

The Determinants of Foreign Direct Investment Employment Restrictions

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Abstract

This paper examines the determinants of FDI employment restrictions. We construct a political economy model where the TNE and the government have different objective functions: the TNE maximizes profits, and the host government cares about tax revenue and local employment. We show that the level of employment preferred by the government exceeds the level preferred by the TNE — the divergence in preferences motivates the government to impose restrictions. We test the implications of the model using data on employment restrictions derived from the World Bank's World Business Environment Survey, conducted in 1999/2000. The analysis employs data for up to 1207 foreign-owned firms operating in 52 countries.

1. Introduction

Foreign Direct Investment (FDI) is playing an increasingly prominent role in the world economy, especially in developing countries, where FDI has now become the main source of development capital.¹ While most countries have been offering assorted incentives (e.g., tax holidays) to attract more FDI, many countries continue to impose restrictions on FDI. These restrictions include the prohibition of FDI in certain industries, ceilings on the share of foreign equity (equity restrictions), controls on financial transactions between transnational enterprises (TNEs) and their local affiliates, minimum requirements for the use of local inputs, and restrictions on the employment of foreign personnel. Not surprisingly, both incentive and restrictive policies affect FDI flows [Clark (2000), Taylor (2000), and Asiedu and Lien (2002)]. It is therefore important to understand the factors that determine incentive and restrictive investment policies. Surprisingly, research on this topic is scant. To the best of our knowledge, there is no empirical study on the determinants of FDI policies, and the theoretical literature has mainly focused on analyzing tax holidays and equity restrictions.² Specifically, there is no systematic study on the reasons why governments intervene in the employment decisions of foreign owned firms. Indeed, there seems to be a dearth of research on the link between FDI and labor market regulations.³ This is surprising because anecdotal evidence suggest that governments (in both developed and developing countries) often intervene in the employment and wage decisions of foreign-owned firms in ways that may significantly deter FDI.⁴ For example, among the foreign-owned firms participating in the World Bank's World Business Environment Survey (WBES), 42 percent reported that labor regulations were a moderate or major problem to the operation and growth of their businesses. About the same percentage also reported that the government frequently intervened in their employment and wages decisions.

This paper fills the gap in the literature by examining the reasons why governments impose employment restrictions on FDI. We construct a political economy model of FDI policy where the preferences of the government and the TNE diverge and the government is motivated to intervene in the employment decisions of the TNE because it cares about the welfare of local workers as well as tax

¹ Over the period 1991-2004, the share of FDI in total flows to developing countries increased from 24% to about 50%, while the share of official capital (loans and aid from multilateral organizations such as the World Bank) declined from 56% to 7% (World Bank, 2005).

² See Asiedu and Esfahani (2004) for a review of the theoretical literature on FDI restrictions.

³ Javorcik and Spatareanu (2004) conduct an extensive literature survey on the effect of labor market regulations on FDI and conclude that "the only empirical analysis of this question can be found in an unpublished paper by Dewit, Gorg and Monagna (2003), which considers the impact of labor laws on FDI flows within the OECD countries."

⁴ Javorcik and Spatareanu (2004) and Dewit, Gorg and Monagna (2003) find evidence that labor restrictions have a negative effect on FDI.

revenues. We test the implications of our model using data on employment restrictions derived from the 1999/2000 WBES survey (see section 3 for a detailed description). Our analysis employs data on 1207 foreign-owned firms operating in 52 countries. We find that the likelihood that the host country will impose restrictions decreases with the government's ability to collect direct taxes, and increases with the extensiveness of the TNE's technological input to the FDI project, the importance of the contribution of local labor to the FDI project, the strength of the demand for the project output in the host country, the extent to which the institutions in the host country enhances the productivity of the project, the value politicians place on each unit of surplus earned by workers, and the wage premium for the employees of foreign owned firms.

Perhaps the most surprising result of the paper is that stronger institutions and more productive economic environment of a country are associated with greater employment intervention. In fact, this may seem counter-intuitive. However, the finding may be less puzzling when one notes that a key motivation of governments to maintain favorable business environments is to ensure better jobs and higher incomes for their citizens (which they can help maintain political support for the incumbent politicians). Once the institutional and physical public goods are made available to foreign investors, governments want to ensure that they share in the returns to those assets, either directly through taxation or indirectly through more remunerative jobs.

The remainder of the paper is organized as follows: Section 2 presents the model of FDI policy. Section 3 discusses our empirical methodology and the data employed for the empirical analysis. Section 4 discusses the empirical results and Section 5 concludes.

2. A Partial Equilibrium Model of FDI Employment Policy

2.1. The Setting

Consider a host country that has investment opportunities for foreign entrepreneurs operating through TNEs. For now, we focus on a single project that can produce a positive surplus in the host country if operated by a given TNE. Once established, the project produces q units of a product by means of managerial and technological input from the TNE, t , and local labor, ℓ . Let the production function be constant returns to scale and Cobb-Douglas:

$$(2.1) \quad q = a\ell^\lambda t^{1-\lambda},$$

where $a > 0$ is a parameter that represents technology as well as country characteristics that enhance business operations and increase the productivity of projects at no cost to the firm — for example, public

goods, especially effective institutions.⁵ The parameter λ represents the importance of local labor in the project's operation, and it is higher when local labor has better and wider ranges of assets, such as higher education or technical abilities.⁶

We assume that the TNE's assets are not contractible and, therefore, the TNE needs to own and operate the project in order to recover the returns to the use of its assets. The project is required to pay tax at a fixed rate, $\tau \in [0,1]$, on the net output. The same tax rate applies to labor income.⁷ We assume that the labor market also has imperfections, but in that case, contracting problems only drive a wedge between the market price and the workers' reservation wage.⁸ We treat the wage rate, w , as given and normalize the labor unit such that its reservation price (or opportunity costs) is equal to 1. Then, the wage premium is $w - 1 > 0$. For the output, we assume that the price, p , is exogenously given and that the market has no imperfection. A higher p indicates a stronger demand for the product.

A final simplifying assumption is that the TNE's input levels can take only two exogenous values; 0 and $t > 0$. If the level is set to zero, the project will not operate. Once the investment is done, the opportunity cost of using the positive levels of these inputs for the project is zero. These assumptions facilitate the analysis, but do not change the basic results concerning the government's motives to impose employment restrictions on the project.

We start the analysis by examining the labor input choice by the TNE when the government does not intervene in the project. We then examine the government's preferences over the labor input. We complete the analysis by modeling the government's decision to regulate.

2.2. The TNE's Preferred Level of Employment Input

The TNE maximizes its after-tax profits from the project, $\pi_T(\ell)$ which is given by:

⁵ Thus, we model a as a summary of country characteristics that enhance the productivity of the project and also exhibit the two characteristics of a public good, i.e., these factors are nontrivial and nonexclusive.

⁶ This idea can be formalized by specifying the production function as $\log q = \int_0^1 s \log x(s) ds$, where $s \in [0,1]$ is an index for a continuum of differentiated inputs required for the production of the output and $x(s)$ is the quantity of input of variety s . The range of input varieties supplied local labor would then be the equivalent of λ , the share of labor's contribution to the production. The functional form in (2.1) provides a shortcut for the analysis with this specification.

⁷ The assumption that labor and profit income tax rates are the same is made to keep things simple. Allowing for differential taxation does not change the results of the paper.

⁸ This particularly notable in the case of employment in FDI projects, which typically pay higher wages and provide more training than domestic firms. See Asiedu (2004) for a review of the evidence.

$$(2.2) \quad \pi_T(\ell) = (1-\tau)(pq - w\ell).$$

Given that the TNE's reservation profit for engaging in the project is zero, it would invest and operate the project as long as $\pi_T \geq 0$. The first-order condition for maximizing π_T with respect to ℓ is:

$$(2.3) \quad \lambda pq = w\ell.$$

The solution to (2.3), ℓ_T^* , is the TNE's *preferred* level of employment in the project:

$$(2.4) \quad \ell_T^* = t \left(\frac{\lambda ap}{w} \right)^{\frac{1}{1-\lambda}}$$

2.3 The Government's Preferences

The politicians in charge of the host government may benefit from the project in two different ways. First, the project adds to the tax revenue, which the politicians value because they need funding for government activities that they control. The amount of this revenue is the total income tax delivered by the project, net of the expected taxes that the workers would have paid in their alternative jobs; that is, $\tau pq - \tau \ell$. Second, the surplus gained by the local workers, $(1-\tau)(w-1)\ell$, helps improve welfare and adds to the political support for the ruling politicians. With these considerations, we specify the utility function of the politicians, expressed in terms of units of tax revenue, as:

$$(2.5) \quad u(\ell) = \tau pq - \tau \ell + \theta(1-\tau)(w-1)\ell,$$

where θ is the premium value that the politicians place on each unit of surplus earned by workers. We assume that

$$(2.6) \quad \tau > \theta(1-\tau)(w-1);$$

i.e., the marginal value of a dollar of tax to the politicians exceeds their valuation of a dollar in the hands of workers. This is a reasonable assumption because if the government valued money more in the hands of worker than in the treasury, it could distribute its funds to them (rather than taxing labor income).

Maximizing u with respect to ℓ yields the following first-order condition:

$$(2.7) \quad \lambda \tau pq = [\tau - \theta(1-\tau)(w-1)]\ell.$$

Note that assumption (2.6) implies that the coefficient of ℓ on the right-hand side of (2.7) is positive and, therefore, (2.7) always has a solution, ℓ_G^* , which is the employment level *preferred* by the government:

$$(2.8) \quad \ell_G^* = t \left(\frac{\lambda a p}{1 - \theta(1/\tau - 1)(w - 1)} \right)^{\frac{1}{1-\lambda}} = \left(\frac{w}{1 - \theta(1/\tau - 1)(w - 1)} \right)^{\frac{1}{1-\lambda}} \ell_T^*.$$

A quick examination of (2.8) shows that $\ell_G^* > \ell_T^*$ because $w > 1 > 1 - \theta(1/\tau - 1)(w - 1)$.

2.4. The Government's FDI Policy

The divergence between the employment preferences of the TNE and the government creates a motive for policy intervention in the labor input decision of the project. The politicians' gain from intervening in employment and requiring the project to employ $\underline{\ell}$ is

$$(2.9) \quad u(\underline{\ell}) - u(\ell_T^*) = [(\pi_T(\underline{\ell}) - \pi(\ell_T^*)) \tau / (1 - \tau) - [\tau - \theta(1 - \tau)](w - 1)(\underline{\ell} - \ell_T^*)].$$

Obviously, $u(\underline{\ell}) - u(\ell_T^*)$ is increasing in $\underline{\ell}$ up to $\underline{\ell} = \ell_G^*$, where it is maximized. Although the government always prefers a higher level of employment than the TNE, it may refrain from imposing employment regulations on the TNE because that may entail costs that could exceed the benefits from the politicians' point of view. The costs consist of administrative effort as well as the risks of costly mistakes, which may depend on the project and country characteristics, but also contain idiosyncratic random elements for individual projects. The government chooses to intervene in a project's employment level if the maximum net benefit that it can obtain from such action is positive.

It is reasonable to assume that the intervention costs have a fixed part, φ , but also depend on the size of required adjustment in the project's employment, $|\underline{\ell} - \ell_T^*|$. As a first-order approximation, we specify the intervention costs as $\varphi - \mu|\underline{\ell} - \ell_T^*|$, where μ is the marginal cost of intervention. Then, the politicians' net benefits from imposing employment level $\underline{\ell}$, is $B(\underline{\ell}) = u(\underline{\ell}) - u(\ell_T^*) - \varphi - \mu|\underline{\ell} - \ell_T^*|$, which is maximized at

$$(2.10) \quad \underline{\ell}^* = \left(\frac{w}{1 - \theta(1/\tau - 1)(w - 1) + \mu} \right)^{\frac{1}{1-\lambda}} \ell_T^*.$$

The government finds it worthwhile to intervene if

$$(2.11) \quad B(\underline{\ell}^*) = [(\pi_T(\underline{\ell}^*) - \pi(\ell_T^*)) \frac{\tau}{1 - \tau} - [\tau - \theta(1 - \tau)](w - 1)(\underline{\ell}^* - \ell_T^*) - \mu(\underline{\ell}^* - \ell_T^*) - \varphi > 0$$

Given that φ and μ have random components, the probability that the government intervenes in a particular project, $\Pr[B(\underline{\ell}^*) > 0]$, rises with the factors that raise $B(\underline{\ell}^*)$. Therefore, to derive testable

implications about the likelihood of intervention in employment decisions of the project, we examine the derivatives of $B(\underline{\ell}^*)$ with respect to the parameters of the model. Using the envelope theorem and noting that $\underline{\ell}^*$ and ℓ_T^* maximize $B(\ell)$ and $\pi(\ell)$, respectively, we find:

$$(2.12) \quad \frac{\partial B}{\partial \theta} = (1-\tau)(w-1)(\underline{\ell}^* - \ell_T^*) > 0.$$

$$(2.13) \quad \frac{\partial B}{\partial \tau} = [\pi_T(\underline{\ell}^*) - \pi(\ell_T^*)] \frac{1}{1-\lambda} - (1-\theta)(w-1)(\underline{\ell}^* - \ell_T^*) < 0.$$

$$(2.14) \quad \frac{\partial B}{\partial w} = \theta(1-\tau)(\underline{\ell}^* - \ell_T^*) - \{[\tau - \theta(1-\tau)](w-1) + \mu\} \frac{1}{1-\lambda} \frac{\ell_T^*}{w} \text{ (ambiguous sign).}$$

$$(2.15) \quad \frac{\partial B}{\partial t} = (1-\lambda) \frac{p}{t} [q(\underline{\ell}^*) - q(\ell_T^*)] \frac{\tau}{1-\tau} + [\tau - \theta(1-\tau)](w-1) + \mu \frac{\ell_T^*}{t} > 0.$$

$$(2.16) \quad \frac{\partial B}{\partial a} = \frac{p}{a} [q(\underline{\ell}^*) - q(\ell_T^*)] \frac{\tau}{1-\tau} + [\tau - \theta(1-\tau)](w-1) + \mu \frac{1}{1-\lambda} \frac{\ell_T^*}{a} > 0.$$

$$(2.17) \quad \frac{\partial B}{\partial p} = [q(\underline{\ell}^*) - q(\ell_T^*)] \frac{\tau}{1-\tau} + [\tau - \theta(1-\tau)](w-1) + \mu \frac{1}{1-\lambda} \frac{\ell_T^*}{p} > 0.$$

$$(2.18) \quad \frac{\partial B}{\partial \lambda} = p[q(\underline{\ell}^*) \log\left(\frac{a\underline{\ell}^*}{q(\underline{\ell}^*)}\right) - q(\ell_T^*) \log\left(\frac{a\ell_T^*}{q(\ell_T^*)}\right)] \frac{\tau}{1-\tau} \\ + [\tau - \theta(1-\tau)](w-1) + \mu \left[1/\lambda + \log\left(\frac{\lambda pa}{w}\right)\right] \frac{1}{1-\lambda} \ell_T^* > 0.$$

Note that (2.13) follows from the fact that $\pi_T(\ell)/(1-\tau) = pq - w\ell$ is independent of τ and $\pi_T(\underline{\ell}^*) < \pi(\ell_T^*)$.

In (2.14), we have used the fact that $\partial \ell_T^* / \partial w = -[1 + 1/(1-\lambda)] \ell_T^* / w$. The sign of $\partial B / \partial w$ is ambiguous because while an increase in w raises the politicians' gains from more employment at the project, at the same time it reduces ℓ_T^* and makes it more costly for the government to push employment towards its preferred level, $\underline{\ell}^*$. Equation (2.18) can be derived by noting that $\partial q / \partial \lambda = q \log(a\ell/q)$, which is increasing in ℓ and ensures that the first term on the right-hand side of (2.18) is positive.

Testable Implications of the Model

Table 1 provides a description of the model's parameters and a summary of the comparative static results.

Table 1: Theoretical Impact of the Model's Parameters on the Likelihood of Employment Restrictions

Parameters	Description of Parameters	Impact on Restrictions
λ	The contribution of labor to the FDI project	Positive
t	Technological input from the TNE	Positive
a	The quality of institutions in the host country	Positive
p	Output price	Positive
θ	Premium value that the politicians place on each unit of surplus earned by workers	Positive
τ	Tax rate on wages and income	Negative
$w - 1$	Wage Premium for domestic workers	Ambiguous

Thus the model generates the following hypothesis: All else equal, the likelihood that the government will impose employment restrictions increases with

- the importance of the contribution of local labor to the FDI project,
- the extensiveness of the TNE's technological input,
- the extent to which the institutions in the host country enhances the productivity of the project,
- the strength of the demand for the product,
- the value politicians place on each unit of surplus earned by workers, and
- the tax rate on income and wages.

The impact of the wage premium is unclear.

3. Empirical Estimation

3.1. Brief Description of the Data on Employment Restrictions

The data for employment restrictions comes from the World Bank's World Business Environment Survey (WBES), conducted in 1999/2000. The aim of the survey was to identify the factors that constrain investment. The WBES database also has information on important firm attributes such as sales, assets, firm size, industry and ownership. The survey covered 10,032 firms in 81 countries. In general, at least about 100 firms were surveyed in each country. Within each country, at least 15 percent of the firms had foreign ownership, at least 15 percent were small (fewer than 50 employees) and at least 15 percent were large (more than 500 employees). The administration of WBES followed the regional structure of World Bank organization and, as a result, there may have been minor differences in the way some questions have been posed or the data has been collected in different regions. We address this issue in our estimation process (see below).

Our measure of employment restrictions is derived from the response by foreign owned firms to the question:

Question 1: "How often does the government intervene in employment decisions by your firm?"

- (1) never
- (2) seldom
- (3) sometimes
- (4) frequently
- (5) usually
- (6) always

To form the dependent variable for our regressions, *Employment Restriction*, we assign scores of 1 to 6 corresponding to the six responses to each observation, so that a higher number implies more intervention.⁹

Data on the answer to Question 1 is available for a total of 8,548 firms of which 1,572 are foreign owned. Our empirical analysis employs data for up to 1207 foreign firms in 52 countries. We lost 365 observations because the data for some of the independent variables were missing for some countries. These also happen to be mostly small countries where there are few observations (an average of less than 10 foreign-owned firms per country).

⁹ The original ordering of the answers is the reverse of the one shown in Question 1. We have re-ordered the answers to facilitate the interpretation of the results.

Table 2 reports the average score for each country as well as the percentage of firms in each country in our sample that reported that the government always, usually or frequently intervened in their decisions regarding employment. Table 3 presents a breakdown of employment restrictions by firm size, industry and by region. Four points stand out from Tables 2 and 3. First, there is a wide variation in the degree of restrictiveness across country, ranging from the case where no firm reported significant restrictions (e.g., Bulgaria and Tunisia) to the case where over 90 percent of firms experienced restrictions (e.g., Canada and Portugal). Second, larger firms face more restrictions (about 51 percent) than smaller or medium sized firms (about 38 percent). Third, firms in the service industry face more restrictions (about 58 percent) and firms engaged in agriculture face fewer restrictions (21 percent). Finally, the most restrictive regions are Western Europe and Latin America where about 80 percent of firms reported restrictions. We argue below that these patterns must be related to the factors identified by our model.

Insert Table 2.

Insert Table 3.

3.2. Description of the Variables

We next describe the explanatory variables used in the estimations. The data for the country variables are averaged from 1995-99. Some of the explanatory variables are ordinal indices that in their original form take several values. To prevent those ordinal values from acting as cardinal measures, we recode all such variables in dichotomous forms by finding a gap in the distribution of the values and using it as a threshold above which our variable takes the value of 1, otherwise it is set equal to zero. The cut-off values and a summary statistics of the variables are provided in Table 4. We present the estimation results with both dichotomous and original coding and discuss their similarities and differences.

Determinants of Parameter λ : Contribution of Local Labor to the FDI Project

Education increases the scope and quality of skills that a country's labor force can offer, which in our model is associated with higher values of λ . To measure educational attainment, we use the average years of schooling in the population 25 years and older. We expect this variable, which we simply refer to as *Education*, to be positively related to the dependent variable, *Employment Restriction*.

The role of labor also varies by industry. In particular, jobs in the service sector are generally more labor intensive. We test this hypothesis by including a dummy variable, *Service*, for firms in the service industry. Then, all else equal, the estimated coefficients of *Service* should be positive.

Determinants of Parameter t : The Firm's Endowments

Larger firms tend to have more assets (technological, managerial, or financial) than smaller firms. This raises t and, therefore, increases the likelihood of government intervention. We experimented with logs of sales and assets as measures of firm size. However, the data for these variables has many missing values and, besides, is quite noisy because respondents were asked to provide “estimates” of their sales and assets. For these reasons, we decided to use the only other measure of size available from the WBES, which is a simple indicator that categorizes firms as *small* (5 to 50 employees), *medium* (51 to 500 employees), and *large* (more than 500 employees). Although this variable is likely to be endogenous to employment restrictions, the broad categories reduce the severity of the problem. Besides, our model predicts a positive correlation between t and employment restrictions, whereas the bias caused by this endogeneity implies a negative effect. This means that the bias works against the model's prediction and, therefore, finding a positive effect would be a stronger confirmation of the hypothesis.

Determinants of Parameter a : Productivity-Enhancing Country Characteristics

The determinants of a include country characteristics that increase the productivity of projects. This includes efficient institutions and effective business environment. We focus on five aspects of the host country's conditions that facilitate business operations—namely, rule of law, social and political stability, lack of corruption, economic openness, and economic growth.

Rule of law and social and political stability are important for business in general, and FDI operations in particular, because they lower the risk of arbitrary policies and, thus, increase the producers' confidence in the predictability of the business environment. For measuring these factors, we use two indicators, *Rule of Law* and *Socio-Political Stability*, which we derive from the International Country Risk Guide (ICRG) dataset produced by the Political Risk Service, Inc. The *Rule of Law* is a measure of the impartiality of the legal system and the extent to which laws are enforced. We define *Rule of Law* as a dichotomous 0-1 measure that takes the value of 1 when the corresponding variable in the ICRG dataset averages above 5 out of 6 during 1995-1999. *Socio-Political Stability* is also defined dichotomously based on the sum of the ICRG scores for government stability, socioeconomic conditions, internal and military involvement in politics. All these scores are coded in a way that they should be rising in the extent of social and political stability, and their total is expected to be associated with higher values of a . When the total during 1995-1999 has an average equal or above 25 out of 48, *Socio-Political Stability* is set equal 1, otherwise it is 0

(see Table A1 in the appendix for a description of the components of *Socio-Political Stability*). We expect both of these variables to be positively related to *Employment Restriction*.¹⁰

As has been documented quite well in the literature, corruption has a negative impact on business.¹¹ To measure *Corruption*, we use another ICRG indicator and turn into a dichotomous index. We expect the index's value of 1 to be associated with higher productivity (a) and, therefore, more *Employment Restriction*.

Economic openness adds to the productivity of FDI projects because it provides firms with access to a greater variety of inputs and less hassle in accessing input and product markets. We measure this variable by two variables: the *share of trade in GDP* from World Development Indicators (WDI) and the index for *freedom of trade* from the Index of Economic Freedom dataset published by the Heritage Foundation. The latter variable is coded as a six-level ranking. To avoid the ordinal values of this index acting as cardinal measures, we recode it as a dichotomous indicator with *freedom of trade* equaling 1 when the Index of Economic Freedom's average 1995-1999 score for trade is greater or equal to 3.5 and 0 otherwise. We expect *Employment Restriction* to rank higher when *freedom of trade* equals 1.

Finally, economic growth can be viewed as an indicator of all other factors that are not captured by the above variables, but play enabling roles in the business environment. It also acts as a source of growing demand for FDI projects, which makes it easier for firms to sell their products and expand their activities. In this role, growth rate can be seen as a determinant of p , which has a positive effect similar to a on *Employment Restriction*. For our purposes, the measure of economic growth is constant-price *GDP growth rate* from the WDI database.

Determinants of Parameter θ : Political Pressure for Employment Expansion

The weight of employment in the politicians' objective function partly depends on the ability of labor to organize and play a role in the political system. One measure of such ability is the index of "freedom for independent trade unions" (or *union independence*, for short) available from *World Human Rights Guide* (1992). This index takes the values of 1 to 4 with the following definitions: (1) constant pattern of violations of the freedoms, rights of trade unions; (2) frequent violations of the freedoms, rights of trade unions; (3) occasional breaches of respect for the freedoms, rights of trade unions; and (4)

¹⁰ We also experimented with other measures of political openness such as the indices of political accountability contained in ICRG and civil and political liberties published by Freedom House. The basic results are essentially the same.

¹¹ For a survey see Rock and Bonnett (2004). Wei (2000) and Asiedu (forthcoming), in particular, show that corruption deters FDI.

unqualified respect for the freedoms, rights of trade unions. To avoid the ordinal values of this index acting as cardinal measures, we recode it as a dichotomous indicator with *union independence* equaling 1 when definition (4) applies and 0 otherwise. We expect *union independence* to be positively related to *Employment Restriction*.

Determinants of Parameter $w - 1$: The Wage Premium in FDI Projects

We do not have access to any direct measure of wage premium across countries. However, we use a proxy for labor market underdevelopment that is likely to be associated with higher wage premia. The proxy is the *share of agriculture in GDP* available from WDI, which has typically been associated with less development in markets. For our purposes, *share of agriculture in total employment* is a good proxy. But, the available data for this variable is much more limited and substantially cuts the size of our sample. We do present the results of estimation with this variable, but for most regressions, we rely on the *share of agriculture in GDP*. We expect both variables to be positively related to *Employment Restriction*.

Determinants of Parameter τ : The Government's Ability to Collect Direct Taxes

Our model predicts that when the government has a greater ability to tax the surplus of an FDI project, it will have less interest in imposing employment restrictions. Since there are no direct measures of ability to tax, we use a combination of variables that may act as proxies. Two of our measures for this variable are the shares of *property* and *social security and payroll taxes* as percentages of total tax revenue. These types of tax, in contrast to international trade and sales taxes, require more effective bureaucracies and better information management. So, we posit that countries that manage to collect more of their taxes in these forms are likely to have greater potentials to tax FDI projects. The data for these variables is obtained from IMF's *Government Finance Statistics*. An alternative measure that we use for this purpose is the ordinal measure of *Bureaucratic Quality* available from ICRG data set. As in other ordinal measured, we turn this index into a 0-1 dummy variable to separate low and high bureaucratic capabilities. We expect all these measures to be negatively related to *Employment Restriction*.

3.2. The Econometric Model and Estimation

Our main econometric equation derived from the model in section 2 is an ordered LOGIT regression. The actual restrictiveness of employment policy is a latent variable, R^* , which as a first approximation, we assume to be a linear function of the variables identified by the model as well as a random error term with a logistic distribution. [Assuming that the distribution is normal (i.e., an ordered PROBIT regression) does not change the results in any tangible way.] The observed responses to Question 1 are assumed to arise when R^* fall into certain ranges. The ordered LOGIT method finds the cutoff points

and the coefficients of the linear equation so as to maximize the likelihood of observing the actual questionnaire responses given the explanatory variables.

We start with a regression that includes the main variables representing the parameter of the model and then carry out sensitivity analysis by testing alternative measures and excluding observations based on different criteria. Besides the variables discussed above, we also included regional dummies in the regression to control for some unobserved effects, especially the possibility that the WBES questionnaire may have been administered or interpreted differently in different regions of the world. We used North America as the default region and tested dummies for other regions. The ones that proved significant were those for Western Europe, Latin America, Sub-Saharan Africa, and transition countries. Once these were included, dummies for other country categories such as OECD membership proved insignificant.

4. Empirical Results

Insert Tables 4-8.

Table 5 presents our main results, using three methods of estimation; namely, ordered LOGIT, ordered PROBIT, and OLS. Although there are some differences in the magnitudes and significance of coefficient estimates based on the three different methods, the results are by and large similar and paint very similar pictures of the determinants of employment intervention in FDI projects. Since the assumptions behind OLS estimation do not fit well with the nature of our dependent variable, we prefer LOGIT and PROBIT estimates. Here, we focus on the outcome of ordered LOGIT, which is representative of the two.

A key observation regarding estimation results is that they enjoy high statistical significance levels and agree with the hypotheses developed in earlier sections. As Table 5 show, the frequency of government intervention in employment decisions of foreign-owned firms rises with the educational attainment of the host country's labor force. This confirms our claim that when the local work force play a greater role in FDI projects, the government will become keener, and finds it less costly, to push for higher employment. Similarly, the negative effect of *Corruption* and the positive coefficients of *Rule of Law*, *Socio-Political Stability*, *Share of Trade in GDP*, *Freedom of Trade*, and *GDP Growth* all confirm the model's prediction that when a country's business environment is more productive, the government sees greater returns from asking foreign firms to expand their employment levels.

We should point out that we considered the log of *GDP per capita* as another possible measure of overall economic conditions. However, once institutional variables and regional dummies were included in the regression, GDP per capita showed no significance.

The dummies for *Large Firm* and *Service Sector* both prove to be generally significant in the regressions. This supports our claim that the project characteristics that make it more productive or more labor intensive tend to increase the government's gain from employment expansion and, therefore, make policy interventions more likely. We made an attempt to test the role of firm's assets by including the size of fixed asset estimate included in WBES dataset. However, the data are very rough estimates and, moreover, have many missing values. As a result, the estimates are not very reliable, though they carry the correct sign. (Those results are not presented here due to space limitations). A similar consideration and outcome applies to the value of firm sales available in the WBES dataset.

The above results, of course, hold for a given amount of surplus that the government can collect from each dollar of surplus produced by firms. When the government's taxation capability is high, then it has less interest in forcing foreign firms to employ more workers because such a policy could reduce its tax revenue. This effect is reflected in the negative coefficient of the *Share of Social Security and Payroll Taxes* in total tax revenue, which, as we argued, should be associated with the government's ability to tax. This point is further confirmed in Table 6, where alternative measures of taxation capability are used in the regression. As the first two columns of Table 6 show, using the *Bureaucratic Quality* dummy and the *Share of Property Taxes* in total tax revenue both have negative effects on the likelihood of *Employment Restriction*. Moreover, the last column of the table makes it clear that all these indicators may be complementary measures of ability to tax because when they enter the regression jointly, the fit of the regression improves and the significance levels of all three variables rise.

The regressions in Table 5 and 6 further show that economic openness and growth are positively related to *Employment Restriction*. This supports our claim that, controlling for the institutional quality and taxation, an economic environment that enhances productivity also motivates the government to demand more employment from foreign firms. This demand rises with the increase in political pressure from workers (measured by *Union Independence*) and with wage premium of workers in FDI projects. The latter variable is captured in the *share of agriculture in GDP* in most of our regressions. However, the last column of Table 6 shows that *share of agriculture in total employment* yields a similar result, though using this variable entails a major reduction in the number of observations and countries included in the analysis.

The regional dummies included in the regressions indicate a negative effect for transition countries and positive ones for Western Europe, Latin America, and Sub-Saharan Africa. This may reflect

some characteristics of those regions not captured by our explanatory variables. However, they could also be due differences in the way data has been collected in different regions.

For further sensitivity analysis, we first added the percent of foreign ownership to our main regressions in Table 5. The first column of Table 7 shows the results of that experiment with LOGIT method. (PROBIT results are very similar.) The foreign share seems to be negatively related to *Employment Restriction*, but its significance level is marginal. To examine whether our results may be driven by the extent of foreign ownership, we re-estimated the main model with the sample of firms that had more than 50 percent foreign ownership. As the second column of Table 7 confirms, the results remain essentially unchanged. Experiments with sample of firms that have larger foreign shares (not shown here) do not change the basic message, though the sample size suffers.

Another sensitivity test was to drop countries with outlying or small numbers of firms in the main sample. For all countries in the sample other than Thailand, number of observations varies from 8 to 57, with a median of 25. Thailand has 124 observations and may be dominating the sample. For this reason, we ran our regressions after omitting Thailand from the sample. The third column of Table 7 shows the result, which is the same model specification as the first column of Table 5, but with Thailand omitted from the sample. The only noticeable changes in the magnitude of coefficients are those of regional dummies and the *social security and payroll tax share*. However, the signs remain unchanged and significance levels are somewhat lower in the smaller sample. A similar observation applies to the case where we drop the eleven countries that have less than 12 observations. (See the last column of Table 7)

A final sensitivity test of our estimates is the use of the full categorization data for the ordinal measures included in the regressions. Table 8 shows the results of re-estimating the regressions of Table 5 with the ordinal measure. Here the changes are more substantial for some variables (in particular, *Rule of Law* and *Freedom of Trade* indicators lose their significance). However, this is likely to reflect the problems of treating ordinal measures as cardinal ones. Nevertheless, it is important to note that for all other variables, the signs and even the significance levels are preserved in the experiment, alleviating concerns that the formation of dichotomous measures may be driving the results.

5. Conclusion

This paper has theoretically and empirically examined the determinants of employment restrictions on FDI. We find that the likelihood that the host country will impose restrictions decreases with the government's ability to collect direct taxes, and increases with the extensiveness of the TNE's technological input to the FDI project, the importance of the contribution of local labor to the FDI project, the strength of the demand for the project output in the host country, the extent to which the institutions in

the host country enhances the productivity of the project, the value politicians place on each unit of surplus earned by workers, and the wage premium for the employees of foreign owned firms.

The result that countries with better institutions tend to be more restrictive seems counter-intuitive. However, it reflects the fact that one of the key motivations of governments to maintain favorable business environments is to ensure better jobs and higher incomes for their citizens (which they can help maintain political support for the incumbent politicians). Once the institutional and physical public goods are made available to foreign investors, governments want to ensure that they share in the returns to those assets, either directly through taxation or indirectly through more remunerative jobs.

This paper is a first step in understanding the roles played by the political and institutional characteristics of the host country in the formation of FDI policies.¹² Specifically, our analysis places FDI policies into an appropriate context by identifying clear rationales for government interventions.¹³ Such an analysis has important policy implications because devising successful and credible policies requires an understanding of the forces that govern policymaking. Thus, identifying the factors that drive countries to impose employment restrictions on FDI will help technical analysts (such as officials of the World Bank) to devise alternative and less costly ways via which governments can achieve their objectives.

We end by pointing out one caveat of our model: it focuses on only one type of FDI restrictive policy. We note however that governments typically employ several policies and that FDI policies are in general interdependent. A natural extension will be to expand the model to include other types of FDI (restrictive and incentive) policies. Such an analysis will permit one to examine several issues that are important in the policy arena.

¹² The effect of institutions and politics on policy formation has received a lot of attention in other areas of economics, but not in FDI.

¹³ In the literature, FDI policies are often treated as *ad hoc* (and typically inefficient) government actions.

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Table 2. Employment Restrictions by Country

Country	Number of Firms	Average Score for <i>Employment Restriction</i> (Range:1-6; Higher number implies more restrictions)	Percent of firms that reported that the government "always", "usually" or "frequently" intervened in employment
<i>Eastern Europe and Central Asia</i>	61	1.66	10
Bulgaria	10	1.20	0
Hungary	8	1.88	13
Poland	15	1.80	20
Romania	15	1.67	7
Turkey	13	1.69	8
<i>Western Europe</i>	158	4.51	80
France	19	3.58	58
Germany	30	4.33	73
Italy	26	4.46	77
Portugal	27	5.15	100
Spain	23	4.39	83
Sweden	22	4.77	86
United Kingdom	11	4.91	82
<i>Sub-Saharan Africa</i>	373	2.19	13
Botswana	44	2.82	27
Cameroon	30	1.97	7
Cote d'Ivoire	39	1.74	8
Ethiopia	8	1.75	0
Ghana	24	2.04	8
Kenya	36	2.17	8
Madagascar	17	1.59	0
Malawi	13	2.15	15
Nigeria	24	1.67	4
Senegal	8	1.50	0
South Africa	36	2.75	28
Tanzania	20	2.40	15
Uganda	28	1.75	0
Zambia	19	2.26	11
Zimbabwe	27	2.89	30
<i>Latin America and Caribbean</i>	366	4.70	79
Argentina	31	4.97	87
Bolivia	20	5.20	95
Brazil	49	3.29	49
Chile	31	5.06	87
Colombia	37	4.14	73
Costa Rica	23	4.74	83
Dominican Republic	20	5.55	95
Ecuador	9	4.78	78
El Salvador	15	4.73	80
Guatemala	12	4.83	83
Honduras	14	5.93	100

Mexico	11	5.00	82
Nicaragua	11	5.55	91
Panama	14	5.21	93
Peru	20	4.25	65
Trinidad and Tobago	14	5.79	100
Uruguay	15	5.20	87
Venezuela	20	4.25	65
<i>Others</i>	249	2.41	21
Thailand	124	1.85	8
Egypt, Arab Rep.	14	2.71	21
Tunisia	8	1.38	0
Bangladesh	10	1.40	0
India	58	2.22	14
Canada	25	5.48	100
United States	10	4.10	60

Table 3. Employment Restrictions by Firm Size and Industry

Country	Number of Firms	Average Score for <i>Employment Restriction</i> (Range:1-6; Higher number implies more restrictions)	Percent of firms that reported that the government "always", "usually" or "frequently" intervened in employment
<u>Breakdown of Sample by Firm Size</u>			
Small (less than 50 employees)	209	3.07	39
Medium (between 50 and 500 employees)	535	3.04	38
Large (more than 500 employees)	463	3.64	51
<u>Breakdown of Sample by Industry</u>			
Manufacturing	560	3.22	42
Services	436	3.82	58
Agriculture	34	2.59	21
Other	177	4.41	30
<u>Breakdown of Sample by Region</u>			
Eastern Europe and Central Asia	61	1.66	10
Western Europe	158	4.51	80
Sub-Saharan Africa	373	2.19	13
Latin America and Caribbean	366	4.70	79
Others	249	2.41	21

Table 4: Summary Statistics

Variable	Source	Mean	Std. Dev.	Min	Max
Employment Restriction	WBES	3.27	1.90	1.00	6.00
Log (Average Years of Schooling)	Barro-Lee	1.64	0.45	0.20	2.50
Share of Trade in GDP (%)	WDI	60.65	24.53	18.17	110.82
GDP growth (annual %)	WDI	3.52	1.87	-1.20	7.80
Share of Agriculture in Total Employment	WDI	22.72	20	1	80
Social Security and Payroll Taxes/Total Tax Revenue	IMF GFS	0.13	0.17	0	0.51
Property Taxes/Total Tax Revenue	IMF GFS	0.01	0.02	0	0.12
Agricultural Value Added (% of GDP)	WDI	15.35	12.45	1.00	51.60
Rule of Law Index (RULE_LAW)	ICRG	4.24	1.07	1.73	6.00
Dummy for Rule of Law =1 if RULE_LAW \geq 5	ICRG	0.16	0.37	0	1
Corruption Index (CORRUPT)	ICRG	3.34	1.01	2.00	6.00
Corruption Dummy=1 if CORRUPT \geq 4.5	ICRG	0.78	0.42	0	1
Bureaucratic Index (BUREAU)	ICRG	2.39	0.81	0	4
Bureaucratic Dummy=1 if BUREAU > 2.5	ICRG	0.54	0.50	0	1
Socio-Political Stability Index (SOC_POL)	ICRG	27.50	3.61	18.83	34.50
Dummy for Socio-Political Stability =1 if SOC_POL \geq 25	ICRG	0.79	0.41	0	1
Share of Foreign Ownership (%)	WBES				
Independence of Trade Union (UNIONS)	Humana	3.03	0.83	1	4
Dummy for Union Independence=1 if UNIONS > 3	Humana	0.30	0.46	0	1
Freedom of Trade (FREE_TRADE)	Heritage Foundation	2.40	1.06	1.00	4.20
Dummy for Freedom of Trade =1 if FREE_TRADE \geq 3.5	Heritage Foundation	0.21	0.41	0	1

Table 5: Main Estimation Results
 Dependent Variable: *Employment Restriction*
 Number of Observations: 1207; Number of Countries: 52
 (Robust *p*-values are given in parentheses below coefficient estimates)

Explanatory Variable	Ordered Logit	Ordered Probit	OLS
<i>Education</i>	1.011*** (0.000)	0.581*** (0.000)	0.609*** (0.000)
<i>Service Sector Dummy</i>	0.317*** (0.009)	0.196*** (0.007)	0.271*** (0.002)
<i>Large Firm Dummy</i>	0.194* (0.085)	0.133** (0.048)	0.169** (0.038)
<i>Rule of Law</i> (Dichotomous Indicator)	0.990*** (0.000)	0.557*** (0.001)	0.716*** (0.000)
<i>Socio-Political Stability</i> (Dichotomous Indicator)	0.636*** (0.001)	0.389*** (0.000)	0.480*** (0.000)
<i>Corruption Index</i> (Dichotomous Indicator)	-0.548*** (0.002)	-0.288*** (0.006)	-0.436*** (0.001)
<i>Share of Trade in GDP</i>	0.009*** (0.003)	0.005*** (0.006)	0.005*** (0.006)
<i>Freedom of Trade</i> (Dichotomous Indicator)	1.053*** (0.000)	0.643*** (0.000)	0.938*** (0.000)
<i>GDP Growth</i> (annual %)	0.144*** (0.000)	0.084*** (0.000)	0.100*** (0.000)
<i>Union Independence</i> (Dichotomous Indicator)	0.592*** (0.001)	0.345*** (0.001)	0.469*** (0.000)
<i>Agricultural Value Added</i> (% of GDP)	0.017** (0.034)	0.009* (0.072)	0.007 (0.199)
<i>Share of Social Security and Payroll Taxes</i>	-2.929*** (0.000)	-1.751*** (0.000)	-2.250*** (0.000)
<i>Transition Dummy</i>	-2.050*** (0.000)	-1.066*** (0.000)	-1.123*** (0.000)
<i>Latin American Dummy</i>	3.814*** (0.000)	2.170*** (0.000)	2.889*** (0.000)
<i>Western Europe Dummy</i>	1.101*** (0.000)	0.632*** (0.001)	0.875*** (0.000)
<i>Sub-Saharan Africa Dummy</i>	0.378** (0.020)	0.222** (0.024)	0.246** (0.037)
Pseudo R^2	0.189	0.186	0.527

* Significant at 10%

** Significant at 5%

*** Significant at 1%

Table 6: Sensitivity Analysis with Alternative Measure of Taxation Capability and Wage PremiumDependent Variable: *Employment Restriction*Estimation Method: Ordered Logit (Robust *p*-values are given in parentheses below coefficient estimates)

Explanatory Variable	Property Taxes as a Measure of Taxation Capability	Bureaucratic Quality as a Measure of Taxation Capability	All Measures of Taxation Capability Included	Agricultural Employment as a Measure of Wage Premium
<i>Education</i>	1.170 ^{***} (0.000)	1.162 ^{***} (0.000)	0.915 ^{***} (0.000)	0.696 ^{**} (0.021)
<i>Service Sector Dummy</i>	0.295 ^{**} (0.015)	0.298 ^{**} (0.014)	0.284 ^{**} (0.019)	0.335 ^{**} (0.011)
<i>Large Firm Dummy</i>	0.255 ^{**} (0.022)	0.256 ^{**} (0.022)	0.187 [*] (0.097)	0.181 (0.152)
<i>Rule of Law</i> (Dichotomous)	0.805 ^{***} (0.002)	0.957 ^{***} (0.000)	1.030 ^{***} (0.000)	1.133 ^{***} (0.000)
<i>Socio-Political Stability</i> (Dichotomous)	0.330 [*] (0.063)	0.480 ^{**} (0.011)	0.859 ^{***} (0.000)	0.481 [*] (0.061)
<i>Corruption Index</i> (Dichotomous)	-0.355 [*] (0.053)	-0.441 ^{**} (0.018)	-0.583 ^{***} (0.001)	-0.656 ^{***} (0.001)
<i>Share of Trade in GDP</i>	0.014 ^{***} (0.000)	0.012 ^{***} (0.000)	0.007 ^{**} (0.010)	0.005 [*] (0.088)
<i>Freedom of Trade</i> (Dichotomous)	1.150 ^{***} (0.000)	0.822 ^{***} (0.002)	1.286 ^{***} (0.000)	1.280 ^{***} (0.000)
<i>GDP Growth</i> (annual %)	0.169 ^{***} (0.000)	0.156 ^{***} (0.000)	0.120 ^{***} (0.001)	0.135 ^{***} (0.003)
<i>Union Independence</i> (Dichotomous)	0.354 ^{**} (0.035)	0.383 ^{**} (0.023)	0.541 ^{***} (0.002)	0.847 ^{***} (0.001)
<i>Agricultural Value Added</i> (% of GDP)	0.022 ^{***} (0.007)	0.022 ^{***} (0.007)	0.015 [*] (0.071)	
<i>Share of Agriculture in Total Employment</i>				0.014 ^{**} (0.041)
<i>Share of Social Security and Payroll Taxes</i>			-3.049 ^{***} (0.000)	-2.997 ^{***} (0.000)
<i>Share of Property Taxes</i>	-5.870 [*] (0.067)		-6.906 ^{**} (0.035)	-5.592 (0.117)
<i>Bureaucratic Quality</i>		-0.351 ^{**} (0.024)	-0.388 ^{**} (0.015)	-0.489 ^{**} (0.032)
<i>Transition Dummy</i>	-2.669 ^{***} (0.000)	-2.813 ^{***} (0.000)	-2.248 ^{***} (0.000)	-1.989 ^{***} (0.000)
<i>Latin American Dummy</i>	3.504 ^{***} (0.000)	3.264 ^{***} (0.000)	3.646 ^{***} (0.000)	3.746 ^{***} (0.000)
<i>Western Europe Dummy</i>	0.599 ^{**} (0.041)	0.666 ^{**} (0.023)	1.000 ^{***} (0.001)	0.936 ^{***} (0.004)
<i>Sub-Saharan Africa Dummy</i>	0.430 ^{***} (0.009)	0.294 [*] (0.088)	0.260 (0.133)	0.764 ^{**} (0.020)
Number of Observations	1207	1207	1207	990
Number of Countries	52	52	52	42
Pseudo <i>R</i> ²	0.184	0.185	0.191	0.184

* Significant at 10%

** Significant at 5%

*** Significant at 1%

Table 7: Sensitivity Analysis with Alternative Specifications and Samples

Dependent Variable: *Employment Restriction*

Estimation Method: Ordered Logit (Robust *p*-values are given in parentheses below coefficient estimates)

Explanatory Variable	Adding the Percentage of Foreign Ownership	Sample of Firms with Majority Foreign Ownership	Dropping Thailand from the Sample	Sample of Countries with More than 12 Observations
<i>Percent of Foreign Ownership</i>	-0.003* (0.088)			
<i>Education</i>	1.242*** (0.000)	0.798*** (0.003)	0.988*** (0.000)	1.046*** (0.000)
<i>Service Sector Dummy</i>	0.300** (0.020)	0.346** (0.015)	0.360** (0.005)	0.367** (0.004)
<i>Large Firm Dummy</i>	0.201* (0.093)	0.165 (0.199)	0.158 (0.187)	0.166 (0.157)
<i>Rule of Law (Dichotomous)</i>	1.005*** (0.001)	0.741** (0.012)	0.846*** (0.002)	0.960*** (0.000)
<i>Socio-Political Stability (Dichotomous)</i>	0.553*** (0.005)	0.539*** (0.009)	0.667*** (0.000)	0.710*** (0.000)
<i>Corruption Index (Dichotomous)</i>	-0.501*** (0.008)	-0.590*** (0.002)	-0.483*** (0.006)	-0.511*** (0.005)
<i>Share of Trade in GDP</i>	0.009*** (0.005)	0.010*** (0.005)	0.014*** (0.000)	0.008** (0.016)
<i>Freedom of Trade (Dichotomous)</i>	0.907*** (0.002)	1.155*** (0.001)	0.799** (0.004)	1.085*** (0.000)
<i>GDP Growth (annual %)</i>	0.152*** (0.000)	0.113*** (0.006)	0.076* (0.053)	0.145*** (0.000)
<i>Union Independence (Dichotomous)</i>	0.449** (0.013)	0.716*** (0.000)	0.571** (0.001)	0.597*** (0.001)
<i>Agricultural Value Added (% of GDP)</i>	0.020** (0.028)	0.011 (0.189)	0.018* (0.028)	0.014 (0.103)
<i>Share of Social Security and Payroll Taxes</i>	-2.576*** (0.000)	-2.717*** (0.000)	0.988*** (0.000)	-3.024*** (0.000)
<i>Transition Dummy</i>	-2.221*** (0.000)	-2.373*** (0.000)	0.360*** (0.005)	-1.917*** (0.001)
<i>Latin American Dummy</i>	3.764*** (0.000)	3.834*** (0.000)	0.158 (0.187)	3.764*** (0.000)
<i>Western Europe Dummy</i>	1.279*** (0.000)	0.885** (0.025)	0.846*** (0.002)	1.084*** (0.001)
<i>Sub-Saharan Africa Dummy</i>	0.513*** (0.005)	0.375* (0.068)	0.667*** (0.000)	0.403** (0.018)
Number of Observations	1092	932	1083	1103
Number of Countries	51	52	51	41
Pseudo R ²	0.185	0.189	0.187	0.179

* Significant at 10%

** Significant at 5%

*** Significant at 1%

Table 8: Estimation Results with Multi-Level Ordinal Values for Explanatory VariablesDependent Variable: *Employment Restriction*

Number of Observations: 1207; Number of Countries: 52

(Robust *p*-values are given in parentheses below coefficient estimates)

Explanatory Variable	Ordered Logit	Ordered Probit	OLS
<i>Education</i>	1.141*** (0.000)	0.662*** (0.000)	0.693*** (0.000)
<i>Service Sector Dummy</i>	0.334*** (0.006)	0.203*** (0.005)	0.279*** (0.002)
<i>Large Firm Dummy</i>	0.269** (0.016)	0.166** (0.013)	0.213** (0.010)
<i>Rule of Law</i>	0.048 (0.658)	0.020 (0.756)	-0.002 (0.978)
<i>Socio-Political Stability</i>	0.070** (0.028)	0.049** (0.017)	0.068*** (0.005)
<i>Corruption Index</i>	-0.297*** (0.001)	-0.148*** (0.007)	-0.230*** (0.000)
<i>Share of Trade in GDP</i>	0.008** (0.014)	0.004** (0.031)	0.004** (0.037)
<i>Freedom of Trade</i>	0.052 (0.528)	0.041 (0.411)	0.107* (0.065)
<i>GDP Growth (annual %)</i>	0.100** (0.021)	0.057** (0.030)	0.068** (0.030)
<i>Union Independence</i>	0.314*** (0.000)	0.193*** (0.000)	0.286*** (0.000)
<i>Agricultural Value Added (% of GDP)</i>	0.029*** (0.002)	0.016*** (0.003)	0.018*** (0.004)
<i>Share of Social Security and Payroll Taxes</i>	-2.094*** (0.002)	-1.318*** (0.001)	-1.735*** (0.000)
<i>Transition Dummy</i>	-2.038*** (0.000)	-1.084*** (0.000)	-1.198*** (0.000)
<i>Latin American Dummy</i>	3.412*** (0.000)	1.941*** (0.000)	2.603*** (0.000)
<i>Western Europe Dummy</i>	1.970*** (0.000)	1.146*** (0.000)	1.573*** (0.000)
<i>Sub-Saharan Africa Dummy</i>	0.207 (0.268)	0.110 (0.319)	0.084 (0.537)
Pseudo R^2	0.178	0.175	0.504

* Significant at 10%

** Significant at 5%

*** Significant at 1%

Appendix

Table A1. Description of the Components of Socio-Political Stability Index (48 Points. Higher Ratings imply more Stability).

Variable	Points	Description
Government Stability	12	This is a measure of the government's ability to carry out its declared program(s), and its ability to stay in office.
Socioeconomic Conditions	12	A measure of general public satisfaction with the government's economic policies. The greater the popular dissatisfaction with a government's policies, the greater the chances that the government will be forced to change track, possibly to the detriment of business.
Internal and External Conflict	12	Internal Conflict measures the political violence in the country and its actual or potential impact on governance. External conflict is an assessment of the risk to the incumbent government and to inward investment.
Military in Politics	6	Measures the involvement of the military in politics.
Religious and Ethnic Tensions	6	Measures the degree of tension within a country attributable to religion, racial, nationality, or language divisions.