



Trust and employment protection legislation

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ARTICLE INFO

JEL classification:

D02
G38
J80
Z10

Keywords:

Trust
Informal institutions
Labor laws
Investment

ABSTRACT

We examine the role of generalized social trust in substituting for employment protection legislation. Using foreign direct investment from the US to a sample of OECD countries, we find that trust diminishes the importance of formal employment regulations in investment attractiveness.

1. Introduction

Employment protection legislation (EPL) is a source of controversial debate around the world, both in terms of its antecedents and impact. Theory predicts an ambiguous effect of EPL on investment because of opposing incentives generated for firms and workers. Strict laws take away flexibility, disincentivizing investment (Abel and Eberly, 1996; Bai et al., 2020; Bertola and Caballero, 1994), but may induce physical capital investment to reduce reliance on labor (Caballero and Hammour, 1998; Cingano et al., 2010). Similarly, while workers are incentivized to invest in firm-specific human capital (Belot et al., 2007), they can also shirk more without fear of dismissal (Autor et al., 2004; Okudaira et al., 2013).

Cross-country variation in legal employee protections is attributed to a range of institutional, financial and political factors. These include legal origin (Botero et al., 2004), proportional electoral systems (Pagano and Volpin, 2005), employee bargaining power (Saint-Paul, 2002), and financial wealth (Perotti and Von Thadden, 2006). We argue that a more underlying feature of society, in the form of trust, has a role to play in the observed level of EPL and in its impact on investment.

We conjecture that a higher level of generalized trust is associated with less strict EPL, based on a growing literature that demonstrates the substitutability between regulations and social institutions. Aghion

et al. (2010) argue that individuals in societies with higher level of distrust expect stronger regulations. Further, Cline and Williamson (2016) and Cline and Williamson (2020) show that trust can substitute for shareholder protection laws and contract regulations. In general, trust can alleviate inefficiencies caused by incomplete contracts between multinationals and domestic stakeholders (Guiso et al., 2009; Bhardwaj et al., 2007). So, we hypothesize that a high level of trust mitigates the impact of strict EPL on investment.

We present two sets of tests. First, we examine the relationship between EPL and trust. Second, we assess the impact of EPL and trust on the flows of foreign direct investment (FDI) from US multinationals to a sample of OECD countries. This approach offers a compact way to analyze investment attractiveness while avoiding potential confounding factors. We find a robust and significant negative association across countries between trust and EPL. To the extent that trust can substitute for EPL, it is highly desirable as it is positively associated with FDI.

2. Data

Our sample consists of 32 OECD countries from 1985 to 2019. We use the annual OECD indices that are constructed by evaluating dismissal laws governing employment under regular contracts (EPR) and temporary contracts (EPT). EPL is constructed as the average of EPR and EPT.

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A higher score reflects stricter regulation. By employing this source, we are able to construct a panel data sample that captures several changes in regulation, with the data also reflecting heterogeneity in the timing of these changes.

Trust is measured using survey responses for the following question from the integrated database of the World Values Survey (WVS) and European Values Survey (EVS): *Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?* Individual responses are coded 1 for yes, and 0 otherwise. We use the aggregate country-level trust measure (between 0 and 1) and fill in linearly interpolated values for years between survey waves. We collect annual FDI flows (net of financial transactions and income) of US parents to foreign affiliates in each country from the US Bureau of Economic Analysis.

We collect additional control variables that are consistent with the literature, and these are listed with the respective regressions.

3. Results

3.1. EPL and trust

We first estimate the relationship between EPL and Trust using the following OLS regression:

$$EPL_{j,t} = \beta_{Trust} Trust_{j,t} + \sum_i \beta_i Controls_{i,j,t} + \alpha_t + \varepsilon_{j,t} \quad (1)$$

The controls for this regression follow Botero et al. (2004) and Pagano and Volpin (2005), and include natural logarithm of *GDP per capita*, *Legal origin*, *Union density*, *Leftist government*, *Proportionality* (proportional voting system), and *Regulatory Quality*. A detailed summary of the data is provided in the online Appendix.

In Table 1, we find a strong negative association between *Trust* and *EPL* (and its two constituents, *EPR* and *EPT*). In Column 4, we use a time-invariant alternative measure of trust as a robustness check: *High Trust* equals one if the average *Trust* for a country is higher than the average *Trust* of the sample, and zero otherwise. Consistent with previous literature, we find similar relations between employment protection and our control variables, apart from *Union Density* (which shows a negative relationship with *EPL* after controlling for *Trust*).

Table 1
EPL and trust: baseline regression.

Dependent variable:	EPR (1)	EPT (2)	EPL (3)	(4)
Trust	-0.631*** (0.120)	-2.870*** (0.157)	-1.750*** (0.106)	
High_Trust				-0.730*** (0.028)
Log GDP per capita	-0.177*** (0.023)	0.563*** (0.041)	0.193*** (0.023)	0.191*** (0.022)
French	1.091*** (0.040)	1.712*** (0.092)	1.402*** (0.054)	1.179*** (0.033)
German	0.639*** (0.054)	0.381*** (0.066)	0.509*** (0.046)	0.283*** (0.036)
Scandinavian	1.248*** (0.050)	2.819*** (0.098)	2.033*** (0.068)	1.944*** (0.044)
Union Density	-0.018*** (0.001)	-0.028*** (0.003)	-0.023*** (0.002)	-0.027*** (0.002)
Leftist government	0.171*** (0.046)	0.058 (0.059)	0.114** (0.036)	0.064* (0.032)
Proportionality	0.221*** (0.011)	0.138*** (0.019)	0.179*** (0.013)	0.195*** (0.011)
Regulatory Quality	0.088*** (0.031)	-0.359*** (0.030)	-0.135*** (0.020)	-0.114*** (0.017)
Year FE	Yes	Yes	Yes	Yes
Observations	869	869	869	869
Adjusted R ²	0.533	0.620	0.718	0.754

Notes: Standard errors are clustered by time. ***, ** indicate statistical significance at the 10 %, 5 % and 1 % level, respectively.

To address endogeneity concerns, we next estimate the model using two staged least squares (2SLS), where we instrument for trust using *Pronoun drop* (extracted from Kashima and Kashima, 1998) - a dummy variable equal to one if the language spoken by the population licenses a pronoun drop. *Pronoun drop* was used to instrument for trust by Tabellini (2008) and Cline and Williamson (2016). It is unlikely to be correlated with *EPL* and should thus satisfy the exclusion criteria.

Table 2 shows the 2SLS results are consistent with our baseline regression. In the first stage results (Column 1), the significant negative coefficient on *Pronoun drop* and the F-test statistic support the appropriateness of the instrument. The Wu–Hausman statistic in Column 2 is significant at a 5 % level, indicating that instrumental variable analysis is consistent.

3.2. Substitutability between EPL and trust

We next regress our investment measure (the natural logarithm of FDI flows) on *Trust* and *EPL*:

$$FDI_{j,t} = \beta_{Trust} Trust_{j,t-1} + \beta_{EPL} EPL_{j,t-1} + \sum_i \beta_i Control_{i,j,t} + \alpha_t + \varepsilon_{j,t} \quad (2)$$

The controls relate to foreign investment attractiveness and include *Tax rate*, *GDP*, *Regulatory Quality*, *Control of Corruption*, *Trade openness*, *Union Density*, *Leftist Government*, and *Legal origin* (see, e.g., Daude and Fratzscher, 2008; Gliberman and Shapiro, 2003).

In Table 3, we find a negative association between *FDI* and *EPL* (Column 1), which is consistent with Olney (2013). Column 2 shows a positive association between *FDI* and *Trust*, which remains when we include *EPL* in Column 3. However, *EPL* becomes statistically insignificant.

4. Conclusion

We firstly find that different employment protection laws emerge at different levels of generalized trust. Secondly, trust acts as an important substitute to EPL in the sense that it helps attract investment while mitigating the need for stricter laws.

Table 2
EPL and Trust: 2SLS results.

Dependent variable:	First stage Trust (1)	Second stage EPL (2)
Pronoun drop	-0.056*** (0.010)	
Trust		-5.137*** (1.618)
Log GDP per capita	0.079*** (0.006)	0.625*** (0.130)
French	-0.082*** (0.010)	1.164*** (0.143)
German	-0.062*** (0.013)	0.209 (0.127)
Scandinavian	0.210*** (0.020)	2.676*** (0.236)
Union Density	-0.001*** (0.000)	-0.024*** (0.002)
Leftist government	-0.013** (0.005)	0.072* (0.040)
Proportionality	0.007*** (0.001)	0.239*** (0.017)
Regulatory Quality	0.010*** (0.002)	-0.133*** (0.020)
Year FE	Yes	Yes
Weak IV test (F-test)	41.61***	
Wu-Hausman test		9.85**
Observations	755	755
Adjusted R ²		0.669

Notes: Standard errors are clustered by time. ***, ** indicates statistical significance at the 10 %, 5 % and 1 % level, respectively.

Table 3
FDI, EPL and Trust.

Dependent variable:	log FDI flows (1)	(2)	(3)
EPL (t-1)	-0.160** (0.059)		-0.055 (0.066)
Trust (t-1)		2.932*** (0.243)	2.868*** (0.262)
Tax Rate (t-1)	-0.022*** (0.005)	-0.030*** (0.005)	-0.028*** (0.005)
Log GDP (t-1)	1.448*** (0.047)	1.413*** (0.046)	1.403*** (0.048)
Regulation Quality	-0.226*** (0.051)	-0.294*** (0.051)	-0.291*** (0.053)
Non-Corruption	0.331*** (0.060)	0.245*** (0.052)	0.241*** (0.054)
Trade Openness	0.028*** (0.001)	0.027*** (0.001)	0.027*** (0.001)
Union Density	-0.023*** (0.003)	-0.018*** (0.003)	-0.019*** (0.003)
Leftist government	0.052 (0.084)	0.080 (0.084)	0.084 (0.082)
French	-1.016*** (0.131)	-1.029*** (0.074)	-0.939*** (0.133)
German	-1.554*** (0.089)	-1.517*** (0.079)	-1.479*** (0.093)
Scandinavian	-0.347* (0.183)	-1.322*** (0.144)	-1.216*** (0.198)
Year FE	Yes	Yes	Yes
Observations	716	716	716
Adjusted R ²	0.753	0.772	0.772

Notes: Standard errors are clustered by time. *, **, *** indicates statistical significance at the 10 %, 5 % and 1 % level, respectively.

Data availability

Data will be made available on request.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.econlet.2023.111441](https://doi.org/10.1016/j.econlet.2023.111441).

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