



# What We Talk About When We Talk About Foreign Direct Investment

ANDREW KERNER

*University of Michigan*

This paper argues that the foreign direct investment (FDI) data commonly used to test political science theories about FDI often diverge from the theorized about phenomena in ways that can introduce bias and complicate hypothesis testing. I describe some of the key conceptual issues surrounding the quantification of FDI, how commonly used data deals with these issues, and the extent to which those coding rules allow or prevent these data from speaking to political science theories. I show that the empirical relationship between democracy, political risk, and multinational corporations behavior is significantly impacted by “getting the measure right.” I conclude by arguing that political science theories about FDI speak to such a wide variety of empirically and conceptually distinct phenomena that conflating them as “FDI” does a disservice to the complexity of the topic.

Multinational corporations (MNCs) and foreign direct investment (FDI) feature prominently in the political science literature. Recent work examines FDI as a means of diffusing norms and practices (Prakash and Potoski 2007), as a determinant of wages and wage inequality (Jensen and Rosas 2007), as a catalyst for improving human rights practices (Greenhill, Mosley, and Prakash 2009), as a phenomenon about which preferences cleave along partisan and economic lines (Pinto and Pinto 2008; Pandya 2010), as a threat to domestic autonomy (Cerny 2003), as a means of binding states together in a “capitalist peace” (Gartzke 2007), and as a vehicle for understanding the distribution of political risk (Jensen 2003, 2008; Li and Resnick 2003; Büthe and Milner 2008; Kerner 2009; Li 2009). The theories and empirical findings from this literature profoundly shape the way that we understand the relationship between politics and FDI and politics and globalization more generally.

But how should we conceptualize FDI? Most political science theories concern various aspects of FDI as a commercial phenomenon relating to the operations and assets of foreign-owned and foreign-controlled firms. Scholars believe that foreign ownership of domestic assets and foreign control over domestic production transmit norms, affect security interests, provoke popular reactions, invite political risk, respond to and influence local labor law, and so on. However, FDI can also be thought of as a financial phenomenon relating to the cross-border movements of capital between parent MNCs and their foreign affiliates. This conceptualization raises specific kinds of political science questions, including FDI’s relationship to the balance of payments and exchange rates or factor prices. These questions have occupied a marginal place in political science literature. Although MNCs’ ownership of domestic assets and control over domestic production are related to cross-border capital flows, the two are conceptually and empirically distinct; political science theory relates to them in different ways. Despite

the overwhelming extent to which our theories understand FDI as a commercial phenomenon, our empirical tests rely heavily on a measure of border-crossing financial flows—FDI flows.

I argue that the flow data commonly used to test theories relating to FDI make a poor empirical proxy for the aspects of FDI that political scientists typically theorize about.<sup>1</sup> I build upon well-known deficiencies of FDI flow data as a proxy for FDI in many economics applications (Lipsev 2003, 2007; Beugelsdijk, Hennart, Slangen, and Smeets 2010) and place those critiques in a political science context.<sup>2</sup> Briefly, FDI flows describe a macroeconomic phenomenon that differs from what most political science theories pertain to and these differences vary across political contexts in ways that are likely to cause bias. Furthermore, I demonstrate that the issues at stake are not at all trivial; getting the measures “right”—or closer to right—carries with it significant implications for the conclusions that we draw about MNCs and their relationship to politics.

FDI flow data measure the net value of border-crossing capital movements between MNCs and their foreign affiliates. In essence, they measure the impact that MNCs have on the host country’s capital account. To illustrate the problem of conflating financial flows with commercial operations, take the ambiguous meaning of 0, or near 0, FDI flows. \$0 of FDI flows could mean that there are no foreign affiliates in a country or that the foreign affiliates in that country repatriated as much capital over the course of a year to their parent MNCs as they received from their parent MNCs and from reinvested earnings. The balance of payments is unaffected in either scenario.

For example, in 2010, Moldova received  $-\$1$  million US FDI inflows from the United States. In this case, the low FDI flow figure corresponds to low FDI activity: In

<sup>1</sup> FDI stock data and their applicability to empirical work in political science are discussed in section “Stock and Flow Data.”

<sup>2</sup> See Beugelsdijk et al. (2010) for citations in which FDI flows and stocks have been used in the recent economics literature. See also, for example, Borenstein, De Gregorio, and Lee (1998), Egger and Pfaffermayr (2004), Li and Liu (2005), Busse and Hefeker (2007) and Desbordes and Vicard (2009).

Andrew Kerner is an assistant professor of political science at the University of Michigan. He writes about the politics of finance.

2010, majority-owned foreign affiliates of US MNCs operating in Moldova controlled \$5 million in assets, \$2 million in fixed capital and employed about 100 people.<sup>3</sup> Poland recorded roughly \$0 dollars of US FDI inflows in 2005,<sup>4</sup> but the low FDI flow figures from Poland and Moldova describe very different phenomena. Between year-end 2004 and year-end 2005, the 193 Majority-Owned Nonbank Foreign Affiliates of US MNCs operating in Poland employed 13,000 more people, increased their total compensation of employees by \$241 million, controlled over \$1 billion more in total assets, produced \$679 million more in value added, and increased sales by over \$3 billion.<sup>5</sup> Poland recorded 0 FDI inflows that year because equity outflows (−\$30 million), reinvested earnings (\$194 million), and intercompany debt flows (−\$163 million) netted out to nearly exactly 0.<sup>6</sup> The expanding operations of American-owned foreign affiliates in Poland during this time is relevant to many of the causal mechanisms embedded in political science theories. But because they had a neutral effect on Poland's capital account, FDI flow data fail to capture them.

I provide a specific demonstration of the consequences of using FDI flows as a proxy for the commercial phenomena that political scientists theorize about by revisiting the empirical relationship between democracy and FDI. Scholars typically use this relationship to explore whether democracies pose more or less political risk than non-democracies (ex. Jensen 2003; Li and Resnick 2003; Choi 2009; Li 2009). I estimate democracy's effect on the foreign investments of US-based MNCs using flow data, stock data, and a measure of fixed capital expenditures. I argue that the last better matches relevant theory than the alternatives. The evidence suggests that the empirical relationship between democracy and the overseas operations of MNCs is both much larger and also more statistically robust when we conceptualize and measure those activities as fixed capital expenditures.

This paper contributes not only to the empirical literature on FDI in political science, it also matters for the growing literature on construct validity in international political economy. For example, Quinn, Schindler, and Toyoda (2011) and Karcher and Steinberg (2012) illustrate both the diversity of plausible measures and the pitfalls of mismatching data to theory with respect to capital controls and financial integration. This paper makes a similar intervention with respect to FDI.

The remainder of this paper proceeds as follows. Section "Defining FDI" discusses different ways to conceptualize FDI with a particular focus on political science applications. Section "Stock and Flow Data" discusses commonly used data—FDI flow and stock data—and the extent to which they correspond with conceptualizations of FDI common in political science theory. Section "Empirical Example: Does Democracy Attract FDI?" uses the insights in Sections "Defining FDI" and "Stock and Flow Data" to revisit the empirical relationship between

democracy and FDI. Section "Political Scientists (Usually) Don't Care About FDI" concludes by noting that FDI-related theories in political science refer to a diverse set of phenomena associated with MNCs' activities abroad, and often not to FDI per se. As such, the literature on FDI in political science would be better termed a literature on the study of MNCs.

### Defining FDI

Oatley's (2012: 376) *International Political Economy* defines FDI as "A form of cross-border investment in which a resident or corporation based in one country owns a productive asset located in a second country. Such investments are made by multinational corporations. FDI can involve the construction of a new, or the purchase of an existing, plant or factory." Sobel's (2006: 460) *Political Economy of Global Affairs* defines FDI as "Investment in control of productive facilities overseas—usually defined by an investment that amounts to control of 10% or more of a company's equity."

These definitions contain subtle but consequential differences. Oatley's implies that a foreign source of capital constitutes a necessary condition of FDI (cross-border investment), while Sobel's definition more clearly allows locally raised capital to count as FDI as long as a foreign-based MNC controls that capital (control of productive facilities overseas). Despite the slight rhetorical difference between these definitions, the empirical difference amounts globally to trillions of dollars of non-randomly allocated capital. Both definitions privilege "productive" assets and activities, which would require any measure to include a working definition of the word "productive," as well as empirical knowledge of how the foreign affiliate employs capital.

Given this, we can be sure about one thing: FDI involves two adjectives—"foreign" and "direct"—and one noun—"investment."

#### *What Does It Mean To Be Foreign?*

There are two ways to understand the significance of the word "foreign" in FDI. The first holds that, to count as FDI, the capital itself needs to come from a foreign MNC and cross a border on its way to the foreign affiliate. A second understanding of the word "foreign" requires that the capital must be under the control of a foreign direct investor. We might call the latter attribute "commercial foreignness" and the former "financial foreignness." The empirical gap between these two can prove quite large to the extent that MNCs' foreign affiliates finance their operations by utilizing local credit markets. Lehmann, Sayek, and Kang (2004:5) show that, in 1999, financing provided through local debt markets accounted for 29.4% of the assets controlled by the majority-owned foreign affiliates of US MNCs.<sup>7</sup>

Foreign affiliates tap host-country credit markets to different degrees for a number of reasons, such as the health of local credit markets, exchange rate risk, tax bill minimization, and the availability of loan guarantees (Lehmann et al. 2004; Desai, Foley, and Hines 2005; Beugelsdijk et al. 2010. See also Caves 1996: ch. 6 and citations therein). MNCs' financing choices often matter

<sup>3</sup> US BEA, "Selected Data for Majority-Owned Foreign Affiliates in All Countries in Which Investment Was Reported, 2010." Available at [https://www.bea.gov/international/xls/selected\\_mofas\\_centry.xls](https://www.bea.gov/international/xls/selected_mofas_centry.xls) (accessed March 2014).

<sup>4</sup> The actual number is somewhere between −\$500,000 and \$500,000.

<sup>5</sup> US Bureau of Economic Analysis (BEA) Financial and Operating Data of US MNCs abroad. Available at [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm) (accessed March 2014).

<sup>6</sup> These data are taken from the BEA's Balance of Payments and Direct Investment Position Data. Available at [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm).

<sup>7</sup> Harrison and McMillan (2003:85–86) find that firms in their sample of 399 foreign-owned firms in Cote d'Ivoire did the majority (87.16%) of their long-term borrowing locally.

little to political science theory in and of themselves.<sup>8</sup> But these financing choices often directly and indirectly reflect aspects of the host country's political environment. This can create non-random measurement error—such that using financially foreign FDI as a proxy for commercially foreign FDI, or vice versa, likely induces bias in many political science applications. This resulting measurement error proves particularly problematic because it is hard to know a priori which direction the resulting bias should run in. For example, measures of financially foreign FDI might systematically understate the scale of commercially foreign FDI in countries with “good” institutions if those institutions also lead to stable financial sectors capable of providing MNCs with local financing (Beugelsdijk et al. 2010:1445). However, it might produce the opposite effect if “good” institutions foster exchange rate stability that reduces the risk of currency mismatch (borrowing in dollars but earning in local currency; Beugelsdijk et al. 2010:1445) or if “bad” institutions catalyze more local borrowing through more generous loan guarantees (Li 2008).

#### *What Does It Mean To Be Direct?*

Direct investment requires a large enough ownership stake in an enterprise to provide the investor with some degree of corporate control. Corporate control matters for at least two reasons. Control suggests a management team responsible to the direct investors, and likely one chosen and trained by them. The responsibility of local management to the foreign direct investor makes it possible to think of FDI as a vehicle for the diffusion of corporate practices and norms from the MNC's home country to the host state. Control also implies a long-term commitment. Exercising control of a foreign affiliate requires time and expense. It often triggers mandatory disclosures. It generally makes it difficult to disinvest quickly for practical reasons—selling large blocks of shares quickly is likely to depress their price—and, often, legal reasons related to insider trading. Controlling interests are not acquired for speculative purposes. The foreign direct investor's long-term commitment to an investment project is important to political science because it implies an expectation of long-term exposure to host-state politics. This allows us to treat FDI allocation as a reasonable proxy for perceptions of political risk.

The IMF defines a 10% ownership threshold as the point at which foreign portfolio investment (FPI) ends and FDI begins. However, the 10% threshold reflects less a substantive rule than a guideline, particularly as it pertains to control. In some cases, investors exercise control with less than 10% share of equity. In other cases, they require a larger ownership stake for corporate control. The threshold for effective control is established varies for a number of reasons—including, at a minimum, the distribution of the other 90% of shareholder equity and the relevant corporate-governance rules. In practice, the data reported by some countries have at times deviated from the 10% ownership threshold. For example, some countries have used alternative thresholds, included firms in which the foreign direct investor owns less than 10% of equity but has an effective voice in management, or excluded firms in which the foreign direct investor owns more than 10% of equity but lacks an effective voice in

management (IMF [International Monetary Fund]/OECD [Organisation for Economic Co-operation and Development] 2003:24–26, see also Appendix tables 15–18). According to the IMF's 2001 *Survey of Implementation of Methodological Standards for Direct Investment*, 10 of 28 surveyed OECD countries and 8 of 23 non-OECD countries used some criteria other than the 10% ownership rule to identify foreign direct investors in their inward stock data (IMF/OECD 2003:24–26).<sup>9</sup>

The 10% threshold is particularly problematic for testing theories related to political risk. Henisz (2000) argues that MNCs can mitigate political risk by entering projects as the minority partner in a joint venture. Thus, the presence of joint ventures in which the foreign direct investor is a minority partner may indicate the *existence* of political risk *mitigated* by the mode of market entry.<sup>10</sup> FDI measures that aggregate across minority- and majority-owned affiliates therefore likely understate the relationship between political forces and MNCs' perceptions of political risk. Better, in this case, to focus on the behaviors of wholly—or at least majority-owned—affiliates. Their spatiotemporal distribution provides a better candidate to reliably reflect MNCs' beliefs about the location of political risk than measures based on a 10% threshold.

#### *What Does It Mean To Be Investment*

The overseas operations of MNCs involve a variety of politically informed and politically consequential activities. MNCs raise capital from diverse foreign and domestic sources and invest in various kinds of assets, hire employees, sell products and services, and so on. All of these activities are, in principle, quantifiable; all provide meaningful indicators of the scale of MNC activities abroad. Beugelsdijk et al. (2010) suggest that measuring FDI by affiliate value added or affiliate sales provides a more accurate indication of MNC presence than the quantity of financial investment *per se*. Indeed, the nominal location of financial assets is often irrelevant to—and may therefore provide a misleading proxy for—the location of production, employment, and sales (Lipsey 2007:5). However, the mechanisms and process of interest in many political science theories really involve patterns of investment. To keep this section tractable, I restrict my attention to definitions of investment that implicate (at least some portion of) the value of capital owned or controlled by the foreign affiliates of MNCs. We find room for debate even within these relatively narrow parameters.<sup>11</sup>

In political science applications, how to account for the liquid assets owned by MNCs' foreign affiliates numbers among the key questions for determining what should and should not count as investment. This matters particularly for theories that relate FDI to political risk through mechanisms based on the “obsolescing bargain.” In the obsolescing bargain, the introduction of illiquid capital by MNCs makes it costly for foreign investors to

<sup>9</sup> Similar figures apply to flow data.

<sup>10</sup> This is more problematic if the researcher is asking whether certain political institutions reduce political risk under the assumption that more FDI implies less political risk. It is less problematic if political risk is directly observed and the analyst is asking about its relationship to FDI.

<sup>11</sup> Gereffi, Humphrey, and Sturgeon (2005) note the various ways in which MNCs can control their supply chain without actually internalizing the production of inputs, suggesting that FDI, however measured, is likely to underestimate MNCs' global influence or political clout.

<sup>8</sup> For the purposes of most of our theories, we care about whether MNCs own and operate local firms.

move operations to an alternative jurisdiction, allowing domestic governments to alter the terms of investment in their favor *ex post* without triggering capital flight (Vernon 1971; Kobrin 1987; Bergara, Henisz, and Spiller 1998). The more liquid the assets held by MNCs, the less theories of political risk premised on the obsolescing bargain apply.

The foreign affiliates of US MNCs carry a lot of liquid assets on their balance sheet. According to 2004 data from the Bureau of Economic Analysis (BEA), Plant, Property and Equipment (PPE)<sup>12</sup> makes up 24% of the assets held by the foreign affiliates of US MNCs while current assets—cash and other highly liquid assets that are expected to be converted into cash within a year under normal operating conditions—make up 43% of the foreign affiliates of US MNCs' assets (Kerner and Lawrence 2014:114).<sup>13</sup> Whether or not the liquidity of large parts of MNC affiliates' balance sheets provokes a conceptual mismatch to obsolescing bargain-based theories depends on how we conceive of illiquidity. One view treats the relevant aspect of liquidity as the ability to sell equity shares quickly on the open market. Quickly selling a controlling share of an enterprise is likely to depress the price. In that sense, direct investment is less liquid than portfolio investment no matter what assets the enterprise owns; the simple fact of being a foreign direct investor triggers the obsolescing bargain.

An alternative approach views illiquidity as a function of the asset owned by investors. Adding a new factory or another form of firm-specific fixed capital makes it harder—and more expensive—to sell off or re-purpose the foreign affiliate's assets. According to this line of reasoning, investing in fixed capital invites host-country governments to conclude that they can redraw the terms of investment in their favor without inducing capital flight. On the other hand, investors can more easily sell or repatriate liquid capital without incurring substantial losses. Adding cash to an affiliate's balance sheet neither triggers nor exacerbates an obsolescing bargain between the firm and the state.

When scholars address the location of risk in multinational investment, they tend to find that the identity of the underlying assets matters more than whether a foreign affiliate of an MNC controls those assets. Vernon (1971), for example, argues that the fixed capital intensive nature of multinational investment in the resource extraction sector gives rise to the obsolescing bargain.<sup>14</sup> Kobrin (1987), Frieden (1994), Caves (1996: 122), Bergara et al. (1998), Henisz (2000), and Anràs, Desai and Foley (2009) make similar claims.<sup>15</sup>

If theory calls for a measure of illiquid assets, then using an inclusive measure of assets owned or controlled

by a foreign direct investor can bias estimates. First, the proportion of assets found in fixed capital often derives from industry-specific factors. Extractive industry firms, for example, typically carry more of their enterprise value in the form of illiquid assets than do manufacturing and, especially, service-sector firms (Kerner and Lawrence 2014:109). The measurement error induced by using total assets as a proxy for illiquid assets therefore correlates with the local industrial landscape, which itself constitutes both a cause and consequence of politics (Ross 1999; Robinson, Torvik, and Verdier 2006). Similarly, a portion—and sometimes a substantial portion—of liquid assets on the balance sheets of an MNC's foreign affiliate reflects other considerations, such as tax avoidance and local interest rates. Tax policy is, of course, the direct product of politics, and interest rates are typically informed by politics. Moreover, countries with safe banks and stable policy environments make for, in general, better tax havens than those lacking these attributes.

I do not mean to suggest the intrinsic superiority of any one conceptualization of “foreign,” “direct,” or “investment.” Rather, my discussion highlights how different research questions demand different conceptualizations. The theories used by political science do not relate to single thing called “FDI.” They often involve conceptually and empirically distinct phenomena that typically accompany MNC's overseas operations. The measures we use to test those theories should reflect that diversity as much as possible.

### Stock and Flow Data

The vast majority of empirical work on FDI in political science uses FDI flow and stock data made public by UNCTAD, the IMF, or the OECD. This section discusses what these data measure and how they relate to the phenomena typically theorized about in the political science literature.

#### *FDI Flow Data*

FDI flows represent the net value of financial transactions between MNCs and their foreign affiliates over a period of time, usually a year (see Mataloni 1995; OECD 2008). Flow data aggregate across intercompany debt, equity, and reinvested earnings. Equity transactions increase FDI flows when the parent MNC acquires or increases its stake in a foreign affiliate and decrease FDI flows when that stake is sold or when the foreign affiliate takes an equity stake in the parent. Intercompany debt transactions capture changes in the net debt position between parent MNCs and their foreign affiliates. Reinvested earnings are the parent MNC's share of undistributed earnings that are reinvested in the foreign affiliate. Reinvested earnings add to FDI flow totals. Negative reinvested earnings represent parent MNCs' share of operating losses (Banque de France 1998: 1–2). FDI flow data are typically gathered by central banks in order to monitor the balance of payments. They are often referred to as “balance of payments data.”

FDI flow data have two important features that limit their usefulness in many political science questions. First, they exclude locally financed capital. Second, they do not discriminate between liquid or illiquid capital or on the basis of whether capital is being used in the production of goods and services. These coding rules are reasonable if the purpose is to monitor the balance of payments or

<sup>12</sup> PPE includes the value of physical structures, land, machinery, equipment, and the book value of land, timber, mineral, and similar rights owned by the foreign affiliate.

<sup>13</sup> Included in that 43% is the 6% held in cash, the 24% held in receivables (that can generally be converted into cash through factoring) and 6% held in marketable securities and pre-paid expenses.

<sup>14</sup> Caves (1996: 161) notes a focus on the accumulation of fixed assets as a measure of FDI in the empirical literature he reviews, though this focus is not solely attributable to an interest in political risk.

<sup>15</sup> The political risk associated with fixed capital can be addressed through insurance (Jensen 2008) or securitization (Finnerty 2001), and the foreign direct investor need not bear the full weight of it on their balance sheets. Nonetheless, these markets are often incomplete (Li 2006: 245) and insurance expensive. These financial products make political risk more manageable, but it remains a costly problem.

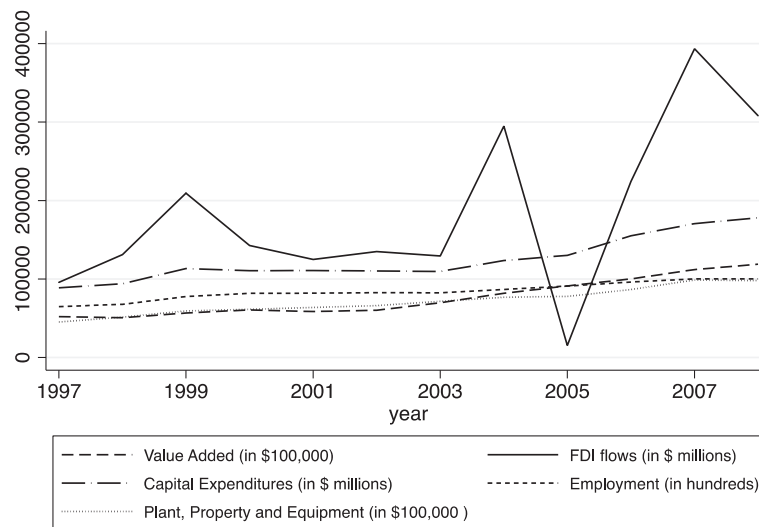


FIG 1. Measures of US outbound FDI 1997–2008

to gauge FDI's relationship to exchange rates, capital labor ratios, or related phenomena. How MNCs' affiliates use foreign capital and whether it is complemented on their balance sheets by capital raised on local debt markets are often irrelevant to these questions. However, how MNCs' affiliates employ capital and whether they raise funds on local debt markets do inform the scale of MNCs' commercial operations and the value of their fixed capital assets. These quantities are conceptually closer to what most political science theories pertain to, and FDI flows are often a poor proxy for them.

The 2004 Homeland Investment Act (HIA) provides a particularly stark example of how FDI flow data can become unmoored from the quantities that political scientists typically theorize about. The HIA provided a temporary tax break to US MNCs on qualifying repatriated earnings. Its purpose was to incentivize MNCs to repatriate and reinvest assets held abroad. The HIA was passed on October 22, 2004 and provided tax relief in 2004 and 2005. Important clarifying documents governing eligibility were not released by the US government until 2005 and many firms used 2004 to build up assets abroad in order to repatriate them later under the clarified tax rules (See Dharmapala, Foley, and Forbes 2011 and citations therein for more details about the HIA).<sup>16</sup>

Figure 1 plots various indicators of US MNC activity abroad around the time the HIA was enacted. These indicators include outbound FDI flows, value added, expenditures on fixed capital, employment, and the value of plant property and equipment. The FDI flow data were downloaded from UNCTAD's database,<sup>17</sup> and the other measures were taken from the BEA's data on the global operations of (majority-owned) US MNCs (this data source is described in more detail below). The FDI flow data appear responsive to the HIA. The spike in outbound FDI flows in 2004 (outbound FDI flows more than double from \$129,352 million in 2003 to \$294,905 million in 2004) captures the buildup of foreign assets in

anticipation of the tax holiday; the steep drop in outbound FDI flows in 2005 (US FDI flows dropped to \$15,369 million, its lowest level since 1985) reflects the subsequent wave of capital repatriation. Data that are more clearly connected to MNCs' commercial activities abroad suggest a much different picture. There is little indication that the HIA affected MNC operations when those operations are measured by the number of employees, value added, the value of plant property and equipment, or expenditures on fixed capital.

Whether the HIA mattered to US foreign investment depends on why the question is being asked. If an analyst is interested in FDI's influence on exchange or interest rates, or the extent and location of taxes paid by MNCs, for example, the HIA and the consequent wave of capital repatriation that is evident in the FDI flow data is potentially important. These aren't the questions that political scientists tend to ask (though see Jensen 2013). More mainstream political science questions include the following: Did the HIA reduce FDI-transmitted US influence abroad? or Did the HIA reduce US MNCs' exposure to political risk? These questions are better answered in reference to the scale of US MNCs commercial activities or the value of fixed capital held in the host state. The answer to these questions appears to be "no," but FDI flow data would, if used to answer them, suggest otherwise.

The data in Figure 1 suggest that FDI flows are noisy indicators of MNCs' commercial activities abroad. They are also biased indicators. Figure 2 shows the same data series as figure one, but limits the sample to US MNC activity in Belgium on the left-hand side and the Netherlands on the right.<sup>18</sup> Several things are readily apparent from Figure 2. US MNCs' presence in Belgium and the Netherlands was similar over this period when that presence is measured in terms of value added, employment, or investments in fixed capital. These similarities are obscured when flow data are used to proxy for them. Prior to the HIA between 1997 and 2003, the Netherlands received annual FDI flows that were, on average, over ten times as large as Belgium's. Second, FDI flows

<sup>16</sup> While the HIA worked as a catalyst for income repatriation, evidence does not suggest this capital was reinvested into the US economy in the ways the act's supporters hoped (Dharmapala et al. 2011).

<sup>17</sup> The figures are identical to the BEA's data on financial outflows without current-cost adjustment.

<sup>18</sup> The variable scaling is changed slightly from Figure 1 to allow for more readable graphs, but is consistent across the two panels in Figure 2.

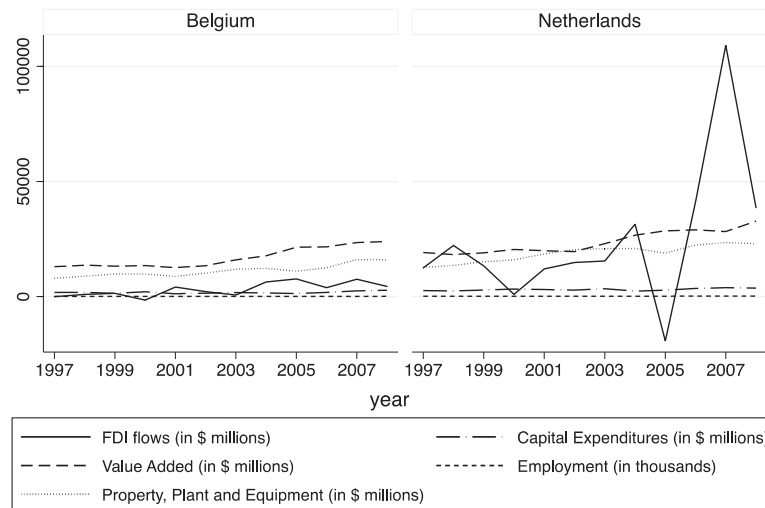


FIG 2. Measures of outbound US FDI in Belgium and the Netherlands 1997–2008

into Belgium and the Netherlands react very differently to the HIA. The changing patterns in FDI flows before and after the HIA was enacted are dramatically present in the Dutch data and barely register in the Belgian data. Neither country's data show any obvious relationship between commercial aspects of FDI and the HIA. This is all to be expected given the Netherlands' role as a tax haven, but it underlines the difficulty in equating empirical measures of FDI flows with MNCs' commercial activities.

This matters particularly to political science because the Netherlands' identity as a successful tax haven reflects political decisions that the Dutch government has made to create the requisite legal structure and politically informed decisions that firms have made to trust that legal structure (Van Dijk, Weyzig, and Murphy 2006; Dharmapala and Hines 2009). While the Netherlands is an extreme case (in 2007, the Netherlands accounted for 27.7% of all outbound US FDI flows),<sup>19</sup> some countries at some times—whether due to their tax policies, local interest rates, exchange rate stability, the perceived reliability of the domestic banking sector or domestic politics, or a combination of all these—are better places to store liquid capital than others. The political roots of these distinctions are a likely source of bias in many political science applications using FDI flow data.

It is, of course, also the case that FDI flow data (and stock data, described below) are measured imperfectly. Notably, data on reinvested earnings are difficult to collect because, unlike other components of FDI flows, they do not cross a border and are thus not picked up through international transactions reporting systems (ITRS) that central banks use to monitor the balance of payments. Collecting these data typically requires surveys, which some countries, including some in the OECD, either do not conduct or do not report (Lundan 2006:37–38; see also IMF/OECD 2003). This is a

potentially significant omission. In 2012, the \$311 billion in earnings that were reinvested by US controlled foreign affiliates accounted for roughly 85% of the \$367 billion of US FDI outflows.<sup>20</sup> The practical difficulties of measuring FDI flows and the shortcomings of existing data in doing so are discussed elsewhere in the literature in more detail (IMF 1992; IMF/OECD 2000, 2003; Lipsey 2003, 2007; Ibarra and Koncz 2008; Beugelsdijk et al. 2010).

#### FDI Stock Data

FDI stock data represent the value of foreign direct investors' stake in the foreign affiliates operating in a host country at any given time. FDI stock data are typically calculated in one of the three ways: at market value (or approximations of market value), at historical cost, or by cumulating FDI flows.

The OECD's benchmark definition of FDI (OECD 2008) and the IMF's balance of payments manual (sixth edition) (IMF 2009) privilege market value estimates of the FDI stock.<sup>21</sup> FDI stock measured at market value differs from flow data in important ways beyond the obvious distinction that flow data represent the value of FDI that has occurred within a year and stock data represent the value of FDI that has accumulated over time. Stock data measured at market value should account for capital gains and losses and other changes in the value of the parent MNC's equity position beyond those attributable to the financial transactions captured by FDI flow data. FDI stock data measured at market value answer the question "What does it mean to be foreign?" differently than FDI flow data do by putting the emphasis on the foreign

<sup>20</sup> BEA' Balance of Payments and direct investment position data of US MNCs abroad. Available at [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm) (accessed April 2014).

<sup>21</sup> While the market value of an MNC's stake in local affiliates is straightforward if those affiliates' shares are frequently traded on a stock exchange, estimates often require measuring the market value of unlisted or illiquid shares. These estimates are typically derived in part or in whole by establishing an estimate of the current period book value of the enterprise and then estimating market value based on the ratio of market to book value for firms that are frequently traded on the domestic stock exchange. See IMF (2009: 122–123) and OECD (2008:174–177). See also Damgaard and Elkjaer (2014), who find that different valuation methods can lead to dramatically different estimates of a country's internal or external FDI stock.

<sup>19</sup> In years between 2008 and 2012, the Netherlands accounted for an average of 16% of US outbound FDI, which is still well out of proportion to the actual economic activity associated with those flows. Between 2009 and 2011, Employees of Dutch affiliates of US MNCs accounted for roughly 1.7% of all employees of US MNCs active abroad (US BEA. Financial and Operating Data of US MNCs abroad. [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm) (accessed April 2014).

owner. These data often provide a better conceptual fit to political science theory and are particularly well suited to answering questions about FDI's influence on politics. However, market value estimates of the FDI stock can be poorly suited to test theories about politics' effects on investor behavior. Changes in the market value of the FDI stock in response to changes in political conditions could reflect politics' effects on MNCs' investment decisions, or they could reflect politics' effects on asset values through mechanisms that have little, if anything, to do with the behavior of foreign direct investors.

An alternative to market value estimates of the FDI stock are historical cost estimates that value the parent MNCs' position at the time it was acquired. Unlike market value estimates, historical cost estimates do not factor in capital gains or losses, except when realized through a sale (Mataloni 1995:44). In the United States, the BEA adjusts historical cost estimates to reflect exchange rate induced changes in the value of the FDI stock (Mataloni 1995:44), though these adjustments are not universally made (UNCTAD 2013a). Other countries calculate the FDI stock by simply cumulating FDI flows or adding (or subtracting) FDI flows from a stock estimate taken at a point in time.

Historical cost estimates and estimates based on cumulated FDI flows provide a less accurate picture of the value of FDI stock than market value estimates. They can be particularly misleading for long-standing investments and when there has been significant inflation or unaccounted for movements in the exchange rate in the time since the investment was made (UNCTAD 2013a). However, their ignorance of capital gains and losses suggests that changes in the FDI stock estimated at historical cost or through cumulated FDI flows may, in some contexts, provide a better indication of foreign direct investors' behaviors than do changes in market value estimates. Neither the IMF nor the OECD recommends estimating FDI stock using historical cost-based methods or by cumulating FDI flows. Misgivings about these methods notwithstanding, the OECD (2008:178) recognizes that historical cost estimates and accumulated FDI flows are often the only options available to compilers.

Whether one method of estimating the FDI stock is preferable to another in a political science application depends on the theory that is being tested. Different questions are often better answered with different data. The more general point is that these methods of estimating the FDI stock are measuring different quantities and can provide very different pictures of FDI trends. For example, between 2007 and 2008, the market value of US FDI stock abroad fell by 41% from \$5.27 trillion to \$3.1 trillion, reflecting the global decline in financial markets during the 2008 financial crisis. At the same time, the historical cost value of the US FDI stock abroad increased by 7.9% from \$3 trillion in 2007 to \$3.2 trillion in 2008 (Lowe 2012:34; see also Landefeld and Lawson 1991:41).

Commonly used FDI stock data sets report FDI stock data derived from a mix of different methods in different countries at different times. The IMF's FDI stock data include estimates based on market values and estimates based on book values (IMF/OECD 2003:135; Patterson, Montanajes, Motala, and Cardillo 2004:10). Metadata from the IMF are available through the *Survey of Implementation of Methodological Standards for Direct Investment* (SIMSDI) carried out jointly by the IMF and OECD in 1997, 2001, and 2003 (IMF 1992; IMF/OECD 2000, 2003; and

the *Coordinated Direct Investment Survey* (CDIS), which the IMF has carried out since 2009.<sup>22</sup> While some variation across countries remains, these surveys suggest that the IMF's FDI stock data has moved steadily toward uniformity across countries and toward international standards. The OECD stock data conform to the same principles as the IMF data, though reported values can depart significantly due to differences in methodology, sources, the timing of reporting, and the varying extent to which countries report revisions to the two organizations (Patterson et al. 2004:9–10). UNCTAD reports FDI stock figures that are a mix of estimates based on historical cost, market value and, especially for developing countries, cumulated FDI flows. Metadata pertaining to UNCTAD FDI stock data are available in the World Investment Report's "Methodological Note" (UNCTAD 2013b).

In sum, FDI stock estimates are often better, if still imperfect, conceptual fits to political science questions than flow data. One drawback that stock data share with flow data is that they do not differentiate between liquid and illiquid assets, which is often an important distinction to political science theory. A second drawback is that FDI stock data sets often report estimates that are calculated using different methods. The resulting figures are not always directly comparable across countries or within countries over time.<sup>23</sup> Political science users of these data should be aware of which method of conceptualizing the FDI stock best represents the theorized about phenomena and, to the extent possible, how well that accords with what any particular data series is actually measuring. The IMF's and UNCTAD's metadata can be especially useful in this regard, though UNCTAD's (2013a) warning that "cross-country comparisons of FDI [stock] data must be treated with caution" should be taken seriously.<sup>24</sup>

There are alternatives to the current use of flow and stock data in political science. First, we could ask questions that relate to FDI as a financial phenomenon and for which FDI flow data are more conceptually appropriate. While this is a non-starter for the majority of mainstream political science questions relating to FDI, such questions do exist and could be pursued more often than they have been. Second, we can complement our quantitative analyses with case studies and/or surveys in order to better illustrate causal mechanisms. This can be particularly useful when, as is often the case, direct measures of (or unbiased proxies for) our theorized about quantities are not available on a large scale. Third, we could make better use of data disseminated by countries that collect comprehensive (and consistently defined and measured) data on MNCs' commercial activities. For example, MNCs in the United States are required to report the financial details of their overseas operations to the BEA. These data include balance sheet and financing information, as well as payroll, production, and exporting data. These surveys provide as comprehensive a view of MNC

<sup>22</sup> Individual country metadata from the SIMSDI survey are available at <https://www.imf.org/external/np/sta/di/country.asp>. Metadata for the CDIS survey are available at <http://cdis.imf.org/SearchMetadata.aspx>.

<sup>23</sup> See in particular UNCTAD (2013b) for documentation of changes within countries over time in the method used to calculate FDI stock data.

<sup>24</sup> Lane and Milesi-Ferretti's (2001, 2007) data set on the external wealth of nations provides a valuable alternative resource by reporting stocks across different countries using a unified method. However, this method (stocks in period  $t$  are equal to the real exchange rate adjusted value of stocks in period  $t-1$  + FDI flows in period  $t$ ) is based on cumulated FDI flows and is therefore conceptually no better of a match to political science theory than the FDI flows themselves.

TABLE 1. Different Concepts for Measuring the Scale of MNC Investments

<i>Name</i>	<i>What it measures</i>	<i>Informed by locally raised capital?</i>	<i>Distinguishes between liquid and illiquid assets?</i>
FDI flows	Net value of equity, debt, and earnings flow between home country parents and local affiliates	N	N
FDI stock at market price	Market value of foreign MNCs assets in the host country	Y	N
FDI stock at historical cost	Value of foreign MNCs assets in the host country at the time the asset was purchased	N	N
Plant property and equipment	Book value of land and other physical assets, including all costs incurred in making the assets usable	Y	Y

activities as exists, though these data are naturally limited to the overseas operations of US-based MNCs.<sup>25</sup> The firm-level data are kept confidential (and are therefore considered reliable), but several aggregates are publicly available.<sup>26</sup> In the next section, I make use of those publicly available aggregates to estimate the relationship between MNC behaviors and democracy.

Table 1 summarizes the main FDI measure concepts described above, as well as those used in the empirical tests below.

### Empirical Example: Does Democracy Attract FDI?

According to Thomson Reuters ISI Web of Science, the two most cited works in political science with the words “FDI” in the title are Jensen (2003) and Li and Resnick (2003), both of which consider the relationship between FDI, political risk, and democracy. Both theories conceptualize FDI as long-term investment subject to government expropriation and both suggest that FDI will flow to jurisdictions where property rights are protected. Both papers operationalize FDI in terms of FDI flows. Where they differ is in their model specification and empirical results. Jensen finds that democracy attracts FDI while Li and Resnick find that it repels FDI, once property rights are accounted for as a control variable (see also Choi 2009; Li 2009).

Revisiting the empirical relationship between democracy and FDI is not meant to resolve the theoretical debate around democracy and FDI. Jensen, Biglaiser, Li, Malesky, Pinto, Pinto, and Staats (2012:36–51) go a long way toward doing so by finding that democracies expropriate less frequently and receive more favorable risk ratings from insurers (see also Jensen 2008).<sup>27</sup> Rather, the purpose of this section is to show that the empirical relationship between FDI and democracy is highly sensitive to how FDI is operationalized and, moreover, that models using measures that my argument suggests should better proxy for political risk sensitive investments generate results that more closely reflect the insights from Jensen et al. (2012).

<sup>25</sup> The most comprehensive of these surveys is the benchmark surveys taken every 5 years. Annual surveys are conducted on representative samples and the data are extrapolated to generate estimates for the full universe.

<sup>26</sup> More information on the survey as well as the publicly available data can be found at <http://www.bea.gov/international/index.htm>. I focus my attention on the publicly available aggregates, though the researchers may apply for access to the underlying data.

<sup>27</sup> Moreover, this application looks exclusively at United States originated FDI while Jensen and Li and Resnick examine global flows. Differences between these findings and the findings reported in those papers are in part a function of that change.

### Sample and Estimation

My sample includes every non-OECD country (plus Mexico and Turkey)<sup>28</sup> without US investment sanctions for which data are available. This sample runs from 1997 through 2008 and includes between 654 and 730 observations from between 72 and 73 countries, depending on the dependent variable being used. I follow Choi (2009) and estimate my models using robust regression (the `reg` routine in Stata 12) as a means of dealing with outliers.

The model that I estimate is given below:

$$FDI_{jt} = \alpha + \beta_1 * polity_{jt-1} + \beta_2 * controls_{jt-1} + \Gamma + \varepsilon_{jt} \quad (1)$$

Where  $j$  subscripts the country,  $t$  subscripts the year,  $\Gamma$  is a vector of year fixed effects, and  $polity$  is the `polity2` variable taken from the Polity IV data set (Marshall, Jaggers, and Gurr 2011). My control variables are the log of GDP, the log of GDP per capita, the log of trade as a percentage of GDP, GDP growth, the logged distance between the country’s capital and Washington DC, and capital account openness.<sup>29</sup> I also control for “Law and Order” from the ICRG data set. Doing so speaks to Li and Resnick’s (2003) argument that the positive correlation between democracy and FDI is a spurious echo of the relationship between democracy and property rights protection. I estimate this model in two ways. The first set of estimates use the data in their time series cross-sectional format. I also estimate my model on a cross-sectional data set of panel averages of my dependent variables (averaged over 1997–2006) and my independent variables (averaged over the 15 years prior from 1982–1996).

Democracy is not randomly assigned to country years and plausibly influences FDI through a variety of channels other than political risk. The estimates provided by these models should be understood as descriptive more than causal. Nonetheless, a causal relationship between democracy and MNC behavior through a political risk-based channel is certainly plausible. Regardless, these regressions describe and clarify an empirical relationship that is both prominent and contested in the literature.

### Dependent Variables

I use three different dependent variables in my tests, all of which were taken from the BEA’s publicly available data.

<sup>28</sup> This inclusion turns out to be innocuous to the result I report.

<sup>29</sup> GDP, GDP per capita, GDP growth, and trade data are taken from WDI. Distance is taken from the correlates of war data set. Capital account openness is taken from Karcher and Steinberg (2012). Descriptive statistics for all variables are included in the Table 3.



TABLE 2. Effect of Democracy on Different Measures of FDI

Model No.	1	2	3	4	5	6
<i>DV</i>	<i>Flows</i> (coef./SE)	<i>d.stock</i> (coef./SE)	<i>Capex</i> (coef./SE)	<i>Flows<sub>97-08</sub></i> (coef./SE)	<i>d.stock<sub>97-08</sub></i> (coef./SE)	<i>Capex<sub>97-08</sub></i> (coef./SE)
Polity <sub><i>it-x</i></sub>	0.3 (0.4)	-0.5 (0.6)	1.9 (0.5)***	0.5 (2.7)	2.8 (2.5)	3.8 (1.3)**
lnGDP <sub><i>it-x</i></sub>	17.1 (1.9)***	16.1 (2.9)***	35.1 (2.5)***	37.1 (11.4)**	60.8 (10.7)***	36.1 (5.5)***
lnGDPPC <sub><i>it-x</i></sub>	-0.9 (2.7)	-2.0 (4.0)	1.5 (3.6)	35.5 (16.7)*	9.1 (15.7)	-7.2 (8.1)
Intrade/GDP <sub><i>it-x</i></sub>	-1.2 (5.8)	16.5 (8.4)*	5.6 (7.4)	-22.7 (34.1)	20.8 (32.0)	31.5 (16.4)
Indist	-21.5 (5.5)***	-3.2 (8.0)	-29.7 (6.9)***	-20.5 (30.1)	0.0 (28.3)	-25.6 (14.5)
GDP growth <sub><i>it-x</i></sub>	23.8 (20.3)	24.8 (30.1)	-24.9 (25.8)	21.6 (229.8)	17.2 (214.6)	86.6 (111.4)
Law and order <sub><i>it-x</i></sub>	-0.6 (2.4)	-4.1 (3.7)	-13.6 (3.1)***	-13.8 (16.3)	-15.7 (15.4)	0.6 (7.9)
Capital account openness <sub><i>it-x</i></sub>	0.3 (1.9)	3.7 (2.8)	-4.4 (2.4)	-23.4 (14.8)	0.1 (14.0)	-8.7 (7.3)
Constant	-164.4 (63.1)**	-369.1 (92.3)***	-467.7 (78.9)***	-718.8 (367.8)	-1417.3 (344.9)***	-630.1 (175.2)***
<i>r</i> <sup>2</sup>	0.2	0.1	0.4	0.4	0.5	0.6
<i>N</i>	730	700	654	73	72	73

(Notes. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , lagged independent variables bearing the  $it-x$  subscript are lagged 1 year in model 1-3 and represent the 1982-1996 averages in models 4-6 year fixed effects included in all models but not shown all models estimated using the rreg routine in Stata.)

My first measure is the BEA's FDI flow measure.<sup>30</sup> These are the same data that are reported by the OECD in their dyadic FDI outflows data set. As described above, these data capture the balance of annual capital flows between US MNCs and their host-country affiliates. These data discriminate based on the source of capital (funds raised on local debt markets do not count toward FDI) but do not discriminate on the basis of the form that capital takes (cash and fixed capital count equally).

The second measure that I use is annual changes in FDI stock, measured at historical cost (market value-based stock estimates from the BEA are not available at the country-year level). Changes recorded in this variable are the result of financial transactions between parent MNCs and their foreign affiliates and exchange rate induced changes in the value of previously acquired assets. Capital gains and losses (other than those realized through sales) are not recorded in these data.

The third measure that I use is the annual expenditure on PPE, which includes physical structures, land, machinery, equipment, and land, timber, mineral and similar rights owned by the foreign affiliate. This measure is gross of depreciation so that it captures the rate at which foreign affiliates of US MNCs are investing in their own fixed capital stock, whether that investment constitutes an expansion or simply the replacement of depreciated capital. These data differ from flow and stock data by being limited to expenditures on fixed capital and by not discriminating on the basis of local versus foreign financing. A further difference between these data on flow and stock data is that data on capital expenditures refer to majority-owned affiliates, while stock and flow data refer to the full universe of overseas affiliates in which the parent MNC owns a greater than 10% share.<sup>31</sup> To the extent that the relationship between democracy and FDI is driven by political risk, expenditures on fixed capital by majority-owned affiliates should be the most capable of drawing that relationship out.<sup>32</sup> Descriptive statistics for all variables used in this analyses are noted in Table 3.

<sup>30</sup> I use "Financial flows without current-cost adjustment" data. These data and all other dependent variables used in this analysis are restated in constant 2000 dollars.

<sup>31</sup> In practice, roughly 86% of the total asset value recorded by the BEA in my sample is found in majority-owned affiliates, which is consistent with findings in Barefoot and Mataloni (2011).

<sup>32</sup> While direct comparisons would be preferable, neither capital expenditures data from the full universe of foreign affiliates of US MNCs, nor stock and flow data from majority-owned affiliates are available.

## Results

The results of my estimates are shown in Table 2. Models 1, 2, and 3 analyze the data in its time series cross-sectional format using FDI flows, changes in FDI stock and expenditures on fixed capital, respectively, as dependent variables. The  $it-x$  subscript on the independent variables in these models indicates a 1-year lag. The results of these models are anticipated by the discussion above. I find a positive and statistically insignificant relationship between democracy and FDI flows, a negative and statistically insignificant relationship between democracy and annual changes in FDI stock, and a positive and highly statistically significant relationship between democracy and annual expenditures on fixed capital. This is to be expected if democracy reduces political risk and if the fixed capital expenditures of majority-owned firms are a more appropriate indicator of firms' perceptions of political risk. The substantive effect is such that a one-standard-deviation (5.9 unit) increase in democracy is estimated to yield an \$11.2 million increase in capital expenditures. By comparison, the median value of fixed capital expenditure in this sample is \$47 million.<sup>33</sup>

Models 4, 5, and 6 replicate models 1, 2, and 3, but employ a cross-sectional analysis on panel averages of the data. The  $it-x$  subscript on the independent variables in these models indicate that the panel averages for the independent variables are taken over 1982-1996, while the panel average for the dependent variables are taken over 1997-2006. These estimates are substantively similar to those from models 1, 2, and 3. While the coefficients on my polity score measure of democracy are always positive, I fail to find statistically significant evidence that either FDI flows or changes in FDI stock are affected by democracy. I do find such evidence with respect to fixed capital expenditures. The coefficient is positive and statistically significant at the 0.01 level.<sup>34</sup> The substantive effects are somewhat larger but still similar to those reported in model 3. A one-standard-deviation increase in the panel averaged democracy variable (5.9 units) yields a \$22.3 million increase in average annual fixed capital

<sup>33</sup> Fixed capital expenditures are not normally distributed, so standard deviations of it do not make appropriate benchmarks.

<sup>34</sup> These findings are somewhat sensitive to the period of time over which the independent variables are averaged. However, the substantive implications are unchanged when these variables are averaged over other plausible intervals.

TABLE 3. Descriptive Statistics

<i>Models 1–3</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Model 4–6</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
FDI flows	364.54	1227.25	−1446.72	13799.22	FDI flows <sub>97–08</sub>	347.82	957.35	−58.69	6996.52
d. FDI stock	328.46	1926.20	−25617.00	15314.00	d. FDI stock <sub>97–08</sub>	333.15	858.59	−735.36	5068.07
Fixed capital expenditures	381.61	775.03	0.00	5083.00	Fixed capital expenditures <sub>97–08</sub>	389.62	784.91	0.00	4334.06
Polity <sub>it−1</sub>	3.86	5.97	−10.00	10.00	Polity <sub>82–96</sub>	0.12	5.87	−10.00	10.00
lnGDP <sub>it−1</sub>	23.76	1.74	19.72	28.45	lnGDP <sub>82–96</sub>	23.15	1.63	19.43	27.39
lnGDPPC <sub>it−1</sub>	7.32	1.28	4.96	10.46	lnGDPPC <sub>82–96</sub>	7.07	1.30	4.95	10.56
Indist	8.95	0.51	7.74	9.70	Indist	8.96	0.53	7.74	9.70
Law and order <sub>it−1</sub>	3.56	1.14	0.50	6.00	Law and order <sub>82–96</sub>	2.96	0.96	1.27	5.15
Capital account openness <sub>it−1</sub>	0.40	1.51	−1.82	2.43	Capital account openness <sub>82–96</sub>	−0.56	1.09	−1.82	2.43
GDPgrowth <sub>it−1</sub>	0.08	0.13	−0.62	0.63	GDPgrowth <sub>82–96</sub>	0.06	0.06	−0.32	0.19
IntradeGDP <sub>it−1</sub>	4.30	0.51	2.77	6.10	IntradeGDP <sub>82–96</sub>	4.19	0.51	2.77	5.36

expenditure, compared to the sample median of \$57 million.

### Summary

If the relationship between democracy and FDI is driven by political risk, we should expect it to be more evident in measure of fixed capital expenditures by majority-owned affiliates than in the flow and stock data that are more commonly used to test this proposition. These data have three qualities that make it well suited for this purpose: (i) They do not discriminate between local and foreign financed assets; (ii) they focus on the deployment of capital in illiquid forms and are therefore consistent with the theories underpinning the political risk literature; and (iii) they focus attention of the behavior of majority-owned foreign affiliates that are least likely to be otherwise insulated from political risk through joint venture partners.

The results of my empirical tests are consistent with this idea. Democracy's correlation with FDI flows and changes in the FDI stock is smaller and less statistically significant than its correlation with fixed capital expenditures by majority-owned affiliates. More generally, the sorts of conclusions that we might draw about the relationship between MNCs and politics are highly sensitive to the way MNCs' activities are conceptualized and measured.

### Political Scientists (Usually) Don't Care About FDI

Few have been more attentive to measurement issues surrounding FDI over the past 20 years than the economist Robert Lipsey. In the abstract to a 2007 article, Lipsey argues that “most uses of FDI data require measures of employment, payrolls, capital inputs, and output from FDI” (Lipsey 2007:1). Lipsey writes about the problematic usage of FDI flow and stock data to answer questions commonly asked by economists, but these data don't measure anything of particular relevance to most political scientists either. We generally deploy them as a proxy variable for other aspects of multinational investment. They often poorly serve that purpose. I hope that this article demonstrates that point. My analysis of MNC activity's empirical relationship to democracy shows that getting the measure right or wrong has significant implications for the sort of conclusions that we draw concerning the nature of FDI and the role of political forces in global finance.

It follows that those political scientists who write about FDI should change the way we describe our shared research agenda. Despite the problems associated with using FDI flow data to test most FDI-related theories in political science, these measures imply a reasonable definition of FDI. Fixed capital investments made by majority-owned affiliates, while better suited to testing important FDI-related political science theories, do not. Indeed, in many contexts, we may not actually care about FDI at all. Most of our theories involve mechanisms and processes related to the scale of MNCs' activity. FDI amounts to an arbitrary—and often misleading—subset of those activities. We should characterize this literature as *the study of MNCs*. The term encompasses the variety of activities that motivate our theories; it leaves open the question of what measures best allow us to test them. Whereas as Lipsey (2007) wrote that “most uses of FDI data require measures of employment, payrolls, capital inputs, and output from FDI,” I suggest that most of what we claim requires FDI data does not. Instead, we are asking questions about employment, payrolls, capital inputs, and output from FDI. We should measure these instead.

### References

- ANTRÀS, POL, MIHIR A. DESAI, AND C. FRITZ FOLEY. (2009) Multinational Firms, FDI Flows, and Imperfect Capital Markets. *The Quarterly Journal of Economics* 124 (3): 1171–1219.
- BANQUE DE FRANCE. (1998) *Reinvested Earnings—The French Experience*, BOPCOM98/1/17. *Eleventh Meeting of the IMF Committee on Balance of Payments Statistics*. Washington, DC. October 21–23. Available at <http://www.imf.org/external/bopage/pdf/117.pdf>. (Accessed June 16, 2014.)
- BAREFOOT, KEVIN B., AND RAYMOND J. MATALONI JR. (2011) Operations of US Multinational Companies in the United States and Abroad. *Survey of Current Business* 91 (11): 29–48.
- BERGARA, MARIO, WITOLD J. HENSZ, AND PABLO SPILLER. (1998) Political Institutions and Electric Utility Investment: A Cross-Nation Analysis. *California Management Review* 40 (2): 18–35.
- BEUGELSDIJK, SJOERD, JEAN-FRANÇOIS HENNART, ARJEN SLANGEN, AND ROGER SMEETS. (2010) Why and How FDI Stocks are a Biased Measure of MNE Affiliate Activity. *Journal of International Business Studies* 41 (9): 1444–1459.
- BORENSZTEIN, EDUARDO, JOSE DE GREGORIO, AND JONG-WHA LEE. (1998) How Does Foreign Direct Investment Affect Economic Growth? *Journal of International Economics* 45 (1): 115–135.
- BUSSE, MATTHIAS, AND CARSTEN HEFEKER. (2007) Political Risk, Institutions and Foreign Direct Investment. *European Journal of Political Economy* 23 (2): 397–415.

- BÜTHE, TIM, AND HELEN V. MILNER. (2008) The Politics of Foreign Direct Investment Into Developing Countries: Increasing FDI through International Trade Agreements? *American Journal of Political Science* 52 (4): 741–762.
- CAVES, RICHARD E. (1996) *Multinational Enterprise and Economic Analysis*, 2nd edition. Cambridge, UK: Cambridge University Press.
- CERNY, PHILLIP G. (2003) Globalization and the Erosion of Democracy. *European Journal of Political Research* 36 (1): 1–26.
- CHOI, SEUNG-WHAN. (2009) The Effect of Outliers on Regression Analysis: Regime Type and Foreign Direct Investment. *Quarterly Journal of Political Science* 4 (2): 153–165.
- DAMGAARD, JANNICK, AND THOMAS ELKJAER. (2014) Foreign Direct Investment and the External Wealth of Nations: How Important Is Valuation? *Review of Income and Wealth* 60 (2): 245–260.
- DESAI, MIHIR A., C. FRITZ FOLEY, AND JAMES R. HINES. (2005) A Multinational Perspective on Capital Structure Choice and Internal Capital Markets. *The Journal of Finance* 59 (6): 2451–2487.
- DESBORDES, RODOLPHE, AND VINCENT VICARD. (2009) Foreign Direct Investment and Bilateral Investment Treaties: An International Political Perspective. *Journal of Comparative Economics* 37 (3): 372–386.
- DHARMAPALA, DHAMMIKA, AND JAMES R. HINES JR. (2009) Which Countries Become Tax Havens? *Journal of Public Economics* 93 (9–10): 1058–1068.
- DHARMAPALA, DHAMMIKA, C. FRITZ FOLEY, AND KRISTIN J. FORBES. (2011) Watch What I Do, Not What I Say: The Unintended Consequences of the Homeland Investment Act. *The Journal of Finance* 66 (3): 753–787.
- EGGER, PETER, AND MICHAEL PFAFFERMAYR. (2004) The Impact of Bilateral Investment Treaties on Foreign Direct Investment. *Journal of Comparative Economics* 32 (4): 788–804.
- FINNERTY, JOHN D. (2001) Securitizing Political Risk Insurance: Lessons from Past Securitizations. In *International political Risk Management: Exploring New Frontiers*, edited by Theodore H. Moran. Washington, DC: World Bank Publications.
- FRIEDEN, JEFFRY A. (1994) International Investment and Colonial Control: A New Interpretation. *International Organization* 48 (4): 559–593.
- GARTZKE, ERIK. (2007) The Capitalist Peace. *American Journal of Political Science* 51 (1): 166–191.
- GEREFFI, GARY, JOHN HUMPHREY, AND TIMOTHY STURGEON. (2005) The Governance of Global Value Chains. *Review of International Political Economy* 12 (1): 78–104.
- GREENHILL, BRIAN, LAYNA MOSLEY, AND ASEEM PRAKASH. (2009) Trade-Based Diffusion of Labor Rights: A Panel Study, 1986–2002. *American Political Science Review* 103 (4): 669–690.
- HARRISON, ANN E., AND MARGARET S. McMILLAN. (2003) Does Direct Foreign Investment Affect Domestic Credit Constraints? *Journal of International Economics* 61 (1): 73–100.
- HENISZ, WITOLD J. (2000) The Institutional Environment for Multinational Investment. *Journal of Law, Economics, and Organization* 16 (2): 334–364.
- IBARRA, MARILYN, AND JENNIFER KONCZ. (2008) Direct Investment Positions for 2007. *Survey of Current Business* 88 (7): 20–35.
- IMF (INTERNATIONAL MONETARY FUND). (1992) *Report on the Measurement of International Capital Flows*. Washington, DC: International Monetary Fund.
- IMF (INTERNATIONAL MONETARY FUND). (2009) *Balance of Payments and International Investment Position Manual*, 6th edition (BPM 6). Washington, DC: International Monetary Fund. Available at <http://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf>. (Accessed June 16, 2014.)
- IMF (INTERNATIONAL MONETARY FUND)/OECD (ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT). (2000) *Report on the Implementation of Methodological Standards for Direct Investment*. Washington, DC: International Monetary Fund. Available at <http://www.imf.org/external/bopage/pdf/mar2000.pdf>. (Accessed June 16, 2014.)
- IMF (INTERNATIONAL MONETARY FUND)/OECD (ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT). (2003) *Foreign Direct Investment Statistics: How Countries Measure FDI 2001*. Washington, DC: International Monetary Fund. Available at <http://www.imf.org/external/pubs/ft/fdis/2003/fdistat.pdf>. (Accessed June 16, 2014.)
- JENSEN, NATHAN M. (2003) Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment. *International Organization* 57 (3): 587–616.
- JENSEN, NATHAN M. (2008) Political Risk, Democratic Institutions, and Foreign Direct Investment. *The Journal of Politics* 70 (4): 1040–1052.
- JENSEN, NATHAN M. (2013) Domestic Institutions and the Taxing of Multinational Corporations. *International Studies Quarterly* 57 (3): 440–448.
- JENSEN, NATHAN M., AND GUILLERMO ROSAS. (2007) Foreign Direct Investment and Income Inequality in Mexico, 1990–2000. *International Organization* 61 (3): 467–487.
- JENSEN, NATHAN M., GLEN BIGLAISER, QUAN LI, EDMUND MALESKY, PABLO M. PINTO, SANTIAGO M. PINTO, AND JOSEPH L. STAATS. (2012) *Politics and Foreign Direct Investment*. Ann Arbor, MI: University of Michigan Press.
- KARCHER, SEBASTIAN, AND DAVID A. STEINBERG. (2012) Assessing the Causes of Capital Account Liberalization: How Measurement Matters. *International Studies Quarterly* 57 (1): 128–137.
- KERNER, ANDREW. (2009) Why Should I Believe You? The Costs and Consequences of Bilateral Investment Treaties. *International Studies Quarterly* 53 (1): 73–102.
- KERNER, ANDREW, AND JANE LAWRENCE. (2014) What's The Risk? Bilateral Investment Treaties, Political Risk and Fixed Capital Accumulation. *British Journal of Political Science* 44 (1): 107–121.
- KOBIN, STEPHEN J. (1987) Testing the Bargaining Hypothesis in the Manufacturing Sector in Developing Countries. *International Organization* 41 (4): 609–638.
- LANDEFELD, J. STEVEN, AND ANN M. LAWSON. (1991) Valuation of the US Net International Investment Position. *Survey of Current Business* 71 (5): 40–49.
- LANE, PHILIP R., AND GIAN MARIA MILESI-FERRETTI. (2001) The External Wealth of Nations: Measures of Foreign Assets and Liabilities for Industrial and Developing Countries. *Journal of International Economics* 55 (2): 263–294.
- LANE, PHILIP R., AND GIAN MARIA MILESI-FERRETTI. (2007) The External Wealth of Nations mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004. *Journal of International Economics* 73 (2): 223–250.
- LEHMANN, ALEXANDER, SELIN SAYEK, AND HYOUNG GOO KANG. (2004) *Multinational Affiliates and Local Financial Markets*. IMF Working Paper 04/107. Washington, DC: International Monetary Fund. Available at <http://ssrn.com/abstract=584941> or <http://dx.doi.org/10.2139/ssrn.584941>. (Accessed May 1 2014.)
- LI, QUAN. (2006) Political Violence and Foreign Direct Investment. *Research in Global Strategic Management* 12: 225–249.
- LI, QUAN. (2008) Democracy, Autocracy, and Tax Incentives to Foreign Direct Investors: A Cross-National Analysis. *The Journal of Politics* 68 (1): 62–74.
- LI, QUAN. (2009) Democracy, Autocracy, and Expropriation of Foreign Direct Investment. *Comparative Political Studies* 42 (8): 1098–1127.
- LI, XIAOYING, AND XIAMING LIU. (2005) Foreign Direct Investment and Economic Growth: An Increasingly Endogenous Relationship. *World Development* 33 (3): 393–407.
- LI, QUAN, AND ADAM RESNICK. (2003) Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries. *International Organization* 57 (1): 175–211.
- LIPSEY, ROBERT E. (2003) Foreign Direct Investment and the Operations of Multinational Firms: Concepts, History, and Data. In *Handbook of International Trade*, eds. E. Kwan Choi, and James Harrigan. London, UK: Blackwell.
- LIPSEY, ROBERT E. (2007) *Defining and Measuring the Location of FDI Output*. NBER Working Paper No. 12996. Cambridge, MA: NBER. Available at <http://www.nber.org/papers/w12996>. (Accessed June 16, 2014.)
- LOWE, JEFFREY. (2012) Direct Investment for 2009–2011: Detailed Historical-Cost Positions and Related Financial and Income Flows. *Survey of Current Business* 92 (9): 28–67.
- LUNDAN, SARIANNA M. (2006) Reinvested Earnings as a Component of FDI: An Analytical Review of the Determinants of Reinvestment. *Transnational Corporations* 15 (3): 33–64.
- MARSHALL, MONTY, KEITH JAGGERS, AND TED ROBERT GURR. (2011) Polity IV Project: Political Regime Characteristics and Transitions, 1800–2011. *INSOCR Data Page*. Available at <http://www.systemicpeace.org/inscrdata.html>. (Accessed September 23, 2013.)

- MATALONI, RAYMOND J. JR. (1995) A Guide to BEA Statistics on U.S. Multinational Companies. *Survey of Current Business* 75 (3): 38–53.
- OATLEY, THOMAS. (2012) *International Political Economy: Interests and Institutions in the Global Economy*, 5th edition. Boston, MA: Longman.
- OECD (ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT). (2008) *OECD Benchmark Definition of Foreign Direct Investment*, 4th edition. Paris: OECD. Available at <http://www.oecd.org/daf/inv/investmentstatisticsandanalysis/40193734.pdf>. (Accessed March 15, 2014.)
- PANDYA, SONAL S. (2010) Labor Markets and the Demand for Foreign Direct Investment. *International Organization* 64 (3): 389–409.
- PATTERSON, NEIL K., MARIE MONTANJEES, JOHN MOTALA, AND COLLEEN CARDILLO. (2004) *Foreign Direct Investment: Trends, Data Availability, Concepts, and Recording Practices*. Washington, DC: International Monetary Fund.
- PINTO, PABLO M., AND SANTIAGO M. PINTO. (2008) The Politics of Investment: Partisanship and the Sectoral Allocation of Foreign Direct Investment. *Economics & Politics* 20 (2): 216–254.
- PRAKASH, ASEEM, AND MATTHEW POTOSKI. (2007) Investing Up: FDI and the Cross-Country Diffusion of ISO 14001 Management Systems. *International Studies Quarterly* 51 (3): 723–744.
- QUINN, DENNIS, MARTIN SCHINDLER, AND A. MARIA TOYODA. (2011) Assessing Measures of Financial Openness and Integration. *IMF Economic Review* 59 (3): 488–522.
- ROBINSON, JAMES A., RAGNAR TORVIK, AND THIERRY VERDIER. (2006) Political Foundations of the Resource Curse. *Journal of Development Economics* 79 (2): 447–468.
- ROSS, MICHAEL L. (1999) The Political Economy of the Resource Curse. *World Politics* 51 (2): 297–322.
- SOBEL, ANDREW C. (2006) *Political Economy and Global Affairs*. Washington, DC: CQ Press.
- UNCTAD. (2013a) Accounting Practices. *UNCTAD Website*. Available at <http://unctad.org/en/Pages/DIAE/Accounting-Practices.aspx>. (Accessed May 1 2014.)
- UNCTAD. (2013b) *World Investment Report 2013– Methodological Note*. Available at [http://unctad.org/en/PublicationChapters/wir2013chMethodNote\\_en.pdf](http://unctad.org/en/PublicationChapters/wir2013chMethodNote_en.pdf). (Accessed May 1 2014.)
- VAN DIJK, MICHAEL, FRANCIS WEYZIG, AND RICHARD MURPHY. (2006) *The Netherlands: A Tax Haven?* Amsterdam: Stichting Onderzoek Multinationale Ondernemingen (SOMO).
- VERNON, RAYMOND. (1971) *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises*. New York: Basic Books.