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A race to the bottom? Employment protection and foreign direct investment☆

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ABSTRACT

A common critique of globalization is that it leads to a race to the bottom. Specifically, it is assumed that multinationals invest in countries with lower regulatory standards and that countries competitively undercut each other's standards in order to attract foreign capital. This paper tests this hypothesis and finds robust empirical support for both predictions. First, a reduction in employment protection rules leads to an increase in foreign direct investment (FDI). Furthermore, changes in employment protection legislation have a larger impact on the relatively mobile types of FDI. Second, there is evidence that countries are competitively undercutting each other's labor market standards.

1. Introduction

A frequent critique of globalization is that it can lead to a race to the bottom, where countries lower their labor standards, environmental standards, or tax rates in order to attract foreign capital.[1] More specifically, the race to the bottom hypothesis hinges on two important predictions. First, multinational enterprises (MNE) choose to invest in countries with less restrictive standards. Second, foreign countries competitively undercut each other's standards in order to attract foreign direct investment (FDI). While these are common fears associated with globalization, there is relatively little empirical evidence supporting either of these predictions. This paper tests these assumptions by examining the impact of employment protection rules on inward FDI and on labor market standards in other countries. The results provide compelling support for both predictions of the race to the bottom hypothesis. However, whether a race to the bottom is an undesirable outcome is a normative question that is outside the scope of this paper and ultimately depends on one's view of employment protection rules.

Anecdotal evidence suggests that there is an important relationship between FDI and labor standards. For instance, in 1993 Hoover, an American multinational firm, relocated a vacuum cleaner plant from Dijon, France to Cambuslang, Scotland. At the time, the U.K. was encouraging inward investment by highlighting it's relatively flexible hiring and firing rules. In addition, a Hoover executive said that the significantly higher non-wage labor costs in France relative to Scotland was a factor in the company's decision to relocate.[2] The French government indicated that this was a case of “social dumping” in which the competitive undercutting of labor standards was used to attract foreign investment and asked the European Commission to investigate.[3] This and other highly publicized cases led to concern among European Union officials that countries were lowering labor standards in order to attract large multinational companies.[4] This paper examines whether stories like this are indicative of a more general race to the bottom in employment protection rules.

A preliminary check of the data seems to support these types of anecdotes. Foreign direct investment has increased substantially in the last twenty five years. For instance, the share of U.S. direct investment in OECD countries relative to U.S. gross domestic product has increased from 4.3% in 1985 to 14.5% in 2007 (see Fig. 1).[5] In addition, employment protection rules in OECD countries have decreased from an average of 2.45 in 1985 to 2.04 in 2007 (see Fig. 1). Certainly there are many other factors that can influence both FDI and labor standards and thus

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[1] The origins of the phrase race to the bottom are often traced to U.S. Supreme Court Justice Louis Brandeis in his dissenting opinion in *Liggatt v Lee* where he describes how firms were formed in U.S. “states where the cost was lowest and the laws least restrictive” which led to a race “not of diligence but of laxity” (Louis K. Liggett CO v. Lee, 288 U.S. 517, 1933).

[2] See Rodrik (1997) and “Social dumping – hardly an open and shut case: The arguments about switching jobs between countries are not so simple” by David Goodhart, Financial Times, February 4, 1993.

[3] “French promise to make Hoover pay dear” by David Buchan, Financial Times, February 4, 1993.

[4] “EU looks to extend laws on worker consultation,” by Caroline Southey, Financial Times, September 23, 1996.

[5] If non-OECD countries are included, the increase is even larger.

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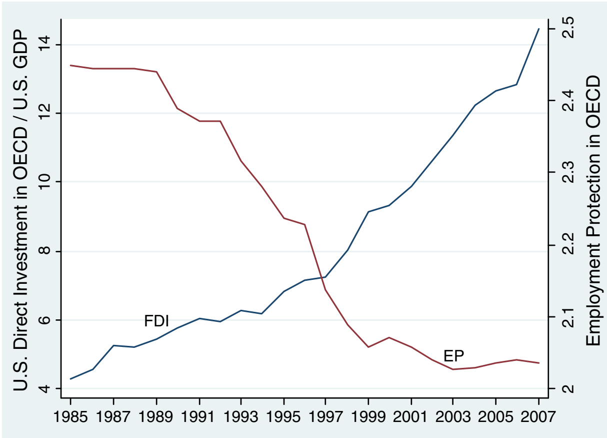

Fig. 1. U.S. Foreign Direct Investment and Employment Protection in OECD.

the goal of this paper is to examine to what extent these trends in the data are related.

According to the first prediction of the race to the bottom hypothesis, a reduction in labor market standards will increase FDI. As employment protection rules become less strict, the cost of operating a foreign affiliate falls, and thus multinationals will shift production activities to that country. Taking this prediction a step further, the response of multinationals to employment protection rules likely depends on the type of FDI. Relatively mobile types of FDI will be more likely to respond to changes in labor market standards than FDI that is tied to a specific location. For instance, vertical FDI, which is motivated by the desire to take advantage of low foreign factor prices, can be relocated to less expensive locations relatively easily. However, horizontal FDI, which is motivated by the desire to access a foreign market, needs to be near the foreign consumers and is thus less mobile.

The second key prediction of the race to the bottom hypothesis is that countries lower their labor standards in order to undercut their competitors and attract FDI. As the average labor standard among your competitors decreases, the foreign host country will lower their own labor standards in response. Thus, the average employment restrictions in other foreign countries should have a positive impact on the employment protection rules in the host country. While the race to the bottom hypothesis is a common fear of globalization and the intuition is relatively straightforward, there is little empirical research studying either of these predictions.

This paper tests these predictions using data on U.S. FDI and data on employment protection legislation in twenty six foreign countries which collectively account for over three quarters of U.S. outward FDI. FDI is measured using data from the Bureau of Economic Analysis (BEA) on U.S. MNE's foreign affiliate sales. This is appealing because it allows horizontal, export-platform, and vertical FDI to be separately identified based on the ultimate destination of these affiliate sales. The measure of employment protection used in this analysis is a composite index of hiring and firing costs obtained from the OECD. This provides a consistent and objective measure of differences in employment protection legislation across countries and over time. Spanning twenty six countries and twenty three years, the data set provides the scale and scope necessary to examine both predictions of the race to the bottom hypothesis.[6]

To test the first prediction, the impact of employment protection on FDI is estimated after controlling for time fixed effects, country fixed effects, and a wide variety of foreign country characteristics that influence FDI. This alleviates concerns that changes in employment protection rules could be inadvertently capturing other types of institutional or economic changes which are correlated with FDI. In addition to the baseline ordinary least squares (OLS) estimation strategy, an instrumental variables (IV) and a dynamic panel generalized methods of moments (Arellano–Bond GMM) are also used which more carefully address endogeneity concerns. The results are remarkably robust across all specifications and indicate that employment protection has a significant, negative impact on the foreign affiliate sales of U.S. multinationals. This is consistent with the prediction that a reduction in employment protection rules will decrease the costs of production in the host country and thus increase U.S. FDI to that foreign country.

Even more compelling is that the impact of employment protection rules vary across different types of FDI in the manner predicted. While employment protection legislation has a negative effect on all types of FDI, the impact is relatively small on affiliate sales to the local market (horizontal FDI) but relatively large on affiliate sales back to the U.S. (vertical FDI). These contrasting results verify that employment protection rules have the largest effect on the relatively more mobile types of FDI. Thus, there is evidence that FDI responds to labor market restrictions and that this response is strongest among the most footloose types of FDI. This confirms the first prediction of the race to the bottom hypothesis and provides a motive for countries to competitively undercut each other's employment protection rules in order to attract FDI.

To test the second key prediction of the race to the bottom hypothesis, this paper examines whether host country employment protection rules depend on labor market standards in other countries. Specifically, an unweighted average, a weighted average based on distance, and a weighted average based on U.S. affiliate sales is used to quantify the employment protection rules in other competing foreign countries. A baseline OLS estimation strategy is used, as well as IV and Arellano–Bond GMM specifications which more carefully identify causality. The results indicate that labor market standards in other foreign countries have a significant positive impact on host country employment protection legislation. As competitors lower their labor standards, the foreign host country responds by lowering their own employment protection rules. This result is robust to all three weighting schemes and all three empirical specifications. Thus, this paper finds compelling empirical evidence supporting both predictions of the race to the bottom hypothesis.

Previous research has found little evidence of a race to the bottom in labor standards. Brown et al. (1996) and Martin and Maskus (2001) examine the theoretical implications of international labor standards on trade and are skeptical of the race to the bottom hypothesis. The few empirical studies that test this hypothesis typically just examine the first prediction by looking at the relationship between employment protection and FDI.[7] For instance, Rodrik (1996), OECD (2004), and Kucera (2002) find a positive correlation between FDI and labor standards in a cross section of countries, contrary to the predictions of the race to the bottom hypothesis. Thus, in surveys of the literature Bhagwati (2007) and Brown et al. (2013) argue that there is no evidence that multinationals are attracted to countries with lower labor standards. Relative to these earlier studies, this paper makes a number of important contributions such as using a panel data set that is able to control for unobserved country and year characteristics and using IV and GMM approaches to address endogeneity concerns.

[6] Unfortunately, there is no employment protection data for other developing countries. However, focusing on relatively similar OECD countries should, if anything, attenuate the results.

[7] A number of other papers have looked at how labor market standards affect domestic factors such as employment (Lazear, 1990; Acemoglu and Angrist, 2001; Di Tella and MacCulloch, 2005; Boeri and Jimeno, 2005) and output (Besley and Burgess, 2004).