Pop_{jt})$	$Lab\_skill_{i,t-1}$	$Rl\_wage_{i,t-1}$	$Ent\_cost_{i,t-1}$	$Pol\_righ_{i,t-1}$	$Civ\_lib_{i,t-1}$	$Econ\_pf_{i,t-1}$	$Gov\_eff_{i,t-1}$	$Bus\_leg_{i,t-1}$	$Bus\_eff_{i,t-1}$	$Infra_{i,t-1}$	$IIA_{ij,t-1}$
$iFDI^{h}_{ijt}$	1																		
$LF_{i,t-1}$	-0.064	1																	
$LF_{j,t-1}$	-0.155	-0.004	1																
$RLF_{ij,t-1}$	-0.008	0.785	-0.459	1															
$\ln(GDPpc_{it})$	0.131	-0.607	0.014	-0.512	1														
$\ln(GDPpc_{jt})$	0.469	0.021	-0.320	0.155	-0.069	1													
$\ln(Pop_{it})$	0.215	0.348	-0.002	0.334	-0.478	0.052	1												
$\ln(Pop_{jt})$	0.140	-0.030	0.387	-0.193	0.069	-0.468	-0.021	1											
$Lab\_skill_{i,t-1}$	0.085	-0.423	0.019	-0.405	0.698	-0.049	-0.375	0.046	1										
$Rl\_wage_{i,t-1}$	0.196	-0.621	0.018	-0.529	0.906	-0.049	-0.336	0.060	0.602	1									
$Ent\_cost_{i,t-1}$	-0.040	0.326	0.004	0.352	-0.513	0.001	0.397	-0.019	-0.480	-0.471	1								
$Pol\_righ_{i,t-1}$	-0.001	-0.382	0.020	-0.358	0.518	-0.086	-0.450	0.063	0.435	0.527	-0.197	1							
$Civ\_lib_{i,t-1}$	0.030	-0.472	0.022	-0.443	0.631	-0.087	-0.490	0.065	0.537	0.622	-0.333	0.928	1						
$Econ\_pf_{i,t-1}$	0.163	-0.147	0.008	-0.111	0.259	0.002	0.152	0.013	0.126	0.260	-0.062	0.045	0.100	1					
$Gov\_eff_{i,t-1}$	0.009	-0.170	-0.010	-0.102	0.308	0.012	-0.149	0.008	0.190	0.249	-0.159	0.074	0.109	0.724	1				
$Bus\_leg_{i,t-1}$	0.047	-0.383	0.001	-0.316	0.525	-0.032	-0.272	0.039	0.298	0.459	-0.319	0.306	0.366	0.728	0.850	1			
$Bus\_eff_{i,t-1}$	0.083	-0.303	-0.005	-0.206	0.464	-0.002	-0.064	0.020	0.212	0.449	-0.211	0.170	0.220	0.775	0.890	0.875	1		
$Infra_{i,t-1}$	0.142	-0.517	0.011	-0.420	0.830	-0.042	-0.252	0.059	0.660	0.800	-0.502	0.338	0.451	0.281	0.295	0.474	0.469	1	
$IIA_{ij,t-1}$	0.078	-0.003	-0.001	-0.015	-0.022	-0.045	-0.061	-0.068	0.028	0.019	0.042	0.002	0.024	-0.070	-0.074	-0.077	-0.082	0.016	1

Notes: The variable correlations are based on the observations that are included in the dataset and used for the estimation of the empirical equation (2) for FDI stock with the WCY indicator of redundancy costs as the labor market flexibility indicator. The values of the variables on FDI stock, redundancy cost indicator, and business entry costs are HS-transformed from the original values.

Table A3. Correlations between the Variables for the Estimation of the Impact of Hiring & Firing Practices (LF, RLF) on FDI Stock

(N = 52,677)

	$iFDI^{h}_{ijt}$	$LF_{i,t-1}$	$LF_{j,t-1}$	$RLF_{ij,t-1}$	$\ln(GDPpc_{it})$	$\ln(GDPpc_{jt})$	$\ln(Pop_{it})$	$\ln(Pop_{jt})$	$Lab\_skill_{i,t-1}$	$Rl\_wage_{i,t-1}$	$Ent\_cost_{i,t-1}$	$Pol\_righ_{i,t-1}$	$Civ\_lib_{i,t-1}$	$Econ\_pf_{i,t-1}$	$Gov\_eff_{i,t-1}$	$Bus\_leg_{i,t-1}$	$Bus\_eff_{i,t-1}$	$Infra_{i,t-1}$	$IIA_{ij,t-1}$
$iFDI^{h}_{ijt}$	1																		
$LF_{i,t-1}$	0.029	1																	
$LF_{j,t-1}$	-0.017	-0.006	1																
$RLF_{ij,t-1}$	0.073	0.718	-0.656	1															
$\ln(GDPpc_{it})$	-0.028	0.123	0.038	0.058	1														
$\ln(GDPpc_{jt})$	0.673	0.027	-0.018	0.082	-0.154	1													
$\ln(Pop_{it})$	0.237	-0.115	-0.022	-0.061	-0.439	0.125	1												
$\ln(Pop_{jt})$	0.233	0.013	-0.054	0.060	-0.013	-0.131	0.027	1											
$Lab\_skill_{i,t-1}$	-0.022	0.207	0.025	0.126	0.628	-0.099	-0.292	-0.005	1										
$Rl\_wage_{i,t-1}$	0.042	0.120	0.026	0.065	0.909	-0.112	-0.292	-0.007	0.546	1									
$Ent\_cost_{i,t-1}$	0.012	-0.274	-0.015	-0.180	-0.531	0.053	0.394	0.004	-0.496	-0.495	1								
$Pol\_righ_{i,t-1}$	-0.129	-0.137	0.033	-0.126	0.549	-0.180	-0.419	-0.018	0.473	0.510	-0.258	1							
$Civ\_lib_{i,t-1}$	-0.109	-0.092	0.028	-0.091	0.638	-0.178	-0.460	-0.019	0.544	0.601	-0.390	0.918	1						
$Econ\_pf_{i,t-1}$	0.095	0.107	0.011	0.073	0.260	-0.002	0.155	-0.009	0.161	0.287	-0.097	0.077	0.129	1					
$Gov\_eff_{i,t-1}$	-0.008	0.248	0.017	0.171	0.317	-0.007	-0.175	-0.011	0.209	0.258	-0.245	0.111	0.148	0.673	1				
$Bus\_leg_{i,t-1}$	-0.045	0.268	0.033	0.171	0.481	-0.089	-0.256	-0.021	0.230	0.428	-0.362	0.291	0.356	0.653	0.834	1			
$Bus\_eff_{i,t-1}$	0.004	0.264	0.023	0.175	0.492	-0.048	-0.118	-0.014	0.237	0.477	-0.304	0.208	0.254	0.718	0.882	0.878	1		
$Infra_{i,t-1}$	0.028	0.288	0.030	0.181	0.814	-0.085	-0.212	0.005	0.639	0.799	-0.538	0.369	0.463	0.275	0.301	0.431	0.482	1	
$IIA_{ij,t-1}$	0.166	-0.098	-0.067	-0.023	0.040	0.125	-0.086	-0.002	0.070	0.095	-0.011	0.050	0.088	-0.031	-0.098	-0.064	-0.077	0.055	1

Notes: The variable correlations are based on the observations that are included in the dataset and used for the estimation of the empirical equation (2) for FDI stock with the index on hiring and firing practices in the GCI as the labor market flexibility indicator. The values of the variables on FDI stock and business entry costs are HS-transformed from the original values.

Table A4. Results of Estimation: Impact of Relative Labor Market Flexibility on FDI Stock

Dependent variable = Inward FDI Stock in host *i* from source *j*, HS-transformed

	(1) Employment Protection	(2) Labor Regulations	(3) Redundancy Costs #	(4) Hiring-Firing Practices
$RLF_{ij,t-1}$	0.013	0.055	0.018	0.245***
	(0.041)	(0.046)	(0.038)	(0.061)
$RLF_{ij,t-1}*D_{ij,t-1}$	-0.059	-0.014	0.088	-0.040*
	(0.121)	(0.028)	(0.078)	(0.022)
$\ln(GDPpc_{it})$	0.788***	0.600***	0.805***	0.432***
	(0.149)	(0.094)	(0.142)	(0.073)
$\ln(GDPpc_{jt})$	0.691***	0.896***	0.746***	0.073
	(0.156)	(0.107)	(0.152)	(0.053)
$\ln(Population_{it})$	1.78**	1.51***	0.466	2.28***
	(0.823)	(0.560)	(0.814)	(0.511)
$\ln(Population_{jt})$	1.11	0.775**	2.07***	0.057
	(0.858)	(0.392)	(0.605)	(0.187)
$Labor\_skill_{i,t-1}$	2.46***	0.643***	0.006	0.824***
	(0.540)	(0.168)	(0.228)	(0.178)
$Real\_wage_{i,t-1}$	-0.028*	-0.031***	0.007	-0.042***
	(0.015)	(0.011)	(0.015)	(0.007)
$Entry\_csts^{h}_{i,t-1}$ #	-0.164***	-0.152***	-0.065**	-0.105***
	(0.035)	(0.027)	(0.030)	(0.017)
$Political\_rights_{i,t-1}$	0.015	0.006	0.088**	0.067***
	(0.055)	(0.028)	(0.041)	(0.023)
$Civil\_liberties_{i,t-1}$	0.103	0.011	-0.072	-0.032
	(0.066)	(0.045)	(0.065)	(0.035)
$Economic\_performance_{i,t-1}$	0.010**	0.008**	0.013**	0.001
	(0.004)	(0.003)	(0.006)	(0.002)
$Government\_efficiency_{i,t-1}$	-0.005	0.001	-0.026***	-0.005
	(0.007)	(0.006)	(0.008)	(0.004)
$Business\_legislation_{i,t-1}$	0.015***	0.011***	0.038***	0.015***
	(0.005)	(0.004)	(0.006)	(0.003)
$Business\_efficiency_{i,t-1}$	-0.004	-0.011***	-0.022***	-0.009***
	(0.005)	(0.004)	(0.006)	(0.003)
$Infrastructure_{i,t-1}$	-0.015***	-0.010***	-0.011***	-0.014***
	(0.005)	(0.003)	(0.004)	(0.002)
$IIA_{ij,t-1}$	0.404***	0.229**	0.140*	0.213***
	(0.156)	(0.104)	(0.078)	(0.074)
i-/*j*-dummies	yes			
ij-dummies	yes			
t-dummies	yes			
N	16,971	30,778	13,689	52,547
Adjusted R^2	0.937	0.934	0.948	0.952
No. of host countries	45	53	52	52
No. of source countries	50	62	49	148
No. of host-source pairs	1,841	2,658	1,963	5,413
No. of years	17	17	10	14

The indicators of redundancy costs and business entry cost are in the HS-transformed value of the original value.

Notes: The variables are as explained in the main text. Standard errors reported in parentheses are clustered by country pair. *, **, and *** indicate the significance at the 10%, 5%, and 1%, levels respectively.