Political Institutions and Foreign Direct Investment in Developing Countries:
Does policy stability mean more to investors than democracy or property rights?

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In the 1990s, foreign direct investment (FDI) became the largest single source of external finance in the developing world. Not only is FDI increasingly important in quantitative terms, it also has a number of qualitative characteristics important to developing countries. It is less volatile than portfolio flows, does not require repayment (as does debt), and is considered to have a number of positive spillover effects such as technology transfer and access to new markets.

Because of the growing importance of FDI in the world economy and in economic development for developing countries,[1] a vast empirical literature has developed exploring the determinants of FDI. Until recently, most of these studies have focused on economic variables. In the past ten years, however, attention has increasingly turned toward political institutions to explain investors' decisions.

Proponents of democratic reform often argue that investors prefer democratic regimes, in part because they tend to have more secure property rights. However, property rights and the associated rule of law can exist independent of democracy, and investors apparently prefer property rights-protecting authoritarians such as Lee Kuan Yew of Singapore to democratically elected leaders with little respect for property rights such as Hugo Chavez of Venezuela. Which political institutions are most important to investors, democracy or property rights?

In this paper, I argue that foreign investors prefer a third political institution - credible commitment to stable, FDI-friendly policies - and that among the most effective signs of commitment is the presence of multiple veto players, i.e. individual or collective decision makers

[1] In this paper, the term developing countries and less developed countries will be used interchangeably, and refer to countries designated by the World Bank as low or middle income, based on gross national income (GNI) levels.

whose agreement is required for a change in policy.[2] States may credibly commit to policy stability in other ways, such as joining a bilateral or multilateral investment agreement,[3] or establishing a reputation through prior behavior. However, it is difficult to ensure that a sovereign government will not deviate from an agreement, either directly or indirectly. Furthermore, a history of respect for policies such as property rights is not always a good predictor of future behavior when an autocrat is unchecked, as recent events in Zimbabwe demonstrate. A system with multiple veto players has the advantage of being self-reinforcing and therefore relatively stable. When multiple veto players with diverging policy preferences share power, a dynamic is created that naturally hampers major policy changes, thus increasing policy stability.[4]

I therefore argue that the best investment environment for foreign investors combines FDI-friendly policies with a large number of veto players. I assume that foreign investors (after taking into consideration such issues as market size, cost of labor, and access to minerals) look at the policy environment in the available host countries. First, these investors will look for favorable policies, such as low taxes and capital mobility. Second, they will consider the likelihood these policies will remain in place after they have sunk their investment in the country. This argument is summarized in Figure 1.

[2] Veto players are the decision makers who control a veto point, such as the executive, a legislative chamber, or a party in a governing coalition. The terms veto points and veto players are used interchangeably in this paper.
[3] Buthe and Milner 2005 find that multilateral agreements such as GATT/WTO and bilateral agreements such as preferential trade agreements and bilateral investment treaties have a positive effect on FDI inflows to developing countries.
[4] Multiple veto players are not a guarantee, of course, that policies will not change, only that change is less likely. The number of veto players and their preferences may change with ensuing elections, although incumbency benefits increase the likelihood that an FDI-friendly party in government will remain in place.

Figure 1: Policy Stability Mechanism

	Few Veto Players	Many Veto Players
FDI-Friendly Policy	2nd Choice - Good policy now, but may change	1st Choice - Good policy, unlikely to change
FDI-Unfriendly Policy	3rd Choice - Bad policy now, but may change	4th Choice - Bad policy, unlikely to change

Empirical analysis offers support for this argument. Using panel data for 117 developing countries from 1975-2002 (including data for FDI-relevant policies such as property rights, foreign investment, capital mobility, and taxes on income and trade), I find that countries with FDI-friendly policies attract more FDI as the number of veto players increases, while the reverse is true for those with policies inimical to FDI. An average country with FDI-friendly policies can expect up to a 40% increase in FDI with a shift from a single to many veto players.

The policy stability argument overlaps with the arguments about democracy and property rights. All autocracies have a single veto player;[5] however, not all democracies have multiple veto players. A unicameral parliamentary system with a majoritarian governing party, for example, has just one veto player. My findings suggest that investors do prefer leaders that are democratically elected, but that the most important democratic institution may be leadership checked by other institutional actors to protect a favorable policy environment. Similarly, secure property rights appear to be attractive to investors, and can be considered as one particular policy that is more stable in the presence of multiple veto players. While many authors seem to suggest that property rights is the most important policy for investors, I argue that investors are attracted by stable, FDI-friendly policies in general, and that this environment of policy stability in general

[5] It is possible for veto players to exist outside of the conventional domestic political institutions, such as international institutions, or domestic actors such as the military or clergy. These less conventional veto players are difficult to measure, however, and are not considered in this paper.

is more important than property rights in particular. After all, even in a country with strong property rights, the state can capture an investor's wealth through tax hikes, restrictions on investment, or changes in laws pertaining to property rights.

In short, the democracy variable may be too broad (including less relevant factors in addition to constraint on the executive) and the property rights variable may be too narrow (ignoring other FDI-relevant polices), while the policy stability argument can accurately target the relevant mechanism.

Apart from the theoretical interest of understanding how political institutions affect the decisions of foreign investors, this study has practical policy implications. While many in the West have been pressing developing countries to adopt democratic institutions, the success of East Asian countries such as Singapore has convinced some that secure property rights are more important and should not be compromised by premature democratization. Similarly, previous empirical studies have competing findings, one that democracy has a negative effect while property rights have a positive effect,[6] another that democracy has a positive effect and property rights no effect.[7] This study argues that it is not democracy alone, but rather multiple veto players, enabled by democratic institutions, that can create an environment of policy stability, which may include secure property rights.

An additional contribution of this paper is the use of new FDI data from the World Bank World Development Indicators (WDI), supplemented with imputed data for missing values using the AMELIA imputation program.[8]

The rest of this paper is organized as follows: In the next section, I summarize the literature on political institutions, particularly democracy, property rights/rule of law, and policy

[6] Li and Resnick 2003.
[7] Jensen 2003.
[8] King et al. 2001.

stability via veto players. In the third section, I develop my argument and make a number of hypotheses based on its implications. In the fourth section, I test the hypotheses of the stability argument against the rival hypotheses of the democracy argument and the property rights argument, and discuss my findings. In the fifth section, I present a sensitivity analysis. I then summarize my findings, discuss policy implications, and suggest opportunities for further research.

Political Institutions and FDI

FDI refers to an investment made to acquire a lasting interest in enterprises operating outside of the investor's home country.[9] Unlike the indirect investor, who passively profits from the purchase of a firm's stock, the direct investor actively participates in managing the enterprise. By definition, a firm that makes FDI is a multinational corporation (MNC). In less developed countries (LDCs), there are three major types of FDI: market-seeking, which duplicates production facilities to supply local markets; efficiency-seeking, which relocates part of the production chain to a low-cost country for export; and natural resource-seeking, which exploits mineral deposits or other location-specific resources.[10]

Until recently, most studies on the determinants of FDI have focused on economic variables. Chakrabarti summarizes approximately forty articles in the literature and notes that there is little consensus on which economic determinants are most significant. [11] Using Extreme Bound Analysis,[12] Chakrabarti finds that the most robust determinant is market size, measured either as GDP or GDP per capita; less consistent determinants include (in order of robustness)

[9] Although FDI is commonly thought of as the establishment of a new enterprise, it can also refer to the purchase of a substantial share (e.g. 10% or more) of equity in an existing business.
[10] Caves 1996.
[11] Chakrabarti 2001.
[12] Leamer 1985.

trade openness, cost of labor, net exports, economic growth, tax on income, profits, and capital gains, and tariff rates. More recent empirical studies have added political factors, including regime type and property rights, to the economic arguments.

Democracy and FDI

Democracy is a commonly used term whose meaning varies depending on the user. Schumpeter emphasizes competition as the essential feature of democracy.[13] Dahl notes the importance of mass participation, competition, and individual rights.[14] Montesquieu makes a distinction based on constraint: in constrained regimes, including democracies, the government is limited by laws, whereas despotic regimes are unchecked by the rule of law.[15]

There are theoretical bases for both a negative and positive effect on FDI by democracy. O'Donnell argues that autocrats shield foreign capital from popular pressure for higher wages, stronger labor protection or taxation on capital.[16] On the other hand, Olson argues that in democracies, where elections enable orderly succession and thus long time horizons, the state will protect property rights rather than engage in short-term confiscation of assets, thus reassuring investors.[17] Jensen and others argue that democratic institutions enable a better flow of information via a free press and transparent decision-making process, improve credibility through audience effects (voters will punish officials with tarnished reputations in the investor community), and provide policy stability through institutional checks and balances.[18] Putnam's theory of the two-level game[19] offers support for both sides. On the one hand, democratic

[13] Schumpeter 1942.
[14] Dahl 1998.
[15] Montesquieu also includes non-democracies in the constrained regime category, e.g. monarchies and aristocracies.
[16] O'Donnell 1978.
[17] Olson 1993.
[18] Jensen 2003, forthcoming.
[19] Putnam 1988.

constraints limit a government's ability to offer concessions to MNCs. On the other, these same constraints may reassure MNCs that terms offered are unlikely to change after investments have been made.

Empirical studies also come to competing conclusions. Oneal finds that democracy had no significant effect,[20] Resnick that democracy has a negative effect,[21] and Harms and Ursprung that democratic institutions have a positive effect on FDI.[22] Li and Resnick find that, when controlling for property rights, democracy has a negative effect on FDI, [23] while Jensen finds that democracy has a positive and statistically significant effect on FDI, even after controlling for property rights factors.[24]

Thus, as is the case with most economic factors, the effect of democracy appears to be highly sensitive to changes in the countries, years, and covariates included in the study.[25]

Property Rights, Rule of Law, and FDI

Property rights, defining an owners right to control and sell both the assets and profits generated by those assets, are defined by law and therefore depend on the rule of law. Rule of law implies that government authority may only be exercised in accordance with written laws, which were adopted through an established procedure and act as a safeguard against arbitrary rulings in individual cases.

According to Adam Smith, the expectation of profit from "improving one's stock of capital," i.e. investment, rests on private property rights. The effect of property rights on

[20] Oneal 1994.
[21] Resnick 2001.
[22] Harms and Ursprung 2002.
[23] Li and Resnick 2003.
[24] Jensen 2003.
[25] E.g., Li and Resnick exclude trade openness from their models; Jensen excludes labor costs.

investment and thereby economic growth is credited by some for the economic rise of Western Europe.[26] Property rights can also explain why multinational firms choose to establish operations in foreign countries rather than rely on trade and licensing agreements. According to the property rights theory of firm scope,[27] firms choose ownership rather than market transactions when ownership of the productive assets will generate surpluses that can be captured by the owner. Similarly, Dunning's eclectic theory[28] argues that firms choose FDI over reliance on market transactions when there are ownership, locational, and internalization advantages.

In the political science literature, two articles are frequently cited to demonstrate how democracy contributes to property rights and thereby investment. Olson argues that orderly succession (which can be brought about through electoral rules or a dynastic monarchy) leads to long time horizons during which the leadership can wait for returns on investment, and thereby offers rulers incentives to secure property rights.[29] North and Weingast argue that veto players create credible commitment to property rights.[30] Prior to the Glorious Revolution in England, the crown could expropriate assets by redefining property rights to favor the sovereign. By introducing the Parliament (representing wealth-holders) as a check on the monarchy, the king's ability to renege was reduced and investment thus facilitated. Although both works are cited to show how democracy contributes to property rights, the arguments are quite different. A dynastic English king should have the longest possible time horizon, and yet North and Weingast argue that it was necessary for parliament to check his expropriations. To paraphrase Judge Roberts in his Supreme Court nomination hearings, the only check on a dictator is his own self-restraint.[31]

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[26] North and Thomas 1973.
[27] Grossman and Hart 1986.
[28] Dunning 1988.
[29] Olson 1993.
[30] North and Weingast 1989.
[31] This is overstating the case, since non-institutional players such as the military or external players such as the IMF may check dictators to an extent. However, democratically-elected leaders may also be checked by such players, in

Most scholars assume that strong property rights for domestic investors, will translate into strong property rights for foreign investors. This may not necessarily be the case, however. If a government requires domestic support to hold onto power, it might grant stronger property rights to domestic investors than to foreign investors. In the 1960s and 1970s, for example, many revolutionary regimes targeted foreign firms for expropriation. Alternatively, a secure government that desires to attract foreign investment might favor foreign investors over local investors, who have fewer opportunities to invest outside the country. In China, for example, foreign companies have had legal property rights since 1982, but the country's constitution did not begin to recognize the property rights of Chinese private entrepreneurs until 1999.[32] Thus, although plenty of domestic capital was available due to high savings rates, Chinese firms sought out foreign partners to invest in joint ventures to protect their rights. In this case, poor property rights contributed to more FDI.

Nonetheless, as a general rule, stronger property rights are assumed to attract FDI. Li and Resnick argue that democracy has a positive effect through greater property rights protection, but when this is controlled for, democracy has a negative effect, and find empirical support for this argument in a number of specifications.[33]

Veto Players, Policy Stability, and FDI

FDI, while mobile *ex ante*, is relatively illiquid *ex post*.[34] Thus, once foreign capital is invested in a country, the investing firm is subject to political risks. To encourage investment, a government must credibly commit itself to refrain from taking action harmful to investors,

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addition to domestic institutional checks and balances. (Judge Roberts was, of course, talking about the judiciary and not dictators.)

[32] Huang 2003.

[33] Li and Resnick 2003.

[34] Vernon 1971.

including but not limited to expropriation. Multiple veto players are arguably the most significant form of credible commitment.

The most thorough development of veto player theory comes from Tsebelis, who emphasizes the effect of veto players on policy stability.[35] Every new policy outcome is a departure from a previous policy outcome (or *status quo*), and any individual or collective actor whose agreement is necessary to make this change is a veto player. An example of an individual veto player is a president; examples of collective decision makers include legislative chambers and parties in governing coalitions. Thus, although a dictatorship will always have just one veto player, democracies may have one (e.g. if a single governing party controls the parliament) or many (e.g. if different parties control the president's office and chambers of a bicameral legislature). A high number of veto players implies democracy, but a low number of veto players does not necessarily indicate a dictatorship.

As the number of veto players increases, it becomes more difficult to change the *status quo*, and so policy stability increases; conversely, a country with a single veto player can have high policy volatility.[36] For example, in a dictatorship such as Cuba policies can reverse quickly. Recent changes in the currency valuation, inspection policy and business rules have led more than half of the 800 foreign firms registered in Cuba in 2002 to leave.[37] Because veto players make it difficult to change a law once it is in place, the terms "policy stability" and "credible commitment" are often used interchangeably.

[35] Tsebelis 2002.
[36] In counting the number of veto players, if two are in agreement on a policy (for example, a president comes from the same party as the ruling party in a legislative chamber), one player is absorbed, or eliminated. In addition to the number of veto players, the ideological distance between veto players will also increase policy stability, as will rules such as how large a majority is necessary to pass a new law.
[37] *The Economist,* June 23 2005.

Several empirical studies have found support for the theory that veto players lead to stability for a number of policies and policy outcomes, including tax levels, budget deficits, and inflation.[38] As noted above, North and Weingast argue that the addition of a veto player creates property rights; however, Stasavage points out that the structure of partisan interests and political coalitions is as important as veto players in explaining property rights and credible commitments.[39]

In an empirical study, Stasavage looks at the effect of veto players on private investment (foreign and domestic).[40] He argues that as the number of veto players increases, so does the likelihood that one of them will represent capital owners and thus block an increase in the *status quo* capital tax rate, thereby reassuring prospective investors that the tax rate will not rise after their investment. He finds support for his argument in an empirical test using data from 74 developing countries. He notes that a more general prediction could be made with information about what *status quo* tax policies exist.

In his study of the effect of democracy on FDI, Jensen cites the role veto players have on policy stability, thus reassuring MNCs that "the government policies in place when the firm entered the country will continue over time."[41] Later, he tests this veto player argument by including veto players in a model to predict FDI inflows, and finds that veto players have either no effect, or a positive effect when country (fixed) effects are included.[42] He leaves an explanation of this to future research. As shown below, I suggest that the positive effect of veto players occurs in the presence of FDI-friendly *status quo* policies.

[38] Hallerberg and Basinger 1998, Franzese 2002, Treisman 2000, and Henisz 2004.
[39] Stasavage 2002a.
[40] Stasavage 2002b.
[41] Jensen 2003.
[42] Jensen 2006.

The Policy Stability Argument: Credible FDI-Friendly Policies Attract FDI

In the realm of political institutions, foreign investors look for two things when making investment decisions. First, they want an attractive policy environment. This includes legal rights (to purchase local assets with foreign money, to freely sell those assets at market value, to repatriate profits and capital, etc.) and policies that affect the cost of operations (tax on income, tax on imports and exports, transaction costs, etc.). Second, they want assurance that these policies will not change for the worse after they have sunk their capital in the host country.

As discussed above, credibility can come from a number of sources, including binding agreements and reputation. However, a sovereign state is free to defect on binding agreements. There are, of course, costs to defection, including reputation costs. Nonetheless, conditions can and do arise when states decide that defection is the best policy choice (analogously, in the repeated prisoner's dilemma, the Nash equilibrium of ongoing cooperation is just one of many potential Nash equilibria). Structural adjustment loans from the IMF or World Bank are contingent on conditions, and yet states can and do break those agreements when doing so is seen as the best option. Similarly, an unchecked government may be consistent for a number of years, but is free to change its mind at a moment's notice. Zimbabwe's reputation for property rights and rule of law, for example, was quite high until Robert Mugabe decided to begin expropriating land.

Another source of credibility is the existence of multiple veto players. Unlike international agreements, which may fail without foreign enforcement, and reputation, which can fail without personal restraint, multiple veto players is a domestic institution that is durable because it is self-reinforcing. A state has multiple veto players when there are multiple collective or individual decision-makers with diverging policy preferences who must agree before a policy

can be changed. By each pursuing their own goals, these veto players are serving the interests of foreign investors by reducing the likelihood that policies will change. Although veto players can be eliminated during elections, they have an incumbent's advantages to help them stay in power.

This credibility is only attractive, obviously, when the *status quo* policies are friendly to investors. If the *status quo* is unattractive, then the higher the credibility that the policies will remain stable, the less attractive the investment environment. I therefore have three predictions:

> *Hypothesis 1: Countries with FDI-friendly policies will attract more FDI than countries without FDI-friendly policies.*
>
> *Hypothesis II: In countries with FDI-friendly policies, more veto players will be associated with more FDI.*
>
> *Hypothesis III: In countries without FDI-friendly policies, more veto players will be associated with less FDI.*

Because veto players are generally found in countries that are considered to be democracies, the existence of veto players is often cited as an advantage of democracy. However, I argue that the investment environment is to an extent independent of the level of democracy. A democracy with many veto players and unfriendly policies will be the most unattractive environment. Furthermore, a democracy may have a single veto player that decides abruptly to change policies in a way detrimental to investors. For example, Venezuela is coded as a free democracy,[43] but recent tax increases and new investment restrictions have made the country less attractive to FDI.[44] Thus, the hypotheses above are predicted to hold true independent of regime type.

[43] On a scale from –10 to 10, with 10 being a perfect democracy, its Polity score has ranged from 6-9 over the years 1958-2002.
[44] *The Economist,* October 7, 2004.

Similarly, veto players support property rights by decreasing the likelihood that laws regarding these rights will change.[45] Property rights refer first to the right to own property, and second to the credibility (most commonly attributed to rule of law) that these rights will not be compromised. Even property rights that are well defined and consistent might be attractive (e.g. few limits on access or usage) or unattractive. Furthermore, although rule of law prevents extrajudicial seizure of assets, it does not preclude policy instability; laws governing property rights can change through legal, established means. For example, the state can pass laws to limit how an owner might use an asset (e.g. environmental regulations and zoning laws) or to capture wealth through raised taxes. Such legal policy changes cannot be prevented by property rights and rule of law, but are hindered by veto players. Thus, foreign investors will respond to property rights policies as described in my hypotheses above, similar to other relevant policies.

It is not necessary for investors to be familiar with the term "veto player theory" in order to behave in accordance with the theory. Although "veto player" is not a term one is likely to hear at dinner parties or in the boardroom,[46] the logic of veto players is clear even to the casual observer of politics.[47] For example, in a recent CNN poll (released September 8, 2006), 70% of respondents thought that a Democratic Congress with a Republican president would lead to more gridlock that is the case with a Republican Congress and president. Previous studies have demonstrated that the number of veto players has predictive power in explaining the decisions of MNC executives. For example, Henisz finds that the number of veto players influences MNCs choice of whether to enter a new market with a joint venture.[48]

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[45] Andrews and Montinola 2004 find that in developing countries, more veto players are associated with improvements in the rule of law.
[46] Jensen 2006 reports that in his interviews, managers of MNCs did not mention "veto players" as a factor when making an investment decision.
[47] E.g., see *The Economist,* November 1, 2000, October 21, 2004; *The New York Times*, November 7, 2002.
[48] Henisz 2000b.

Empirical Analysis

Dependent Variable

The dependent variable is net FDI inflows as a percentage of GDP, from the World Bank's World Development Indicators,[49] for 117 countries from 1976-2002.[50] Net FDI inflows is a measure of the change in the position of foreign investors in a country. A country with a positive FDI inflow position is attracting new FDI investment, while a country with a negative position is experiencing an outflow of foreign capital. I exclude countries whose average population is less than one million over the period studied, many of which are island states, because they tend to have severe levels of missing data and their small economies lead to large swings in FDI as a percentage of GDP.

This study uses new data from WDI 2005, which includes new data for recent years and new data for previous years,[51] offering an opportunity to test the robustness of key findings from previous studies using older data.

According to the available data from this dataset, the average level of FDI for the countries included is 1.7% of GDP (see Appendices A and B for more details). After imputing for missing values (see *Research Design* below), the average is about 1.5% of GDP. I will use this average when interpreting results.

[49] All data comes from WDI unless specified otherwise.
[50] The 1976 cut-off is used because the earliest data for an important control variable, GDP (PPP adjusted) and GDP per capital (PPP adjusted) is not available prior to 1975 (explanatory variables are lagged by one year). PPP-adjustment makes countries that are inexpensive to live or operate in comparable to countries that are more expensive. The 2002 cut-off is used because some of my explanatory variables of interest are not available after 2001.
[51] Sometimes data for previous years replaces missing values with data, sometimes it replaces old data with improved data. The correlation between old data and new data is 0.86.

Explanatory Variables

The economic variables included are those that Chakrabarti[52] finds to be most robust: Market Size (measured using both log GDP and log GDP per capita, each PPP-adjusted), Trade Openness (exports and imports as a percentage of GDP), Growth of GDP (annual percentage), Net Exports (exports minus imports as a percentage of GDP), and log Wages (for the manufacturing industry).[53] I also include Natural Resources, which is important for FDI to developing countries.[54]

A large GDP is predicted to attract FDI due to the size of the potential market for market seeking-FDI and economies of scale for market- or efficiency-seeking FDI. GDP per capita attracts market-seeking FDI (particularly in developed countries), but in developing countries, economic theory predicts that capital should flow to capital-scarce countries, thus predicting a negative relationship between GDP per capita and FDI. The net effect is thus uncertain. Most FDI in developing countries is in the tradable sector, requiring imports of inputs and exports of finished goods, and so trade openness is expected to have a positive effect on FDI. Growth of GDP indicates a healthy economy and future profit opportunities. Some writers argue that net exports also indicates a healthy economy and thus should attract FDI, but Chakrabarti finds that net exports tend to have a negative effect on FDI. A possible explanation comes from Vernon's product life cycle theory,[55] which says that firms seeking foreign markets will begin by exporting (the 1st phase in the cycle), and after the market has demonstrated its viability for that product,

[52] Chakrabarti 2001.
[53] I use monthly wage data from Freeman and Oostendorp 2001, converted into US$. One might guess that there would be a strong correlation between GDP per capita and wage levels, such that wage data would not be necessary. However, the correlation is only 0.4, and there are theoretical reasons why wage data would affect FDI differently than GDP per capita. Foreign investors are likely to be attracted by high levels of GDP per capita (which includes all forms of income), because this indicates higher buying power, but attracted by lower manufacturing wages, because this indicates low production costs. In developing countries, it is not unusual for a wealthy elite that can afford expensive foreign consumer goods to coincide with masses of low-wage workers.
[54] Natural Resources is measured as fuel, ore and mineral exports as a percentage of total merchandise exports.
[55] Vernon 1966.

the firm will establish local production facilities to serve that market (the 2nd phase). Thus, high levels of imports may indicate a market opportunity that attracts FDI. Low wages should attract efficiency-seeking FDI (the 3rd stage in Vernon's cycle). Natural resources should attract resource-seeking FDI.

I measure democracy using the Polity IV 21-point scale, which is constructed by subtracting an autocracy score (ranging from 0-10) from a democracy score (ranging from 0-10) to create a regime type score between -10 and 10. The scale includes competitiveness of political participation, regulation of participation, constraint on chief executive,[56] openness of executive recruitment, and competitiveness of executive recruitment.[57]

There are a number of measures of veto players.[58] As does Stasavage,[59] I use the Political Constraint Index III (POLCONIII),[60] which covers the largest number of country-years, and which is designed to reflect the non-linear effect veto players should have on policy stability (i.e. a second veto player will have a larger marginal impact than a fourth or fifth).[61] A government without an "effective" legislature, the executive is considered to be the sole veto player. For countries with an effective legislature, he identifies the number of independent branches of government (executive, lower and upper legislative chambers). The preferences of each of these branches and the *status quo* policy are assumed to be independently and identically drawn from a uniform, unidimensional policy space. This initial measure is then modified to take into account

[56] The constraint factor is analogous to the existence of multiple veto players.
[57] Marshall and Jaggers 2002.
[58] Henisz 2000a, Henisz 2002, Beck et al. 2001., and Andrews and Montinola 2004.
[59] Stasavage 2002b.
[60] Henisz 2002.
[61] I do not use POLCONV (Henisz 2000a which is based on POLCONIII but also includes sub-federal entities and the judiciary, for the following reasons: The measure of an independent judiciary is indirect, based on the Polity constraint index and the ICRG Rule of Law, which will pose endogeneity problems when used with the Polity measure or the property rights protection measure, and in any case the judicial branch does not always have veto power (Tsebelis 2002, p. 205). Counting federal entities in addition to the second chamber of the legislature, which is more common in federal systems, might be considered double-counting federalism (ibid). The POLCONIII measure is also more conservative; in the cases where I tested both measures, the effect was always stronger when using POLCONV.

alignment across branches of government (using party data for the executive and legislative branches), and to capture the extent of preference heterogeneity within each legislative branch (which affects decision costs of overturning policy for executive branches).

Possible scores for the final measure of political constraints range from zero (most hazardous) to one (most constrained). I rescaled these to a 1-2 scale. Thus, a score of one indicates an executive unchecked by an effective legislature or a single party dictatorship. A 2, mathematically but not practically possible, would be a system with a president and a bicameral legislature in which all seats are controlled by different parties. In the country-years covered in this analysis, the highest values are slightly under 1.7.[62]

I will consider five policies that are important to investors: property rights, foreign investment policy, restrictions on capital flows, taxes on international trade, and taxes on income, profits, and capital gains. I look at two measures of property rights. The first, developed by Knack and Keefer,[63] goes from 0-50 and covers 85 countries from 1985-1994. The measure includes rule of law, bureaucratic quality, control of corruption, risk of expropriation, and risk of contract repudiation, and might therefore be characterized as a measure of governance quality as well as policy. The second is the measure from the Index of Economic Freedom (IEF),[64] a 1-5 scale (transformed to make 5 best and 1 worst) that covers 110 countries from 1995-2001. This measure also considers governance issues, such as corruption of the judiciary, in addition to policies such as those legally granting and protecting private property. Capital controls are measured in two ways: First with the Capital Account Openness Index (CAOI),[65] a scale from 0-

[62] Poland, in 1990, had a POLCONIII score of about 0.67 (1.67 for this paper). There was a president and two chambers of legislature. The president's party controlled the lower house but not the upper house, and the upper house was highly fractionalized, such that there is only a 20% chance that two random draws would be from the same party.
[63] Keefer and Knack 1995.
[64] Holmes et al. 2002.
[65] Brune et al. 2001.

9, which I rescale to 1-10. The second is as part of the Foreign Investment scale from the IEF. The Foreign Investment index also includes investment policies such as a foreign investment code, restrictions and performance requirements on foreign companies, and availability of local financing for foreign companies.

Tax levels are measured indirectly using WDI data. Tax on international trade is measured as taxes on international trade as a percentage of trade. This measure is arguably more useful than statutory tariff rates, since many foreign investors are attracted by tax holidays and other breaks. Thus, this measure can be considered as the effective tax level on trade. Tax on income, profits, and capital gains is measured as a percentage of GDP. To put these on a scale in which a higher number is favorable, as is the case with the other variables, I subtract each from 100 and refer to them as Untaxed Trade and Untaxed Income.

To test how an FDI-friendly policy combined with more veto players affects FDI, I create interaction terms between the policy and the number of veto players.[66]

Research Design

As with other such statistical studies, the direction of causality is difficult to establish. For example, FDI is considered to be both a cause and an effect of economic growth. FDI may also affect the level of democracy.[67] To deal (at least in part) with such endogeneity issues, all explanatory variables are lagged by one year.

I use ordinary least squares (OLS) with panel-corrected standard errors because it seems reasonable to expect that disturbances are heteroskedastic and contemporaneously correlated across panels: FDI inflows are likely to reflect the world economy as a whole as well as factors

[66] This is why it is necessary to move the veto points scale from 0-1 to 1-2. An observation with a POLCONIII score of 0 would eliminate any information from the policy measure.
[67] Li and Reuveny 2003.

specific to the recipient countries. I also include decade dummies to capture major time effects. For example, "during most of the 1980s, the majority of the developing economies were effectively shut out of the international capital markets following the borrowing binge of the 1970s… This resulted in the growing importance of FDI as a relatively reliable source of capital flows for the LDCs."[68] In the 1990s, with the fall of the Soviet Union and widespread acceptance of the Washington Consensus (which advocated liberalizing foreign direct investment flows), private capital flows accelerated.

I also include a lagged dependent variable, which models the tendency for new FDI to follow where FDI has flowed in the past.[69] Inclusion of the lagged dependent variable is equivalent to using the change in FDI as a dependent variable. The lagged dependent variable also absorbs much of the effect of omitted variables, and because it is measured in exactly the same way as the dependent variable, it is likely to pick up some of the effect of the included variables due to their measurement error. Thus, inclusion of the dependent variable makes any results conservative.

Because of the high level of missingness for some important variables, I used AMELIA[70] to impute missing data.[71] For example, previous studies indicate that wage level is an important determinant of FDI in developing countries, yet there is only wage data for 21% of the country-years (and this is after interpolating wage rates for intervening years). Furthermore, some of the policy measures cover different countries and years. Using imputed data ensures that results are determined by data and not by the missingness mechanism. For example, less democratic

[68] Chakrabarti 2001.
[69] This occurs for a number of reasons. FDI inflow includes reinvestment of profits from previous FDI. Investors tend to start with a foothold investment and that add to it later. Once investment by one firm is in place, other investors tend to follow, particularly those in the same industry, due to network effects.
[70] King et al. 2001.
[71] Both wage and natural resource data have a high degree of missing data and are unlikely to fluctuate, so I linearly interpolate missing values between available data for these variables before using Amelia.

countries are more likely to be missing economic data such as FDI inflows and GDP.[72] To ensure that imputed data is comparable to and does not overpower observed data, I truncate the imputed data so that their range does not exceed that of the observed data. To demonstrate that results are not substantively affected by the imputation process, I reproduce my results without imputed data in the sensitivity analysis section.

Even after imputation, missing data continues to exist for countries such as the former Soviet Republics, which did not exist as independent entities until the early 1990s.[73] I therefore use pairwise inclusion rather than casewise inclusion.

OLS is highly sensitive to outliers, so I deal with outliers in three different ways. First, for three variables that are skewed and are not ratios or net amounts leading to negative values (i.e. GDP, GDP per capita, and wages), I transformed the data by taking the log. Next, for one particularly egregious case in the dependent variable,[74] I average over a three-year period. Third, I truncated outliers to three standard deviations from the mean, one of the strategies recommended by Osborne and Overbay.[75] This ensures that results are not driven by outliers. Details about the outlying cases, with some explanations about why extreme values occurred in a particular year, are presented in Appendix C. In the sensitivity analysis section, I present the

[72] Here are the results of a logit regression where the dependent variable is missing (1 for countries missing either FDI or GDP (PPP adjusted) data, 0 otherwise), and the explanatory variable is democracy (based on the Polity IV measure):

	Coef.	Std. Err.	Z-score	P>|z|
Democracy	-0.133	.0126	-10.55	0.000
Constant	-2.510	.0876	-28.65	0.000

Clearly the data is not "missing completely at random," which is the condition necessary for list-wise deletion (the default approach without imputation) to be unbiased (King et al. 2001).

[73] I did not impute for any country-year where data included neither GDP data nor exchange rate data.

[74] Liberia from 1996-1998, which swings from -83 to 73, each about 20 standard deviations from the mean. These observations are not included in the non-imputed analysis because data for virtually all of the control variables are missing for those years, which included a full year of widespread civil war and special elections in July, 1997.

[75] Osborne and Overbay 2004.

results with untruncated data to demonstrate that results are not substantively affected by the truncation.

Results and Discussion

The results analyzing democracy, property rights, and credible commitment to property rights are presented in Table One.

Control Variables:

The control variables are all in the expected direction, except for Log GDP.[76] Log GDP per capita is insignificant, reflecting the conflicting effects of wealthier countries attracting market-seeking FDI and the attraction of capital to capital-scarce countries.

Democracy:

Democracy has a positive and statistically significant effect on FDI, even after including measures of property rights and credible commitment via veto players. This offers support for the findings regarding democracy of Jensen[77] and Harms and Ursprung.[78] The magnitude of the effect is similar to that found by Jensen in his panel analysis. For a country with an average level of FDI (about 1.5% of GDP), a one standard deviation change in democracy level (about 7 points in the 21-point Polity index) is associated with a roughly 7% increase in FDI.[79]

[76] However, when the decade dummies are not included (results not shown), Log GDP is positive and (in some specifications) statistically significant. This result is driven by China, which had very low levels of FDI prior to 1988 and very high levels from 1993 on. If China is removed from the dataset, Log GDP is no longer statistically significant (with no decade dummies). None of these permutations make any significant difference on the political institutions. I chose to keep the decade dummies, which were significant with or without China.
[77] Jensen 2003 and 2006.
[78] Harms and Ursprung 2002.
[79] I.e. a country with FDI net inflows equivalent to 1.5% of GDP will see an increase of FDI inflows equal to 1.5 * 7%, bringing FDI net inflows up to 1.605% of GDP.

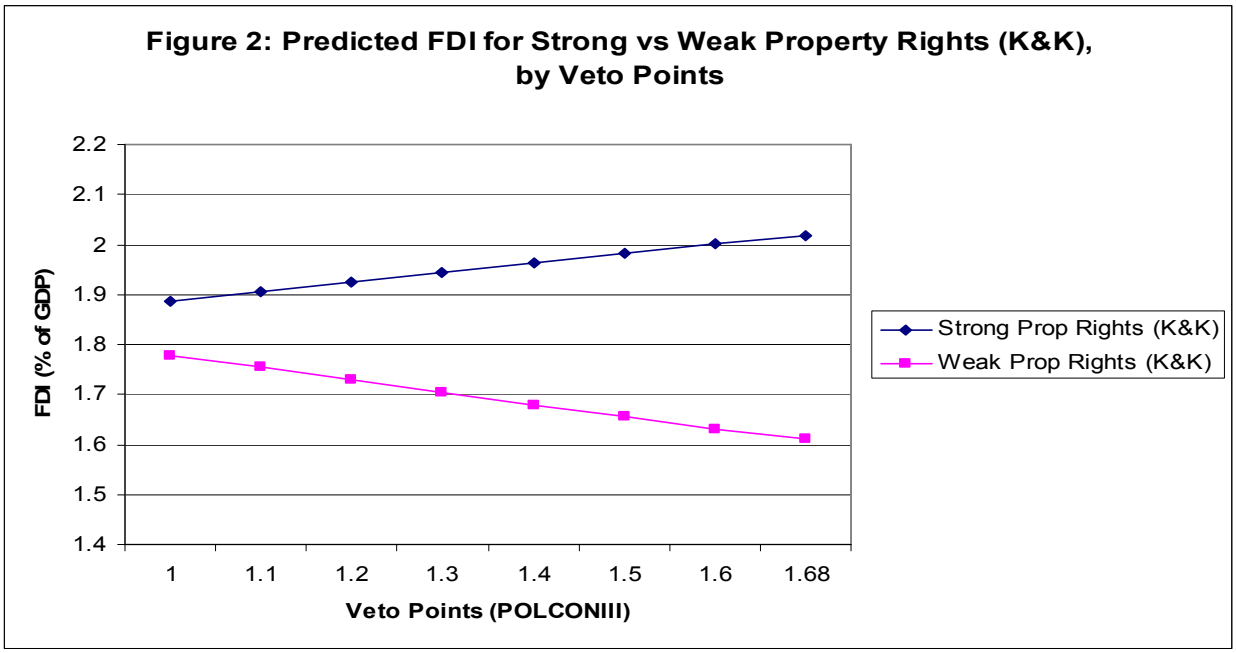
Property Rights:

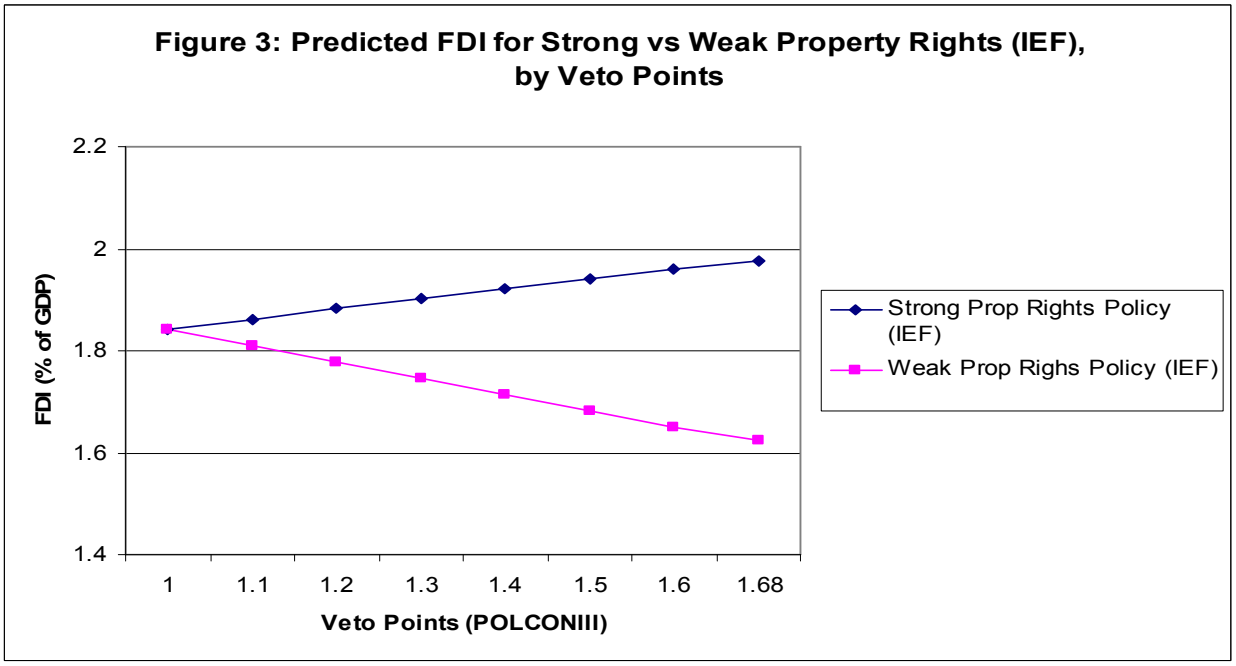
Property rights in most specifications also have a positive and statistically significant effect on FDI, supporting the findings of Li and Resnick regarding property rights.[80] Using the K&K measure, a one standard deviation improvement (about an 8 point improvement on the 50-point scale) is associated with roughly a 10% increase in FDI.[81] A one standard deviation in the IEF measure (about a 0.9 improvement on the 1-5 scale) is associated with roughly a 5% increase in FDI.[82]

Credible Commitment to Property Rights:

As for the credible commitment argument, countries with an FDI-friendly policy and many veto players are attractive to foreign investors, as expected, although this finding is not statistically significant. Because the combination of veto players, policy, and the interaction term is difficult to interpret, I have created figures of predicted values (y-hat) for FDI levels at different numbers of veto players for favorable and unfavorable policies (see Figures 2 and 3). A favorable policy is one that is one standard deviation above the mean; an unfavorable policy is one standard deviation below the mean. All other values are set at their mean. The two decade dummies are set at 0, implying predictions for 1990-2002.

[80] Li and Resnick 2003.
[81] Using model 2 or 4.
[82] Using an average of the coefficients in models 3 and 5.





As can be seen by comparing Figure 1, which summarizes my argument, to Figures 2 and 3, the data provides support for my hypotheses. Strong property rights are consistently preferred over weak property rights (*Hypothesis 1*). As the number of veto points increases (implying more

credible commitment to the policy), countries with strong property rights tend to attract more and more FDI (*Hypothesis 2*), while countries with weak property rights tend to attract less and less (*Hypothesis 3*).

To compare these results with those for democracy and property rights, a one standard deviation increase in the number of veto points (a 0.2 point increase on the 1-2 scale) for an average country with strong property rights (one standard deviation above average) is associated with a 2-3% increase in FDI.[83] Alternatively, one can measure how a change in property rights affects predicted FDI levels, given a particular number of veto players. In countries with a single veto player, FDI levels are similar in countries with strong and weak property rights. However, for a country with the maximum observed number of veto players (about 1.67), a one standard deviation in property rights is associated with a 10-14% increase in FDI. This suggests that a country can get more bang for its property rights-buck where there are more veto players, which sends a signal of more credible commitment to property rights policy.

The failure of these results to achieve conventional levels of statistical significance can be explained in a number of ways. The property rights measures are only partly caused by direct policy decisions; they also include measures of governance quality, which is not easily changed through legislative action. A related reason is that the quality of property rights is collinear with the number of veto players. Another explanation is that the high level of missingness in the property rights data contributes to a greater standard error. I therefore apply the policy stability model to FDI-relevant polices that are more directly affected by political actors, and generally lower levels of missingness.

[83] Depending on the measure of property rights used.

Credible Commitment to Other FDI-Related Policies:

I next apply the policy stability model to the four other policies described above.[84] The results are in Table 2.

The interaction term between policy and veto players indicates the effect when veto players are combined with an FDI-friendly policy. Five of six are in the expected direction. The exception is tax level on income, profits, and capital gains (as percentage of GDP). This is intuitively surprising; it is conventional wisdom that MNCs prefer to invest where corporate income taxes are low. However, Chakrabarti finds that taxes on income, profits, and capital gains tend to have a (non-statistically significant) *positive* effect on FDI inflows, and Markusen, in a review of the economic literature, notes that most studies find income tax to have little or no effect on FDI decisions, suggesting that "most firms first choose foreign production locations, and then instruct their tax departments to minimize taxes."[85] For MNCs, this can be done in a number of ways, including manipulating internal accounting procedures such as transfer costs and overhead allocation to minimize net income in high income tax countries. Furthermore, the level of income tax revenues for developing countries may depend less on policy decisions and more on state capacity. States with low capacity tend to emphasize tax revenues with low transaction costs such as tariffs.[86] Thus, revenues from taxes on international trade are more likely to reflect policy decisions.

[84] Because the Polity measure includes a factor equivalent to veto players (constraint on the executive), I do not include the democracy variable for these regressions. I also repeat the analysis of property rights policies without democracy. I repeat the analyses of property rights without democracy to demonstrate that this change in the model has little effect on the other estimates.
[85] Markusen 1995.
[86] Levi 1988.

The interaction terms for the other three polices – foreign investment policies, tax level on international trade, and restrictions on capital mobility – are statistically significant. Again, because these results are difficult to interpret, I have created figures showing predicted values (y-hat) for good and bad policies (one standard deviation above and below the mean), at different numbers of veto points, with all other variables set at the mean (see Figures 4-6).

Figure 4: Predicted FDI for Favorable vs Unfavorable Foreign Investment Policies, by Veto Points

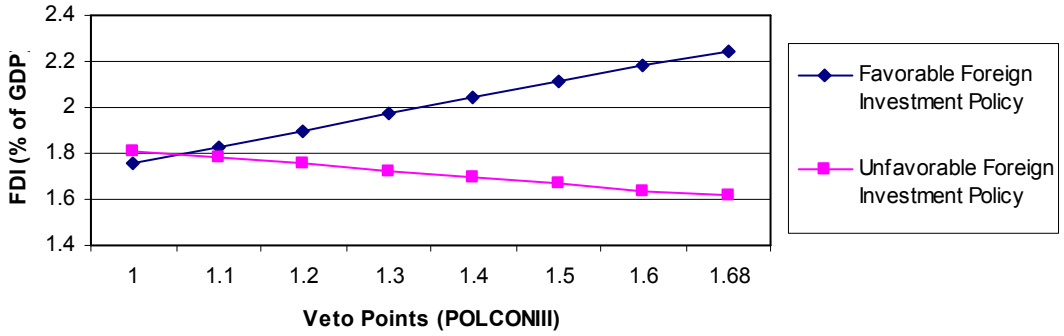
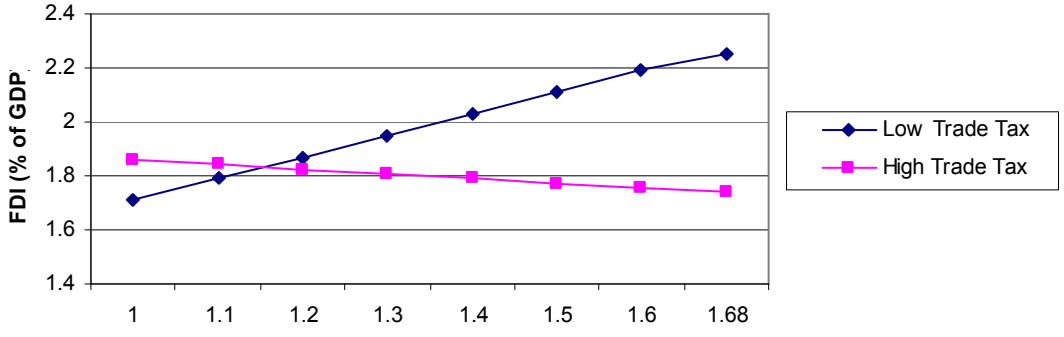
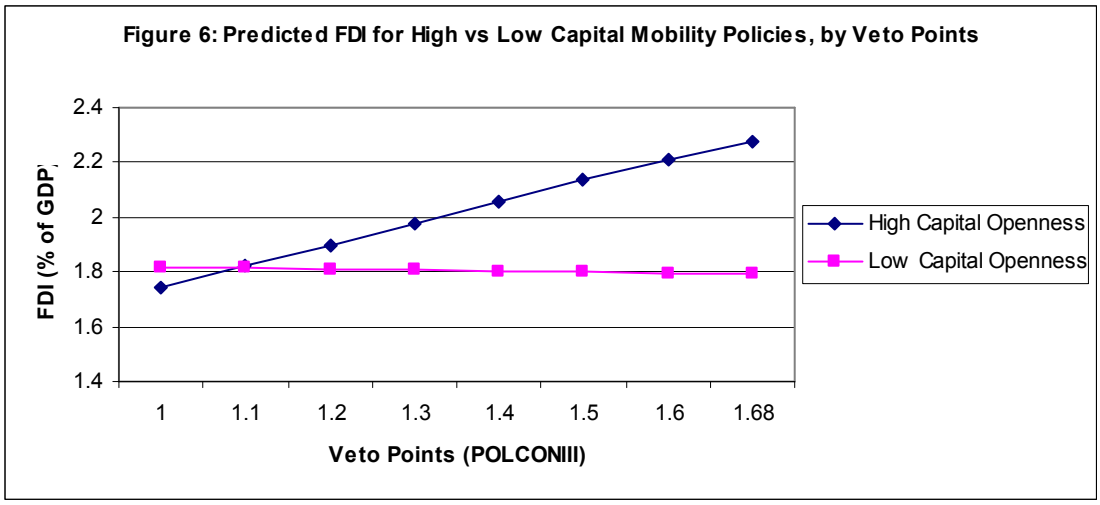


Figure 5: Predicted FDI for Low vs High Trade Tax Policies, by Veto Points





In general, these results support all three of my hypotheses. With some exceptions,[87] countries with FDI-friendly policies attract more FDI regardless of the number of veto players (*Hypothesis 1*). All three FDI-friendly policies seem to attract more FDI as the number of veto players increases (*Hypothesis 2*). Finally, countries without FDI-friendly polices generally tend to attract less FDI as the number of veto players increases (*Hypothesis 3*).

Based on the results in Table 2, the magnitude of change in FDI for an average country (with FDI equivalent to 1.5% of GDP) is presented in Table 3. Depending on the policy, a one standard deviation increase in the number of veto points for a country with an average level of FDI and an FDI-friendly policy (i.e. one SD better than the mean) is associated with a 6-12% increase in FDI. A move for the same country from the minimum to maximum observed number of veto players is predicted to generate up to a 40% increase in FDI. For a country with a high number of veto points (the highest observed in the country-years studies, i.e. 1.67), a one SD improvement in policy is associated with a 10-18% increase in FDI. Thus, the impact of an increase in veto players, when combined with an FDI-friendly policy, or the impact of an

[87] These exceptions occur where there are very few veto players, and are likely caused by cases such as countries with authoritarian regimes where new oil deposits have been discovered, such as Angola and Kazakhstan. Such FDI generates outliers on the high side because oil production has not yet led to a rise in GDP (the denominator of the dependent variable) nor yet led to a rise in fuel exports (the measure used in the Natural Resources variable).

improvement in an FDI-related policy, when combined with a high number of veto players, is in many cases larger in magnitude than either an increase in the level of democracy or in the quality of property rights.

Sensitivity Analysis

To demonstrate that results have not been substantively affected by either the truncation or the imputation process, I repeat the model with less treatment of the data. First, I repeat my analysis using the original data, without imputation.[88] Because wage data is missing for approximately 80% of country-years, I also examine the effect of excluding wage data. Finally, I test the effect of using imputed data where outliers are not truncated.[89]

The results are shown in Table 4. To conserve space, estimates for the control variables are not presented.

As in previous studies of democracy and FDI, the effect of democracy is sensitive to changes in specification. For cases where original data is included, democracy has a statistically insignificant effect (sometimes positive, sometimes negative). Where wage data is excluded, democracy is consistently positive, but not always statistically significant. The instability of democracy's effect may be in part due to the relationship between the level of democracy and the tendency for data to be missing.

Property rights are also sensitive to changes in specification. For most models in the sensitivity analysis, the effect of property rights is statistically insignificant (sometimes positive, sometimes negative).

[88] Because 2005 data has significantly more missing data on income and trade tax revenues than previous datasets, I use the 2003 WDI data for these variables, which have a 0.99 correlation with the 2005 data.
[89] The exception being FDI in Liberia, 1996-1998, where I take the average over three years, as described in the previous section.

The effect of credible commitment to FDI-friendly policies holds up well in the sensitivity analysis. In fact, contrary to the results for democracy and property rights, the credible commitment to policy effect tends to be more statistically significant in the sensitivity analyses without imputed data. Except for income tax rates (discussed above), all interaction terms between policy and veto players are positive in every specification, as expected, although the magnitude and level of significance do vary. In the two analyses using original data, four of the five positive interaction coefficients are statistically significant (the exception is the K&K measure of property rights). In the analysis using imputed data without truncation, two of the five interaction coefficients are statistically significant. Two of the insignificant interactions are those including property rights;[90] the other is capital mobility, which, at 85% confidence, falls slightly short of the 90% confidence cut-off.

Conclusion

In this paper, I have tested two political institutions that are commonly claimed to attract FDI - democracy and property rights - as well as a third: credible commitment to stable FDI-friendly policies via multiple veto players. I find that both democracy and property rights have a positive effect on FDI. However, these relationships are sensitive to changes in model specification (as is the case with most economic determinants). The effect of credible policy commitment is more robust to changes in model specification, and for several policies the magnitude of effect is greater as well. Strong property rights attract more FDI when combined with more veto players (indicating that the country is committed to maintain these property rights) while weak property rights attract less FDI when combined with more veto players (indicating that property rights laws are unlikely to improve). This finding is not always,

[90] Which, as discussed above, measures governance quality as well as policy decisions.

however, statistically significant, perhaps because measures of property rights tend to include factors not easily changed by policy-makers, such as corruption. For three other relevant policies, however – taxes on international trade, policies relating to foreign investment, and restrictions on capital flows – the same pattern holds true at a statistically significant level. Countries with FDI-friendly policies can expect to attract up to 12% more FDI with a one standard deviation increase in the number of veto players; those with a high number of veto players may attract up to 18% more FDI with a one standard deviation improvement in FDI-related policies.

These findings highlight the fact that property rights consists of two parts – the legal right to own property, and the likelihood that these rights will not be compromised in the future. Strong legislated rights are less reassuring when there are no institutional checks to prevent those rights from changing. It also highlights the fact that constraints on the executive are only one part of democracy, and that this part is important to investors.

There may be practical implications for government leaders and those who advise them, such as the World Bank and IMF. Countries wishing to attract more FDI have two opportunities: those with policies inimical to FDI can change their policies (although this will be challenging in countries with many veto players), and those with good policies but few veto players can demonstrate their commitment to these policies by enacting reforms to put institutional checks and balances in place. For reforms to attract FDI, the order matters; putting institutional checks in place before improving policies will tend to render the latter move more difficult.

There are a number of research opportunities to extend the analysis in this paper. Several of the policy measures used here are imperfect, and there are, of course, additional policies that may be of interest to investors. Furthermore, the finding that democracy tends to have a positive effect, even after controlling for the policy stabilizing effect of veto players, implies that

investors may value other attributes of democracy, including press freedom, civil liberties, accountability to the voting public, etc. Another line of research might be to explore alternative sources of credible commitment to FDI-friendly policies, such as historical policy stability or international agreements. Finally, this paper focuses on the decisions of foreign investors. The analysis in the paper could be used to build on the findings of Stasavage[91] on the investing decisions of private investors more generally.

[91] Stasavage 2002b.

Table 1: Comparing the Effect of Democracy, Property Rights, and Credible Commitment to Property Rights on FDI

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Lagged FDI	0.617***	0.613***	0.616***	0.616***	0.620***	0.612***	0.614***
	(12.84)	(12.77)	(12.83)	(12.93)	(12.99)	(12.76)	(12.81)
Log GDP	-0.013	-0.022	-0.014	-0.027	-0.018	-0.022	-0.014
	(-0.44)	(-0.70)	(-0.47)	(-0.87)	(-0.61)	(-0.73)	(-0.47)
Log GDP per capita	0.057	0.034	0.046	0.078	0.085	0.032	0.045
	(0.90)	(0.52)	(0.72)	(1.26)	(1.37)	(0.48)	(0.69)
TRADE	0.009***	0.008***	0.009***	0.008***	0.008***	0.008***	0.009***
	(4.98)	(4.63)	(4.85)	(4.59)	(4.81)	(4.62)	(4.86)
Log WAGES	-0.137***	-0.146***	-0.153***	-0.144***	-0.157***	-0.148***	-0.156***
	(-3.01)	(-3.16)	(-3.22)	(-3.13)	(-3.33)	(-3.20)	(-3.27)
NET EXPORTS	-0.003	-0.003	-0.004	-0.003	-0.003	-0.004	-0.004
	(-0.79)	(-0.81)	(-0.82)	(-0.68)	(-0.72)	(-0.82)	(-0.86)
GROWTH	0.022***	0.021***	0.022***	0.020**	0.022***	0.021***	0.022***
	(2.74)	(2.65)	(2.76)	(2.49)	(2.64)	(2.62)	(2.72)
NATURAL RESOURCES	0.003**	0.003**	0.003**	0.003**	0.003**	0.003**	0.003**
	(2.29)	(2.42)	(2.39)	(2.03)	(2.06)	(2.46)	(2.40)
DEMOCRACY	0.017***	0.016***	0.015***			0.015*	0.015*
	(3.60)	(3.26)	(3.07)			(1.86)	(1.94)
PROPRIGHTS (K&K)		0.012**		0.013**		-0.007	
		(2.19)		(2.49)		(-0.27)	
PROPRIGHTS (IEF)			0.069		0.097**		-0.322
			(1.48)		(2.13)		(-1.18)
Veto Points (POLCONIII)						-0.370	-0.928
						(-0.50)	(-0.87)
Prop Rights (K&K) * VPs						0.016	
						(0.79)	
Prop Rights (IEF) * VPs							0.334
							(1.48)
1970s	-0.550***	-0.534***	-0.559***	-0.572***	-0.599***	-0.537***	-0.557***
	(-3.84)	(-3.76)	(-3.91)	(-3.91)	(-4.08)	(-3.80)	(-3.93)
1980s	-0.559***	-0.535***	-0.560***	-0.578***	-0.602***	-0.534***	-0.556***
	(-4.86)	(-4.67)	(-4.89)	(-4.87)	(-5.09)	(-4.68)	(-4.88)
Constant	0.782	0.930	0.794	0.705	0.576	1.397	1.880
	(0.98)	(1.18)	(0.97)	(0.90)	(0.69)	(0.86)	(1.02)
Observations	2842	2842	2842	2842	2842	2842	2842
Countries	117	117	117	117	117	117	117

***=99% confidence level, **=95% confidence level, *=90% confidence level
(Z-scores, based on panel corrected standard errors, in parentheses)

Table 2: The Effect of Credible Commitment to 5 FDI-related Policies on FDI

FDI-Friendly Policy:	Property Rights (K&K)	Property Rights (IEF)	Foreign Investment (IEF)	Untaxed Income (1)	Untaxed Trade (2)	Capital Mobility
	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13
Lagged FDI	0.613***	0.616***	0.614***	0.619***	0.615***	0.615***
	(12.82)	(12.88)	(12.88)	(12.91)	(12.86)	(12.84)
Log GDP	-0.025	-0.017	-0.011	-0.016	-0.008	-0.008
	(-0.82)	(-0.56)	(-0.35)	(-0.52)	(-0.25)	(-0.24)
Log GDP per capita	0.044	0.057	0.054	0.068	0.074	0.058
	(0.68)	(0.88)	(0.83)	(1.03)	(1.06)	(0.87)
TRADE	0.008***	0.009***	0.009***	0.009***	0.009***	0.009***
	(4.62)	(4.86)	(5.16)	(4.92)	(5.17)	(5.23)
Log WAGES	-0.147***	-0.157***	-0.140***	-0.131***	-0.146**	-0.139***
	(-3.18)	(-3.29)	(-3.03)	(-2.71)	(-3.21)	(-3.04)
NET EXPORTS	-0.003	-0.004	-0.003	-0.003	-0.002	-0.003
	(-0.78)	(-0.82)	(-0.70)	(-0.670	(-0.51)	(-0.68)
GROWTH	0.020**	0.021***	0.021**	0.021***	0.021**	0.021**
	(2.49)	(2.60)	(2.55)	(2.58)	(2.57)	(2.55)
NATURAL RESOURCES	0.003**	0.003**	0.003**	0.003**	0.003**	0.003**
	(2.27)	(2.23)	(2.03)	(2.16)	(2.43)	(2.24)
FDI-Friendly POLICY	-0.002	-0.279	-0.603	0.075	-0.150***	-0.186
	(-0.08)	(-1.02)	(-1.61)	(1.23)	(-3.41)	(-1.44)
Veto Points (POLCONIII)	0.076	-0.496	-1.178	5.991	-11.250	0.026
	(0.11)	(-0.52)	(-0.75)	(0.32)	(-1.05)	(0.09)
Policy * Veto Points	0.012	0.305	0.530*	-0.058	0.125***	0.162*
	(0.62)	(1.35)	(1.76)	(-1.17)	(3.43)	(1.67)
1970s	-0.557***	-0.580***	-0.576***	-0.571***	-0.577***	-0.559***
	(-3.88)	(-4.04)	(-4.01)	(-3.95)	(-3.99)	(-3.92)
1980s	-0.553***	-0.578***	-0.575***	-0.576***	-0.576***	-0.567***
	(-4.77)	(-4.99)	(-4.97)	(-4.93)	(-4.99)	(-4.82)
Constant	0.841	1.338	2.033	-7.000	14.103	0.581
	(0.51)	(0.76)	(0.84)	(-0.28)	(0.88)	(0.65)
Observations	2842	2842	2842	2842	2842	2842
Countries	117	117	117	117	117	117

***=99% confidence level, **=95% confidence level, *=90% confidence level

(Z-scores, based on panel corrected standard errors, in parentheses)
(1) 100 – taxes on income, profits, and capital gains (% of GDP)
(2) 100 – taxes on international trade (% of trade)

Table 3: Expected change in FDI for a typical country* associated with increase in veto points or improvement in FDI-relevant policy

	Change in FDI associated with a standard deviation increase in "institution"[for veto points: given "good policy," i.e. one sd above mean]	Change in FDI associated with one sd improvement in policy, given many (1.67) veto points	Change in FDI associated with change from min to max in "institution" [for veto points: given "good policy," i.e. one sd above mean]	Change in FDI associated with improvement in policy from min to max, given many (1.67) veto points
Property Rights (K&K)	6%	10%	20%	51%
Property Rights (IEF)	8%	13%	27%	58%
Foreign Investment Policies	11%	17%	37%	76%
Trade Tax Levels	12%	18%	40%	144%
Capital Mobility	10%	13%	34%	51%
Democracy	7%		20%	
Property rights (K&K)	10%		51%	
Property rights (IEF)	5%		22%	

* I.e., a country with an average level of FDI, ~ 1.5% of GDP

Table 4: Sensitivity Analyses

FDI-Friendly Policy:		Property Rights (K&K)	Property Rights (IEF)	Property Rights (K&K)	Property Rights (IEF)	Property Rights (K&K)	Property Rights (IEF)	Foreign Investment (IEF)	Untaxed Income (1)	Untaxed Trade (2)	Capital Mobility
Sensitivity Analysis 1: No imputation, no truncation, with Wages data											
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 10	Model 11	Model 12	Model 13
Democracy	0.000	0.012	-0.011			-0.008	0.051				
	(0.03)	(0.74)	(-0.15)			(-0.51)	(1.17)				
Policy		0.010	0.097	0.009	0.069	-0.085	-5.094*	-7.680**	0.167	-0.217**	-0.493**
		(0.64)	(0.39)	(0.56)	(0.29)	(-0.94)	(-1.86)	(-2.23)	(0.90)	(-2.13)	(-2.18)
Veto Points						-1.228	-11.598*	-18.427**	8.126	-17.985**	-0.476
						(-0.68)	(-1.93)	(-2.05)	(0.62)	(-2.33)	(-0.82)
Policy * VPs						0.074	3.728*	5.845**	-0.079	0.197**	0.373**
						(1.03)	(1.92)	(2.26)	(-0.600	(2.34)	(2.31)
Observations	500	278	137	278	137	275	137	137	362	360	490
Countries	61	43	40	43	40	43	40	40	49	49	60
R-squared	0.63	0.48	0.64	0.48	0.64	0.51	0.65	0.67	0.67	0.67	0.64
Sensitivity Analysis 2: No imputation, no truncation, without Wages data											
Democracy	0.015**	0.035***	0.016			0.02	0.029				
	(2.31)	(3.17)	(1.08)			(1.38)	(1.44)				
Policy		0.018*	-0.051	0.015	-0.028	-0.032	-1.715*	-2.876**	0.087	-0.136***	-0.292***
		(1.74)	(-0.38)	(1.54)	(-0.19)	(-0.70)	(-1.79)	(-2.11)	(1.26)	(-2.76)	(-2.73)
Veto Points						-0.391	-4.039**	-7.011**	4.953	-10.675***	-0.020
						(-0.34)	(-2.07)	(-2.03)	(0.97)	(-2.87)	(-0.06)
Policy * VPs						0.040	1.278*	2.253**	-0.043	0.121***	0.249***
						(1.11)	(1.88)	(2.11)	(-0.80)	(3.01)	(3.25)
Observations	1919	586	588	591	595	583	586	591	1365	1346	1705
Countries	103	67	95	68	96	67	95	96	93	93	100
R-squared	0.50	0.41	0.47	0.40	0.47	0.42	0.47	0.47	0.57	0.55	0.50
Sensitivity Analysis 3: With imputation, with Wages data but without truncation of outliers											
Democracy	0.018***	0.017***	0.019***			0.022**	0.026**				
	(3.01)	(2.69)	(3.05)			(2.17)	(2.51)				
Policy		0.013***	-0.021	0.014**	0.018	0.016	-0.505	-0.958**	0.006	-0.115**	-0.154
		(1.79)	(-0.33)	(2.05)	(0.29)	(0.48)	(-1.07)	(-2.16)	(0.08)	(-2.42)	(-1.16)
Veto Points						-0.214	-1.449	-2.14	1.88	-8.563	-0.08
						(-0.24)	(-1.02)	(-1.32)	(0.05)	(-1.43)	(-0.23)
Policy * VPs						-0.003	0.414	0.805**	-0.017	0.095**	0.141
						(-0.10)	(1.30)	(2.34)	(-0.29)	(2.37)	(1.42)
Observations	2842	2842	2842	2842	2842	2842	2842	2842	2842	2842	2842
Countries	117	117	117	117	117	117	117	117	117	117	117

***=99% confidence level, **=95% confidence level, *=90% confidence level

(Z-scores, based on panel corrected standard errors, in parentheses)
(1) 100 – taxes on income, profits, and capital gains (% of GDP)
(2) 100 – taxes on international trade (% of trade)

Appendix A: Description of Data (Original Observations)

Variable	Observations	Mean	Std. Dev.	Min.	Max.
FDI net inflows (% of GDP)	2575	1.72	4.00	-82.89	72.26
FDI (lagged)	2552	1.60	3.86	-82.89	72.26
Log GDP (PPP adjusted, current international $)	2533	23.81	1.63	19.46	29.30
LogGDP per capita	2533	7.62	0.94	5.27	9.80
TRADE (% of GDP)	2544	64.25	34.25	1.53	228.88
GDP GROWTH (annual %)	2603	2.86	6.82	-51.03	106.28
Net Exports (% of GDP)	2478	-7.30	14.68	-120.72	36.69
Log Wages (Monthly wages in manufacturing industry, in US$)	609	4.98	0.86	2.95	7.44
Natural Resources (fuel, mineral, ore exports % of exports)	2132	26.67	30.32	0	99.70
Democracy (from Polity IV)	2700	-0.53	6.96	-10	10
Veto Points (POLCONIII + 1)	2685	1.16	0.20	1	1.67
Property Rights (Knack & Keefer)	761	25.38	7.47	7	45
Property Rights (IEF, 5 best)	709	2.83	0.90	1	5
Foreign Investment Policy (IEF, 5 best)	709	3.14	0.90	1	5
Capital Mobility (CAOI + 1)	2358	2.30	2.30	1	10
Untaxed Income (100 - taxes on income, profits, and capital gains (% of GDP))	695	94.97	3.79	68.66	100
Untaxed Trade (100 - taxes on international trade (% of trade))	683	94.64	4.99	60.53	100

Appendix B: Average FDI (% of GDP) by Decade

Country	1976-9	1980-9	1990-2002	Country	1976-9	1980-9	1990-2002	Country	1976-9	1980-9	1990-2002
Afghanistan	.	.	.	Guatemala	1.61	1.33	1.16	Oman	3.26	1.52	0.62
Albania	.	0.00	2.72	Guinea	.	0.55	0.53	Pakistan	0.17	0.33	0.83
Algeria	0.65	0.08	0.58	Haiti	0.83	0.42	0.15	Panama	0.41	0.00	5.43
Angola	.	2.64	11.63	Honduras	0.70	0.70	2.26	Papua New Guinea	1.30	3.99	3.21
Argentina	0.31	0.65	2.64	Hungary	0.00	0.07	5.04	Paraguay	1.28	0.28	1.74
Armenia	.	.	3.06	India	0.03	0.04	0.47	Peru	0.81	0.13	3.11
Azerbaijan	.	.	9.09	Indonesia	0.75	0.37	0.39	Philippines	0.59	0.57	1.87
Bangladesh	0.03	0.01	0.19	Iran	0.54	-0.03	0.07	Poland	.	0.02	2.80
Belarus	.	.	0.93	Iraq	.	.	.	Portugal	0.39	1.09	2.57
Benin	0.29	0.47	2.08	Jamaica	-0.05	0.22	4.04	Romania	.	0.00	1.88
Bolivia	1.10	1.34	6.31	Jordan	1.00	0.93	1.96	Russian Federation	.	0.00	0.65
Botswana	3.49	4.64	0.14	Kazakhstan	.	.	5.40	Rwanda	0.76	1.00	0.21
Brazil	1.04	0.66	2.32	Kenya	1.03	0.42	0.30	Senegal	0.91	0.28	1.29
Bulgaria	.	0.00	3.04	Korea, South	0.19	0.26	0.77	Sierra Leone	1.53	-2.60	0.68
Burkina Faso	0.17	0.10	0.38	Kyrgyz	.	.	2.38	Slovak Republic	.	0.00	2.58
Burundi	0.03	0.26	0.19	Laos	.	0.14	2.25	Slovenia	.	.	1.10
Cambodia	.	0.00	4.37	Latvia	.	0.00	3.86	Somalia	0.57	-0.32	.
Cameroon	0.75	1.23	0.29	Lebanon	.	0.02	0.78	South Africa	0.00	-0.11	1.19
Central African Republic	1.20	0.61	0.17	Lesotho	0.06	1.34	15.30	Sri Lanka	0.28	0.75	1.25
Chad	2.15	1.09	4.53	Liberia	5.01	1.33	5.20	Sudan	0.00	0.01	1.36
Chile	0.64	2.03	5.60	Lithuania	.	.	2.47	Syria	0.00	0.27	0.93
China	0.00	0.52	4.29	Macedonia	.	.	2.16	Tajikistan	.	.	1.23
Colombia	0.34	1.30	2.37	Madagascar	-0.04	0.15	0.82	Tanzania	.	0.10	2.28
Congo (Brazzaville)	0.86	1.39	5.55	Malawi	0.88	0.55	0.56	Thailand	0.40	0.97	2.64
Congo (Kinshasa)	0.86	-0.07	0.27	Malaysia	3.07	3.18	5.26	Togo	4.07	1.05	1.65
Costa Rica	2.12	1.78	3.07	Mali	0.16	0.16	1.60	Trinidad	3.48	1.75	8.51
Cote d'Ivoire	0.97	0.56	1.62	Mauritania	-2.87	1.12	1.62	Tunisia	1.50	1.83	2.41
Croatia	.	.	3.02	Mauritius	.	0.61	1.06	Turkey	0.09	0.20	0.63
Czech Republic	.	.	4.39	Mexico	0.77	1.16	2.59	Turkmenistan	.	0.00	3.63
Dominican Republic	1.30	1.04	3.32	Moldova	.	.	2.92	Uganda	0.06	0.00	1.99
Ecuador	0.70	0.83	3.21	Mongolia	.	.	2.47	Ukraine	.	0.00	1.02
Egypt	2.02	2.66	1.15	Morocco	0.12	0.37	2.39	Uruguay	1.45	0.52	0.75
El Salvador	0.47	0.33	1.46	Mozambique	.	0.07	3.47	Uzbekistan	.	.	0.50
Eritrea	.	.	4.72	Myanmar	.	.	.	Venezuela	-0.16	0.16	2.98
Estonia	.	0.00	5.20	Namibia	.	.	.	Vietnam	.	0.02	6.68
Ethiopia	.	0.01	1.18	Nepal	0.01	0.02	0.10	Yemen	.	.	2.07
Georgia	.	.	2.44	Nicaragu	0.47	0.00	3.87	Yugoslavia	.	.	1.26
Ghana	0.53	0.19	2.00	Niger	1.74	0.45	0.47	Zambia	1.17	1.69	3.81
Greece	1.21	1.14	0.89	Nigeria	0.98	1.72	3.93	Zimbabwe	-0.01	-0.06	1.33

Appendix C: Truncated Observations

For the analysis in the main empirical section, I truncate observations that are more that 3 standard deviations from the mean in the original data set. I truncate outliers because some of them may be measurement errors, because extreme observations are generally due to a dynamic that I am not trying to analyze, and because I don't want the extreme outliers to warp my results. The sensitivity analysis section demonstrates that this truncation does not substantively affect my results.

Below is a summary of the outliers that are truncated, along with an explanation of why some of these outliers occurred.

FDI: Liberia 1996-1998 were averaged. The extreme outflow occurred during a violent civil war, and the extreme inflows occurred the year of and year after elections following a (temporary) end to the war. Two negative outliers were truncated: Panama 1988 (the year after the US froze assistance and the year before US troops invaded) and Sierra Leone 1986. Twenty-two high outliers were truncated. Ten were small economies with major oil discoveries, including Angola (4 years), Azerbaijan (4 years), and Chad (2 years). Six years were for Lesotho, a small economy surrounded by South Africa which received much FDI from Taiwan to circumvent its multifiber export quota to the US. Other high outliers include Botswana 1980, Rep. of Congo 1993 & 1999, Eritrea 1998, Slovak Republic 2002, Trinidad 1997, and Yemen 1993.

Trade Openness: 24 high outliers. Eight are Panama and five are Malaysia. Others include Angola 1999, Estonia 2000 & 2001, Lithuania 1993, Moldova 1992, Mongolia 1991, Tajikistan 1997.

GDP Growth: Low outliers are generally during war years or former Soviet republics following the disintegration of the Soviet Union - Angola 1993, Albania 1991, Armenia 1992, Azerbaijan 1992-4, Estonia 1992, Georgia 1991-1993, Croatia 1991, Kyrgyzstan 1994, Lebanon 1989, Liberia 1989-90, 1992-94, Lithuania 1992, Latvia 1992, Moldova 1992 & 94, Mongolia 1995, Nicaragua 1979, Rwanda 1994, Sierra Leone 1992, Chad 1979, Tajikistan 1992 & 1994, Ukraine 1995, Yugoslavia 1999. High outliers are generally following civil wars - Liberia 1997-8, Lebanon 1990-1, Jordan 1976, Rwanda 1995.

GDP: China 1998-2001.

Net Exports: All outliers were on the low side, all from tiny economies that rely heavily on foreign trade. Lesotho (26 years), Eritrea (8), Jordan (3), Lebanon (7), Rwanda (1), and Albania (1).

Taxes on income, profits, and capital gains: Outliers on the low-tax end: Algeria 1994-2001 and Botswana 1990.

Taxes on international trade: Outliers on the low-tax end: Myanmar 1991-98, India 1990, Lesotho 1994.

Capital Mobility: I don't replace the CAOI outliers because 3 standard deviations above mean is 9.2, not far from the top of the scale, 10.

Bibliography

Andrews, Josephine T., and Gabriella R. Montinola. 2004. Veto Players and the Rule of Law in Emerging Democracies. *Comparative Political Studies* 37, no. 1: 55-87.

Thorsten Beck, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh. 2001. New Tools in Comparative Political Economy: The Database of Political Institutions. *World Bank Economic Review* 15, no. 1: 165-76.

Brune, Nancy, Geoffrey Garrett, Alexandra Guisinger, and Jason Sorens. 2001. The Political Economy of Capital Account Liberalization. Paper presented at the Annual Meetings of the American Political Science Association, San Francisco.

Caves, Richard E. 1996. *Multinational Enterprise and Economic Analysis*. 2nd ed, *Cambridge Surveys of Economic Literature*. Cambridge [England]; New York: Cambridge University Press.

Chakrabarti, Avik. 2001. The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions. *Kyklos* 54, no. 1: 89-113.

Dahl, Robert Alan. 1998. *On Democracy*. New Haven, Conn.: Yale University Press.

Dunning, John H. 1988. The Eclectic Paradigm of International Production - a Restatement and Some Possible Extensions. *Journal of International Business Studies* 19, no. 1: 1-31.

Economist, The. 2000. Congress up for grabs. November 1, 2000.

Economist, The. 2004a. Divide and Rule: Political gridlock may not be quite as enticing as many fiscal conservatives hope. October 21, 2004.

Economist, The. 2004b. What revolution? The erratic economic course of Venezuela's populist president. October 7, 2004.

Economist, The. 2005. Unappetising: The return of the state sandwich. June 23, 2005.

Franzese, Robert J. 2002. *Macroeconomic Policies of Developed Democracies*, *Cambridge Studies in Comparative Politics*. Cambridge, UK ; New York: Cambridge University Press.

Freeman, Richard B., and Remco H. Oostendorp. 2001. The Occupational Wages around the World Data File. *International Labour Review* 140, no. 4: 379-+.

Grossman, Sanford J. and Hart, Oliver D. 1986. The Costs and Benefits of Ownership - a Theory of Vertical and Lateral Integration. *Journal of Political Economy* 94, no. 4: 691-719.

Hallerberg, Mark, and Scott Basinger. 1998. Internationalization and Changes in Tax Policy in OECD Countries - the Importance of Domestic Veto Players. *Comparative Political Studies* 31, no. 3: 321-52.

Harms, Philipp and Heinrich W. Ursprung. 2002. Do Civil and Political Repression Really Boost Foreign Direct Investments? *Economic Inquiry* 40, no. 4: 651-63.

Henisz, Witold Jerzy. 2000a. The Institutional Environment for Economic Growth. *Economics & Politics* 12, no. 1: 1-31.

———2002. The Institutional Environment for Infrastructure Investment. *Industrial and Corporate Change* 11, no. 2: 355-89.

———2000b. The Institutional Environment for Multinational Investment. *Journal of Law Economics & Organization* 16, no. 2: 334-64.

———2004. Political Institutions and Policy Volatility. *Economics & Politics* Vol. 16, no. 1: 1-27.

Holmes, Kim R., Gerald P. O'Driscoll, Mary Anastasia O'Grady, Heritage Foundation (Washington D.C.), and Wall Street Journal (Firm). 2002. *2002 Index of Economic*

Freedom. 8th ed. Washington, D.C.; New York, N.Y.: Heritage Foundation; Wall Street Journal.
Huang, Yasheng. 2003. One Country, Two Systems: Foreign-Invested Enterprises and Domestic Firms in China. *China Economic Review* 14, no. 4: 404-16.
Jensen, Nathan M. 2003. Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment. *International Organization* 57, no. 3: 587-+.
———2006. *Institutions, Information and International Capital: Political Determinants of Foreign Direct Investment Flows*. Princeton: Princeton Books.
Keefer, Philip, and Stephen Knack. 1995. Polarization, Property Rights and the Links between Inequality and Growth. Paper presented at the American Economic Association annual meetings, Washington DC.
King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 2001. Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation. *American Political Science Review* 95, no. 1: 49-69.
Leamer, Edward E. 1985. Sensitivity Analyses Would Help. *American Economic Review* 75, no. 3: 308-13.
Levi, Margaret. 1988. *Of Rule and Revenue*, *California Series on Social Choice and Political Economy ; 9*. Berkeley: University of California Press.
Li, Quan, and Rafael Reuveny. 2003. Economic Globalization and Democracy: An Empirical Analysis. *British Journal of Political Science* 33: 29-54.
Li, Quan, and Adam Resnick. 2003. Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries. *International Organization* 57, no. 1: 175-+.
Markusen, James R. 1995. The Boundaries of Multinational-Enterprises and the Theory of International-Trade. *Journal of Economic Perspectives* 9, no. 2: 169-89.
New York Times. 2002. The 2002 Elections: The Overview; Victorious Republicans Preparing a Drive for Bush Agenda and Judgeship Nominees. November 7, 2002.
North, Douglass C., and Robert Paul Thomas. 1973. *The Rise of the Western World: A New Economic History*. New York: Cambridge University Press.
North, Douglass and Barry Weingast. 1989. Constitutions and Commitment - the Evolution of Institutions Governing Public Choice in 17th-Century England. *Journal of Economic History* 49, no. 4: 803-32.
O'Donnell, Guillermo. 1978. Reflections on the Patterns of Change in the Bureaucratic-Authoritarian State. *Latin American Research Review* 13, no. 1: 3-38.
Olson, Mancur. 1993. Dictatorship, Democracy, and Development. *American Political Science Review* 87, no. 3: 567-76.
Oneal, John R. 1994. The Affinity of Foreign Investors for Authoritarian Regimes. *Political Research Quarterly* 47, no. 3: 565-88.
Osborne, Jason W., and Amy Overbay. 2004. The Power of Outliers (and Why Researchers Should Always Check for Them). *Practical Assessment, Research & Evaluation* 9, no. 6.
Putnam, Robert D. 1988. Diplomacy and Domestic Politics - the Logic of 2-Level Games. *International Organization* 42, no. 3: 427-60.
Resnick, Adam L. 2001. Investors, Turbulence, and Transition: Democratic Transition and Foreign Direct Investment in Nineteen Developing Countries. *International Interactions* 27, no. 4: 381-98.

Schumpeter, Joseph Alois. 1942. *Capitalism, Socialism, and Democracy*. New York: Harper.
Stasavage, David. 2002a. Credible Commitment in Early Modern Europe: North and Weingast Revisited. *Journal of Law Economics & Organization* 18, no. 1: 155-86.
———2002b. Private Investment and Political Uncertainty. *Economics and Politics* 14: 41-63.
Treisman, Daniel. 2000. Decentralization and Inflation: Commitment, Collective Action, or Continuity? *American Political Science Review* 94, no. 4: 837-57.
Tsebelis, George. 2002. *Veto Players : How Political Institutions Work*. New York; Princeton, N.J.: Russell Sage Foundation; Princeton University Press.
Vernon, Raymond. 1966. International Investment and International Trade in Product Cycle. *Quarterly Journal of Economics* 80, no. 2: 190-207.
———1971. *Sovereignty at Bay; the Multinational Spread of U.S. Enterprises*. New York: Basic Books.