Abstract: This paper seeks to explain the effect of different economic reforms for attracting foreign direct investment (FDI) in Latin America. Controlling for macroeconomic and good governance factors, we find that governments that implement economic reforms are not always more likely to attract FDI inflows. Instead, attempts to minimize expropriation risk complement domestic financial and trade reforms, which enhances foreign investor interest. Elements of both good governance and reform are important. The results provide reasons for optimism—the fact that most economic reforms are not essential for attracting FDI suggests that countries seeking FDI will encounter fewer obstacles.

Over the past two decades Latin America has experienced a foreign direct investment (FDI) revival (Birch 1991, 149; Grosse 2001, 119). Concurrent with renewed interest in FDI, most Latin American countries have implemented market-oriented reforms. Capital shortages, caused in part by protectionist, import-substitution industrialization (ISI) policies in the 1940s–1970s, led many countries to shift economic policy course in the 1980s. Latin American policy makers hoped that initiating reforms would signal their governments’ creditworthiness and good intentions to prospective foreign investors (Rodrik 1996, 28). Despite the breadth of new investments and adoption of economic reforms, FDI has varied among countries. Do different market-oriented reforms affect FDI inflows to Latin American countries?

1. The authors acknowledge the help of David Brulé, Hye Jee Cho, Harvey Kline, Monty Marshall, Uk Heo, Geoffrey Garrett, Ron Rogowski, Michael New, John Tures, and three anonymous reviewers. Special thanks to Nate Jensen for his many useful suggestions on this work.

2. See Gastanaga, Nugent, and Pashamova (1998), who show that host country policies can influence FDI.
Economic reforms including changes in tax laws, trade liberalization, privatization, domestic financial reform, and removing barriers to international capital flows are all posited as crucial for drawing in foreign investment. While several important studies have researched the economic effects of FDI on developing countries (Amirahmadi and Wu 1994; Baer and Miles 2001; Bajpai and Sachs 2000; Birch 1994; Ramirez 2001; Trevino, Daniels, Arbeláez, and Upadhaya 2002), a disaggregated study of economic reforms is needed to understand what types of reforms are most likely to attract FDI.  

Building on economic explanations, macroeconomic conditions are also expected to affect FDI. Economic growth rates, government consumption, previous FDI inflows, and per capita gross domestic product (GDP) are strong predictors of foreign capital inflows (Birch 1994; Crenshaw 1991; Oneal 1988; Pastor 1992; Rummel and Heenan 1978; Tuman and Emmert 2004). Foreign firms are attracted to countries with high growth and per capita GDP rates and to areas with previous FDI inflows, while they resist investing in big government-spending countries.

Alternatively, host country characteristics influence FDI decisions. The term good governance stresses the impact of the host country to provide a stable investment climate on FDI. Many scholars link regime type, and especially democratic rule, with investor confidence (Jensen 2002, 2003; Li and Resnick 2003; Oneal 1994; Pastor and Hilt 1993; Tumur 2003). The stability and credibility provided by democracies as well as their transparency that enhance enforcement of property rights attracts foreign monies (Biglaiser and Danis 2002; Jensen 2003; Li and Resnick 2003). Similarly, risk not necessarily linked with regime type also influences foreign investor decisions (Birch 1991; Crenshaw 1991; Haendel 1979; Levis 1979; Tuman and Emmert 2004). Investors prefer countries with secure property rights, low corruption reputations, and fewer societal conflicts to minimize FDI risk.

This study tests existing theories to determine whether all forms of economic liberalization have the same effect on FDI inflows. We provide a multivariate analysis of FDI that includes three groups of

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3. There are many areas of inquiry that draw interest in the FDI literature. See, for example, Rothgeb’s (1990, 1991) work on the effects of foreign investment dependence upon domestic political conflict in Third World states.

4. For more details on the effects of good governance on economic choices and conditions, see Knack and Keefer (1995), Feng (2003), and Svensson (1999).

5. The effect of labor on FDI investment is another potential line of inquiry (see Rodrik 1996). However, because the focus of this paper is on assessing economic reforms as well as data limitations, we chose not to use labor explicitly as a control variable. GDP per capita does capture some of the wage issues.

6. On the importance of stable property rights for economic development, see North (1990) and de Soto (2000).
independent variables: 1) economic reforms; 2) macroeconomic conditions; and 3) good governance factors. Controlling for macroeconomic and good governance factors, we test whether some economic reforms are more conducive to FDI inflows than others are. The economic reforms we analyze are: tax, trade, and domestic financial reform, privatization, and international capital liberalization.

Using panel data for fifteen Latin American countries from 1980 to 1996, this study shows that, with the exception of domestic financial and trade reform, governments that implement economic reforms are not more likely to attract FDI. We find that a unified model combining some political and economic variables best explains governments’ foreign investment decisions. Our results suggest that enforcement of property rights influences FDI. Because of the high sunk-capital costs associated with initial investments, foreign investors fear nationalization. Efforts to minimize expropriation risk are especially relevant in Latin America, a region known for appropriating foreign investments since the 1930s.

Lessened expropriation fears complement domestic financial and trade reforms and reinvestment by multinational corporations (MNCs). Financial reforms that provide local capital at low interest rates draw in foreign investors. Low initial interest rates also reduce investment loss if the firm is expropriated. In addition, policy changes since the 1980s appear to enhance foreign interest in trade reform. Given the collapse of ISI and the loss of rent-seeking opportunities in host countries, MNCs are most interested in export opportunities. Host countries have similarly shifted to an export-oriented strategy, which supports efforts to reduce expropriation and gain investor trust. Previous positive experience with investment in the host country also is significant for FDI decisions. MNCs are likely to expand existing operations in host countries where there is low expropriation risk and growing profit potential.

Despite the limitations of a broad aggregate study, our findings hold important implications for the relationship between foreign investment and structural reform. First, the results provide reasons for optimism—the fact that most economic reforms are not necessary for attracting FDI suggests that countries seeking FDI will encounter fewer obstacles. Second, our findings contribute to the debate on the effect of good governance on foreign investor preferences. The results complement work by

7. See also Globerman and Shapiro (2002), who argue for the importance of protecting privately held assets from arbitrary appropriation as part of a positive governance infrastructure.

8. We also found that increased government consumption negatively affects FDI flows, which complements financial reform concerns, as greater government spending tends to crowd out available local capital sources.
Grosse (1997, 148), Li and Resnick (2003), and Tuman and Emmert (2004), indicating the relevance of property rights for obtaining greater FDI.

In the first section, we discuss the possible determinants of FDI with an emphasis on economic reforms. Issues of model specification are presented in section two. The results are presented in section three. We provide an explanation for the results in section four. Section five concludes the paper.

THE POLITICS OF ECONOMIC REFORM AND FOREIGN DIRECT INVESTMENT

FDI, defined as private capital flows that provide a parent firm with some control over an enterprise outside the home country, has a long legacy dating back hundreds, if not thousands, of years. FDI fell in the early part of the 1900s only to take off in the mid-1950s with U.S. MNCs leading the way. At the same time that FDI expanded, many developing countries questioned the merits of foreign investment. In Latin America, nationalist sentiments fought foreign expansion. In fact, in the 1930s–1970s most Latin American countries expropriated U.S. MNCs, converting these firms into state-owned enterprises (SOEs) (Toral 2001, 62).

In addition to nationalizations, Latin American countries also implemented ISI policies, imposing high tariffs on foreign industrial goods in order to promote the development of a domestic industrial base. Initially, success resulted from ISI policies, as Latin American countries averaged annual growth rates of over 5 percent between 1945 and 1972 (Thorp 1998, 15). However, by the 1970s, ISI forced domestic consumers to buy overpriced goods from uncompetitive domestic industries, contributing to foreign exchange shortages (Edwards 1995, 117–23).

Market distortions linked with ISI also generated severe balance of trade and payment deficits and capital scarcities in the 1970s. To compensate for capital shortfalls, Latin American countries borrowed heavily from international financial institutions and commercial banks. Fighting the effects of high inflation, central bankers in developed countries raised their prime rates to curb buying power at home. Efforts to control domestic inflation contributed to exorbitant interest rates on Latin America’s loans, causing financial and debt chaos in the 1980s. The resulting debt crisis led to capital flight throughout the region (Boeker 1993; Toral 2001, 61).

9. For a thoughtful and informative history of FDI, see Wilkins (1974).
10. See Akinsanya (1980) and Vernon (1971) for more details on the expropriation of foreign assets. See also Vernon (1998, 65) on the “obsolescing bargain,” which assesses the advantages host governments possess once MNCs make heavy capital expenditures.
11. For the negative consequences of ISI, see Baer (1972) and Hirschman (1968).
With few alternative capital sources, most Latin American countries ditched nationalist-inspired ISI policies and attempted to raise capital through several sources, including multinational investment. The question is which economic policies could Latin American governments introduce to attract FDI?

Interestingly, the literature on FDI in developing countries focuses less on the determinants of foreign investment decisions and more on the benefits or detriments of FDI. Often linked to debates between dependency/world-system scholars and modernization theorists, the literature provides ammunition for and against FDI. Similarly, work in the economic reform literature stresses more the effects of political institutions on policy choice and less its impact on FDI. The new institutional literature draws important distinctions among electoral systems, party structures, and legislative-executive relationships (Tsebelis 2002; Shugart and Carey 1992; Coppedge 1999; Figueiredo and Limongi 2000; Ames 2000). Institutional scholars posit that sub-regime type factors including the degree of presidential authority (Haggard and Kaufman 1995; Remmer 1991), the relationship between the legislature and the executive branch (Shugart and Carey 1992; Tsebelis 2002), and ideological considerations (Sikkink 1991; Hall 1989) explain the government’s ability or inability to initiate important reforms.

Despite the wide appeal in assessing the merits of FDI and exploring the effects of political institutions on economic reform, attempts to understand how economic policy influences FDI inflows has received less interest. The literature on FDI determinants is divided into three categories: 1) economic reforms; 2) macroeconomic conditions; and 3) good governance explanations.

Many studies suggest that specific economic reforms foster FDI interest. Among economic reforms, there are generally five policies to attract prospective investors: domestic and international capital liberalization, tax and tariff reductions, and privatization.

13. See Armijo (1999) to understand why developing countries turned to FDI as compared to aid, loans, and portfolio investment.
14. For studies that show developing countries seeking FDI, see Mallampally and Sauvant (1999); Lipsey (2001).
15. See Firebaugh (1992) who claims that foreign investment has a positive effect on economic growth but who also argues that domestic capital investment has an even larger effect on growth. See also Heo and DeRouen (2002) who show that United States direct investment in Latin America has a region-wide short-term positive effect but whose long-term effects vary by country. Similarly, Rothgeb (1984) contends that foreign investment has a negative long-term effect on overall growth, but a short-run positive effect.
16. For studies that negatively view MNC investment to less-developed countries, see Rothgeb (1984); Dixon and Boswell (1996); Kentor (1998). For studies that show the benefits of capital transfer to the developing world, see Oneal (1988, 1994); Oneal and Oneal (1988).
Some contend that domestic financial reform helps draw in foreign capital (Pastor 1992). Domestic capital liberalization linked to credit available at low interest rates heightens FDI. Foreign interests seek local capital sources for expansion and development of new enterprises.  

International capital liberalization offers another incentive to potential investors. Open capital markets also refer to the most biting criticism leveled against MNCs, namely profit repatriation. Firms investing abroad are most concerned about maximizing profits in order to satisfy stockholders at home, with corporate autonomy playing an important role in generating revenue. Firms desire the flexibility to move assets between countries in order to reduce costs and enhance benefits (Ramirez 2001). 

Complementing financial liberalization are tax reforms. As many U.S. state governors learned when attempting to attract MNCs such as BMW to build automobile plants, tax incentives are an important consideration. Notorious for high corporate taxes, Latin American countries are aware that tax policies may affect FDI. MNCs are expected to invest in countries with lower marginal tax rates on corporate incomes (Root and Ahmed 1978; Bajpai and Sachs 2000; Amirahmadi and Wu 1994). Trade reform also lures foreign investors. However, trade reform can have the opposite effect depending on foreign investors’ goals. In the case of export-oriented FDI, where MNCs plan to produce goods in the host country for export, or to unbundle the company’s production processes into smaller units in order to lower firm costs, lower tariffs are a primary concern (McKeown 1999). MNCs may even engage in quid pro quo FDI to defuse tariff demands in host countries (Bhagwati, Dinopoulos, and Wong 1992). On the other hand, in larger host countries, such as Brazil, MNCs may invest in order to avoid high trade barriers (Ellingsen and Warneryd 1999). Given the small size of most Latin American economies and recent shift away from ISI, FDI is most likely where tariffs are lowest (Agarwal, Gubitz, and Nunnenkamp 1992). 

Lastly, privatization is a common explanation for increased FDI inflows (Baer and Miles 2001; Birch 1994; Birch and Halton 2001). Desperate to obtain foreign capital and to shed loss-making businesses, many Latin American countries sold off SOEs in the 1980s and 1990s. Attracted by denationalization of infrastructure in telecommunications, 

17. Although by using domestic credit, MNCs are absorbing scarce local supplies, “FDI flows add to the pool available for investment on a global basis” (Spero and Hart 2003, 132).

18. We tested the variable country size (i.e., the log of GDP) in the models because larger countries might draw more FDI not only to jump local tariffs, but also because they offer much larger markets to foreign investors. However, country size is not significant in any of the models.

19. A large literature exists on the sale of SOEs. For more information about privatization, see Biglaiser and Brown (2003), Manzetti (1999), and Ramamurti (1996).
energy, electricity, and mining, foreigners invested aggressively in countries selling off important assets.

Alternatively, macroeconomic factors may contribute to FDI inflows. Linked to Dunning’s (1981) classic ownership, location, and internationalization framework as well as Markusen’s (1995) knowledge capital, and vertical and horizontal integration models, which focused on firm-level decisions, macroeconomic country-specific factors explain foreign investment decisions. Economic conditions in the host country as represented by economic growth rates, per capita GDP, previous experience with FDI, and government consumption provide varying incentives for foreign investors (Trevino, Daniels, and Arbeláez 2002). Positive domestic growth rates suggest to investors the “potential development of the economy as well as the potential market size” (Cho 2003, 22). Complementing growth rates, higher per capita GDP implies a larger local market for MNC goods (Brewer 1993). In host countries where tariffs are fairly high, foreign investors will market goods to better off host consumers that are shielded from external competition (Pastor and Hilt 1993). On the other hand, lower per capita GDP implies reduced wage costs for employers, making the host country attractive for labor-intensive businesses. MNCs are also drawn to countries already accustomed to producing goods for foreign investors. Countries that have a positive track record for manufacturing competitive goods are likely to receive continued orders from MNCs. By contrast, in countries where government spending is excessive, lower FDI is expected. High government spending is likely to crowd out available local capital, reducing the competitiveness of foreign investments.

In contrast to economic explanations, good governance factors including regime type and risk considerations also may influence foreign investment. In the development literature, scholars including Huntington (1968), Oneal (1994), Haley (1999), Tuman and Emmert (2004), and Winters (1999) contend that rightist authoritarian regimes hold advantages over their democratic counterparts for promoting a stable investment environment. Because authoritarian regimes are not usually subject to electoral constraints, and have the capacity to use repression against protesters, such regimes are expected to provide advantages over less insular democracies. Moreover, since authoritarian regimes tend to favor more conservative economic ideas, these regimes are expected to protect foreign interests.

20. Although Dunning (1981) and Markusen (1995) provide rich insights into FDI, according to Jensen (2003), neither framework goes far enough in explaining which countries will attract foreign investment.

Pastor and Hilt (1993) claim the opposite, arguing that democracies do not hamper FDI. Tures (2003) goes even further, positing that international investors actually prefer countries with democratic institutions in order to monitor and defend their capital. Building on North’s (1990) work that democracies protect property rights better than authoritarian regimes and Gourevitch’s (1993) view that democracies limit lawmaker opportunism, Tures shows the benefits of democracies for potential investors. Similarly, Jensen (2003) argues that democratic institutions hold credibility advantages that lower political risks for foreign investors. Transparency, a feature more widely identified with democratic over authoritarian regimes, also promotes investor security.

Alternatively, some contend that risk and stability regardless of regime type affects investment decisions. Cho (2003, 3) argues that FDI is attracted to host countries that provide a predictable and stable political environment that safeguard private property. Crenshaw (1991) concurs, stating that political upheavals discourage foreign investment in developing countries. Societal conflicts, related to warfare and genocide, in particular, raise serious concerns by investors about country stability.

This study develops three hypotheses to explain the determinants of FDI in Latin America. The first hypothesis claims a positive relationship between the introduction of economic reforms and foreign investment. Higher privatization, trade opening, tax reform, and domestic and international financial liberalization are anticipated to attract greater FDI. The second hypothesis contends that good governance heightens foreign investment. Lowered expropriation risk, democratization, less corrupt governments, and fewer societal conflicts promote greater investor interest from abroad. Finally, the third hypothesis suggests that a unified model combining economic reform and good governance factors is necessary to understand the determinants of FDI. Not all economic reforms and governance factors are created equal. Some measures are more important than others for attracting foreign investment.

22. Similarly, Harms and Ursprung (2002) argue that FDI is not boosted by civil and political repression usually associated with authoritarian regimes.
23. See Jensen’s (2002) earlier work, which also shows the benefits of democratic regimes. In addition, Wintrobe (1998) contends that a lack of impartial courts or an independent media under authoritarian governments affects investment decisions.
24. See Lehmann (1999), who also argues that higher political risk adversely affects FDI.
25. See also Bollen and Jones (1982), Rummel and Heenan (1978), and Levis (1979), who claim that political instability and violent events discourage FDI.
RESEARCH DESIGN

Dependent Variable

We selected fifteen Latin American countries from 1980–1996 to assess the effect of economic reforms and other factors on FDI. Our analysis includes all cases for which data are available, representing a good cross section within the region. These countries also attempted to initiate market-oriented reforms between 1980 and 1996.26

To measure FDI, we use the average net FDI inflows as a percentage of GDP from the World Development Indicators (2003). Unlike overall net FDI flows that subtract foreign capital inflows from domestic capital outflows, net FDI inflows measure a change in the position of foreign investors in a country (Jensen 2003). The literature on the determinants of FDI is concerned with responses by foreign investors, not decisions by domestic interests abroad. As such, net FDI inflows as a percentage of GDP best captures a country’s ability to attract FDI.

Independent Variables

Economic reforms The most common economic reforms initiated by policy makers are trade, tax, and domestic and international financial reforms as well as privatization.27 Each reform provides foreign interests with incentives to invest in the host country. MNCs interested in outsourcing manufactured goods for future export prefer low and uniform tariffs, a key element of trade reform (Gastanaga, Nugent, and Pashamova 1998, 1312).28 Similarly, MNCs prefer tax reforms that secure the lowest possible tax rates.

MNCs are also interested in domestic financial reform, international financial liberalization, and privatization that often draw nationalist furor in host countries. A popular criticism from economic nationalists is that MNCs invest only when local financial sources provide ample capital supplies and preferred terms for foreign firms. Rather than providing capital to the host country, MNCs consume scarce local capital (see Spero and Hart 2003, 134). MNCs are expected to invest in countries that implement domestic financial reforms that provide MNCs with better

26. The fifteen countries in this study are: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Paraguay, Peru, Uruguay, and Venezuela.
27. See Morley, Machado, and Pettinato (1999) and Lora (1997), which measure structural reform using the same or similar indices.
28. However, some firms set up subsidiaries in host countries to jump high tariffs. Such firms, of course, are less concerned about trade reform (see Spero and Hart 2003, 131).
borrowing and lending rates at local banks. Similarly, MNCs are frequently rebuked for engaging in profit repatriation. Firms favor capital liberalization with few capital controls, which allows profits to flow back to the home country (Gastanaga, Nugent, and Pashamova 1998, 1310). Finally, MNCs are attracted to privatization of state assets (Trevino, Daniels, Arbeláez, and Upadhaya 2002). The potential for foreign firms to earn significant profits raises nationalist tensions.

Measures for these economic reforms except trade reform come from indexes by Morley, Machado, and Pettinato (1999).29 They measure the degree of market freedom for each index in the particular reform category on a continuous scale between zero and one. Zero corresponds to the case with the least amount of reform for any country and any year among the period and countries considered. One is identified with the most reformed of the countries and years in the entire sample. Domestic financial reform is measured using the average of three subindexes: control of borrowing at banks, control of lending rates, and reserves to deposits ratios. Reserve rate requirements and decontrolled lending and borrowing rates affect interest rates on loans. International financial liberalization reflects the average of four components: the sectoral control of foreign investment, limits on profit and interest repatriation, controls on external credits by domestic borrowers, and capital outflows. We measure privatization by subtracting one from the ratio of value-added in SOEs to non-agricultural GDP.30 This variable measures the minority and majority share that each government holds in its country’s economy. The degree of tax reform is based on an average of four subcomponents: the maximum marginal tax rate on corporate incomes and personal incomes, the value added tax rate, and the efficiency of the value added tax (VAT) (i.e., the ratio of the VAT rate to the receipts from this tax expressed as a ratio of GDP). To measure trade reform, we use the sum of exports and imports of goods and services (lagged) as a share of

29. As with other measures, indices for economic reform or good governance are not always perfect. Although experts determine the levels for each variable, it may be argued that researchers should use other measures. Based on data limitations for developing countries, in particular, however, expert assessments are often the best available proxies. The frequency of their adoption in research attests not only to their availability but also to their relative accuracy and consistency.

30. Some may contend that the ratio of money garnered via privatization in a given year is a better indicator of privatization. However, we chose not to use the ratio for two reasons. First, and most importantly, the measure used in this study better reflects the size of the public sector in the economy. The index has the benefit that it does not penalize countries which do not have public enterprises, or which, like Chile, sold off a good deal of the public enterprise sector before the measurement begins. Second, such a measure is not available for the years covered in the study.
GDP because it is the best proxy of trade openness (World Development Indicators 2003).\(^{31}\)

**Macroeconomic Variables** For macroeconomic control variables, we use real per capita GDP, economic growth, government consumption, and previous experience with FDI (all lagged). Countries with high per capita GDP and economic growth rates are expected to promote future MNC sales domestically, making them attractive to foreign investment (Grosse 1997, 145). In countries with high government consumption, FDI is expected to fall as private investors are crowded out by state firms.\(^{32}\) Countries with a positive history in previous FDI are expected to receive renewed interest from MNCs. Data for the macroeconomic variables come from the World Development Indicators (2003). To measure economic growth, we use GDP growth (annual percent at market prices based on local currency in constant 1995 U.S. dollars).

**Good Governance Variables** Several factors identified with state characteristics also may affect FDI. Specifically, firms consider regime type, risk of expropriation, degree of corruption, and societal conflict when deciding whether to “sink” large amounts of capital into a project in a host country. These factors relate to stability, an important ingredient for long-term foreign investors. Regime type is a fairly controversial factor with some people contending that democracies promote greater stability while others claim the opposite. In order to determine whether regime type affects FDI, we use Polity IV data to operationalize democracy (Marshall and Jaggers 2002).\(^{33}\)

Risk of expropriation is also germane to FDI in Latin America. In the 1930s–1970s, many MNCs saw their investments expropriated with little or no compensation. Vernon’s (1998, 65) work on the “obsolescing
bargaining” between host countries and MNCs showcases the risk of expropriation. Vernon argues that foreign governments often approach MNCs to build power plants, develop transit lines, or explore an offshore area for oil. MNCs help develop infrastructure and create new jobs and sources of revenue. However, once investors have sunk their time and money into projects, the bargaining power shifts to the host country’s advantage, weakening the MNC’s position and enhancing appropriation risk. Degree of corruption is also expected to influence investment decisions. Corrupt governments increase the costs associated with setting up plants, making the endeavors less attractive to potential suitors. Moreover, there is no guarantee that consistently corrupt governments will not expect higher future payouts from MNCs, further dampening foreign investment. For measures of expropriation risk and corruption, we use annual data compiled by Stephen Knack from the quality of governance data of the PRS Group’s International Country Risk Guide project.\(^{34}\) We downloaded the data from the State Failure project Web site at http://www.cidcm.umd.edu/inscr/stfail/sfdata.htm. Risk of expropriation of private investment is measured on a scale of 0 to 10, with 10 providing the best protection of property rights. Countries are given lower scores where forced nationalization of assets is a higher threat. Corruption is rated on a 0 to 6 scale, with 6 indicating the least corrupt country. A corrupt country will have higher incidences of bribes throughout government. This measure is useful as it captures bribes associated with importing and exporting and tax rates. The codebook for these measures, compiled by Stephen Knack, is available at http://ssdc.ucsd.edu/ssdc/iri00001.html. These measures are further discussed in Knack and Keefer (1995).

Societal conflict also concerns foreign investors. Political instability resulting from warfare events (e.g., interstate warfare, wars of independence, civil warfare, ethnic warfare, and genocide) is expected to lower foreign investor interest. To measure societal conflict, we use Marshall’s “Societal Effects of Warfare” Data (2002).\(^{35}\) This variable captures various effects of armed conflict ( interstate and internal): both direct and indirect casualties, population dislocations, damage to societal networks, environmental degradation, infrastructure damage, and diminished quality of life. The magnitude variable ranges from 0 to 10, with 10 being the greatest source of societal conflict.

\(^{34}\) See the Political Risk Service Group (www.prsgroup.com), which assesses the risk of confiscation and forced nationalization.

\(^{35}\) We also consulted Marshall’s Center for Systemic Peace site at http://members.aol.com/CSPmgm/warlist.htm.
Table 1 Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
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<td></td>
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<tr>
<td>Net FDI</td>
<td>300</td>
<td>1.6842</td>
<td>1.9779</td>
<td>-5174</td>
<td>13.6171</td>
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<td>Growth</td>
<td>434</td>
<td>3.6593</td>
<td>4.4773</td>
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<td>24.0306</td>
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<tr>
<td>Govt. Consumption</td>
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<td>11.0432</td>
<td>3.1034</td>
<td>2.9756</td>
<td>20.5911</td>
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<td>Real GDP/capita</td>
<td>449</td>
<td>3480.2170</td>
<td>1684.8150</td>
<td>1190.0000</td>
<td>8257.0000</td>
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<td></td>
</tr>
<tr>
<td>Polity</td>
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<td>6.4805</td>
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<td>10</td>
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<tr>
<td>Expropriation Risk</td>
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<td>1.9121</td>
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<td>10</td>
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<tr>
<td>Corruption</td>
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<td>2.8904</td>
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<td>0</td>
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<td>Societal Conflict</td>
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<tr>
<td>Trade</td>
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<td>9.5947</td>
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<tr>
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<tr>
<td>Cap. Acct. Opening</td>
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<td>.2032</td>
<td>.1980</td>
<td>1</td>
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<td>.0270</td>
<td>.7850</td>
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</table>

Taken together, these independent variables represent three basic themes: macroeconomy, economic reforms, and governance factors. Summary statistics for the independent variables are presented in Table 1.

METHOD

We estimate the effect of political and economic variables on FDI in Latin America by creating models for panel data. We use Beck and Katz’s (1995) panel-corrected standard error (PCSE) procedure to estimate our model. OLS estimates of the standard errors may be misleading as a result of panel heteroskedasticity or spatial correlation of the errors caused by nonrandom data. Heteroskedasticity leads to inconsistent standard errors. The xtserial (without the lagged dependent variable) test reflects the presence of first order autoregression - AR(1) (Drukker 2003) and AR(1) is the most basic type of autocorrelation, meaning the residuals are correlated with the previous observation. The lagged dependent variable addresses the autocorrelation issue in the pooled setting (Beck and Katz 2004).

In order to proceed systematically and ensure robustness of our key findings, we break our analysis into three steps. First, we test the good governance model. Next, we test two versions of the reform model because potential multicollinearity between financial and tax reforms precludes them
from being tested in the same model. Finally, we test two versions of a unified model using variables from the reform and governance models.

RESULTS

We present the findings from our analysis in table 2, which contains results from good governance, economic reforms, and unified models. The good governance model presented in column 1 explains a large percentage of the variation in FDI in Latin America. As expected, the previous year’s value of net FDI is very important. MNCs continue to reinvest in profitable firms. Risk of expropriation has a strong impact on FDI. We find that reduced country risk and property-rights protection contributes to investor confidence. As Jensen (2003) rightly notes, the risk of expropriation has gone down dramatically in recent years. However, risk minimization is still critical as initial capital investments in infrastructure are high. Real GDP per capita has a significant and negative impact, suggesting that lower wages in poorer countries attract foreign investors. Government consumption has a negative though insignificant impact in this model. Regime type (polity) is not significant in this model though it is positive. In contrast to much of the literature that argues for the relevance of regime type, our study suggests that the likelihood of FDI inflows to Latin America is the same under democratic and authoritarian rule. Similarly, corruption and societal conflict do not seem to deter FDI.

The second and third columns of table 2 contain the economic reform models. Both financial and tax reforms significantly increase FDI. We also see that a healthy export sector helps attract FDI. Similar to Trevino, Daniels, Arbeláez, and Upadhyaya (2002), we found that capital account reform is not significant in any of the models. Privatization also appeared to have little effect on FDI inflows. Increased government consumption

36. Achen (2000) suggests that including a lagged dependent variable can produce biased estimates of the coefficients. Keele and Kelly (2004) downplay this problem and suggest, in general, that if theory necessitates, the lagged dependent variable should stay. Theoretically it makes sense to include lagged net FDI on the right-hand side as previous FDI is expected to affect future decisions by MNCs. In any case, our results are generally very robust regardless of whether or not a lagged dependent variable is used. In fact, when lagged FDI is taken out, the magnitude and significance level of many of the significant variables (e.g., expropriation risk) increases moderately. We report the findings with the lagged dependent variable as our theory dictates a dynamic relationship between levels of FDI in one year as partially based on the previous year’s level.

has a negative impact on FDI in these models. Higher government spending appears to crowd-out available local capital, reducing the competitiveness of foreign investment. In contrast, while real GDP per capita has a significant and negative effect in the governance model, it has no systematic effect when economic reforms are included.

In the unified model in column 5, tax reform is no longer significant. Its effect goes away in the presence of governance factors. The unified models substantiate other models' findings suggesting that the previous year's value of FDI, expropriation, government consumption, financial reform, and exports drive FDI inflows to Latin America. A state that transparently demonstrates that appropriation is not likely and implements reforms in the financial and trade sector that enhance future profitability is more likely to receive FDI. Surprisingly, societal conflict is positive and significant in the unified models. A possible explanation is that the countries that experienced the most civil unrest during the period under review (Colombia, Mexico, and Peru) all have significant natural resources, making them attractive to foreign investors regardless of the political situation. The inconsistency of results measuring societal conflict and the positive sign of the coefficient, which goes against results in other studies, suggest more research beyond the scope of this paper is needed before drawing solid conclusions.

**DISCUSSION**

How do we account for the pattern that emerges from the statistical estimates? First, why are some economic reforms including financial and trade liberalization important to foreign investors while tax reform, international capital liberalization, and privatization are less significant for attracting capital? Second, why is expropriation risk more critical than specific regime type for fostering greater investor interest? Further investigation is required in order to systematically account for the variance in FDI to Latin America. Nevertheless, we can forward some plausible explanations that account for the strong patterns elicited in the regression analysis.

38. For studies that show either negative or no effects of political stability on FDI flows, see Li and Resnick (2003) and Tures (2003).

39. The societal conflict measure we use has its limitations in that it aggregates different types of domestic and international sources of instability. For a more refined approach using separate measures for revolution and defeat in foreign war, see Tuman and Emmert (1999, 2004).
The relative significance of financial reform and trade liberalization is expected given the policy changes implemented in the 1980s. The 1980s are often referred to as the "lost decade" in Latin America (Boeker 1993).
Nearly every country confronted a mountain of debt. Given the crisis conditions, Latin American countries, in competition with each other for FDI, needed to entice foreign investors. In such situations, offering low interest rate loans is an important means for drawing in FDI. These loans are especially important for initial investment in recently denationalized firms or in new start up firms, where capital demands tend to be high. Lower initial interest rates also limit investment loss if the firm is later expropriated. In addition to the economic benefits of borrowing locally, MNCs also borrow for exchange rate reasons. Foreign investment affiliates attempt to balance out local liabilities with local assets in that same currency, and thus reduce their exchange risk (Grosse 2001, 129).

The shift away from ISI also enhanced export promotion for foreign investors. In the 1940s–1970s, many MNCs invested in Latin America to avoid high tariffs and reap possible monopolistic benefits in protected host markets. However, with few exceptions, the small market size of most Latin American countries limited the wealth potential of this strategy. On the other hand, the enhanced benefits of U.S. MNCs outsourcing manufactured goods to Latin America, where labor and other costs are much lower, make an export-driven strategy very attractive. In fact, the expansion of maquiladora industries on the U.S.-Mexican border is an example that supports reduced tariff barriers for attracting FDI inflows. With lower tariffs in the western hemisphere as a result of several trade pacts as well as increased participation of Latin American countries in the World Trade Organization, FDI continues to expand.40

The relative insignificance of privatization, international capital liberalization, and tax reform is less surprising once we dig deeper in the analysis. In terms of privatization, in the 1990s countries sold off many firms previously appropriated by Latin American governments. However, as a percent of total FDI, privatization was not very large. Indeed, with the exception of Chile, few countries engaged in privatization prior to 1988 (Bureaucrats in Business 1995). Although some newsworthy privatizations occurred in telecommunications, electricity, and energy sectors, most Latin American governments showed reluctance to denationalize many SOEs in the 1990s, at the height of the privatization boom. In fact, Mexico and Uruguay rejected some state sell-offs (Biglaiser and Brown 2003). Even in Chile, a country that served as a forerunner for privatization, copper mines that were nationalized in the early 1970s and are still the country’s most important export remain in the state’s hands.

40. We do not include a measure for trade pacts because they played a minimal role for most years in this study. Trade pacts are especially relevant since the early 1990s when the Mercosur (1991) and NAFTA (1994) originated. While the Andean Pact (1969) and CARICOM (1968) started much earlier, the “lost decade” of the 1980s minimized their impact. These pacts were rejuvenated in the 1990s. For more details on trade pacts and FDI, see Schott and Oegg (2001).
International capital liberalization on the surface should merit scrutiny from foreign investors. Repatriating profits to shareholders in the home country is a common interest for MNCs. However, limited capital controls are a greater concern for portfolio investment than it is for FDI. Portfolio investment tends to rely on short-term decisions with exchange rate policy, currency crises, and debt defaults often contributing to capital flight. FDI tends to look to the long-term and actually sees such crises potentially in a positive light. Rather than attempting to move capital out of the country (sometimes referred to as “hot money”), MNCs may see economic chaos caused, for example, by a currency crisis, as an opportunity to buy local firms on the cheap. Thus, international capital liberalization is a less pressing issue for longer-term investors.

Tax reform affects MNC investment decisions. However, among economic reforms, governments have moved slowest in changing tax policies. Perhaps, because of the political and administrative difficulty in gaining legislative and executive political backing and actually implementing tax modifications, corporate tax changes have lagged behind other reforms. In addition, through intra-firm exchanges, MNCs may have less worry about tax policies. A common complaint against MNCs is their ability to use affiliations and subsidiaries in several countries to limit tax burdens. Because the transactions of subsidiaries of the same MNC are not arm’s-length transactions, MNCs can engage in transfer pricing, evading high taxes by showing the highest profits in countries where taxes are low and the lowest profits where taxes are high (Spero and Hart 2003, 138). Such financial maneuvers reduce the importance of tax policies for foreign conglomerates.

In contrast, expropriation risk is expected given Latin America’s history with nationalization. In the late 1930s–1970s the largest countries in the region, including Argentina, Brazil, Chile, Mexico, and Venezuela, engaged in extensive expropriations. Previous experience with foreign multinationals, principally from Great Britain and the United States, who controlled the main exports and infrastructure in these countries prior to World War II, caused a nationalist backlash. Governments in these countries and others appropriated many firms. However, the types of governments in power did not seem to affect the decision to nationalize. Authoritarian governments (e.g., Perón in Argentina [1946–1955], Cardenas in Mexico [1934–1940], and Velasco in Peru [1968–1975]) nationalized just as readily as democratic governments did (e.g., Goulart in Brazil [1961–1964], Allende in Chile [1970–1973], and Pérez in Venezuela [1974–1978]). Regime type played little role in the decision to nationalize.

Recently, many of these nationalized industries have returned to private hands. Although the risk of future nationalization has fallen, the enormous amounts of monies required for upgrading and enhancing
many industries in disrepair and disarray, especially in infrastructure, make risk-minimizing strategies important. Even today, leaders in Uruguay and Venezuela have threatened to nationalize private investments. The stakes and long-term interests are too great for foreign investors not to consider expropriation risk when deciding whether to invest in Latin America. Unlike portfolio investors, who are interested in short-term returns and rapid financial flows, the very nature of FDI makes long-term decisions and risk assessment most crucial.

CONCLUSION

Although many excellent studies research the economic determinants of FDI, given the recent increase of FDI inflows to Latin America combined with the change in the region’s economic policy course from protectionism and a large state to liberalization and an enhanced private sector, it is imperative to assess the effects of different types of economic reform in attracting foreign investment. To test the relative strength of economic reform factors we specified a unified model of FDI that included a number of important economic and governance control variables in order to evaluate the importance of tax, trade, and domestic financial liberalization, international capital opening, and privatization. Our results indicated that the risk of expropriation as well as domestic financial and trade reform, reinvestment by MNCs, and high government consumption in host countries were the only covariates strongly correlated with the rate of FDI in a given year.

Contrary to conventional wisdom, results generated by our model imply that most economic reforms have limited effect on FDI inflows. International capital liberalization and privatization are unlikely to attract foreign interests. In fact, among economic reforms only trade and domestic financial liberalization encourage FDI. We also find limited evidence that tax reform is important. In addition, regime type also seems to have little impact on foreign investors. In contrast to beliefs of scholars who defend the importance of regime type and argue that democratic or authoritarian governments possess advantages with international investor community, regime type is not a significant indicator for FDI (see also Heo and DeRouen 2002). Instead, what appears critical is the risk of expropriation. Minimizing the risk of appropriation is unsurprising in Latin America, a region that has a long history of nationalization.

The risk of expropriation complements other determinants of FDI. The provision of ample local capital at low interest rates suggests that at least if the firm is expropriated the loss is not as great as it would be if the firm borrowed at higher rates. The shift to an export-based economy also suggests a change in the mindset of policy makers in the host
country. For more than thirty years, Latin American governments followed nationalistic ISI policies with the hope of promoting domestic industry. Expropriation also factored in to the mix of benefiting local producers including the state at the expense of foreign producers. The dramatic shift to an export orientation indicates a policy commitment to more open markets that is unlikely to lead, at least in the short term, to expropriation. Finally, MNCs are expected to continue reinvesting profits in the host country as the risk of nationalization falls and economic prospects remain positive.

Despite the minimal effect most economic reforms have on FDI inflows, we perceive this finding positively. The fact that most economic reforms are apparently not essential for attracting FDI suggests that countries seeking FDI will encounter fewer obstacles. More research is needed to determine if other factors perhaps trump the initiation of economic reforms. For example, foreign investors may tolerate less orthodox neoliberal policies by governments that hold ample natural resources. While governments are able to change economic policies relatively quickly from the introduction of economic reforms to enhanced government intervention and back, leading to unpredictability for investors, natural resource stocks are easier to gauge. Subsequent work needs to assess host country factor endowments and how their permanent nature may have a more lasting effect on FDI flows than possibly transitory economic reforms.

More comparative research on FDI inflows in other developing countries is also critical to evaluate the effect of good governance on potential investors. Comparisons with or between developed and developing countries might also highlight the wide range of factors that influence FDI. In addition, future research that includes the period between 1997 and 2000 is warranted, when Brazil, in particular, experienced a dramatic FDI inflow increase. Based on our sample, it appears that as long as countries are able to limit the threat of expropriation, opportunities to attract foreign investment are attainable.

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