



- ◆ Trabajo realizado por el equipo de la Biblioteca Digital de la Fundación Universitaria San Pablo-CEU
- ◆ Me comprometo a utilizar esta copia privada sin finalidad lucrativa, para fines de investigación y docencia, de acuerdo con el art. 37 del T.R.L.P.I. (Texto Refundido de la Ley de Propiedad Intelectual del 12 abril 1996)

FEDERAL INSTITUTIONS AND MULTINATIONAL INVESTORS: FEDERALISM, GOVERNMENT CREDIBILITY, AND FOREIGN DIRECT INVESTMENT

Nathan Jensen

Assistant Professor, Department of Political Science, Washington University
in St. Louis, St. Louis, Missouri

Fiona McGillivray

Associate Professor, Department of Politics, New York University,
New York, New York

Political risk is an important factor in the decision to invest abroad. While the investment potential might be lucrative, there is always the risk that the host government will expropriate the profits and assets of the foreign investor. Political institutions, however, can serve as constraints on the actions of political actors in the host country. We argue that federal structures lower political risk. Joint-reputational accountability in overlapping political jurisdictions increases the likelihood that investment contracts will be honored. Empirical analyses of cross-sectional time-series data for 115 countries, from 1975–1995, are used to study how political institutions affect foreign direct investment (FDI) flows. After controlling for the effect of relevant economic and political variables, we find that both democratic and federal institutions help attract FDI, although the additive effect of democracy and federalism is small. This is not surprising; democratic systems already have low political risk; they do not need the additional credibility that the federal system provides to attract FDI. In contrast, we expect that federal structures significantly improve the trustworthiness of less democratic states. Empirically, we find that less democratic countries with federal political systems attract some of the highest levels of FDI.

Our thanks to Jose Cheibub, Geoffrey Garrett, Jonathan Rodden, Susan Rose-Ackerman, and Alastair Smith for valuable comments and suggestions. Thanks also to the Leitner Program in Political Economy, Yale University for providing funding for this project.

Keywords: Foreign direct investment, federalism, multinational corporation, political risk, globalization

Firms invest in foreign production facilities for a variety of reasons. U.S. oil companies invest in pipelines in Central Asia to extract the region's oil reserves. Building car factories in England is one way Japanese firms can jump EU import restrictions on Asian automobiles. Many Western firms invest in China to capture first-mover advantage in an expanding economy with over one billion potential consumers. Most firms invest in South Korea as a platform for export, utilizing their low wages and high labor productivity. Clearly, economic factors are important in a firm's decision about where to invest, but political factors also matter. Political risk refers to the probability that political decisions or events will harm business transactions. Where political risk is high, investors have little protection against breach of contract or outright theft. In such circumstances, a foreign investor will think twice before investing abroad. In this paper we argue that political institutions, specifically federal political systems, can lower political risk for investors by increasing the trustworthiness of government.

Federal states are particularly attractive locations for foreign investment because they usually possess a large market with open internal trade. We argue that the political structure of federal systems is also a draw for foreign investors because it lowers their exposure to political risk. Our argument hinges on the role of veto-players in the federal political system, but differs from other arguments in this area (Tsebelis, 1995, 2002). Veto players, institutions such as the chambers in a legislature, executives, supreme courts, etc have the ability to block policy change. Heinsz (2000) argues that institutional veto players lower political risks for multinationals by inhibiting dramatic and swift policy change. The more veto players, the lower the political risk. However, it is unclear why the political actors in these institutions would want to veto; there are short-term political incentives for them to renege on foreign investment contracts. We focus on how the institutional framework of the federal system affects the incentives for political actors to thwart breach of contract.

The basic logic of our argument is as follows. In federal systems, states compete against each other to attract foreign direct investment. Yet, state and federal governments have overlapping jurisdiction on legislation that both directly and indirectly affects multinational operations. If one political unit breaches its side of the contract, it reaps all the short-term gains, but the reputational costs are shared by all political units in the federal system. While each political unit has an incentive to expropriate, each has an incentive to prevent other political units from doing the same. It is

possible for state and federal government to collude; however, because the benefits are shared between multiple political units, expropriation isn't as profitable for a federal government as it would be for a unitary government, all else being equal. Comparatively, we can say that the incentives for renegeing on a contract are lower for a federal system than for a unitary system. Indeed, federal political systems are doubly attractive to foreign investors when compared to unitary political systems because competition between federal states can lead to lucrative entry deals, and joint-reputational accountability ensures that investment contracts will be honored.

Whether federalism lowers political risk for foreign investors is an empirical question. Using cross-sectional time series data for 115 countries from 1975–1995, we tested the effects of federalism on foreign direct investment inflows. After controlling for the effects of democracy and the number of veto players, as well as the relevant economic variables, such as market size and growth, we find that federal countries do attract higher levels of FDI. We find that federal structures have the biggest effect on FDI in less democratic countries. Stable democratic states already have low political risk, so the additional political constraints provided by the federal structure have little added value. Not so in less democratic political systems. Controlling for market size, growth and natural resources, we find that moving from a unitary to a federal system in a less democratic country significantly increases the level of foreign direct investment. Before outlining the theoretical arguments in the paper, we start by defining the concept of political risk.

POLITICAL RISK

Definitions of political risk vary greatly in the literature. Broadly defined, political risk refers to the probability that political decisions or events will harm business transactions. Change in government policy, such as new restrictions on capital flows, is one form of political risk. Political instability, such as regime or leadership change (Kobrin, 1982), can increase political risk where new political leaders (new regimes) will default on contracts negotiated by previous leaders (regimes). Street riots and political unrest can increase political risk if they disrupt production or lead to a leadership or regime change. Human rights abuses can also increase political risk if they result in international sanctions on foreign investment or lead to consumer boycotts in foreign countries. All of these factors can have a potentially negative impact on multinational ownership or operations.¹

¹See Harms (2000) for a review of the political risk literature.

In this paper, we focus on one type of political risk: the risk that the host government reneges on a foreign investment contract. Multinational investors are extremely vulnerable to these risks since most FDI is mobile *ex ante*, yet relatively immobile *ex post* (Vernon, 1971). Once capital has been invested, such as the building of a multibillion dollar production facility, it is costly to relocate or liquidate the investment. Once the foreign firm has invested, host governments may attempt to renegotiate contracts now that their bargaining leverage has improved (Gatignon and Anderson, 1988; Williamson, 1996), or they may unilaterally expropriate assets or income streams (Kobrin, 1979).

While the nationalizations of the 60s and 70s are often associated with the risks of international investment, most political risks do not involve a change in ownership from the multinational corporation to the host government.² Kobrin (1985) argues that only in the period from 1968 to 1975 was nationalization common. Most political risks today are not dramatic changes in ownership from foreign firms to host governments; rather, they are policy changes that affect the operations of a multinational firm: defaulting on tax deals, restricting capital flows, defaulting on subsidies, etc. (Kobrin, 1982). Governments today seldom directly nationalize industries, but they often attempt to wrestle management control or capture income streams from foreign corporations (Heinsz, 2000). These types of policy changes have been referred to as “creeping expropriation.”³

Foreign investors are concerned not just that the host government keeps to its part of the contract, but also that the host-government does not exploit incomplete contracts. It is often extremely difficult to specify complete investment contracts that cover every contingency. In technology joint-ventures, for example, multinationals are wary that technological leakages or inadequate enforcement of property rights could threaten an investment. (Freeman, 1982; Mowery and Rosenberg, 1989; Oxley, 1997). Foreign investors have to do more than predict whether contracts will be enforced; they are also concerned about how disputes over the unspecified elements of the contract will be resolved.

If a country is considered a high political risk, how does that affect FDI?⁴ Multinational investors may divert their investment to a complementary market with less political risk.⁵ Alternatively, multinational investors may choose to alter their entry strategies. For example, Heinsz (2000, 2002) argues that

²For examples of contract disputes see Baker (1999).

³See Osebhale (1993) for more on creeping expropriation.

⁴Numerous studies have found that countries ranked as political risks by investors have lower returns on equity investments even when other economic factors are controlled for (Erb et al., 1996; Gatignon and Anderson, 1988; Murtha, 1991; Oxley, 1997; and Heinsz, 2000).

⁵Lehmann (1999), Brewer (1983, 1993). See Sobel (1999) for a similar argument on debt markets.

joint-ownership by foreign and local firms came to be seen as the solution to risky political investments. Local firms have greater political access to government, and governments are less likely to implement policies that adversely affect the operation of local firms. However, there is always a risk that local capital will ally with government to cut foreign capital out of the profits.

Extant theories suggest that reputational costs of expropriating investments will prevent governments from defaulting.⁶ The investment problem resembles a repeated prisoners' dilemma game. Initially, independent economic agents decide whether to invest in a nation. If they choose to invest, the host government decides whether to expropriate the investment, or to honor the terms under which the investment was made. In a single interaction, the nation will always expropriate and so the firm never invests. Yet, when the interaction is repeated indefinitely, investment can be sustained by conditioning future investment decisions upon past expropriation. In other words, foreign investors can threaten to punish exploitative behavior through the removal of future investment. A government that defects today foregoes the benefits of FDI tomorrow.

However, defecting today can provide the government with very large immediate benefits.⁷ Many governments value the short-term political benefits of defecting over higher long-term levels of FDI. Whether or not a government chooses to renege depends on how much it values future expected FDI over the immediate benefits of expropriation. While some governments honor FDI contracts, others renege.

We argue that political institutions can lower the risk that the host-government will renege on the contract. Specifically, we believe that federal political structures can decrease political risks for multinational investors. However, federal systems might attract foreign investors for other political and economic reasons. We turn next to the extensive literature on how federal structures affect economic performance.⁸ We add to this literature by exploring how federalism affects FDI.

FEDERALISM

Before discussing the mechanism through which federalism affects FDI, we first define the term federalism. In federal political systems, there is both overlapping jurisdictional authority between state and federal government and jurisdictional autonomy, such that both the federal and state governments have some autonomy within their own

⁶See Eaton and Gersovitz (1981), Kletzer (1984), and Grossman and Van Huyck (1988).

⁷See Kydland and Prescott (1977) for a discussion of time-inconsistency. See Bulow and Rogoff (1989) for the limits of reputation effects on avoiding debt default.

⁸See Oates (1999) for a review of the literature.

sphere of authority.⁹ States that are fiscally federal have the additional power to raise taxes and issue bonds. Fiscally federal states also face hard budget constraints.¹⁰ The central government polices the common market, but states raise and spend their own revenues. Within this basic political and economic structure there exist a wide variety of federal systems.¹¹

How does federalism affect FDI? Firms consider investing in production facilities in foreign locations for a variety of reasons.¹² Perhaps the most obvious is investing in locations with valuable natural or created resources, such as highly skilled, low-cost labor.¹³ Firms may produce their goods or services for consumption in the local market, or for export to foreign markets. Obviously, this makes firms more likely to locate FDI projects in countries with large local markets, countries with higher levels of growth, and countries that are large traders.¹⁴

Federal countries typically have large markets with open interstate trade. This gives foreign investors access to a large cluster of potential consumers. Another advantage of a large market is that it provides a spatially diversified tax base. For example, in the federal U.S., if a natural disaster in Iowa destroys the local tax base, revenue to rebuild can be raised from taxes in California, Montana, etc.

Foreign investors prefer to enter markets that are growing, rather than shrinking, in size. However, the role of federalism in promoting economic performance and growth is controversial. Weingast (1995) argues that in fiscally federal countries, political institutions allow governments to credibly commit to protecting economic and political rights. These economic and political rights are necessary for the

⁹Rodden and Rose-Ackerman (1997) discuss the differences between political federalism, as originally defined by Riker (1964), and fiscal federalism, as defined by Montinola, Qinan and Weingast (1995).

¹⁰As Rodden and Rose-Ackerman (1997) point out, few federal countries are also fiscally federal. State governments in developing countries rarely have the authority to raise their own taxes or to issue bonds. In short, few federal systems meet the strict definitional criteria of politically federal or fiscally federal as they are defined in the extant literature.

¹¹See Rodden and Rose-Ackerman (1997) and Watts (1999) for discussions on the different types of federal political structures.

¹²See Markusen (1995) for a survey of the literature

¹³Dunning (1981) explains multinational investment as a means of using 1) natural resources, 2) local market access, 3) strategic assets or capabilities, and 4) efficiencies.

¹⁴Mundell's (1957) ground-breaking work posited that trade in goods (trade) and factors (FDI) are substitutes. More recent work stresses how trade and FDI are compliments. See Markusen (1983), Markusen and Svensson (1985), Wong (1986), and Eithier and Svensson (1986). This argument becomes more complex when MNEs invest in order to "jump tariffs." See Bhagwati et al. (1992), Blonigen and Fennstra (1996) and Ellingsen and Warneryd (1999) for an examination of this subject.

efficient functioning of markets, linking federal political structures to higher levels of economic growth.¹⁵ Lohmann (1998) argues that divided political control of federal institutions can help preserve central bank independence. The latter is believed to aid growth and probably also lowers political risk.¹⁶

Other scholars, however, argue that federal structures impede growth and development. Additional levels of bureaucracy increase transaction costs. This is particularly problematic in less democratic countries where patronage and corruption in federal and state bureaucracies can impose high costs on foreign investors (Rodden and Rose-Ackerman, 1997). In sum, federalism affects FDI indirectly through market size and economic growth. We argue, however, that even after controlling for market size and economic growth, federalism has a direct effect on FDI by lowering political risk. It is to these arguments that we now turn.

POLITICAL INSTITUTIONS AND POLITICAL RISK

In the extant literature, federal systems are believed to lower political risk because they contain more veto players (Tsebelis, 1995, 2002). Veto players are political actors and/or institutions that can block legislation. In federal systems there is overlapping jurisdictional authority between state and federal government in many policy areas. This limits both the federal and the state governments' freedom to unilaterally alter policy. Weingast's theory of fiscal federalism argues that separate jurisdictional authority over fiscal policy creates economically responsible governments. Both arguments imply that political leaders in federal systems are a low political risk for default.

Our joint-reputational argument contains elements of both of these theories. Both state and federal actors are involved in decisionmaking that automatically increases the number of potential veto players. However, we focus on the incentives for state and federal governments to veto each other's attempts to expropriate resources. To develop our arguments in a consistent manner, we consider a stylized example.

¹⁵Other works such as Tiebout (1956) and Oates (1972), show that federalism increases welfare.

¹⁶There are other arguments in the literature as to why federalism should positively affect growth that are not discussed here. For example, scholars have also noted the role of federalism in finding innovative solutions to problems by allowing different states to experiment with different policy solutions. See Oates (1999) for a review of this literature. Other recent contributions have nuanced views on the effects of federalism. See Rodden and Wibbles (2002) and Rodden (2003).

Consider a foreign investor contemplating investing capital in a factory overseas. Suppose the foreign investor negotiates a contract to build a factory with a foreign government. Once the foreign investor actually builds the factory, she is vulnerable to creeping expropriation by the host government. The host government has an incentive to renegotiate the terms of the contract once the foreign investor has invested capital. The government wants to stay in power hence needs to satisfy the demands of key domestic supporters.¹⁷ Breaching the contract by revoking subsidies or raising tax rates on the factory provides the government with additional resources to spend on domestic supporters. In response, the foreign investor can threaten to move the factory to another country, taking away jobs and tax revenues. However, their threat lacks credibility because of the high cost of relocating the physical plant.¹⁸ The foreign investor can still threaten to withhold future investment in the host country. Hence, by defecting today, the government foregoes future benefits from FDI. However, the government wants to stay in power today. It values the short-term political benefits of defecting over higher long-term levels of FDI. In this kind of scenario, we expect the government to engage in creeping expropriation up to the point where the foreign firm is indifferent between remaining in the host country and relocating its factory elsewhere.

Suppose next that the host country is a federal political system with three states, A, B, and C. Any two of these three state governments can veto the federal government's policy proposals. The federal government can veto the policy initiatives of any individual state government. Legislation relating to FDI requires the agreement of both the state and federal governments.¹⁹ Both the state and the federal governments benefit from FDI (via federal and local taxes, local employment, etc).²⁰

Suppose that the state government reneges on the contract with the foreign investor by demanding higher local taxes. The state reaps the benefits from defaulting. For the government, these short-term benefits outweigh the damage to their reputation and the loss of future FDI. However, renegeing damages the reputation of both the federal and the state government. The federal government gets none of the short-term political benefits but

¹⁷This holds for both democratic and nondemocratic countries. In both cases, leaders need the support of domestic groups to stay in power.

¹⁸The cost of exit varies across industries.

¹⁹Central governments might not need "formal" approval of states, but, in practice, central government must "guarantee" state cooperation. State cooperation is an essential part of any federal contract.

²⁰The benefits of FDI go well beyond tax revenues to include employment creation, technology sharing, localized production spillovers, generation of foreign exchange, and the infusion of managerial expertise.

shares the reputational costs (less future investment for the nation).²¹ It has an incentive to intervene to prevent the state government from defaulting. One could argue that since it is the state that defaults and not the federal government, this will not damage the federal government's reputation. However, by not stepping in to prevent the state from defaulting, the federal government's reputation is harmed.

Suppose next that the federal government reneges by demanding higher federal taxes from the foreign investor's factory, located in state A. If the federal government reneges on the contract, it reaps all the benefits. In this case, the short-term benefits of renegeing outweigh the long-term cost in lost future investment. State A does not share in the short-term benefits; rather its reputation is damaged because it could not prevent the federal government from defaulting. Indeed, the reputational costs are shared by all the states. If the federal government steals in one state, it harms future investment in other states. States have incentives to cooperate in preventing the federal government from renegeing on FDI contracts.²² In this way, state governments act as a restraint on the federal government.

How do these arguments for federal systems compare with the case for unitary systems? Suppose that a particular country is unitary in structure. FDI contracts need only the approval of the central government. The central government reaps all the benefits from FDI (some of which it distributes to local governments). The only constraint on the central government is the damage renegeing does to its own reputation. However, as discussed earlier, the immediate political benefits from renegeing often outweigh long-term economic costs. The pure reputational argument is not as powerful a constraint on the central government as is the state veto in federal systems, where because of joint reputational accountability, the federal government is prevented from renegeing by a majority of states.

In a unitary system, the central government keeps all the benefits of renegeing on the contract, while in a federal system these benefits must be shared with a minimum winning coalition of states. In the federal case, it is theoretically possible for a group of states and the central government to collude to renege on an FDI contract. However, this would involve side-

²¹What are the incentives for states B and C? A default by state A will only slightly tarnish the reputation of other states. Moreover, it encourages states B and C to expropriate existing FDI. The reputational threat is less of a constraint, since weaker investment is anticipated in the future. So if one state defaults, the other states have an incentive to follow suit. Some scholars have argued that the federal structure makes state actors more likely to default. However, we argue that joint reputational accountability ensures that the federal government restrains the actions of state actors. State actors might have an incentive to default, but the central government vetoes in every case.

²²See Weingast (1995). For an analysis of the reputation effects of debt defaults on states, see Lanton and Smith (2000).

payments between the central government and a majority of states. While the short-term benefits of expropriation outweigh the long-term reputation costs, in federal systems these benefits are spread across a number of states as side-payments. In federal states, it is less profitable to default than for unitary states. Comparatively, we can say that the incentives for renegeing on a contract are lower for a federal system than for a unitary system.

Next we take a step backwards to consider whether competition between states to secure FDI increases the incentives to renege on FDI contracts. At the international level there is competition between countries to attract FDI. Some argue that in federal systems, this competition is magnified by internal competition.²³ Suppose, as in the earlier example, a foreign investor wants access to a large federal market. It can locate in state A, B, or C. States compete to offer the most attractive entry deals. Suppose that, within a particular industry, state A would be the most profitable site for investment. Nevertheless, states B and C will be ever willing to strike a deal to attract this profitable foreign investment. For example, state B might be prepared to offer favorable tax rates if the industry chooses to locate there. Indeed, we might imagine a bidding war between states to attract a potential investor. At each bidding round, host states surrender a greater share of their potential profits to the investor. In such a bidding war, state A would win, since its natural advantage allows it to offer greater concessions. Unfortunately, as host, state A would be left with few, if any, of the profits. Comparative advantage continues to dominate in the location of investment, but the race to the bottom prevents hosts from sharing in the rewards. This increases the likelihood that the state will default on the deal after the foreign investment has been made.

However, if there is joint reputational accountability between state and federal government, states are expected to honor these investment contracts. This makes federal systems doubly attractive locations for investment. Competition between states leads to lucrative entry deals, and joint-reputational accountability ensures that investment contracts will be honored. In summary, in the absence of a way of solving the credibility problem, we should expect federal systems to attract more FDI than unitary systems.

In the next section of the paper we test whether or not federalism lowers political risk by studying FDI inflows to federal and nonfederal countries. We expect federal political systems to attract higher levels of FDI than unitary countries, all else equal. Clearly, other economic and political variables need to be controlled for in this analysis. These are discussed in the empirical section of the paper. However, we take a paragraph here to talk about the effect of democracy on FDI. Most federal countries are democracies. It is argued that democracies attract higher levels of FDI because of their affects

²³See Jensen (2006) for a discussion of this literature.

on growth and political risk.²⁴ There is a large body of literature arguing that democratic countries offer more credible agreements than nondemocratic countries.²⁵ In democratic countries, it is often argued that audience costs constrain leaders from defaulting on agreements. There appears to be an empirical link between democracy and higher economic growth. Most scholars argue democracies are associated with higher economic growth because they protect individual property rights and have bureaucracies that can monitor and enforce laws and regulations.²⁶ For these reasons, our empirical analysis controls for the effect of democracy on FDI. However, we are also interested in the interactive effect of democracy and federalism. Strongly democratic states already have low political risk. Earlier, we argued that, in the absence of a way of solving the credibility problem, we should expect federal systems to attract more FDI than unitary systems. At the margin, the structure of the political system in strongly democratic countries probably adds little to their already high credibility. In contrast, weakly democratic states have a much larger credibility problem. The structure of the political system is expected to have a significant effect on their overall level of political risk. Empirically, all else being equal, we expect the impact of federalism on FDI inflows to be highest in the case of less democratic states.

EMPIRICAL ANALYSIS

A glut of private data sets attempting to capture political risks have emerged in recent years. These measures of political risk, i.e., the Institutional Investor Country Credit Risk and the Euromoney Country Risk Rating, while valuable, are incomplete tools for analyzing the risks of investment environments. First, these measures incorporate a number of types of political risks, not all directly related the risks of multinational operations.²⁷ Second, these measures may be “sticky,” only measuring major changes in risk levels following major disputes between multinationals and governments. In either case, we prefer to use a market measure, the actual flows of FDI, to explore how political institutions affect risk.

²⁴See Jensen (2003) and Li and Resnick (2003) for an empirical test of the link between democracy and FDI.

²⁵See Bueno de Mesquita and Lalman (1992); Fearon (1994); Guisinger and Smith (1999); Leeds (1999); Schultz (1999). According to this literature, voters remove governments who renege on agreements, or in other ways break the norms of international cooperation. This risk of removal is often referred to as an audience cost.

²⁶The relationship between democracy, growth, and economic development is controversial. See for example, Barro (1996), and Przeworski and Limongi (1997), and Przeworski et al. (2000).

²⁷See Jensen (2006).

Thus our empirical tests utilize time-series cross-sectional regressions to examine how federal and democratic institutions affect the level of FDI inflows for 115 countries from 1975–1995. All observations are annual and all independent variables are lagged one year. The ordinary least squares (OLS) time-series-cross-sectional regression equation is:

$$\text{NET FDI INFLOWS}_t = \text{FDI}_{t-1} + \beta_1(\text{INDEPENDENT VARIABLES}_{t-1}) + \varepsilon_t$$

The dependent variable is net foreign direct investment inflows as a percentage of GDP from the World Bank's World Development Indicators 1999. Countries with positive net FDI inflows are attracting new foreign investments, while a negative number indicates a liquidation of existing FDI projects. This measure does not include domestic capital invested in foreign FDI projects.²⁸ This variable is the best available measure of a country's success in attracting FDI inflows.

A number of control variables were taken from the World Bank's World Development Indicators, including the level of development (log of GDP per capita), market size (log of GDP), trade (exports + imports/GDP), economic growth (GDP growth), government consumption (general government consumption as a percentage of GDP), and budget deficits (overall budget deficit as a percentage of GDP). The variables for market size, level of development, growth, and exports are all standard economic control variables. They provide the investor with information about the potential for production in the domestic market and the usefulness of this nation as a platform to serve other domestic markets. Variables measuring budget deficits and government consumption were included to capture any differences in spending patterns that may occur in federal versus unitary political systems.²⁹

This baseline model is used in a number of projects. In Jensen (2003) this baseline model is used to predict the levels of FDI inflows. Other political institutions and measures of government policy were included along with this baseline model. In a cross-sectional regression of 69 countries, only the level of democracy was statistically significant, while measures of government reputation, expropriation, corruption, rule of law, and bureaucratic quality were insignificant.³⁰ We believe that this baseline model is the appropriate model to evaluate the impact of federal political institutions on FDI inflows.

²⁸With this dependent variable, even net capital exports have positive FDI inflows values.

²⁹The empirical results are not affected by dropping these control variables.

³⁰In a series of cross-national regressions Jensen (2003) tested this baseline model and included measures of government reputation, expropriation, corruption, rule of law, and bureaucratic quality. These variables were insignificant and had no impact on the baseline model.

To test the effects of political regimes on economic performance we used the Polity IV political regime data from Marshall and Jaggers (2000). Sticking with convention, we have subtracted a country's authoritarian score (0–10) from its democracy score (0–10). This variable provides an ordinal raking of political regimes on a scale of 10 to –10 (democracy to authoritarian regimes), which we have rescaled to a 0–20 scale for easier interpretation. Countries with a score of 20 constitute the most democratic countries in the sample.

To test the implications of political federalism on economic performance we constructed a federalism scale of 0–2, with a 0 representing a unitary system, a 1 an intermediate system, and a 2 a politically federal system. According to our definition, in unitary systems regional actors have no power over decisions made by the central government. In a fully federal system, regional actors can veto decisions made by the center.

To construct this measure of federalism we utilized a number of sources, including the Polity IV measure of decentralization, Banks's *The Political Handbook of the World*, Derbyshire and Derbyshire's *Political Systems of the World*, Ronald Watts's *Comparing Federal Systems*, Lijphart's *Patterns of Democracy*, and the Word Bank's Database of Political Institutions.³¹ The average federalism score for 115 countries from 1975 to 1995 is included in appendix B. The empirical results did not change with the use of different measures of federalism.

We have taken a number of critiques of panel regression analysis into account in constructing our tests. Beck and Katz (1995) showed that the OLS estimates of standard errors in pooled time series regressions led to an "extreme overconfidence." We have used Beck and Katz's recommended OLS regressions with panel corrected standard errors and a lagged dependent variable. The results of our regressions are presented in Table 1.

For the economic variables, economic growth and trade have positive and statistically significant effects on FDI inflows, which is similar to the findings of other studies.³² Government consumption has a negative effect on FDI inflows, giving some support to the "race to the bottom" thesis.

One surprising result is that market size is statistically insignificant in all of the regressions. We should expect large markets to attract higher levels of FDI inflows. One possible explanation is that while large markets attract higher aggregate FDI flows, they may not attract higher levels

³¹See Banks (various years), Derbyshire and Derbyshire (1999), Lijphart (1999), Watts (1999), Beck et al. (2000), and Marshall and Jaggers (2000).

³²See Markdusen (1995).

Table 1. The Determinants of FDI Levels: 1975–1995

| Variable | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---------------------|---------------------|---------------------|---------------------|----------------------|
| Lagged FDI | 0.598*** (7.467) | 0.520*** (6.440) | 0.519*** (6.413) | 0.552*** (8.317) | 0.550*** (8.319) |
| Market Size | -0.026 (-1.394) | -0.009 (-0.680) | -0.010 (-0.692) | -0.008 (-0.603) | -0.107 (-0.835) |
| Growth | 0.022*** (2.880) | 0.022*** (2.746) | 0.022*** (2.822) | 0.027*** (3.167) | 0.026*** (3.133) |
| Development Level | 0.063 (0.949) | 0.006 (0.117) | 0.006 (0.105) | 0.010 (0.202) | 0.014 (0.268) |
| Trade | 0.008*** (4.162) | 0.009*** (4.870) | 0.009*** (4.875) | 0.009*** (4.995) | 0.009*** (5.029) |
| Budget Deficits | 0.005 (0.492) | 0.007 (0.707) | 0.007 (0.718) | 0.003 (0.273) | 0.003 (0.335) |
| Government Consumption Federalism | 0.001 (0.126) | 0.0004 (0.037) | 0.0004 (0.038) | -0.014 (-1.566) | -0.013 (-1.483) |
| | | 0.147*** (3.681) | 0.147*** (3.674) | 0.103*** (2.668) | 0.386*** (4.169) |
| Veto Points | | | 0.003 (0.205) | | |
| Democracy | | | | 0.010* (1.855) | 0.012** (2.167) |
| Fed*Dem | | | | | 0.017*** (-2.955) |
| Number of Observations | 1823 | 1698 | 1692 | 1535 | 1535 |
| Number of Countries | 128 | 115 | 115 | 104 | 104 |
| R-sq | 0.65 | 0.65 | 0.65 | 0.66 | 0.66 |

Note: The dependent variable in all regressions is net FDI inflows as a percentage of GDP.
 *** = 99% confidence level, ** = 95% confidence level, * = 90% confidence level.

of FDI as a percentage of GDP. For example, country A may have double the market size of country B, but may not attract double the level of FDI inflows.

Model 2 introduces the variable “federalism” into the OLS regression. As predicted by our joint-accountability theory, countries with politically federal institutions attract higher levels of FDI. The magnitude of this effect is relatively large. In this sample, the average level of FDI inflows is roughly 1.33% of GDP. The immediate effect of moving from a unitary system to a federal system is increased FDI inflows of 0.294% of GDP. This effect becomes even stronger when we examine the long-run effects of federalism on FDI. FDI is self-perpetuating: higher levels of FDI in period 1 attract higher levels of FDI in period 2. When these long-run

Table 2. Effects of Federalism on FDI

| Polity Score | Unitary (0) | Mixed (1) | Federal (2) |
|--------------|-------------|-----------|-------------|
| 0 | 0 | 0.386 | 0.772 |
| 5 | 0.06 | 0.361 | 0.662 |
| 10 | 0.096 | 0.346 | 0.596 |
| 15 | 0.18 | 0.311 | 0.442 |
| 20 | 0.24 | 0.286 | 0.332 |

effects are taken into account, a shift from a unitary to a federal political system increases FDI by an average of 0.6125% of GDP.³³

Model 3 includes a measure of the number of “veto points” from the World Bank’s Database of Political Institutions. The magnitude and significance of the federalism coefficient is unchanged, while the variable “veto points” is insignificant. Although, theoretically, the number of veto points could help political leaders reduce political risks, there is no empirical support for the supposition that the number of veto points in a political system has any relationship to the level of FDI inflows.

Models 4 and 5 include the Polity IV measure of democracy. Democracy has a positive and statistically significant effect on FDI flows. What is interesting is how democratic institutions interact with federal political structures. To examine this, model 5 includes an interaction term of democracy and federalism. As predicted, federal political institutions have a greater positive effect on countries with lower levels of democracy. Table 2 presents the estimated effects of differing levels of political federalism on FDI, conditional on the level of democracy.

For all levels of democracy, a move toward federalism increases FDI inflows.³⁴ This effect is greatest for the more authoritarian political systems. Fully authoritarian regimes can increase their levels of FDI inflows by 0.772% of GDP given a shift from a unitary political structure to a federal political structure. This same move from a unitary to a federal system for a fully democratic regime (coded 20) will only increase FDI inflows by 0.092% of GDP. As stated earlier, the self-perpetuating nature of FDI will make these effects even stronger over time.

³³The long-term effects are calculated using this equation: (Federalism Coefficient*Federalism Score)/(1-Lagged FDI Coefficient).

³⁴One interesting result not directly related to this paper but of tangential interest is the effect of democracy given a level of federalism. For unitary political systems, a move toward democracy will *increase* FDI inflows by 0.24% of GDP, for a mixed political system it will *decrease* FDI inflows by 0.10% of GDP, and for federal systems a move toward democracy *decreases* FDI inflows by 0.44% of GDP. We leave this issue for future research.

CONCLUSION

Both economic and political factors enter into the decision by multinational corporations of where to invest. Political risk is a popular concept within the financial community. However, the theoretical underpinnings of this concept are poorly developed. Political risk has become an umbrella term that aggregates the effects of a wide range of political factors that influence the probability that political decisions or events lead to breach of contract or outright theft. As a first step to getting a better grasp of this concept, we focus on one type of political variable that affects political risk, federal political structures.

We argue that federal systems can help reduce political risks for foreign investors by improving the trustworthiness of political leaders. Where political risk is high, investors have little protection against breach of contract or outright theft. Competition between federal states leads to lucrative entry deals for foreign investors. However, this increases the temptation for federal or state governments to renegotiate the contract after the foreign firm has invested. However, in federal systems, political actors have incentives to keep each other in check; each constrains the other from reneging. Although one side reaps all the benefits from expropriating, both sides bear the reputational costs. In the absence of a way of solving the integrity problem, we should expect federal systems to attract more FDI than unitary systems. We expect the federal structure is particularly important in lowering political risk in less democratic systems. The federal political structure improves the trustworthiness of weakly democratic governments.

Empirical analyses of cross-sectional time-series data for 115 countries, from 1975–1995, are used to study how political institutions affect FDI flows. After controlling for the effect of economic variables, we find that both democratic and federal countries attract higher levels of FDI. Both institutions help lower political risk. The additive effect of combining federalism and democracy, however, is small. As we suspected, democratic countries are already regarded as trustworthy, so the additional credibility provided by federalism has little effect on FDI. However, federalism has a strong effect on the integrity of nondemocratic countries. All else equal, federal nondemocratic countries attract some of the highest levels of FDI.

These empirical results contribute to both the literature on the political determinants of foreign direct investment and the growing literature on the impact of federalism on macroeconomic performance. Although we argue that federal institutions have a large impact on FDI inflows, there are many other political factors that affect the trustworthiness of government, such as the structure of democratic institutions, organized labor or the judicial system. We leave the study of these to future research.

REFERENCES

- Baker, James C. (1999). *Foreign Direct Investment in Less Developed Countries: The Role of ICSID and MIGA*, Westport: Quorum Books.
- Banks, Arthur S. (Various Years). *The Political Handbook of the World*, Binghampton: CSA Publications.
- Barro, Robert (1996). "Democracy and Growth," *Journal of Economic Growth*, Vol. 1, pp. 1–27.
- Beck, Nathaniel and Jonathan Katz (1995). "What to Do (and Not to Do) with Time-Series-Cross-Sectional Data in Comparative Politics." *American Political Science Review*, Vol. 89, pp. 634–647.
- Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh (2000). "New Tools and New Tests in Comparative Political Economy: The Database of Political Institutions." *World Bank Research Paper* 2283.
- Bhagwati, Jagdish N., Elias Dinopoulos, and Kar-Yiu Wong (1992). "Quid Pro Quo Foreign Direct Investment." *American Economic Review*, Vol. 82, pp. 186–190.
- Brewer, Thomas L. (1983). "The instability of governments and the instability of controls on funds transfers by multinational enterprises: Implications for political risk analysis." *Journal of International Business Studies*, Vol. 14, pp. 147–57.
- Brewer, Thomas L. (1993). "Government policies, market imperfections, and foreign direct investment." *Journal of International Business Studies*, Vol. 24, pp. 67–80.
- Bueno de Mesquita, Bruce and David Lalman (1992). *War and Reason: Domestic and International Imperatives*, New Haven, CT: Yale University Press.
- Bulow, Jeremy and Kenneth Rogoff (1989). "Sovereign Debt: Is to Forgive to Forget?" *American Economic Review*, Vol. 79, pp. 43–50.
- Derbyshire, J. Denis and Ian Derbyshire (1999). *Political Systems of the World*, New York: St. Martin's Press.
- Dunning, John H. (1981). *International Production and the Multinational Enterprise*, London: Allen and Unwin.
- Eaton, Jonathan and Mark Gersovitz (1981). "Debt with Political Reputation: Theoretical and Empirical Analysis." *Review of Economic Studies*, Vol. 48, pp. 289–309.
- Eithier, Wilfred and Lars E. O. Svensson (1986). "Theorems of International Trade with Factor Mobility." *Journal of International Economics*, Vol. 20, pp. 21–42.
- Ellingsen, Tore and Karl Warneryd (1999). "Foreign Direct Investment and the Political Economy of Protection." *International Economic Review*, Vol. 40, pp. 357–379.
- Erb, Claupe B., Campbell R. Harvey, and Tadas E. Viskanta (1996). *Journal of Portfolio Management*, Vol. 21, pp. 74–83.
- Fearon, James D. (1994). "Domestic Political Audiences and the Escalation of International Disputes." *American Political Science Review*, Vol. 88, pp. 577–592.
- Freeman, Chris. (1982). *The Economics of Industrial Innovation*, London: Francis Pinter.
- Gatignon, Hubert and Erin Anderson (1988). "The Multinational Corporations's Degree of Control over Foreign Subsidiaries. An Empirical Test of a Transaction Cost Explanation." *Journal of Law, Economics, and Organization*, Vol. 4, No. 2, pp. 305–336.
- Grossman, Herschel I. and John B. Van Huyck (1988). "Sovereign Debt as a Contingent Claim: Excusable Default, Repudiation, and Reputation." *American Economic Review*, Vol. 78, No. 5, pp. 1088–1097.

- Harms, Philipp (2000). *International Investment, Political Risk, and Growth*, Boston: Kluwer Academic Publishers.
- Heinsz, Witold J. (2000). "The Institutional Environment for Multinational Investment." *Journal of Law, Economics, and Organization*, Vol. 16, No. 2, pp. 334–364.
- Heinsz, Witold J. (2002). *Politics and International Investment*, Cheltenham, UK: Edward Elgar.
- Jensen, Nathan M. (2003). "Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment." *International Organization*, Vol. 57, No. 3, pp. 587–616.
- Jensen, Nathan M. (2006). *Nation-States and the Multinational Corporation: A Political Economy of Foreign Direct Investment*, Princeton: Princeton University Press.
- Kletzer, Kenneth M. (1984). "Asymmetries in Information and LDC Borrowing with Sovereign Risk." *Economic Journal*, Vol. 94, pp. 287–307.
- Kobrin, Stephen J. (1982). *Managing Political Risk Assessment: A Strategic Response to Environmental Change*, Berkeley: University of California Press.
- Kobrin, Stephen J. (1985). "Expropriation as an Attempt to Control Foreign Firms in Developing Countries: Trends from 1960–1979," In Thomas L. Brewer, ed., *Political Risk in International Business*, New York: Praeger.
- Kydland, F. and E. Prescott (1977). "Rules Rather than Discretion: The Inconsistency of Optimal Plans." *Journal of Political Economy*, Vol. 85, pp. 473–491.
- Lanton, Stuart and Constance E. Smith (2000). "Government Debt Spillovers and Creditworthiness in a Federation." *Canadian Journal of Economics*, Vol. 33, No. 3, pp. 634–661.
- Leeds, Brett Ashley (1999). "Domestic Political Institutions, Credible Commitments, and International Cooperation." *American Journal of Political Science*, Vol. 42, No. 4, pp. 979–1002.
- Lehmann, Alexander (1999). "Country Risks and the Investment Activity of U.S. Multinationals in Developing Countries." IMF Working Paper WP/99/1333.
- Lohmann, Susan (1998). "Federalism and Central Bank Independence: The Politics of German Monetary Policy 1957–92." *World Politics*, Vol. 50, No. 3, pp. 401–446.
- Li, Quan and Adam Resnick (2003). "Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries." *International Organization*, Vol. 57, No. 1, pp. 175–212.
- Lijphart, Arend (1999). *Patterns of Democracy*, New Haven, CT: Yale University Press.
- Markusen, James R. (1983). "Factor Movements and Commodity Trade as Complementments." *Journal of International Economics*, Vol. 13, pp. 341–356.
- Markusen, James R. (1995). "The Boundaries of Multinational Firms and the Theory of International Trade." *Journal of Economic Perspectives*, Vol. 9, pp. 169–189.
- Markusen, James R. and Lars E. O. Svensson. (1985). "Trade in Goods and Factors with International Differences in Technology." *International Economic Review*, Vol. 26, pp. 175–192.
- Marshall, Monty G. and Keith Jagers (2000). "Polity IV Project: Political Regime Characteristics and Transitions, 1800–1999." Center for International Development and Conflict Management, University of Maryland.

- Montinola Gabriella, Yingyi Quian, and Barry R. Weingast (1995). "Federalism, Chinese Style: The Political Basis for Economic Success in China." *World Politics*, Vol. 50, pp. 50–81.
- Mowery, David C. and Nathan Rosenberg (1989). *Technology and the Pursuit of Economic Growth*, Cambridge: Cambridge University Press.
- Murtha, Thomas (1991). "Surviving Industrial Targeting: State Credibility and Public Policy Competencies in Multinational Subcontracting." *Journal of Law, Economics, and Organization*, Vol. 7, No. 1, pp. 117–143.
- Oates, Wallace E. (1972). *Fiscal Federalism*, New York: Harcourt Brace Jovanovich.
- Oates, Wallace E. (1999). "An Essay on Fiscal Federalism." *Journal of Economic Literature*, Vol. 37, No. 3, pp. 1120–1149.
- Osebhale, Braimho D. (1993). *Political Instability, Interstate Conflict, Adverse Change in Host Government Policies and Foreign Direct Investment. A Sensitivity Analysis*, New York: Garland Publishing.
- Oxley, Joanne E. (1997). "Appropriability Hazards and Governance in Strategic Alliances: A Transaction Cost Approach." *Journal of Law, Economics, and Organization*, Vol. 13, No. 2, pp. 387–409.
- Przeworski Adam and Fernando Limongi (1997). "Modernization: Theories and Facts," *World Politics*, Vol. 49, pp. 155–183.
- Przeworski, Adam, Michael E. Alvarez and José Antonio Cheibub and Fernando Limongi (2000). *Democracy and Development: Political Institutions and Material Well-Being in the World, 1950–1990*, Cambridge: Cambridge University Press.
- Riker, William H. (1964). *Federalism: Origin, Operation, Significance*, Boston: Little.
- Rodden, Jonathan. (2003). "Reviving Leviathan: Fiscal Federalism and the Growth of Government." *International Organization*, Vol. 57, pp. 695–729.
- Rodden, Jonathan and Susan Rose-Ackerman (1997). "Does Federalism Preserve Markets?" *Virginia Law Review*, Vol. 83, pp. 1521–1572.
- Rodden, Jonathan and Erik Wibbles (2002). "Beyond the Fiction of Federalism: Macroeconomic Management in Multitiered Systems." *World Politics*, Vol. 54, pp. 494–531.
- Sobel, Andrew C. (1999). *State Institutions, Private Incentives, Global Capital*, Ann Arbor: University of Michigan Press.
- Schultz, Kenneth A. (1999). "Do Democratic Institutions Constrain or Inform? Contrasting Two Institutional Perspectives on Democracy and War." *International Organization*, Vol. 53, No. 2, pp. 233–266.
- Qian, Yingyi and Barry R. Weingast (1997). "Federalism as a Commitment to Preserving Market Incentives." *Journal of Economic Perspectives*, Vol. 11, No. 4, pp. 83–92.
- Tiebout, Charles M. (1956). "A Pure Theory of Local Expenditures." *Journal of Political Economy*, Vol. 64, No. 5, pp. 416–424.
- Tsebelis, George (1995). "Decision making in political systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism and Multipartyism." *British Journal of Political Science*, Vol. 25, pp. 289–325.
- Tsebelis, George. (2002). *Veto Players: How Political Institutions Work*, Russell Sage Foundation and Princeton University Press: New York and Princeton.
- Vernon, Raymond (1971). *Sovereignty at Bay: The Multinational Spread of U.S. Enterprises*, New York: Basic Books.

- Watts, Ronald. (1999). *Comparing Federal Systems*, Montreal: McGill-Queen's University Press.
- Weingast, Barry R. (1995). "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development." *Journal of Law, Economics, and Organization*, Vol. 11, No. 1, pp. 1–32.
- Williamson, Oliver E. (1996). *The Mechanisms of Governance*, Oxford: Oxford University Press.

Appendix A. Descriptive Statistics

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---------------------------|------|--------|-----------|---------|---------|
| Net FDI inflows | 3615 | 1.333 | 2.927 | -30.329 | 39.211 |
| GDP Growth | 3833 | 3.372 | 7.456 | -52.000 | 181.148 |
| Log of GDP Per Capita | 3141 | 7.987 | 1.080 | 5.438 | 10.324 |
| Log of GDP | 3141 | 23.599 | 2.094 | 16.952 | 29.681 |
| Trade | 3804 | 74.487 | 47.985 | 2.383 | 439.595 |
| Budget Deficits | 2521 | -3.640 | 5.964 | -61.141 | 58.713 |
| Government Consumption | 3772 | 16.016 | 7.219 | 0.897 | 76.222 |
| Democracy | 3727 | 9.686 | 7.785 | 0 | 20 |
| Political Federalism | 2844 | 0.251 | 0.614 | 0 | 2 |

Appendix B. Constructed Federalism Scores for 115 Countries

| Country | Federalism |
|--------------------------|------------|
| Albania | 0 |
| Algeria | 0 |
| Angola | 0 |
| Argentina | 1.7 |
| Australia | 2 |
| Austria | 1 |
| Bahrain | 0 |
| Bangladesh | 0 |
| Belgium | 1 |
| Benin | 0 |
| Bolivia | 0 |
| Botswana | 0 |
| Brazil | 1.8 |
| Burkina Faso | 0 |
| Burundi | 0 |
| Cambodia | 0 |
| Cameroon | 0 |
| Canada | 2 |
| Central African Republic | 0 |
| Chad | 0 |
| Chile | 0 |
| China | 0 |
| Colombia | 1 |
| Congo, Dem Rep | 0 |
| Congo, Rep | 0 |
| Costa Rica | 0 |
| Cote d'Ivoire | 0 |
| Denmark | 0 |
| Ecuador | 0 |
| Egypt | 0 |
| Ethiopia | 0 |
| Fiji | 0 |
| Finland | 0 |
| France | 0 |
| Gabon | 0 |
| Gambia | 1.8 |
| Germany | 2 |
| Ghana | 0 |
| Greece | 0 |
| Guatemala | 0 |
| Guinea | 0 |
| Guyana | 0 |
| Haiti | 0 |
| Honduras | 0 |
| Hungary | 0 |
| Iceland | 0 |

(Continued)

Appendix B. (Continued)

| Country | Federalism |
|----------------|-------------------|
| India | 2 |
| Indonesia | 0 |
| Iran | 0 |
| Ireland | 0 |
| Israel | 0 |
| Italy | 0 |
| Jamacia | 0 |
| Japan | 0 |
| Jordan | 0 |
| Kenya | 0 |
| Korea, Rep | 0 |
| Kuwait | 0 |
| Laos | 0 |
| Lesotho | 0 |
| Madagascar | 0 |
| Malawi | 0 |
| Malaysia | 2 |
| Mali | 0 |
| Mexico | 2 |
| Mongolia | 0 |
| Morocco | 0 |
| Mozambique | 0 |
| Namibia | 0 |
| Nepal | 0 |
| Netherlands | 0 |
| New Zealand | 0 |
| Nicaragua | 0 |
| Niger | 0 |
| Nigeria | 1.4 |
| Norway | 0 |
| Oman | 0 |
| Pakistan | 1.5 |
| Panama | 0 |
| Paraguay | 0 |
| Peru | 0 |
| Philippines | 0 |
| Poland | 0 |
| Portugal | 0 |
| Qatar | 0 |
| Romania | 0 |
| Rwanda | 0 |
| Saudi Arabia | 0 |
| Senegal | 0 |
| Sierra Leon | 0 |
| Singapore | 0 |

(Continued)

Appendix B. (Continued)

| Country | Federalism |
|---------------------|-------------------|
| South Africa | 0 |
| Spain | 1 |
| Sri Lanka | 0 |
| Sudan | 1 |
| Swaziland | 0 |
| Sweden | 0 |
| Switzerland | 2 |
| Syria | 0 |
| Tanzania | 1 |
| Thailand | 0 |
| Togo | 0 |
| Trinidad and Tobago | 0 |
| Tunisia | 0 |
| Turkey | 0 |
| Uganda | 0 |
| United Kingdom | 0 |
| United States | 2 |
| Uruguay | 0 |
| Venezuela | 2 |
| Vietnam | 0 |
| Zambia | 0 |
| Zimbabwe | 0 |

