

Party system structure and its consequences for foreign direct investment

Party Politics

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Abstract

Studies of foreign direct investment's (FDI's) determinants focus on irreversibility as the main source of governments' credibility problems. Here, we highlight an underexplored source of time-inconsistency dilemmas: geographic agglomeration within a country. FDI's tendency to agglomerate creates visible inequalities in the country and generates demands for geographic income redistribution. Unchecked, such redistributive pressures can dissuade investors from entering the country altogether. Not all political systems are equally vulnerable, however. Countries with regionalized party systems are relatively unattractive to investors because regionalism increases the probability that investment returns from one region will be appropriated by the national government and used for geographic-based income redistribution. Countries with national parties, however, are less likely to engage in such behavior. Thus, we predict higher FDI inflows in countries with nationalized party systems and lower inflows in countries characterized by regional parties. Evidence from democracies between 1975 and 2007 supports our argument and its posited causal mechanisms.

Keywords

credibility, development, economic issues, foreign investment, party systems

Introduction

Political economy explanations of where foreign direct investment (FDI) locates maintain that capital owners are more likely to invest in countries that can credibly commit to restrain the state from stealing investment returns (Henisz, 2000; Jensen, 2006; Nooruddin, 2011). We advance this perspective by highlighting a new determinant of expropriation risk. We argue that investors in FDI will prefer countries where the ruling parties tend to be national rather than regional organizations, because regionalized party systems carry with them a higher risk of state expropriation.

Why should the geographic dispersion of parties' political support affect investment? One implication of Lucas's (1988) insight that factors of production tend to flow to the same locations is that such agglomeration creates an important geographic dimension to income inequality within a country. Thus, citizens' efforts to redress that income inequality through redistribution also contain an important

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geographic component. We argue that countries where ruling parties are regional organizations will manage geographic-based redistribution demands differently than countries where parties are national organizations. In the former, democratic politics allows control of government to alternate between a party deriving support from regions of the country abundant in the factors that drive agglomeration and a party drawing support from less-advantaged regions. Such alternation increases the likelihood of state appropriation of investment returns, as the new government has incentives to renegotiate tax promises made to capital owners to redistribute income to areas from which it draws political support.

By contrast, where parties are national organizations, retaining political power requires maximizing a welfare function that includes citizens residing in areas abundant in external economies and location advantages, and citizens residing in areas scarce in those factors. Thus, even if national parties pursue some geographic income redistribution, their national constituency gives them an encompassing interest that moderates the share of investment returns they appropriate. Moreover, in nationalized party systems, opposition parties *also* have geographically dispersed constituencies. Therefore, changes in government in nationalized party systems carry a lower risk of stark policy renegotiations in comparison with regionalized party systems.

Forward-looking and profit-seeking firms considering making difficult-to-reverse investments will consider these redistribution imperatives and act accordingly. All else constant, we expect less FDI to flow to countries with regionalized party systems compared to nationalized party systems.

Results from a sample of democracies between 1975 and 2007 support this prediction.¹ The finding is robust. It withstands various ways of measuring party system regionalism and it holds up to alternative measures of FDI flows. The result is also robust to the inclusion of country-specific fixed effects that capture the influence of any slowly moving or time invariant factors such as political institutions, constitutional structures, electoral rules, and political culture. In addition, we show that the effect of regionalism is exacerbated when the factors that drive agglomeration are concentrated in fewer and smaller geographic areas of the country. Consistent with our argument, we also show that tax policies are more volatile in countries with regional parties than where parties are nationalized.

Politics, credibility, and FDI

There is general agreement among political scientists that the most important feature distinguishing countries that attract FDI from those that do not is the ability of the former to refrain credibly from expropriating investment returns (Jensen, 2006; Nooruddin, 2011). Here, the central

characteristic of FDI is its irreversibility. The irreversible nature of much of FDI means that once the investment is sunk, revenue-seeking states are tempted to renegotiate policy bargains affecting the share of investment returns that the state appropriates for itself. In the extreme, the state might nationalize the firm altogether, but the more common situation is a subtler “creeping expropriation” wherein the state adjusts gradually the prevailing tax rate, level of capital mobility, or the regulatory environment in such a way as to boost state revenues or respond to changing economic conditions (Nooruddin 2011: 38–39). Regardless of whether the state engages in outright predation or creeping expropriation, what is clear is that to the extent that states are revenue seekers, they suffer from time-inconsistency problems that threaten to reduce appreciably the returns to investment.

Explanations of whether a state can credibly commit to policy stability focus on constellations of preferences and institutions that give representation in government to diverse societal interests. Such configurations make renegeing on policy promises and stealing from capital owners more difficult because some actor who stands to lose from such behavior has a better opportunity to block it. Thus, Jensen (2006) and Doces (2010) extol the virtues of democracy, arguing that because democracies tend to have more veto players than autocratic regimes do, the former can better assure investors the state will refrain from predation. Similarly, Henisz’s (2000) index of political constraints correlates positively with FDI inflows, and Nooruddin (2011) argues that coalition governments in parliamentary systems should be more attractive to investors in spite of the higher likelihood of policy gridlock because that gridlock reflects the presence of policy-stabilizing and credibility-inducing veto points.

Who wins? A political geography of FDI

A limitation of existing scholarship on FDI is that it treats foreign investment as a national-level good. The implicit assumption is that citizens in every region within a country benefit when more FDI flows into a country. Core principles of economic geography lead us to question this assumption. Factors of production agglomerate, so that labor and capital cluster geographically. Such clustering is just as visible *within* countries, as it is across them (Easterly and Levine, 2001: 198–208; Lucas, 1988: 35–39). Indeed, in virtually any country, even the most casual observation will reveal regions where economic activity clusters and other regions trapped in comparatively high poverty—witness the stark differences in income between the northeastern and western coasts of the United States compared to the Mississippi River Delta, or northern Italy compared to the south, eastern China compared to inland, or Delhi and Maharashtra states in India compared to the northeastern states in that country.

Geographic clustering of economic activity has many causes. Areas with large markets will generate more investment than other parts of the country because they allow firms (1) to take advantage of information spillovers concerning, say, the politics, business environment, or culture of the host country; (2) to find employees with specialized skills; and (3) to create forward and backward linkages (Krugman, 1998: 8). There are also sizable externalities to human capital that attract both labor and investment to areas already abundant in particular skills. In addition, differences in physical location can induce clustering. As Glaeser (2005) points out, its particular geography was vital in making New York City a manufacturing hub in the 19th century. Jensen and Rosas (2007) show that much of the investment in Mexico is clustered in the states closest to Mexico–US border, presumably to exploit the advantages of being close to US suppliers and consumers.²

One political implication of international and intranational factor movements is that so long as some regions of a country are better endowed in the external economies and location advantages that induce clustering, income inequality is to a sizable extent geographic inequality.³ This is a point directly implied by the theoretical literature on agglomeration and supported by the evidence. Indeed, researchers have found that capital's tendency to cluster creates regional income disparities in Malaysia (Ali et al., 2013), India (Daumal, 2013; Nunnenkamp and Stracke, 2008; Pal and Ghosh, 2007), China (Lessmann, 2013), throughout Latin America (Daumal, 2013; Heerzer et al., 2012), and even the United States (Easterly and Levine, 2001: 199–203). Because income inequality so frequently corresponds with geographic inequality, the efforts of citizens to redress inequality through redistribution are effectively efforts to redistribute income from one geographical area of the country to another.

We stress this correspondence between income inequality and geographic inequality to highlight an underappreciated tension inherent to democratic politics. In democracy, political representation is largely geographically based. Given the tendency for the factors of production to agglomerate, geographically based political representation results in office-seeking politicians who represent regions that are comparatively poorly endowed in the factors that induce clustering and who, therefore, have incentives to raise taxes on capital and to redistribute this income to their constituents.

The geography-based representation in nearly all democracies thus presents a serious threat to investment returns. We should expect profit-seeking capital owners deciding whether and where to allocate their difficult-to-reverse investments to consider these redistribution imperatives. But not all democracies are equally susceptible to geographic income redistribution. Our core hypothesis is that democracies with *regionalized party systems* are particularly worrisome for capital owners because

regionalism increases the incentive for states to renegotiate tax promises made to investors in the name of geographic-based income redistribution.

To develop and test this argument, we now define nationalized and regionalized party systems. Following on the recent surge of research interest in nationalization of party systems, a *nationalized* party system is one where the major political parties at the national level are locally competitive across a country's districts and regions, whereas a *regionalized* party system is one where parties gain a significant share of seats in the national legislature by running competitively in only a select few electoral districts and/or regions (Bochsler, 2010; Caramani, 2004; Chhibber and Kollman, 2004; Hicken, 2009; Jones and Mainwaring, 2003; Morgenstern and Pothoff, 2004; Morgenstern and Swindle, 2005; Morgenstern et al., 2014). The distinction is the extent of cross-district coordination between politicians. In nationalized systems, politicians from diverse districts across the nation have strong incentives to run for office under the same party label. In regionalized systems, incentives for such cross-district coordination are weak, leading to parties with geographically limited political support.

A comparison of the party systems in the United States and India is illustrative. Across six legislative elections in the United States between 1992 and 2000 inclusive, the average effective number of parties in the 435 districts was just under two (1.8). Incentives for cross-district coordination are strong in the United States (Chhibber and Kollman, 2004) and so *the same two parties* competed across those 435 districts and occupied nearly every seat in the national legislature. In four national Indian elections between 1991 and 1999, the effective number of parties in the districts was also quite modest, with an average of 2.78. However, incentives for cross-district coordination are weak in India, and this has caused a proliferation of parties with limited geographic appeal but that nonetheless manage to win seats in the national legislature (Chhibber and Kollman, 2004; Chhibber and Nooruddin, 2000). By our definition, India is a regionalized party system while the United States is a nationalized one.

Note that party system *regionalism* is different than party system *fragmentation*. Fragmentation refers to the (effective) number of parties, while nationalization involves the extent to which parties in the national legislature are competitive across a country's electoral districts. The two are related, yet distinct. A country that has several parties, each of which competes reasonably well across all districts would be considered fragmented, but not regionalized. For instance, in Estonia's 1999 election, the effective number of parties at the national level was 6.87. Notably, the effective number of parties receiving votes in the average electoral district was also above six (6.13) indicating that the same set of parties competed across the vast majority of the country's district such that the system was fragmented, but quite nationalized.

With these definitions in place, consider the political calculations for a nationalized party. If the party is to win enough legislative seats to control government, it must improve the joint utility of many, if not all, districts in the country. As a practical matter, this requires it to manage an important tension. On one hand, the party needs to tax capital and income at a level high enough to afford a politically profitable level of income redistribution to poor regions of the country. On the other hand, the party cannot raise taxes so high that they offset completely the benefits of agglomeration economies to those regions well endowed in them. If tax rates are too low, the level of geographic income redistribution will be too low to merit the support of voters in poorer regions; too high and the party loses the support of the voters living in regions that would otherwise be attractive to foreign capital. Just as Schattschneider (1942) argued with regard to the role of parties in forging bargains among regional economies seeking trade protection, we expect national parties to smooth the geographic disparities caused by variation in the external economies and location advantages that factors of production find attractive.

Luring irreversible investments like FDI requires this geographic bargain to be renegotiation-proof. In nationalized systems, the bargain is difficult to renegotiate for two reasons. First, the incumbent party internalizes the costs should it renegotiate the tax rate. Suppose the ruling party decided to renege and appropriate a larger than promised share of investment returns. Doing so would allow the government to redistribute more income to regions poorly endowed in agglomeration economies and therefore would increase the party's support there. But doing so simultaneously reduces the party's support in the regions better endowed in the factors that induce agglomeration. The government's revelation of itself as a noncredible bargaining partner will encourage the existing capital that sought to take advantage of the region's external economies to divest while also causing potential investors, wary of having the returns on their investments stolen by the state, to look to other countries to allocate their resources. Thus, predatory behavior by a party with a national constituency essentially amounts to catering to those poorly endowed districts at the expense of the support from the better-endowed regions when electoral support from *both sets* is necessary to control the national government.

Second, in nationalized party systems, opposition parties have similarly encompassing geographic interests and will therefore favor a reasonably similar bargain with capital owners when they come to power. Thus, alternation of power is not expected to produce much policy volatility. Of course, government and opposition parties may have different ideologies that may lead to renegotiation of policy bargains after turnover, even in nationalized party systems. We do not deny such ideological differences; rather, we maintain that nationalization reduces their effects, *ceteris paribus*.

Political calculations are different in regionalized systems. In regionalized systems, parties can externalize the costs of predatory behavior onto the rest of society and therefore have strong incentives to renegotiate policy bargains to their advantage when they take office. To demonstrate, consider the policy platform of a party whose support comes predominantly from regions well endowed with factors that induce agglomeration. Such parties do not have to maximize the joint utility of all districts to win a politically important share of seats in the national legislature. Rather, they can cater to the preferences of the geographically limited constituents, which implies enhancing further the attractiveness of the region to foreign capital by offering investor-friendly policies such as low tax rates. These policy bargains are not renegotiation-proof, though. Should the party lose control of government to a counterpart from a region poorly endowed in external economies and location advantages, we should expect a significant change in policy precisely because the new government's prospects of retaining power are maximized by increasing revenues and using them for spending and constituent service in the regions from which it derives support. Note that the costs of the state's low credibility are shouldered disproportionately by residents of regions that are well endowed in location advantages and external economies. They suffer welfare losses from the ensuing divestment and forgone future investment that follows when the state reveals itself to have low credibility. But these costs are irrelevant for the ruling party precisely because it does not derive much electoral support from the affected regions under any condition. In short, when the party system is regionalized, the possibility of a change in the geographic composition of government that leads to a renegotiation of policy bargains looms large over capital owners. Wary of losing their investments, capital owners will prefer to sink their resources in countries better able to commit to bind the state's grabbing hand.

To summarize, we argue that nationalized party systems have two advantages over regionalized ones. Their encompassing interests requires that they moderate their appropriation of investment returns, and those promises to capital owners are more renegotiation-proof compared to similar promises in regionalized systems. Capital owners will either recognize this logic or, more likely, will learn from experience (their own or others) about which states are more credible, and behave accordingly. Our main prediction, therefore, is that there should be higher levels of FDI in countries with nationalized party systems and lower levels in countries with less nationalization.

Potential criticisms of our argument

Two criticisms of our argument warrant attention. The first is that regionalism will not matter much because it is correlated with coalition governments (Lago-Peñas and Lago-

Peñas, 2009), which tend to *lure* investment because of the greater number of veto players (Nooruddin 2011). The second is that party regionalism will not influence FDI flows because even when parties from poorly endowed regions govern, opposition parties representing regions favored by FDI will block any efforts at expropriation.

Our first response to these criticisms is embedded in our empirical approach. As an empirical matter, all of the statistical models we present below control for the *effective number of government parties* to account for the correlation between regionalism in the party system and the propensity to form coalition governments. Our second response is both theoretical and empirical. While opposition parties representing FDI-favored regions might try to block expropriation, they might lack the capacity to do so. As a thought experiment, divide the sample of countries with medium to high levels of regionalism into two groups. The first group includes countries that have strong presidents or coalition governments with small coalitions and a clear senior and junior partner—examples might include Venezuela and India until the late 1980s. The second group includes countries with large governing coalitions—for example, Belgium or India after the late 1980s. With smaller coalitions, a change in the largest legislative party from one whose support comes from regions attractive to FDI to one whose support comes from regions that are not attractive can readily lead to wide swings in policy in the name of geographic redistribution. As coalitions become larger, the geographic dispersion of the government's support increases, raising the probability that a member of the coalition derives support from a region relatively attractive to FDI and making it more difficult for the government to renegotiate the terms of the bargain with capital owners. In essence, large coalitions increase the range and coverage of the incumbent government's economic interests and make regionalized systems resemble closely their nationalized counterparts.

This insight allows us to reconcile our theory with the critique that all efforts at expropriation will be blocked by regional parties that stand to benefit from FDI. It is not inconsistent with our theory that the effect of party regionalism might *depend* on the size of the governing coalition. An extension of our main hypothesis would argue that the downward pressure regionalism exerts on FDI is exacerbated in single-party governments and coalitions with clear junior and senior partners, but mitigated by larger coalition governments. We test this context-conditional expectation below after evaluating our main hypothesis.

Research design and results

We construct a time-series cross-section data set of 57 democracies between 1975 and 2007.⁴ The dependent variable measures *net FDI inflows* to a country as a share of its

Gross Domestic Product (GDP) and the main independent variable is *party system nationalization*.

Our measure of party system nationalization compares the effective number of parties in the national legislature (ENP_{nat}) to the average effective number of parties in the individual electoral districts—the smallest unit for which there is representation to the national parliament (ENP_{avg}).⁵ The difference between the two ($ENP_{nat} - ENP_{avg}$) yields a measure of the extent to which politicians coordinate across districts under the same party label (Caramani, 2004; Cox, 1997; Chhibber, and Kollman, 2004; Hicken, 2009). Furthermore, we follow Cox (1997: 17) and divide this difference by ENP_{nat} , such that our final measure is $\frac{ENP_{nat} - ENP_{avg}}{ENP_{nat}}$. Larger values indicate poorer cross-district coordination and more regionalization, which means a more geographically fragmented, less-national party system. A score of 0.10 means that 10% of the size of the national party system can be attributed to different parties garnering votes in different parts of the country (poor nationalization). In robustness tests below, we show that our main results hold when using alternative measures of regionalism in the party system.⁶

We include a comprehensive set of economic and political control variables. Specifically, we control for per capita *GDP* and the *GDP growth rate* to model the expectation that wealthy and rapidly growing countries will receive more FDI than developing and poorly performing countries. We also control the level of *trade openness* (i.e. $\frac{[imports+exports]}{GDP}$), since we expect more open economies to attract more FDI. *Total population* captures the effects of market size on investment decisions. GDP per capita, trade openness, and population all enter the model as natural logarithms. We control for the *effective number of government parties*, since that variable correlates positively with our nationalization measure (Lago-Peñas and Lago-Peñas, 2009) and because, as Nooruddin (2011) argues, coalition governments reduce economic policy volatility. We control for *regime age*, since FDI might be more attracted to stable and consolidated democracies than to new ones and because regionalism might be higher in new democracies where party systems have yet to consolidate.⁷ The model includes a *time trend* to absorb temporal dependence and *country-specific fixed effects* to capture unit heterogeneity.

Note that the inclusion of country-specific fixed effects amounts to controlling for the effects of all potentially confounding variables that are time invariant or that change infrequently. Our model therefore accounts for factors like a country's degree of *democracy* (even though the sample is limited to democracies, there is variation in the precise Polity scores), its *ethnolinguistic fractionalization*, its *electoral rules*, and *constitutional structures* (e.g. federalism). This is important. Since party system nationalization is affected by institutions and electoral rules (Chhibber and Kollman, 2004; Hicken, 2009; Hicken and Stoll, 2013), one

Table 1. Party system nationalization and FDI inflows.^a

	(1)	(2)	(3)
	Δ FDI (% GDP)	Δ US capital expenditures	Δ FDI (% GDP)
Nationalization _{t-1}	-1.78** (0.86)	-1.93*** (0.47)	
Δ Nationalization _t	-1.77* (1.04)	-0.78** (0.35)	
FDI (% GDP) _{t-1}	-0.57*** (0.097)		-0.59*** (0.13)
Δ FDI (% GDP) _{t-1}	0.099 (0.11)		0.27** (0.14)
Per capita GDP _{t-1}	0.78 (1.39)	1.26*** (0.47)	-0.36 (1.08)
Δ Per capita GDP _t	-34.6 (37.1)	11.4 (16.6)	-30.9 (45.0)
GDP growth _{t-1}	42.0 (37.0)	-10.3 (16.2)	41.6 (43.9)
Δ GDP growth _t	37.9 (36.4)	-11.2 (16.2)	37.0 (43.5)
Trade openness _{t-1}	0.10 (0.64)	0.63 (0.42)	-0.82 (0.68)
Δ Trade openness _t	2.47* (1.36)	0.70 (0.47)	2.69** (1.29)
Population _{t-1}	-3.35 (2.38)	1.04 (1.02)	-4.87** (1.96)
Δ Population _t	-7.67 (39.9)	-8.62 (6.70)	-18.1 (12.8)
Number of govt parties _{t-1}	0.33* (0.20)	0.15** (0.075)	0.62** (0.25)
Δ Number of govt parties _t	0.63*** (0.18)	0.19*** (0.068)	0.82*** (0.21)
Regime age _{t-1}	0.066 (0.18)	-1.33*** (0.39)	0.034 (0.23)
Δ Regime age _t	0.43 (0.28)	-3.76*** (1.18)	0.27 (0.73)
Time trend	0.10** (0.048)	0.040** (0.019)	0.16*** (0.056)
US capital expenditures _{t-1}		-0.96*** (0.12)	
Δ US capital expenditures _{t-1}		0.19** (0.090)	
Nationalization (Bochsler) _{t-1}			2.26* (1.20)
Δ Nationalization (Bochsler) _t			1.72 (1.98)
Observations	917	248	967
Adjusted R ²	0.26	0.59	0.30

FDI: foreign direct investment.

^aPanel-corrected standard errors in parentheses.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

might wonder if regionalism affects FDI independent of the electoral rules and institutions that caused it. We would note that while these electoral rules and constitutional structures are sticky over time, the exact level of party system nationalization within a given country varies from election to election. Because we include the country-specific fixed effects, it is precisely from the time-series variation that the coefficient estimates are derived. Thus, our regression estimates capture the independent effects of regionalism.

We adopt an error-correction modeling (ECM) strategy. In particular, we follow the approach suggested by Beck (1992), Franzese (2002), and De Boef and Keele (2008) in which the first difference of the dependent variable is regressed on its lagged level, any necessary lagged differences, and lagged levels and first differences of the independent variables, as theory might suggest.⁸ We use the ECM for two reasons. First, FDI inflows exhibit serial correlation and by first differencing the dependent variable, the ECM allows us to avoid some of the estimation issues this correlation produces. Second, the ECM allows easy assessment of both the short-run and long-run effects of the independent variables. The coefficients on the differenced independent variables refer to short-run or momentum-like effects, while the coefficients on the lagged levels refer to equilibrium-like or long-run effects

(De Boef and Keele, 2008). As we lack strong theoretical priors regarding whether the independent and control variables have long-run effects, short-run effects, or both, we include all variables as lagged levels and first differences. We estimate panel-corrected standard errors. Summary statistics are provided in Appendix Table A1.

Main results

We expect increasing regionalism to deter FDI. This implies that either or both the lagged level and differenced nationalization variables will have statistically significant negative coefficients. In model 1, in Table 1, the coefficient on the lagged level of party system nationalization is negative and statistically significant at the 0.05 level. Substantively, this negative effect is appreciable. While no country in the sample moves from zero to one on our nationalization measure, a 0.1 increase is common and the coefficient estimates imply that such a change would reduce FDI inflows *in the next year* by about 0.18%, *ceteris paribus*. Given that the median year-to-year change in FDI is 0.05%, a 0.18% reduction is a substantial effect. Furthermore, if that 0.1 increase in regionalism was permanent, then over the long-run FDI inflows would decrease by about 0.31%, *ceteris paribus*.

The results of model 1 thus support our core hypothesis. Countries where cross-district coordination is low attract less FDI than do those with strong coordination and high party system nationalization. This makes sense if, as argued, party regionalism undermines policy credibility for capital investors by raising concerns that parties who derive support primarily from FDI-disadvantaged regions may renege on tax offerings should they come to power in a future period.

Robustness checks

We assess the robustness of our results using a different measure of foreign investment and using alternate measures of party system nationalization. Model 2 analyzes an alternative dependent variable. While common in the literature, net FDI inflows is an imperfect indicator of whether irreversible FDI is responsive to changes in a state's political credibility.⁹ The problem is that net inflows to country *i* also depend on factors that occur elsewhere in the international economy that have nothing to do with *i*'s credibility to foreign investors. For instance, suppose the United States, in an effort to encourage profit repatriation, offers a tax holiday to its citizens who control capital abroad. If US firms exploit the holiday, FDI will flow outward from a variety of host countries. As a consequence, many countries will have lower net inflows of FDI compared to previous years, but clearly the divestment had nothing to do with host countries' credibility or business environments.

Model 2 uses an alternative measure of difficult-to-reverse foreign investment. Specifically, we utilize Bureau of Economic Analysis (BEA) data for capital expenditures US companies make in foreign countries.¹⁰ Because these data capture the actual money spent "on the ground" on difficult-to-reverse investments, they should be particularly responsive to the degree to which states can make credible commitments, and because they are gross figures rather than net, they should be free of some of the more problematic aspects of the net FDI inflows variable. The BEA data are only available for 1997–2008 and so we prefer to use them as a robustness test of model 1 rather than as a substitute.

The results of model 2 also support our argument. A 0.1 unit increase in the lagged level of the nationalization measure predicts a 0.19% reduction in capital expenditures from US firms next year. This is a sizable effect, given the mean change in the dependent variable is 0.05.¹¹ The differenced nationalization measure is also negative and significant, indicating the presence of a contemporaneous effect of increasing regionalism. Specifically, a temporary 0.1 increase in regionalism this year induces a contemporaneous 0.08% reduction in capital expenditures.^{12,13}

Model 3 assesses whether our results are robust to an alternative measure of regionalization. Measures like ours

have been criticized on two grounds (see Bochsler, 2010). First, they do not take into account cross-national variation in the number of districts that we use to compare against the effective number of parties at the national level. The problem is that party systems with fewer districts might appear more nationalized than those with many districts. Second, they average the effective number of parties across the districts. Suppose, at the national level, the effective number of parties equals 3. It is quite plausible that some districts will have an effective number of parties less than that at the national level, say, 2, while other districts will have more, say, 4.¹⁴ Averaging across the districts yields a value of 3, which by our measure would imply a perfectly nationalized system, but in reality the party system is more regionalized than that.

Bochsler (2010) develops a Gini-based measure of party nationalization that addresses these concerns by capturing the geographic inequality of support for a given party. The measure ranges from zero to one where, in contrast to our measure, *higher values mean more nationalized and less regionalized party systems*.¹⁵ Model 3 substitutes Bochsler's measure for our own. Our results holds. Here, moving from zero to one on Bochsler's measure (i.e. become more nationalized) produces a 2.3% increase in FDI.¹⁶

Testing the intermediate mechanism

Why does party system nationalization attract FDI? We have argued that policy bargains regarding the share of investment returns expropriated by the state are more robust to renegotiation in nationalized party systems than in regionalized ones. Comparable cross-national subnational economic data that can be matched to parties' specific geographic bases of electoral support do not exist and so testing this implication directly is not feasible. Therefore, we evaluate another implication of our argument: over enough time, as control of government changes hands, policies governing the distribution of investment returns between the investor and the state will be more volatile in regionalized systems than in their nationalized counterparts.

We investigate this hypothesis with data from the World Bank's *World Development Indicators* on tax revenues as a percent of GDP. We calculate for each country the standard deviation of those revenues. Then, we regress this measure on the average level of party system regionalization over the same period of time. If the theorized causal mechanism is correct, tax rates on capital, and hence tax revenues, will fluctuate more in regionalized systems and less in nationalized ones and so we expect a *positive* coefficient on party system regionalization. We control for per capita GDP and its growth rate, the country's population, the level of openness, the effective number of government parties, the average level of tax revenues over the period in question, the number of years for which the World Bank gathers the tax

Table 2. Party system nationalization and tax volatility.

Model	(4) Tax revenue volatility	
	β	Standard error
Nationalization	1.12*	(0.60)
Per capita GDP	0.19	(0.30)
Population	-0.20***	(0.07)
Trade openness	-0.42*	(0.22)
Number of govt parties	-0.13	(0.10)
Number of years of tax data	0.04*	(0.02)
Tax revenues (% GDP)	0.03***	(0.01)
Sub-Saharan Africa	1.26**	(0.61)
East Asia/Pacific	1.22*	(0.72)
Latin America/Caribbean	0.74	(0.51)
Eastern Europe/Post-Soviet	0.49	(0.33)
Constant	1.63	(3.27)
Observations	45	
Adjusted R ²	0.207	

Tax revenue volatility is measured as the standard deviation of tax revenues as share of GDP.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

revenue data, and regional indicators that help to model any regional trends that may exist.¹⁷ Diagnostics point to the presence of several influential outliers in the sample. Because our sample is small already ($n = 45$), we use the bounded-influence estimator developed by Welsch (1980) and applied in Granato et al. (1996) and Hicken and Simmons (2008).

Model 4 in Table 2 presents the results. As predicted, the coefficient on our measure of party regionalization is positive and statistically significant at conventional levels. *Ceteris paribus*, as regionalism in the party system increases, policies governing the share of investment returns accruing to the capital owner and the share going to the state become more volatile. These results suggest that we have identified correctly the mechanism through which regionalism exerts downward pressure of inflows of FDI.¹⁸

Putting party system regionalism in context

Even though economic agglomeration is a fact of economic life everywhere, the extent to which foreign investment concentrates geographically varies from country to country. We leverage this variation to extend our theory. Specifically, the negative effect of party regionalism should be exacerbated where economic activity concentrates heavily and will attenuate where economic activity is dispersed more equally throughout the country.

To test this expectation, we use Gennaioli et al.'s (2013) data on per capita income for 1569 top-level administrative regions within 107 countries in 2005. Specifically, we use a country-level Gini coefficient capturing the geographic dispersion of income.¹⁹ We create a dichotomous indicator for

whether the country's Gini score is less than the variable's median value of 0.15. Below-median countries are those where economic activity (and hence wealth) is relatively equally dispersed throughout all the regions while above-median countries have a few regions that are particularly well off while the remaining regions lag behind.²⁰

To test if the degree of economic concentration modifies the effect of party system regionalism requires our measure of party system nationalization, the Gini indicator described above, and a multiplicative interaction between the two, along with the control variables. Because the Gennaioli et al.'s data are only for 2005, we estimate this equation on a cross-section of democratic countries, where all variables are averaged over the period 2003–2007 inclusive. Although we have data between 1975 and 2007, we prefer to average over this 5-year window around 2005, because we do not believe the Gini coefficient is sufficiently stable to make inferences to a longer time series. In many countries, poorer regions tend to grow faster than their richer counterparts (Barro and Sala-i-Martin, 1992), while in other countries, the income gap is widening over time (Kumar and Subramanian, 2011). In either event, it is clear that regional income disparities are not constant. Accordingly, we have opted to create the cross-section by averaging the variables over a time period, where it is plausible that the 2005 Gini coefficient is reasonably stable.²¹ Finally, because our sample is cross-sectional, the dependent variable is the average level of FDI for 2003–2007 and all the independent variables enter as contemporaneous levels.

Diagnostics indicate the presence of influential outliers in the sample and so, given the small sample, we use the bounded-influence estimator described above. The coefficients are presented in Appendix Table C1, but given the inclusion of the interaction term, a graph is more useful to discuss the results. Figure 1 plots the marginal effect of a 0.1 unit increase in our party system nationalization measure for the two values of the Gini dummy variable. Notice that an increase in the degree of regionalism in the party system has no effect on FDI inflows when the geographic distribution of wealth is roughly equal. By contrast, when wealth is distributed very unequally throughout a country, an increase in regionalism has a substantively appreciable and statistically significant negative effect on FDI inflows. This lends credence to our argument that agglomeration of factors of production makes party system regionalization a liability in the effort to lure foreign investment.

Our second context-conditional hypothesis concerns coalition government. In response to the two critiques discussed above, we argued that the downward pressure of regionalism should be most strongly felt in countries with single-party governments or small coalitions and its effect should weaken as coalitions expand because large coalitions will tend to have more geographically encompassing

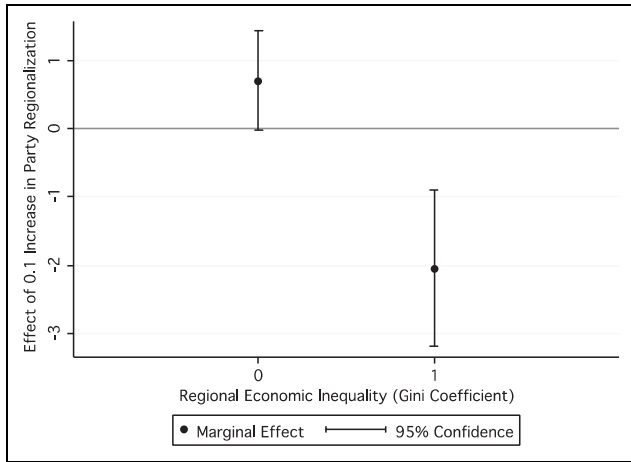


Figure 1. Marginal effect of party system nationalization as the geographic distribution of wealth changes.

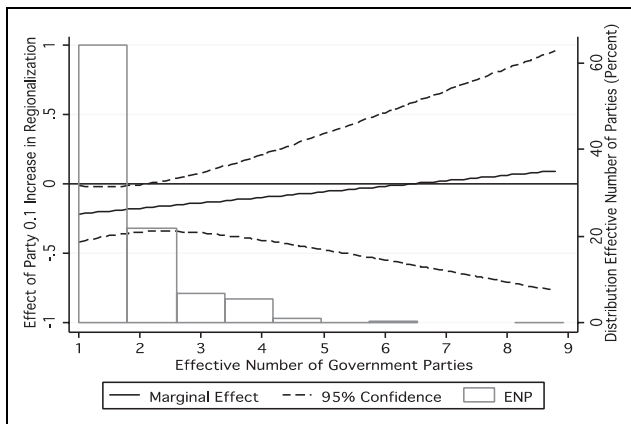


Figure 2. Marginal effect of party system nationalization as the effective number of government parties changes.

economic interests and will thus make regionalized systems resemble closely their nationalized counterparts.

We test this expectation through an interaction term between nationalization and the effective number of government parties. The coefficient estimates are presented in Table D1 in the appendix but we focus here on Figure 2, which graphs the marginal effect of a 0.1 unit increase in the lagged level of party regionalization for the range of the effective number of government parties in our sample as well as the 95% confidence intervals around the effect. The histogram, which is to be evaluated on the right-hand side Y-axis, displays the distribution of the effective number of government parties in the sample.

The results are noteworthy. In single-party governments, there is a substantively large negative effect of regionalism on FDI inflows. In such systems, a 0.1 increase in the nationalization measure in 1 year leads to a 0.21% decrease in FDI inflows the next year (with a long-run effect of a 0.37% reduction in FDI). This effect is

statistically significant. Furthermore, as expected, larger coalition governments tend to reduce the magnitude of the negative effect. When there are about 1.5 parties, the effect is to reduce FDI about 0.19% (the long-run effect is 0.34%) and when there are two parties, the effect is a 0.17% reduction in FDI (long-run effect is about 0.3%). These effects are statistically significant, and, per the histogram, this implies that some downward pressure of regionalism on FDI exists for just over 75% of the observations in our sample. As coalitions become larger still, the effect of regionalism is no longer significant.

These results offer a synthesis between our results and those implied by the existing literature. Regionalism in the party system undermines investment but particularly large coalition governments mitigate this negative effect by expanding the range and scope of the government’s interests and forcing parties that might otherwise seek to expropriate investment returns to bargain with counterparts who oppose such behavior. In essence, large governing coalitions make regionalized party systems resemble more closely their nationalized counterparts (Nooruddin 2011).

Conclusion

Our results offer compelling evidence from data across many democratic countries that party system nationalization attracts FDI. We have argued that investors fear the possibility that party leaders from regionalized parties—especially from FDI-poor regions—have incentives to renege on business-friendly policy commitments. In nationalized party systems, investors expect leaders to withstand pressure from FDI-poor regional interests for business-hostile policies. This is because they will assume (correctly, we believe) that leaders of nationalized parties, in the process of incorporating regional leaders into the national parties, will have already come to a policy program that has taken account of inter-regional rivalries for tax revenues.

It is interesting, in closing, to compare our theory and results to the underlying theoretical arguments made by political economists about the benefits of federalism for economic growth. Weingast (1995), for instance, has extolled the virtues of “market preserving federalism,” the idea that fragmenting authority across subunits and between center and subunits make these units compete with each other for investment and this, in turn, reduces predation, improves public policy, and fosters growth. Our findings here have different implications. Existing research suggests that decentralization leads to increased regionalism in the party system (Chhibber and Kollman, 1998, 2004). We have argued here that such regionalism increases the prospects of predation. Whereas Weingast offers a Leviathan story—larger entities are more dangerous for economic liberty—our claim is that national political parties enable a centralized authority to manage

problems of inequality and redistribution. The distinction between our argument and Weingast's ultimately boils down to what matters more for attracting investment, policy competition or external economies, and location advantages that are hard to change by local policies. To the extent economic production concentrates in spite of policy competition, we suggest the geographic redistribution mechanism trumps the competition one and federalism might, via the mechanism of increased party system regionalism, reduce investment. This is certainly an interesting issue for future research.

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Notes

1. Additional analyses, data, and supporting materials necessary to reproduce the numerical results are available at <https://dataverse.harvard.edu/dataverse/irfan>.
2. Unsurprisingly, FDI clusters also in Mexico City, due to its population density, market size, and stock of human capital.
3. For politicians, it is undoubtedly frustrating that many factors driving agglomeration are beyond the purview of local public policy—local officials cannot, after all, make the Mexican states of Veracruz and Oaxaca closer to the US border, and public policy cannot immediately make Cheyenne, Wyoming have the market size of New York City. Additionally, even small initial differences in endowments produce sizable differences in economic outcomes over the long run (Easterly and Levine, 2001: 198).
4. Democracies are countries scoring 7 or higher on the –10 to 10 Polity scale. The sample is limited to democracies because our theory requires meaningful party competition to occur regularly. Since we exclude episodes of nondemocratic rule from the sample, not all countries have data for the entire time series.
5. The election data are drawn from the Constituency Level Electoral Archive (Kollman et al., 2014) and from the Global Elections Database (Brancati, 2013). Unless otherwise stated,

all economic data are from the World Bank's World Development Indicators database (World Bank, 2004).

6. For other ways to measure nationalization, see Jones and Mainwaring (2003), Morgenstern and Pothoff (2004), Morgenstern and Swindle (2005), Bochsler (2010), and Morgenstern, Polga-Hecimovic, and Siavelis (2014).
7. Data for per capita GDP, GDP growth, trade openness, and population come from the Penn World Tables (Heston et al., 2006). The effective number of government parties and regime age variables are coded using the World Bank's *Database of Political Institutions* (Beck et al., 2001).
8. The reader will note that in their influential paper, De Boef and Keele (2008) do not include the lagged difference of the dependent variable on the right-hand side of their model. However, previous scholarship on ECMs recommends doing so. Specifically, both Beck (1992) and Franzese (2002: 81–82) recommend including lagged differences as needed to model autocorrelation that may linger when only the lagged level is included on the right-hand side of the regression. We have opted to follow that advice here. Notably, doing so ought to produce more conservative estimates of the effects of the Xs. Since the dependent variable in our models is *differenced* FDI, including the lagged difference amounts to including the lagged dependent variable. As such, our approach models more strictly the dependence that may exist between observations at time t and $t + 1$ than does a model that does not include the lagged difference. This will tend to increase the size of the standard errors and thus produce conservative coefficient estimates. We thank an anonymous reviewer for bringing this point to our attention.
9. See Kerner (2014) for a discussion of these issues.
10. Capital expenditures are “expenditures made by a firm to acquire, to add to, or to improve property, plant, and equipment” including “land, timber, mineral and like-rights owned; structures, machinery, equipment, special tools, and other depreciable property; construction in progress; and tangible and intangible exploration and development costs” (http://www.bea.gov/iTable/index_MNC.cfm; accessed August 15, 2013). These data are gathered for all nonbank majority-owned foreign affiliates between 1997 and 2008.
11. The total effect of a permanent increase in the nationalization variable is about a 0.2% reduction in US capital expenditures in the country.
12. We have also estimated models analyzing plant and property expenditures by US firms abroad. These models generate consistent results and are available upon request.
13. Another important critique of FDI normalized by GDP as a measure of FDI flows comes from Li (2009). He argues that (1) normalized FDI measures either a country's openness to foreign investment or its dependence on foreign capital, but not the level of foreign investment per se and (2) when normalized FDI is the dependent variable, it is not clear if the estimated coefficients on the Xs reflect the effects of those variables on FDI inflows, GDP levels, or both. In light of these critiques, Li recommends using logged total net inflows

of FDI instead of FDI/GDP. In robustness checks not presented here to preserve space, we follow Li's suggestion. We obtain data for FDI inflows from Benjamin Graham's IPE Data Resource (Graham, 2015) and reestimate our models with it as our dependent variable. Our results hold and are reported as Table A5 in the online appendix. We appreciate an anonymous reviewer for encouraging us to address this important issue.

14. Bochsler offers Albania as a possible example.
15. Our measure and Bochsler's are strongly negatively correlated ($r \approx -0.72$).
16. Our results are also robust to alternative measures of nationalization/regionalism proposed by Kasuya and Moenius (2008) and Bochsler (2010) that weight electoral constituencies by their size. Along with assessing whether our baseline results are robust to alternative measures of FDI and party system nationalization, we have assessed whether they hold up when we include additional control variables. Specifically, we have estimated models that have added the number of bilateral investment treaties country i has signed (Tobin and Busch, 2010) and Hensiz's (2000) measure of political constraints. The addition of these variables do not materially change the effects we have reported here.
17. The World Bank provides tax data for 1990–2011, but not all countries report data for the full time period. Accordingly, our sampling strategy is to calculate the standard deviation for the tax revenue variable and the averages of all the independent variables only for those years for which there exists data on both tax revenue and party system nationalization.
18. These results are robust to using the alternative measures of nationalization discussed above. The results are also robust to estimating the effect of party nationalization using an error-correction model on a time-series cross-section sample of countries, where the dependent variable is the (differenced) standard deviation of tax revenue collections as a share of GDP for country i , calculated in 5-year rolling windows.
19. We thank for these data Fabricio Vasselai, who generously calculated the Gini coefficients and shared the data.
20. We prefer this indicator to the continuous Gini measure because we do not expect the marginal effect of party regionalism to change smoothly across the relatively small changes in the Gini coefficient that exist from country to country. Rather, we expect the effect of regionalism to change more discretely, attenuating dramatically when economic activity is relatively equally distributed throughout a country and exacerbating appreciably when economic activity is highly concentrated.
21. Further notes on the estimation sample: The reader will note from the results table (Appendix Table C1) that the sample in this model is smaller than in the baseline specification. This is because we consider only those countries that had a democratic election sometime between 2003 and 2007. We think this is a sensible sampling choice, since we gather the data needed to calculate our nationalization measure only during election years. Furthermore, along with the expected stability

of the regional Gini measure, the choice to construct averages between 2003 and 2007 reflects data availability. We have data for the regional inequality variable only for 2005. Were we to test our hypothesis using only 2005 data, we would have an unusably small sample, owing to the facts that not every country had elections in 2005 and that there is some missing data for the other variables in the model. Thus, we felt it necessary to expand the temporal coverage to allow more countries into the sample. Expanding the period sampled to span 2003–2007 reflects (1) the fact that our party nationalization data ends in 2007 and (2) our expectation that the level of regional inequality during this window of 5 years will be reasonably stable.

Supplemental material

The online appendices are available at <http://ppq.sagepub.com/supplemental>

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