

Investment Incentives Attract Foreign Direct Investment: Evidence from the Great Recession

Aycan Katitas*

Sonal Pandya†

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[Current Version](#)

Abstract

Do investment incentives influence private firms' location decisions? Whereas prior research emphasizes tax incentives, we focus on incentives that require real-time government spending including job training and infrastructure. Real incentives influence where firms invest by resolving costly information asymmetries, and are subject to budget constraints that give rise to political targeting. This paper evaluates how real incentives shape the location decisions of foreign firms, investors who suffer from acute information asymmetries. We leverage features of the Great Recession and the 2009 American Recovery and Reinvestment Act stimulus, which temporarily increased states' fiscal capacity to fund real incentives. During the narrow stimulus spending window, states that received more federal Medicaid stimulus - instrumented with the exogenous component of the Act's funding formula - attracted more foreign direct investment (FDI) and increased state spending on real incentives. The stimulus window approximately coincides with FDI's temporary geographic expansion into US counties that lacked a history of these investments. On average, these counties had narrow vote margins in the prior gubernatorial election and garnered more state real incentive spending. These correlates are pronounced in counties with idle industrial capacity and in states whose governors sought re-election. Tax incentives had no effect on FDI. These findings have important implications for the efficacy of investment incentives and the political economy of industrial policy.

*Postdoctoral Fellow, Carnegie Mellon University. E-mail: akatitas@andrew.cmu.edu

†Associate Professor, University of Virginia. E-mail: spandya@virginia.edu

State and local governments in the United States spend an estimated \$50 billion annually on investment incentives, a threefold increase since 1990 (Bartik, 2019b, 2020). These subsidies to attract new investment by private firms are controversial. Evidence is mixed as to whether incentives influence firms' location decisions or contribute to economic development enough to justify their cost to taxpayers (Austin et al., 2018; Greenstone et al., 2010; Kline & Moretti, 2014; Slattery & Zidar, 2020). Sharper critiques cast incentives as little more than veiled corporate subsidies that fuel destructive bidding wars among states (Burstein & Rolnick, 1995). As US policymakers grapple with global supply chain vulnerabilities and rising income inequality, incentives garner renewed interest as a key tool of industrial policy (National Economic Council, 2023).

Current research focuses on tax incentives, which reduce firms' tax liability for undertaking activities such as job creation and research (Bartik, 2019a). Conventional wisdom holds that tax incentives rarely drive where firms locate because firms first select locations that meet their basic production needs and then seek incentives (Jensen, 2018). Politicians nonetheless offer tax incentives to opportunistically claim credit from voters for job-creating investments (Jensen & Malesky, 2018). Credit claiming is immediate while the fiscal costs of lower tax revenues are deferred. Unconstrained by current budgets, tax incentives give rise to bidding wars (Sobel et al., 2022).

By contrast, we argue that certain types of incentives can influence firms' location decisions by addressing information asymmetries that raise firms' costs. These incentives typically entail real-time government spending including cash grants, specialized business inputs, and land development. Although real incentives account for a minority of incentives that US states offer, they contribute to local economic development more generally and their value to firms can exceed their dollar cost to taxpayers (Bartik, 2020). They are especially valuable to firms who are unfamiliar with the market and in circumstances that magnify costs of information asymmetries.

Spending on real incentives is subject to current budget constraints whereas tax incentives forgo future income. From a welfare perspective, constraints effectively preclude bidding wars of the magnitude that tax incentives enable. Constraints also require politicians to offer real incentives selectively. We argue that real incentives are a form of targeted spending (Ansolabehere & Snyder, 2006; Cain et al., 1987; Grimmer et al., 2012). Politicians strategically offer real incentives to help attract investment to jurisdictions with key voters.

Empirical tests of these claims must overcome the inference challenge that states with the fiscal capacity to offer real incentives may be systematically different in other ways relevant to firms' location decisions. Further, these tests must disentangle politicians' electoral motives to target incentives from other location characteristics salient to investing firms.

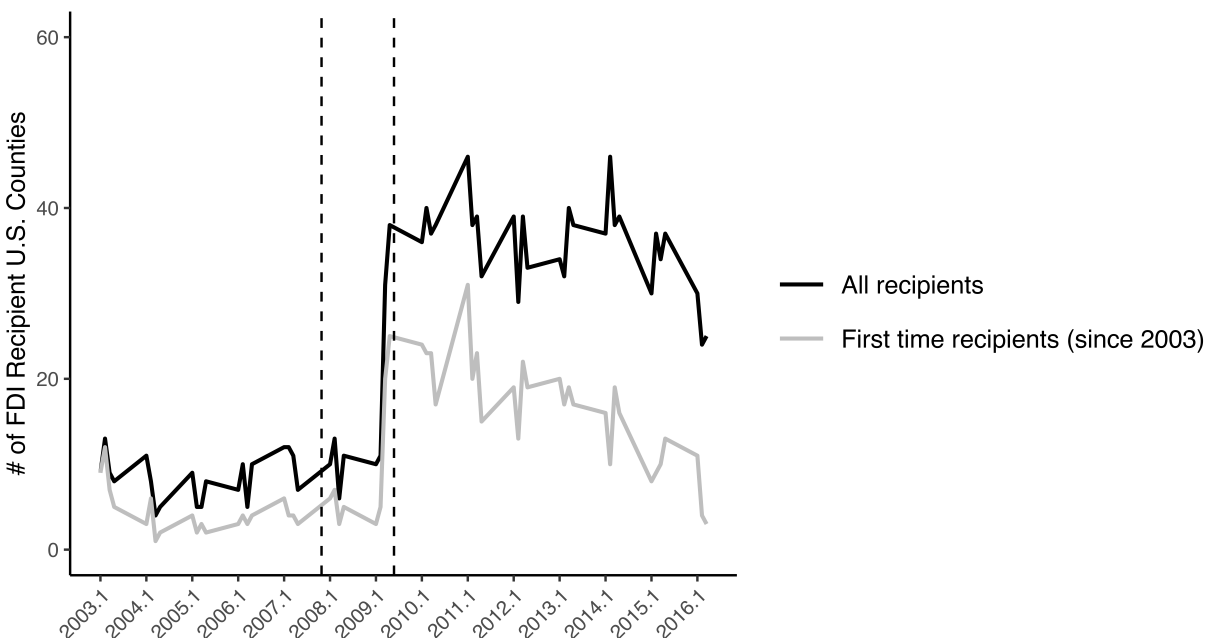
We meet these challenges by leveraging features of the Great Recession and the 2009 American Recovery and Reinvestment Act. The Act dispersed \$200 billion to state governments, an exogenous positive budget shock that temporarily increased states' fiscal capacity to fund real incentives. Nearly half was distributed across states using the existing federal funding formula for Medicaid, the means-tested health insurance program jointly funded by federal and state governments. States, however, had full discretion over how to spend these funds, which they had to spend before October 2010. Our instrumental variable framework centers around an exogenous source of variation in the Medicaid formula, states' pre-recession Medicaid spending (Chodorow-Reich et al., 2012). Using this framework, we analyze the effects of Medicaid stimulus on new manufacturing foreign direct investment (FDI) into US states during 2009-2011. Foreign firms are sought-after investors who create new jobs and positive productivity spillovers, and can suffer from especially acute information asymmetries.

We find that Medicaid stimulus corresponded to higher state FDI inflows during 2009-2011, controlling for several other state-level drivers of FDI. FDI concentrated in counties that had not received new FDI in the preceding five years, suggesting distinctive drivers of firms' location decisions during this period. Our findings are robust to different model specifications and alternative definitions of the stimulus spending window. Using the same empirical framework, we find that stimulus corresponded to higher state spending on real incentives. On average, states spent \$170,000 more on real incentives for every \$1 million in Medicaid stimulus received. A subset of real incentives drives this pattern, incentives that resolve information asymmetries related to site selection and adapting production processes. Stimulus had no direct bearing on state's capacity to offer tax incentives and, accordingly, we find no effect on tax incentives granted during the stimulus spending window.

Next, we investigate the mechanisms through which real incentives influence FDI location decisions. [Figure 1](#) plots the geographic distribution of new manufacturing FDI in the US by quarter during 2003-2016. The black line indicates the number of US counties that had at least one new announced investment in

that quarter. The gray line depicts what we call “new” counties, the subset of counties in that quarter that received FDI for the first time since 2003, the first year for which county-level FDI data are available. During 2003-2008, a total of 208 US counties received FDI. During 2009-2011, 396 counties received FDI, of which 229 (fifty-eight percent) were new counties. The trend is short lived, with the expansion returning to pre-recession levels after the stimulus spending window closed.

Figure 1: County Distribution of US Greenfield Manufacturing FDI Inflows, 2003-2016 (Quarterly)



The figure plots the number of US counties that received at least one new (greenfield) manufacturing FDI investment by quarter. Black line plots the total number of counties that received investment. Gray line is the subset that received investment for the first time since 2003. Vertical lines demarcate the Great Recession. Data Source: fDi Markets database.

We analyze the correlates of new county status to explore how real incentives influence firms’ location choices. Although we cannot directly observe if incentives were decisive, our empirical setting of a temporary expansion holds constant many of the fundamental location characteristics thought to attract FDI. We estimate a multinomial logit model of county FDI status during 2009-2011: “new” (received FDI during but not before), “old” (received FDI before and during) and “none” (no FDI during). Controlling for county-level drivers of FDI, the sum of real incentives correlates with new county status. Tax incentives, however, do not. A positive interaction of mass layoffs, a proxy for idle industrial capacity, and narrow vote margin in the prior

gubernatorial election suggests that state politicians directed real incentives to counties that both met firms' needs and in which politicians could claim credit for investment from swing voters. Narrow margin counties were more likely to be new in states with incumbent governors who sought re-election, consistent with these governors' stronger motives to claim credit from voters. We address several alternative explanations for new county status including local governments' incentive spending, stimulus-funded infrastructure improvements, and changed industry composition of FDI. We validate our classification of county FDI status with historical proxies, and also show no geographic expansion of domestic investment.

Our study contributes to scholarship on industrial policy by demonstrating that real incentives attract FDI by alleviating information asymmetries. We offer an important qualification to the conventional wisdom, based on tax incentives, that incentives are ineffective (Slattery & Zidar, 2020). Our findings extend prior work on how information asymmetries influence investment (Crescenzi et al., 2021; Criscuolo et al., 2019). A clear policy implication of our findings - offer real incentives when information asymmetries are acute - is especially relevant for contexts in which firms must quickly reconfigure supply chains such as the 2018 US-China trade war and the Covid-19 pandemic.

Our findings also contribute to scholarship on politicians' motives to offer investment incentives. Prior work emphasizes that politicians offer tax incentives because their successors bear little cost of forgone tax revenue (Jensen & Malesky, 2018). Our findings suggest that politicians are willing to prioritize incentive spending despite real-time trade offs with other categories of public spending. Whereas existing research focuses on electoral drivers of local government incentives (Jensen et al., 2015, 2020), our analysis of state incentives allows us to analyze potential geographic targeting of incentives. Our county-level findings are consistent with state politicians using incentives to claim credit from a specific subset of the electorate, swing voters.

More broadly, we contribute to research on the political economy of targeted spending (Ansolabehere & Snyder, 2006; Cain et al., 1987; Dixit & Londregan, 1996; Grimmer et al., 2012). We show that, despite federal efforts to allocate stimulus in a transparent manner, state politicians' electoral motives guided both the programmatic (re)direction and geographic distribution of federal transfers (Young & Sobel, 2013). Additionally, our focus on foreign-owned firms holds constant to some degree formal lobbying for spending

policies, demonstrating that institutions can influence public spending purely through shaping politicians' electoral incentives (Aidt & Shvets, 2012).

Theoretical Framework

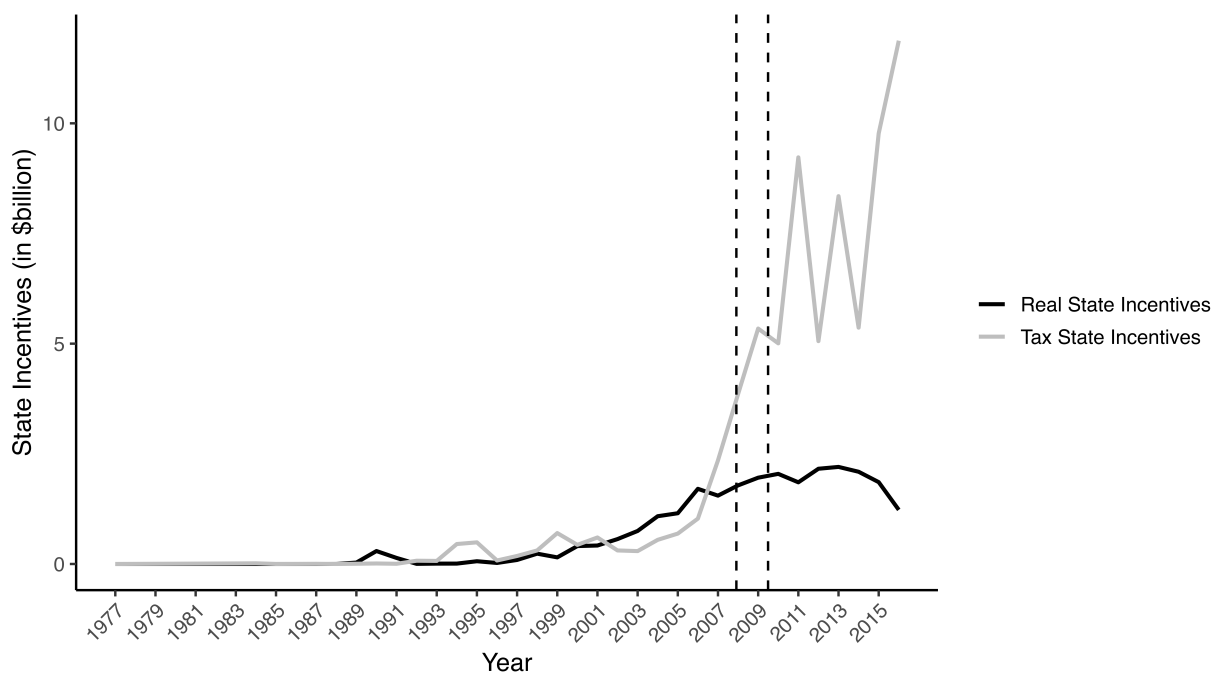
The goal of investment incentives is to influence where private firms locate economically productive activities. Tax incentives reduce firms' tax liabilities and may be contingent on the number of jobs created, or linked to specific activities such as research and development. Real incentives, defined by the real-time government expenditures that they typically entail, defray investing firms' costs or enhance productivity. They take several forms including cash grants, loan guarantees, and specialized inputs such as job training, industrial land, and infrastructure. In practice, firms receive incentive packages that bundle multiple types of incentives. Some incentives are automatically available to firms who meet published criteria whereas others are subject to policymakers' discretion.

In the United States, state governments are the single largest source of incentives (Slattery & Zidar, 2020). Figure 2 plots annual state incentive expenditures during 1977-2016. Tax incentives grew sharply just prior to the Great Recession, driven by exceptionally large tax incentives for specific projects (Sobel et al., 2022). Real incentives exhibited modest growth. During 2009-2011, the average tax incentive was almost \$3 million whereas the average real incentive was about \$500,000.

Conventional wisdom, focused on tax incentives, holds that incentives do not influence where firms locate because, the wisdom holds, firms select locations according to basic production needs and then seek incentives (Jensen, 2018). Thus, even if incentives correlate with new investment, they do not necessarily drive location choices. Politicians may recognize this but nonetheless offer tax incentives to give voters the impression that the politician's efforts were decisive in attracting the investment (Jensen & Malesky, 2018). Tax incentives allow politicians to claim credit for new investment immediately while deferring the consequences of reduced tax revenue.

We argue that this conventional wisdom does not extend to real incentives. Real incentives can influence where firms invest by alleviating costly information asymmetries. We develop this argument in the context of FDI, investments by foreign firms, which, in the US, are generally to produce and sell within the

Figure 2: US State Incentive Expenditures, 1977-2016



Annual spending measured in constant 2010 dollars. Vertical lines demarcate the Great Recession. Data Source: Good Jobs First Subsidy Tracker.

US.¹ Firms undertake FDI to capture global scale economies from highly productive intangible assets – technology, managerial practices – while maintaining control over the assets (Alfaro, 2017). Given high costs of multinational production, foreign firms are among the world’s most productive (Helpman et al., 2004). Therein lies politicians’ intense interest in attracting FDI. Not only does FDI create new jobs, FDI spillovers increased American firms’ productivity by 14 percent (Keller & Yeaple, 2009) and American workers’ wages an average of seven percent (Setzler & Tintelnot, 2021). Like most firms, foreign firms seek locations that meet their basic production needs, including skilled labor, reliable infrastructure, and low regulatory burden, among other needs.

To varying degrees, foreign firms confront costs arising from their lack of familiarity with the host market. We characterize these costs as information asymmetries, using the term to encompass cultural/linguistic frictions and the absence of relationships with key partners (Eden & Miller, 2004; Zaheer, 1995). Foreign firms have higher initial production costs associated with adapting products and production practices to

¹Firms are foreign in as much as their ultimate beneficial owner is in a foreign country.

a new market (Chor & Manova, 2012), and higher labor and input search costs (Javorcik, 2015). Their borrowing costs are higher due to the relative lack of relationships with host country lenders (Antràs & Yeaple, 2014; Desbordes & Wei, 2017).² Underlying many of these costs are cultural and linguistic differences that further complicate the already complex communication required to produce and sell goods made with sophisticated production technologies (Oldenski, 2012).

Real Incentives Influence FDI Location Decisions

Real incentives address costly information asymmetries.³ Cash grants and loan guarantees offset higher capital requirements, and often with less scrutiny than a private lender would exercise (Buch et al., 2009). Publicly funded, firm-specific worker training helps foreign firms overcome cultural frictions to realize the productivity potential of advanced technologies (Fosfuri et al., 2001). These programs reduce labor turnover and increase productivity, especially in collaboration and communication-oriented production tasks (Hollenbeck, 2008). All else equal, foreign firms would have a harder time establishing such programs themselves. They are less familiar with local educational and training resources and require local expertise to adapt production processes to the local market. European and Japanese firms indicate a particular interest in training programs because they anticipate that American workers lack skills essential to their production techniques (Schneider, 2010). Incentives can reduce costs in other ways. Manufacturing firms require factories and other kinds of industrial land (Munson & Schultz, 2013). Incentives that subsidize these inputs reduce both firms' real financial costs and search costs. Depending on the industry, firms may require upgrades to local infrastructure such as roads or power grids, improvements for which private alternatives are few. Manufacturing extension programs exist to facilitate connections with suppliers and the adaptation of products to the local market (Brandt et al., 2018; Lowe et al., 2023).

Real incentives can influence where foreign firms locate by providing a location-specific solution to

²Although parent companies are a potential source of capital (Desai et al., 2008), borrowing locally mitigates currency risk (Bilir et al., 2019).

³Foreign firms often hire site selection consultants to assist with location decisions. These consultants lower search costs but cannot alleviate information problems related to adapting processes and products to the local market.

information asymmetries.⁴ When foreign firms evaluate the internal rate of return for potential investment sites, they seek to minimize infrastructure and start-up costs (Woessner-Collins, 2010). Many types of real incentives, though not all, have an inherent location-specific component. For example, provision of land and factory space necessarily dictate firms' location decisions. Bartik (2020, p. 117) relays the example:

One CEO told me that his decision about where to locate a particular new facility had been determined by the availability in that city of an empty factory. The empty factory allowed the new facility to get into production quickly.

Incentives related to infrastructure and specialized inputs often build upon existing, place-based capacity. Job training programs often require collaboration with educational institutions with the relevant capacity to facilitate training (Miller, 2014).

Electoral Motives Influence Distribution of Real Incentives

A crucial difference between tax and real incentives is that latter are subject to budget constraints. Whereas politicians can offer tax incentives widely, their ability to offer real incentives is limited by both budget constraints and, for some incentives, the local characteristics upon which the incentives build. Within these parameters, politicians may still prioritize areas where incentives yield larger electoral rewards. For example, analyses of governors' designation of areas eligible for a large federal tax incentive program find that designated census tracts met eligibility criteria and were also more likely to have a state representative from the governor's party (Alm et al., 2021; Frank et al., 2022) or have firms connected to the governor (Eldar & Garber, 2023). Thus, any account of how real incentives influence FDI location decisions has to consider how politicians' motives fuel geographic variation in the availability of incentives.

FDI can have electoral benefits for incumbent politicians (Jensen & Malesky, 2018; Owen, 2019).⁵ New plant announcement are high profile local media events that connect a politician to job creation in voters'

⁴In the US, location decisions refer to the state in which a foreign firm locates or a county within the state. These are not necessarily sequential choices as firms often compare counties across states (Greenstone et al., 2010).

⁵Though less relevant to foreign firms, politicians may target incentives to campaign donors or otherwise politically connected firms (Sobel et al., 2022). Foreign firms are prohibited from making contributions and

minds (Bao & Chen, 2018). Despite a resurgence of economic nationalism (Andrews et al., 2018), nearly 75 percent of Americans surveyed report a favorable view of new FDI (Pew Research Center, 2014). Politicians do not discriminate against foreign firms when offering incentives (Jensen et al., 2020).

We propose that, to the extent that politicians can favor certain areas, they offer more incentives to projects in counties with swing voters. Investment incentives are well suited to persuade voters who lack strong party allegiances (Cox, 2009). Such voters are often more responsive to targeted spending (Dixit & Londregan, 1996; Grimmer et al., 2012), economic policies of ideologically distant candidates, and politicians' skill and experience (Fowler et al., 2022). In general, voters hold incumbent governors accountable for state economic conditions regardless of whether they have control over the state's economy (Atkeson & Partin, 1995).

Empirical Context: The Great Recession

The Great Recession is an insightful setting to examine how real incentives influence where in the US foreign firms locate. From foreign firms' perspective, borrowing from US banks became even more costly (Chodorow-Reich, 2014). Foreign parent companies, themselves credit constrained, had less capacity to provide working capital (Biermann & Huber, 2023; Buch et al., 2009). Additionally, the US dollar appreciated, which increased foreign investors' real costs (Froot & Stein, 1991). Firms reported greater interest in incentives (Johnson & Toledano, 2022), citing incentives as more salient to their location decision than in previous years (Gambale, 2011). Tax incentives, however, may have been less attractive because secondary markets for tax credit monetization contracted (Aldy, 2013).

Federal stimulus partially relieved states' budget constraints in offering real incentives. In general, states operate under tight fiscal constraints that require trade-offs across spending categories and between spending and taxation (Poterba, 1994). Most states are legally required to balance their budgets and have limited scope to borrow (Jonas, 2012). The recession strained state budgets to a degree not seen since the Great Depression (National Association of State Budget Officers, 2009). On average, federal stimulus replaced approximately one-fourth of lost state revenue (Leachman & Williams, 2021).

are arguably less likely to have political connections independent of a prospective investment.

Despite these constraints, states increased incentive spending (Bosman, 2009; Stringer, 2010), especially cash incentives (McIntosh, 2012). Ohio’s governor claimed credit for a \$650 million investment by French steel manufacturer Vallourec, explicitly stating that federal stimulus was redirected towards incentives (Akron Beacon Journal, 2010). Many states expanded the geographic scope of previously localized incentive programs (Goodman & Wakefield, 2021; The Pew Charitable Trusts, 2021). States redoubled investment promotion efforts, which inform potential investors about specific counties in the state suited to their needs. Anecdotal evidence is consistent with governors’ electoral motives to privilege certain counties for incentive spending. Wisconsin Governor Scott Walker designated Milwaukee as a *city-non-grata* because of its pro-union orientation and the city failed to receive a single major subsidy package during 2010-2016 (Hinkley & Weber, 2021; McCarthy, 2015, p. 835).

Empirical Strategy

Our empirical strategy leverages distinctive features of the 2009 Recovery Act, which transferred \$200 billion to state and local governments. Health care, education, and transportation accounted for over ninety percent of transfers. The act relied heavily on existing statutory funding formulas to distribute funds quickly and in a transparent manner and to limit pork barrel-style targeting. Consistent with this goal, congressional district-level stimulus expenditures do not correlate with partisanship (Boone et al., 2014; Gimpel et al., 2012).

Our state-level analysis focuses on the single largest stimulus transfer, \$88 billion towards Medicaid. Typically, the federal government funds 50-83 percent of a state’s Medicaid expenditures. The precise federal contribution is based on the Federal Medical Assistance Percentages (FMAP) formula. FMAP incorporates a three-year rolling average of state unemployment and other state economic characteristics, such that states with worse economic performance receive more funding. The Recovery Act temporarily increased the federal government’s share of Medicaid expenses by 6.2 percentage points across the board, with additional increases indexed to current state unemployment. The Act retroactively applied this modified formula from October 2008. Medicaid stimulus accounted for 75% of Recovery Act transfers distributed in the first quarter of 2009.

Our state-level empirical strategy rests on three features of this stimulus. First, Medicaid stimulus was

a positive shock to state budgets. Federal lawmakers “intended to boost the level of discretionary funds available to states and not simply to relieve Medicaid burdens” (White House Council of Economic Advisors, 2009). States also replaced some of their own planned spending with stimulus, freeing up state funds for other uses (Conley & Dupor, 2013; Dupor, 2013).⁶ Peter Orzag, then-director of the federal Office of Management and Budget, blamed this practice for the act’s modest effects on economic growth (Boone et al., 2014).

Second, the Recovery Act relied on the FMAP formula to distribute stimulus across states. Following research on the employment effects of stimulus (Chodorow-Reich et al., 2012), we deploy the plausibly exogenous portion of the formula, state Medicaid spending in 2007, in an instrumental variable framework. Third, states forfeited any unspent Medicaid stimulus left at the end of the 2010 federal fiscal year (September 30, 2010). States were prohibited from depositing funds into reserves or narrowing Medicaid eligibility. This requirement provides us a discrete window to evaluate the effects of stimulus on incentive spending.

Our county-level analysis considers the potential effects of non-Medicaid stimulus spending on which counties received FDI. Of particular interest is the \$54 billion in education stimulus. While we discuss this spending in greater detail below, we note here two important features relevant to our research design. The act relied on funding formulas to distribute these funds across states so, similar to Medicaid stimulus, their distribution across states was apolitical. Unlike Medicaid stimulus, governors had little flexibility to use these funds. The act required states to distribute education stimulus to local education agencies according to existing education funding formulas and required that states maintain their education spending at specified levels. The law also granted states an additional year to spend non-Medicaid stimulus and subsequently extended that deadline one to two years for many programs.

Finally, two additional stimulus provisions are relevant to our argument. Federal grants and loan guarantees sought to expand private investment in renewable energy. Both foreign and domestic firms were eligible for this support. Consistent with our theoretical argument, grants under this program were considered successful in attracting renewable energy investment whereas tax provisions were not (Aldy, 2013). Second, the act’s “Buy American” provision required all building materials used in stimulus-funded construction of public

⁶State and local governments have been shown to use growth in intergovernmental transfers to free up their own funds for other uses (Baicker & Gordon, 2006; Baicker & Staiger, 2005).

buildings be sourced domestically. Both provisions plausibly motivated foreign firms in relevant industries to invest in the US quickly, suggesting greater sensitivity to information symmetries.

FDI During Great Recession

During 2009-2011, new manufacturing FDI was more than triple than during 2005-2007. Despite the recession, the US remained an attractive market for foreign firms. A 2009 United Nations survey revealed that most multinational companies anticipated that US market demand would rebound by 2012 (UNCTAD, 2010).

FDI's post-recession geographic expansion defies simple explanation.⁷ Ostensibly, the basic logic of firms' location decisions did not change.⁸ FDI tends to spatially agglomerate, reflecting firms' common location-specific needs including labor and infrastructure, and positive externalities from proximity to other foreign firms and firms in their industry (Bobonis & Shatz, 2007; Head et al., 1995). Location decisions for manufacturing FDI, our focus, are relatively flexible as compared other industries in which proximity to natural resources or customers dictate location. For example, Golden Dragon, a Chinese manufacturer of copper pipes and tubes reported considering 62 sites across the US before selecting Thomasville, Alabama for its first US plant in 2011 (Amy, 2011).

Appendix A compares FDI across new and old counties. One notable difference is that among new counties, two industries feature prominently, metals and renewable energy, consistent with Recovery Act provisions that motivated foreign firms in these industries to establish themselves in the US market quickly. Renewable energy firms display classic features of information asymmetries including high initial capital requirement and the need for specialized labor (Woessner-Collins, 2010). Both industries have arguably weaker motives to locate in old counties. Renewable energy, as a relatively new industry, had fewer opportunities for agglomeration externalities. As a relatively low value added industry, steel has inherently lower externalities. The average project value and distribution of FDI across source countries and industries were broadly unchanged after the recession, with most FDI flowing from advanced industrialized source countries into manufacturing

⁷Figure A1 maps FDI's geographic expansion after the recession.

⁸Although economic crises correlate with increased foreign acquisition of distressed firms (Aguilar & Gopinath, 2005), they do not routinely stimulate new foreign plants.

industries.⁹

Some might associate FDI with very large investments by sophisticated multinational companies with experience and internal capacity to overcome information asymmetries. New county investments tended to create fewer jobs, suggesting that new county investments do not fit this description (Table A1). For example, Alpla, an Austrian manufacturer of plastic packaging, invested in Hoke County, North Carolina, creating 40 jobs. The state’s One North Carolina Fund awarded Alpla a \$120,000 grant (McCleary, 2009). To the extent that smaller investments imply larger information asymmetries, real incentives may have had a larger role in these firms’ location decisions. As compared to new counties, old counties have higher mean project values and higher variance, indicating that investment by firms less swayed by real incentives concentrated in old counties.

State-Level Empirical Analysis

Data

Our dependent variable in the baseline state-level analysis is the sum of new state manufacturing FDI during 2009-2011 (inflation-adjusted millions of US dollars).¹⁰ We measure investment using project-level FDI data from the *Financial Times’s* fDi Markets database.¹¹ The database reports salient project characteristics including industry, investors’ country of origin, production activities, and the plant’s US county location. Our sample is restricted to new manufacturing plants.¹² We model FDI’s geographic expansion by disaggregating state FDI into “new” FDI, counties that had not received FDI during 2003-2008 but did during 2009-2011, and “old”, which had received FDI both before and during. “None” counties received no FDI during 2009-2011.

⁹See Figure A2 - Figure A7.

¹⁰Table A2 provides summary statistics and data sources for all variables.

¹¹The database timestamps projects by date of announcement, rather than operation, and retroactively removes any announced projects that failed to materialize. We exclude projects whose estimated valuation is two standard deviations greater than the mean.

¹²The database’s manufacturing classification closely corresponds to NAICS categories 31-33.

The sample consists of 229 new, 56 old, and 2,827 none counties.¹³

Our independent variable is total Medicaid stimulus transfers to the state. In an ordinary least square framework, FDI may correlate with the regression error term through the potential effect of contemporaneous state economic conditions on location decisions.¹⁴ Following Chodorow-Reich et al. (2012), our instrument is the exogenous component of the FMAP formula, 2007 state Medicaid spending.

Model

We use a two-stage least squares regression to estimate the causal effect of Medicaid stimulus on state FDI inflows during 2009-2011, Y_s . Our sample ends in 2011 to allow for potential lags between the end of stimulus (September 2010) and announcement of foreign investment. In the first stage, we regress Medicaid stimulus on our 2007 Medicaid spending instrument Z_s . In the second stage, we regress state FDI inflows on instrumented Medicaid stimulus, \hat{S}_s . The coefficient of interest is β , which captures the causal effect of Medicaid stimulus on FDI. A β that is positive and significant would be consistent with stimulus attracting new FDI.

First stage:

$$1(a) \hat{S}_s = \gamma + \lambda \mathbf{Z}_s + \zeta \mathbf{X}_s + \delta v_s + \psi_s,$$

Second stage:

$$1(b) Y_s = \alpha + \beta \hat{S}_s + \eta \mathbf{X}_s + \kappa v_s + \epsilon_s,$$

We include a vector of controls, X_s , for state characteristics that may have influenced a state's propensity to receive FDI independent of stimulus. Given FDI's tendency to geographic agglomeration, we control for stock of state FDI with the sum of announced projects during 2003-2008. We account for multiple state labor market characteristics including union membership in 2007, lagged employment growth (from May to December 2008), 2008 state unemployment rate, and 2008 manufacturing share of state employment. We

¹³Some none counties received FDI during 2003-2008. Our results do not change when we omit those counties.

¹⁴The FMAP formula relies on three endogenous factors that correlate with states' contemporaneous economic conditions: change in the number of Medicaid claimants, change in average spending per beneficiary, and change in a state's unemployment rate.

also control for 2008 state gross domestic product (GDP) per worker capita and adult population, which may correlate with levels of Medicaid stimulus received. John Kerry’s 2004 presidential vote share controls for a state’s political and regulatory investment climate. Finally, we use region-fixed effects, v_s , for nine census divisions to account for unobserved differences that may influence FDI location decisions.

Results

[Table 1](#) presents our first-stage estimates. Model 1 reveals a significant and positive bivariate correlation between the instrument and Medicaid stimulus. The estimated coefficient of the instrument in Model 2 with full covariates is 0.15 and is statistically significant at the 95% confidence level, which reflects the importance of pre-recession Medicaid transfers in determining stimulus payments to states. With F-statistics well above 10, we can reject the null hypothesis that our instrument is weak.

[Table 2](#) presents our second stage results. The dependent variable in Model 1 is total state FDI inflows during 2009-2011. Model 1 shows that Medicaid stimulus had a positive and significant effect on FDI. Models 2 and 3 restrict the sample to FDI in new and old counties, respectively. This positive effect is driven exclusively by new counties. The coefficient estimate in Model 2 shows that, on average and accounting for other relevant factors, each additional \$1 million in Medicaid stimulus corresponds to \$300,000 in FDI in new counties. We find no effect for old counties (Model 3).

Given our cross-sectional model, we cannot control for time-invariant state characteristics. High Medicaid spending states may be systematically different in their propensity to receive FDI. We address this possibility by estimating a model of change in FDI in new counties between 2006-2008 and 2009-2011 (Model 4). The effect of Medicaid stimulus remains positive and significant. Results are not sensitive to changing the sample period to 2009-2010 ([Table A3](#)). Additionally, we regress FDI inflows during 2006-2008 on post-recession Medicaid stimulus. Our null result indicates that pre-recession FDI did not correlate with the Medicaid stimulus ([Table A4](#)).

Incentives Drive FDI Growth

Next, we evaluate the role of incentives in driving state FDI inflows during 2009-2011. Incentives data are from Good Jobs First, a non-governmental watchdog group. Their Subsidy Tracker reports data collected

from media and direct government inquiries, among other sources, including incentive type, cost, and source. These data are the most comprehensive accounting of incentives in the U.S. We note some shortcomings. Consistent with the widely criticized lack of transparency surrounding incentives, the sample may be biased towards large incentives, which receive more media coverage. Jurisdictions vary in the methodologies used to calculate incentives' reported value. One possible implication is that real incentives are underreported because they tend to be smaller. We have no reason to believe that this measurement error is correlated with other variables of interest.

First, we use our instrumental variable framework to estimate the causal effect of Medicaid stimulus on state government incentive spending during 2009-2011 as our second stage outcome. We also disaggregate incentives into real and tax incentives based on Subsidy Tracker descriptions.¹⁵ An observable implication of our empirical strategy is that real incentive spending grew because states had a limited time frame to spend Medicaid stimulus. Although [Figure 2](#) indicates high growth of tax incentives, their use should not directly correlate with stimulus. Given our cross-sectional analysis, we cannot control for time-invariant state characteristics including the legal capacity to offer certain types of incentives. We proceed on the plausible assumption that this capacity does not correlate with 2007 state Medicaid spending.

[Table 3](#) summarizes our results. The positive and significant coefficient estimate in Model 1 implies that, on average, an additional \$1 million in Medicaid stimulus corresponds to \$170,000 more in real incentives. We also estimate the effect on change in incentive spending between 2006-2008 and 2009-2011, which addresses the possibility that high Medicaid spending states are systematically different in their incentive spending. The coefficient on Medicaid stimulus remains positive and significant for real incentives (Model 2).¹⁶ We find no effect of stimulus on tax incentives (Model 3) or change in tax incentives (Model 4).

We next focus on two type of real incentives that address costly information asymmetries: cash incentives - grants and training costs - and land incentives include firm-specific infrastructure spending and improvements

¹⁵Real incentives: training and cost reimbursement, grants, loans, enterprise zone funds, bond financing, and infrastructure assistance. Tax incentives: property tax abatement, tax credits and rebates, and tax increment financing. Some incentives, such as opportunity zones, combine tax and real incentives.

¹⁶[Table A5](#) presents the results for the sum of state and local government incentives.

to industrial land and buildings.¹⁷ We find positive and significant effects of both incentive types (Table A6), lending further support to our theory that these subsidies may help foreign firms overcome information asymmetries. Additionally, we regress FDI in old and new counties on investment incentives to demonstrate the positive correlation between FDI in new counties and real incentives (Table A7).

Appendix B reports additional evidence that supports our findings. Content analysis of local newspapers confirms that the FDI projects in our sample received state investment incentives. We also estimate our baseline model with new domestic manufacturing investment, which suffers less from information asymmetries, in place of FDI to show no analogous pattern for domestic firms (Table A8).

County-Level Empirical Analysis

In this section, we analyze correlates of new county status. Our empirical setting of a temporary expansion holds constant many standard drivers of firms' location decisions including infrastructure, labor force, and regulatory climate, which are relatively fixed during the narrow stimulus spending window. Firms' decision calculus cannot be directly observed but anecdotes suggest that real incentives were important during this period. For example, Mobile County, Alabama lost pipe manufacturers Lakeside Steel (Canada) or Golden Dragon (China) to neighboring counties. Despite boasting multiple foreign plants that would offer potential agglomeration externalities, the county was unable to match cash and land grants offered by the other counties (Amy, 2010).

We estimate a multinomial logit regression of county FDI status with state fixed effects.¹⁸ Counties are classified as new, old, or none corresponding to if and when they received FDI during 2003-2011.¹⁹ Our sample includes 217 new counties and 47 old counties.²⁰ The baseline category is none counties. Relative to

¹⁷Land incentives are sometimes bundled with tax incentives in the context of opportunity zones. The majority of state opportunity zone incentives during our sample period were for land redevelopment.

¹⁸See Appendix C for details on model specification. Table A11 provides summary statistics and data sources.

¹⁹The unconditional probabilities that a county is new, old, and none are 7%, 2%, and 91%, respectively.

²⁰We omit counties that include state capitals. Stimulus data incorrectly indicate these counties as final recipient of stimulus funds intended for further distribution by state governments.

old counties, new counties had lower educational attainment and less racial diversity, and were more rural and politically conservative.²¹ County FDI data begin in 2003 so we verify our county classification using 1991-2002 local foreign firm employment data.²² The average of annual median employment in foreign-owned manufacturing plants during 1991-2002 is consistent with our classification.²³

Our main variable of interest is the sum of state spending on incentives in the county during 2009-2011 (inflation-adjusted millions of US dollars). We also control for federal education stimulus received by a county, which could have indirectly funded local government incentives. Recall that Recovery Act education stimulus first went to state governments who further distributed the funds according to existing educational funding formulas. We cannot rule out the possibility that formulas correlate with a county's propensity to receive FDI or state-funded investment incentives. We capture geographic variation in governors' motives to fund incentives using county vote margins in the prior gubernatorial election. Governors should be more likely to offer incentives in narrow vote margin countries, defined as a less than ten percentage point difference in the two-party vote share. Additionally, we account for overall political context by controlling for the partisanship of the county's US Congressional representative and John McCain's 2008 presidential vote share, reasonable proxies for local partisanship (Gerber & Huber, 2010). Controls for other county-level traits that may affect foreign firms' location decisions: unemployment rate, working-age population, lagged FDI, lagged domestic investment, and lagged foreign mergers and acquisitions. The latter two variables capture unobserved county characteristics that influence the overall environment for new business. We also control for patents issued in a county, an observable and time-varying proxy for innovation, which may attract FDI. Although our cross-sectional research design precludes controls for time-invariant county characteristics, the short-lived geographic expansion of FDI makes our focus on time-varying county characteristics salient to foreign firms.

Figure 3 illustrates the average marginal effect of each predictor in our county-level model. Real incentives

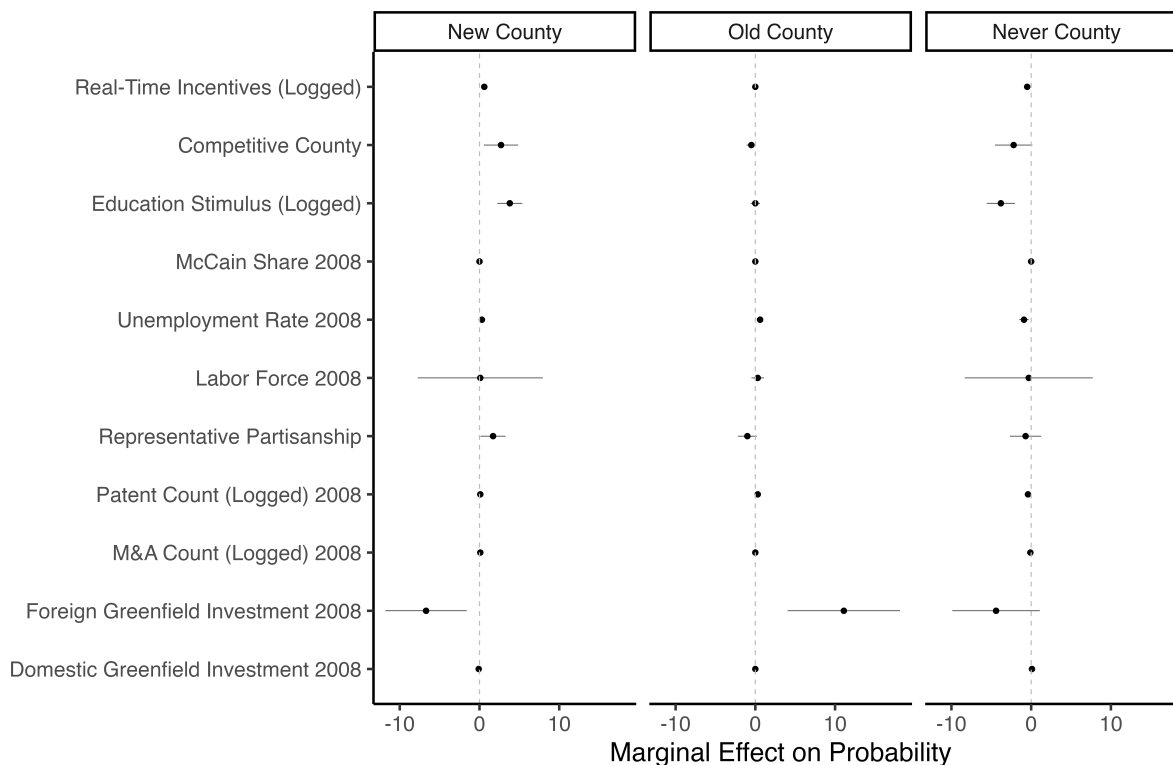
²¹See Appendix A, Table A9 and Table A10.

²²Data are for US census-designated metropolitan areas. Source: Brookings Institution FDI in US Metro Areas database (Saha et al., 2014).

²³Old counties = 105,472, new counties = 45,542, and none counties = 12,126. Patterns are similar if we restrict the sample to just 2002 or to plants that were not foreign acquisitions, or if we weight employment by 1990 county population.

correlate with new county status only. An additional \$22,000 in real incentives raises the average probability of new county status by two percentage points. Consistent with our state-level findings, real incentives that address informational asymmetries drive this correlation (Table A12) and tax incentives do not correlate with county status (Table A13).

Figure 3: The Marginal Effect of Economic and Political Predictors On the County Categorization Probabilities



Marginal effect of covariates on the probability of none, old, or new county status with respect to FDI during 2009-2011. Horizontal lines indicate 95% confidence intervals. Coefficients are reported in Table A12.

We find that counties with a narrow vote margin in the prior gubernatorial election had a three-percentage point higher average probability of new county status.²⁴ Vote margin does not correlate with none or old county status. This finding is consistent with politicians' electoral motives to channel investment to gain approval from swing voters. Given that our model already includes real incentives, this variable likely captures politicians' broader unobserved efforts to attract investment.

²⁴The predicted probability of being a new county increases from 6% to 9% as the vote margin narrows. This difference is statistically significant at the 95% confidence level.

One implication of our theoretical framework is that political effort to influence firms' location decisions is conditional on counties' underlying capacity to support investment. During our sample period, many foreign firms cited the importance of "shovel-ready" conditions that would allow them to establish production quickly. We capture these conditions with a proxy for idle industrial capacity, the sum of county workers affected by extended mass layoffs during 2000-2006.²⁵ These events often coincide with plant closures, indicating idle capacity such as factories and machinery as well as specialized labor. We add this proxy to our baseline specification. [Figure 4](#) illustrates our findings.²⁶ Mass layoffs increase the probability of new county status only in competitive counties. One interpretation of this finding is that incentives support adapting idle capacity to meet foreign firms' needs.

An additional implication of our framework is that governors seeking re-election have stronger motives to claim credit from swing voters for new investment. Term limits create a partially exogenous source of variation in governors' motives.²⁷ [Figure A9](#) visualizes the interaction between governors seeking re-election and county vote margin, and the predicted probability of county status. In states whose governors subsequently ran for re-election, narrow vote margin counties had a three percentage point higher probability of being a new FDI recipient relative to states whose incumbent governors did not seek re-election. Within states with governors seeking re-election, competitive counties were 5.5 percentage points more likely to be new as compared to non-competitive counties.

Alternative Mechanisms

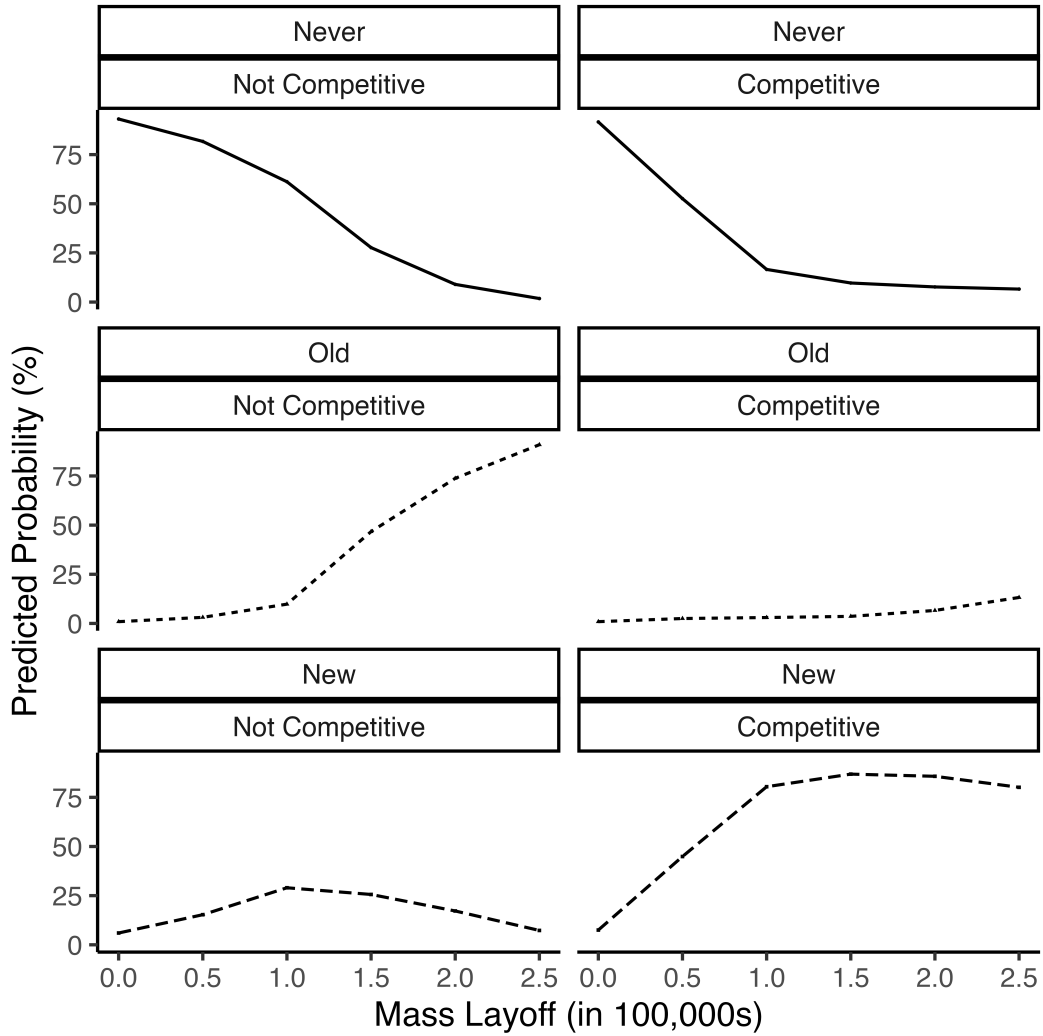
A plausible alternative mechanism for FDI expansion is that local governments in new counties offered real incentives that attracted investment. Typically, local governments have little to offer investors beyond property tax incentives. In our setting, however, local governments were the ultimate recipient of most

²⁵The US Department of Labor defines extended mass layoffs as layoffs by a single employer lasting more than 31 days and that produce more than 50 unemployment claims.

²⁶Full results in [Table A14](#).

²⁷Not all states have term limits. The presence of term limits may correlate with other factors relevant to firms' location decisions. Additional reasons for not seeking re-election such as retirement or pursuit of higher office may also correlate with FDI-relevant county factors.

Figure 4: Mass Layoffs Increase the Probability of New County Categorization in Competitive Elections



This figure plots the predicted probability of being categorized as a none, old, and new county depending on mass layoffs and competitiveness of prior gubernatorial election.

Recovery Act education stimulus. [Figure 3](#) illustrates a positive correlation between education stimulus and new county status. Local governments may have spent this stimulus in ways that subsidized new investment. Alternately, stimulus may have freed up other local funds to use for incentives.

Two tests help to verify that local government incentives do not drive new county status. We analyze the subset of education stimulus designated for K-12 students with disabilities, which the Recovery Act required states to distribute according to the pre-recession share of county students eligible for federal disability benefits under the 1990 Individuals with Disabilities Education Act. Proceeding on the identifying assumption that county share of these students is otherwise uncorrelated with the propensity to be a new country, we estimate a two-stage least squares regression using the pre-recession share of benefits-eligible students as our instrument. We find no evidence consistent with local governments diverting this stimulus into investment subsidies and the correlation of state-sponsored real incentives remain significant.²⁸ A separate analysis finds that education stimulus spent for community colleges, which often coordinate job training programs, does not correlate with new county status ([Table A18](#)).

We address multiple alternative mechanisms through which stimulus expenditures could have made counties more attractive for FDI.²⁹ Infrastructure quality is a high priority in manufacturing firms' location decisions. Though most stimulus-funded infrastructure projects were not yet operational during the sample period (US Government Accountability Office, 2011), firms may have invested in anticipation of improved infrastructure. We evaluate this mechanism within our county-level empirical framework by controlling for three types of infrastructure stimulus relevant to FDI: highway and bridge improvements; renewable energy; and job training and broadband Internet. For each type, we control for logged stimulus spent in the county during 2009-2011. Our baseline findings remain unchanged ([Table A19](#)). Renewable energy FDI grew during the sample, the most notable shift in FDI's industrial composition. Our results are unchanged if we exclude renewable energy FDI projects ([Table A20](#)).

Finally, we address other mechanisms through which the Great Recession may have contributed to FDI's geographic expansion. Using our county-level framework, we show that foreign firms did not strategically

²⁸Appendix D.1 explains this analysis in detail. [Table A16](#) and [Table A17](#) present first and second stage regressions results, respectively.

²⁹Appendix D.2 provides further details about these analyses.

invest in key congressional districts to head off trade restrictions (Table A21), and that corporate inversions, the nominal movement of American companies' headquarters overseas for tax avoidance, did not produce the illusion of new FDI (Table A22).³⁰ The statistical significance of real incentives changes only modestly if we control for county GDP in 2008 (Table A23). The federal government did not increase FDI promotion during the sample period and generally has limited capacity to directly offer incentives.³¹ The US offers immigration visas in exchange for investment in economically distressed areas, but these investments are not considered FDI.

Conclusion

Investment incentives are a controversial policy tool because they redistribute public resources to private firms despite mixed evidence on tangible economic benefits. We leverage unique circumstances of the Great Recession and 2009 Recovery Act stimulus to shed new light on these controversies. Highlighting the distinction between tax and real incentives, and the latter's potential to resolve information asymmetries, we find that stimulus corresponded to more FDI, much of which went to counties that with little history of FDI. Our findings are consistent with states using stimulus to increase real incentive spending. New FDI recipient counties were more likely to have idle industrial capacity and a narrow vote margin in the prior gubernatorial election, suggesting governors' electoral motives to offer incentives in counties with higher electoral rewards for attracting new FDI.

Future research can build on these findings by further unpacking how information asymmetries influence firms' location decisions. Some types of asymmetries may be more costly and circumstances can create new asymmetries. Policymakers could use these insights to deploy incentives more efficiently. Our findings also introduce a new dimension to the long standing puzzle of why politicians offer incentives. We confirm the conventional wisdom that tax incentives are ineffective and show that real incentives can, under certain circumstances, help to attract investment in a relatively cost effective manner. Future research might compare

³⁰See Appendix D.3.

³¹Francisco Sanchez, "Testimony on Foreign Direct Investment and SelectUSA." Testimony before the House Energy and Commerce Subcommittee on Commerce, Manufacturing, and Trade (April 18, 2013).

the electoral return to offering large yet ineffective tax incentives versus modest real incentives that actually yield investment.

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Table 1: First Stage Regression Results

	Medicaid Stimulus (1)	Medicaid Stimulus (2)
2007 Medicaid Spending	0.19*** (0.01)	0.16*** (0.00)
2004 John Kerry Vote Share		0.96 (1.97)
2007 Unionization Share		11.12* (5.86)
GDP Per Capita		0.00 (0.00)
Manufacturing Employment		-4.53 (9.71)
Working Age Population		73.06*** (25.21)
2003-2008 Greenfield FDI		-0.03 (0.03)
Employment Growth		-0.00 (0.00)
Unemployment Rate		-23.72 (21.58)
Observations	51	51
Region-fixed Effects	no	yes
F-Statistic	377.85	1,105.91

The dependent variable is post-recession Medicaid stimulus. Unless otherwise states, variables are from 2008. Robust standard errors are in parentheses. * p<0.10, ** p<0.05, *** p<0.010

Table 2: Two-Stage Least Squares Regression of Greenfield FDI on Medicaid Stimulus

	FDI (1)	FDI in New Counties (2)	FDI in Old Counties (3)	Δ FDI in New Counties (4)
Medicaid Stimulus	0.17** (0.08)	0.30*** (0.07)	-0.06 (0.06)	0.29*** (0.07)
2004 John Kerry Vote Share	0.38 (5.24)	2.16 (4.96)	0.03 (2.04)	-0.44 (5.41)
2007 Unionization Share	-34.84** (14.57)	-24.59* (14.19)	-16.19 (9.99)	-15.20 (13.71)
GDP Per Capita	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)
Manufacturing Employment	26.04 (17.73)	32.39** (14.97)	-3.94 (7.09)	42.45** (18.31)
Working Age Population	-62.72 (59.55)	-171.15*** (46.96)	53.14 (43.33)	-198.23*** (50.02)
2003-2008 Greenfield FDI	0.17** (0.07)	0.02*** (0.00)	-0.00 (0.01)	0.02*** (0.00)
Employment Growth	-0.00 (0.00)	-0.01*** (0.00)	0.00 (0.00)	-0.01*** (0.00)
Unemployment Rate	21.86 (45.87)	10.08 (38.00)	0.98 (20.27)	-51.55 (55.61)
Observations	51	51	51	51
Region-Fixed Effects	yes	yes	yes	yes

The dependent variable is post-recession FDI. The independent variable is post-recession Medicaid stimulus. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table 3: Two-Stage Least Squares Regression Of Investment Incentives on Medicaid Stimulus

	State-Sponsored Real Incentives (1)	Δ State-Sponsored Real Incentives (2)	State-Sponsored Tax Incentives (3)	Δ State-Sponsored Tax Incentives (4)
Medicaid Stimulus	0.17*** (0.03)	0.13** (0.05)	-0.02 (0.22)	-0.08 (0.21)
2004 John Kerry Vote Share	0.56 (1.90)	-2.97** (1.33)	-5.73 (16.05)	-5.09 (15.55)
2007 Unionization Share	-2.64 (3.76)	2.75 (3.72)	47.07 (66.64)	45.09 (66.57)
GDP Per Capita	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.01)	-0.00 (0.01)
Manufacturing Employment	5.19 (4.38)	3.67 (5.05)	-17.81 (58.36)	-26.11 (55.59)
Working Age Population	-36.05*** (8.57)	-21.21* (11.32)	-86.67 (104.56)	-67.01 (96.43)
State Incentives Spending	0.32*** (0.03)	-0.16*** (0.05)	0.22** (0.11)	-0.24** (0.10)
Employment Growth	0.00* (0.00)	0.00** (0.00)	-0.01 (0.00)	-0.00 (0.00)
Unemployment Rate	1.09 (13.05)	16.06 (10.18)	263.83 (170.33)	280.51* (169.72)
Observations	51	51	51	51
Region-Fixed Effects	yes	yes	yes	yes

The dependent variable is post-recession state sponsored incentives. The independent variable is post-recession Medicaid stimulus. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

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A COMPARING NEW AND OLD COUNTIES

In this section, we compare and contrast US counties that were first-time FDI recipients during 2009-2011 (“new”) with counties that received FDI during 2003-2008 and 2009-2011 (“old”) and counties that did not receive FDI during 2009-2011 (“none”).³²

With respect to demographics, new counties had higher Republican vote shares in the 2008 US presidential election, less racial diversity, lower educational attainment and household incomes, smaller populations, and were less urban as compared to old counties (Table A9 and Table A10).

With respect to investment composition, new counties received more investments in metals and renewable energy. New counties garnered 41 investments in metals and 11 investments in renewable energy. Older counties secured only 8 investments in metals and 1 renewable energy project (Figure A6). FDI source country composition of FDI was similar in new and old counties (Figure A7). Projects in new counties created fewer jobs on average. Average project value was similar though with greater variance in old counties (Table A1).

Most new counties received one plant during 2009-2011 whereas old counties were more likely to receive multiple plants. 278 firms invested in new counties and 118 firms in old counties. Most foreign firms made a single US investment. 16 firms invested in both new and old counties. The top five states for per capita incentives were Louisiana (\$1,500), Michigan (\$1,100), Kentucky (\$351), Connecticut (\$322), and Oklahoma (\$225).³³

B TEXT ANALYSIS OF LOCAL NEWS COVERAGE OF INVESTMENT INCENTIVES AND DOMESTIC INVESTMENT PLACEBO TEST

Local news is the primary source through which voters learn about new investment (Slattery, 2022). For each investment project in our data, we searched local newspapers in the location of the plant for a two-month window following the project announcement. Approximately 75% of those projects received incentives, which ranged between between \$120,000 and \$150 million with an average of \$17 million. Although these estimates

³²2003 is the first year for which county-level FDI are available.

³³Data source: Good Jobs First Subsidy Tracker (Mattera & Tarczynska, 2019).

include both tax and real-incentives, they directly link incentives to the projects in our sample.

We wrote a web crawler to scrape NewsBank, a database that provides full-text of many local newspaper articles.³⁴ First, we created a list of all 425 foreign firms that made new greenfield investments in manufacturing during January 2009-December 2011. We removed common words/terms such as “Inc”, “Ltd” and “Co” to broaden the search results. If the company name became a widely used word we added either the source country or the industry next to it.³⁵ The Python code for the crawler took the company name, investment receiving state and date investment announced as inputs and searched NewsBank for all local news about the company. We searched for any newspaper article written in the two-month range after the investment was announced.³⁶ For example, to find related news on Fujifilm’s investment announcement in South Carolina on July 2009, we searched for “Fujifilm” with the search refined by source location “South Carolina” in July and August 2009. We saved all articles returned by the search engine about a company as one PDF.

After we completed searches for 425 companies, we compiled a corpus combining all company-related articles. To filter articles that mentioned incentives, we did a keyword search with the following keywords: **tax credit, grant, incent*, tax abate, inducement, stimulus fund, job training, subsidi*, relocation, expense, reimbursement, fund, rebate, tax refund, assistance** We created this list of keywords from how other incentives databases characterize company incentives and all the newspaper articles we read about them. We extracted sentences (sometimes paragraphs) that contained one or more of these keywords. We located articles for 264/425 investing companies in our sample. 48/264 companies had no articles that mentioned incentives.

These articles reveal that the role of state and county incentives in attracting foreign companies right after the Great Recession. Excerpts:

“Blade Dynamics, a British designer and manufacturer of wind turbine blades, announced in August it was moving to Michoud, bringing 600 jobs over the next decade in exchange for a \$30 million state incentive

³⁴[NewsBank](#)

³⁵For example, on June 6, 2011, Santana, a textile company, announced a new plant opening in Hidalgo County, Texas. To eliminate irrelevant search results, we added “Textiles” next to the company name while we conducted our search.

³⁶Most local newspaper coverage of new projects was within two month of the initial announcement.

package.” - New Orleans City Business, New Orleans LA

“On the Jan. 27 editorial that said Shelby County commissioners’ frustration over \$22 million in county funds that’s included in the Electrolux incentives package is understandable, but it’s sometimes necessary to commit public money to attract job-creating businesses. We’ll never know what it takes to get companies to come to Memphis if all we plan to do is to buy their love.” The Commercial Appeal, Memphis TN

“Jobs, but at what cost? Three hundred new jobs in the San Fernando Valley are surely a plus, but let’s not overlook what it costs the taxpayers. It is a reasonable assumption that \$37,440 in tax breaks per employee approximates the average payroll cost per employee, management included. Add to this a reasonable estimate of \$500,000 in equipment tax breaks and we have a total of roughly 12 million dollars that Mission will not have to pay, meaning that the taxpayer has just taken the hit for about 10 years of Mission’s payroll for the new plant. What company wouldn’t take that?” Daily News of Los Angeles, CA

“The state already has a no-bid contract with Talgo, a Spanish train manufacturer, to build two 14-car trains for the Hiawatha, using \$43.1 million in state funds, down from \$47.6 million because of a joint purchasing deal with Oregon. State officials are in talks with the Federal Railroad Administration on the purchasing rules that must be followed in spending stimulus money on passenger cars and locomotives, Klein said.” The Freeman, Milwaukee, WI

“Unitex USA is the company that county officials have been calling by the code name “Project Forest” as they have negotiated an incentives package for it.” Anderson Independent-Mail, Anderson, SC

“Zultek credited the Gibson County Economic Development Corp. for helping the company make the decision to locate in Gibson County. Windsor Machine will receive personal property tax phase-in incentives granted by the Gibson County Council.” The Herald, Jasper, IN

“We are grateful to our state funding partners and the entire management team of the local ABB operation that worked tirelessly for months on our behalf to win this project and help secure the continued growth of ABB” Danville Register & Bee, Danville, VA

“Determining who or what was responsible for bringing these jobs to our state can sometimes be an exercise in eeny-meeny-miny-moe. Did Gov. Nikki Haley’s phone calls bring them to South Carolina? Was it a presentation by the state Commerce Department and agency head Bobby Hitt? Was it the tens of millions of

dollars in incentives offered by the state? ... As soon as the Continental announcement was made public, all sorts of S.C. officials commenced patting each other on the back... In North Carolina, the reverse is occurring, as politicians and officials fall over themselves to issue blame for losing Continental, which had considered locating in Brunswick County. Ultimately, however, what matters to most Carolinians – at least for those who aren't in or seeking elected office – is not so much who should get the credit, but simply that jobs are coming.” Sun News, Myrtle Beach, SC

We conduct a placebo test by replacing foreign investment with domestic investment. On average, domestic firms do not suffer from the same degree of information asymmetry as do foreign firms. Domestic investment data are from *fDi Markets*. These data begin in 2007, which almost certainly causes us to overestimate the number of new counties. Nonetheless domestic investment did not exhibit geographic expansion ([Figure A8](#)). [Table A8](#) summarizes our estimates. Model 1 is the second stage of our 2SLS estimation. Models 2 and 3 are ordinary least squares regressions of domestic investment on real and tax incentives, respectively. We find no correlation between incentives and domestic investment.

C COUNTY-LEVEL REGRESSIONS

Our county-level regressions examine the correlation between state-funded real incentives and new county FDI status. We filter the Good Jobs First Subsidy Tracker data to include only state-sponsored incentive projects to calculate the total value of real subsidies by county during 2009-2011. We exclude 10 states and the District of Columbia from our analysis due to missing county indicators.³⁷ We take the log of county incentives (in \$ millions) as our final measure.³⁸

We derive data for our education stimulus measure by searching the [Recovery Act Recipient Reports Database](#) for stimulus awarded by the US Department of Education during 2009-2011. We restricted our research to “subprime” funds that are distributed by state departments to local governments.³⁹ The US Department of Education distributed funds to state governments and tasked them with distributing funds to local education agencies in a manner consistent with the state’s existing education funding formula. We adjusted award amounts for inflation using 2010 dollars. We then aggregated award amounts at the county level by using the county geocodes provided in the database.

We include a county’s unemployment rate as a control to account for excess labor available for production. To the extent that the recession freed up large pools of labor, post-recession greenfield investment may locate accordingly. These data are from the US Bureau of Labor Statistics database. Using the same data, we also control for the labor force in the county. We use lagged greenfield projects to control for FDI agglomeration effects. Our measure includes both new investments and expansions to old investments in order to account for big investment projects that expanded in our sample period. We follow other municipal-level political

³⁷Alaska, Arkansas, Idaho, Massachusetts, Minnesota, North Dakota, New Hampshire, Rhode Island, and Wyoming.

³⁸We add a small number before we take the log to deal with zeros.

³⁹There are three types of recipients for federal awards: prime, subprime, vendors. Recipients are categorized as prime if they receive funds from the awarding agency directly. Prime recipients can be companies, state, county, and city agencies. Recipients are categorized as subprime if they receive funds from the awarding agency indirectly through a middleman (mostly state offices). Vendors are companies that receive the funds to execute the task. We exclude vendors from our analyses.

economy studies of economic activity in measuring local partisanship with county-level presidential vote shares (Gerber & Huber, 2010). Levendusky et al. (2008) show that presidential vote share is a reasonably consistent proxy for partisanship. Tausanovitch and Warshaw (2014) show municipal government policies reflect partisan preferences of constituents. We use county-level Republican presidential vote share in the 2008 election, drawn from Dave Leip's Atlas of US Elections.

Data for domestic greenfield come from fDi Markets; data for M&A come from Thomson Reuters' SDC Platinum database. We also add the number of patents as a control. To the extent that foreign firms are drawn to locations with greater technological innovation, patents are an observable and time varying metric of innovation at the county level. Patent data are from US Patent and Trademark Office.⁴⁰

We compose our measure of excess capacity using the Bureau of Labor Statistics' Mass Layoff statistics. We use the number of initial claimants (in thousands) for unemployment insurance associated with extended mass layoffs at the county level between 2001 and 2006. This measure proxies for excess capacity that a county has to entice new manufacturing investors with idle factories and machinery. We interact this measure with county vote margin to see if politicians can direct location-based incentives to get firms to invest in swing counties conditional on excess capacity.

We further investigate whether governors have political motives to target stimulus funds by exploiting governor term limits. We argue that such targeting should be the most relevant for governors who are facing elections in the near future. We use exogenous variation created by term limits for governors by each state to further examine whether political ambitions are driving the results in our paper. We collect information on governors' term limits from ballotpedia.org. We only consider immediate term limits since they are a better proxy for immediate election concerns. We coded governors that couldn't run due to term limits and governors who chose to not run for other reasons as 0.⁴¹ We coded governors who ran in the subsequent election as 1. Out of 49 governors who were in office in 2009, 29% (14) ran in the subsequent election, whereas 71% (35) did not. We then re-ran our multinomial logit model, including an interaction term between our eligibility measure and competitiveness.

⁴⁰https://www.uspto.gov/web/offices/ac/ido/oeip/taf/countyall/usa_county_gd.htm

⁴¹These reasons included: retirement, impeachment, or bid for the presidential election.

C.1 Multinomial Logit Model

We model the log-odds of a county to be classified as the last two categories by the following equations;

$$\ln \left(\frac{P(\text{county=new})}{P(\text{county=none})} \right) = \mu_{10} + \mu_{11}S_c + \mu_{12}\mathbf{V}_c + \mu_{13}s_c,$$

$$\ln \left(\frac{P(\text{county=old})}{P(\text{county=none})} \right) = \mu_{20} + \mu_{21}S_c + \mu_{22}\mathbf{V}_c + \mu_{23}s_c,$$

where $\ln \left(\frac{P(\text{county=new})}{P(\text{county=none})} \right)$ is the log-odds of a new county, $\ln \left(\frac{P(\text{county=old})}{P(\text{county=none})} \right)$ is the log-odds of an old county, S_c is received stimulus by county c , V_c is a vector of county-level controls and s_c is state-fixed effects. Our reference category is none counties - counties that have not received any investment in our sample period. We expect receiving more real incentives to differentiate new counties from none counties as sudden influx of cash would allow these counties to attract more FDI.

D ALTERNATIVE EXPLANATIONS

D.1 Education Stimulus-Funded Incentives

We argue that the growth of FDI following the Great Recession reflects, in part, governors' allocation of investment incentives. Local governments, such as county and cities, also offer funds to foreign firms to locate in their region. To rule out the possibility that FDI's geographic expansion is due to local government subsidies, we look at the effect of education stimulus on FDI at the county level. We employ an instrumental variable approach to calculate the local average treatment effect. Our focus is a subset of federal education stimulus designated for K-12 students with eligible for federal disability benefits. The Recovery Act stipulated that these funds be distributed to counties in proportion to the number of students eligible for federal disability benefits just prior to the recession. We construct our instrument by using the number of eligible students in a county's education system in 2006 and scaling it by a county's 2006 population.⁴² We argue that this is a valid instrument since the number of benefits-eligible students is exogenous and it influences county-level FDI only through its effect on the education stimulus.

Table A16 shows that disabled students as a share of county school-age population is significantly and positively correlated with the amount of education stimulus counties received per working population.

⁴²Data are from [Urban Institute & Brookings Institution Tax Policy Center](#)

Table A17 demonstrates that there is no significant relationship between a county’s education stimulus and greenfield FDI received after the Great Recession. We interpret these results as suggestive, as the F-statistics for the instrumental variable regression are just above the traditional threshold. We also assume that the 2006 share of disabled students in a county influences FDI after the Great Recession only through affecting the distribution of the education stimulus.

D.2 Different Types of Stimulus

The ARRA included several different categories of stimulus. Our analysis in the main text focuses of Medicaid and education stimulus, the top largest categories of spending. An alternative explanation could be that other types of stimulus these counties received alongside education and health stimulus may have made them attractive options for foreign firms.

We evaluate three categories of stimulus that may influenced which counties received new investment. First, we look at whether stimulus distributed for highway infrastructure enhancements played a role in attracting FDI. We scrape the [Recovery Act Recipient Reports Database](#) funds awarded by the Department of Transportation. Unlike our education stimulus measure, our transportation stimulus measure includes funds awarded to prime recipients, in this case mostly states’ transportation departments. The majority of these funds are allocated for highway improvement purposes. Even though controlling for transportation stimulus alleviates some omitted variable bias concerns, we can’t rule out that new counties were more likely to have highways in need of repair.⁴³

Second, we construct a measure for energy stimulus to account for FDI attracted to localities due to generous funding available for renewable energy. These funds are distributed under “Title 17 Innovative Technology Direct Loan Financing” and “Energy Efficiency and Renewable Energy” programs. For example, SAFT America, a subsidiary of a French battery company, opened in Jacksonville, Florida after receiving \$95.5 million loan from the US Department of Energy under the “Energy Efficiency and Renewable Energy” program. Thus, we restrict our sample to funds awarded by the Department of Energy under the previously mentioned programs to prime recipients which are mainly solar energy companies and state energy departments.

⁴³Results are the same if we replace total Department of Transportation spending with just highway funds.

Finally, we create a stimulus category called infrastructure stimulus using funds awarded under certain programs. Infrastructure stimulus was given to local governments with the aim of improving their soft infrastructure, such as internet access, job training etc, to make them more competitive in the job market. We construct this measure by looking at funds distributed for job training, broadband, and rural broadband. These funds are distributed by the Department of Labor under “Employment and Training Administration-Training and Employment Services”, Department of Commerce under “Federal Communications Commission-Broadband Technology Opportunities Program”, and Department of Agriculture under “Rural Utilities Service-Distance Learning, Telemedicine, and Broadband Direct Loan.”

Table A19 presents the regression results where we include three stimulus categories as controls. All stimulus amounts are normalized to 2010 dollars. Counties that received more transportation and infrastructure stimulus are more likely to be categorized as new counties. Thus, it is possible that foreign firms considered the anticipated stimulus-funded improvements in infrastructure in their investment location decisions. Importantly, our baseline findings regarding real incentives and county vote margins are unchanged. In contrast to our SAFT America example, we do not observe an increase in the probability of receiving FDI post-recession in renewable energy industry. We re-estimate our county models by excluding renewable energy FDI from our sample in Table A20. Our main results do not change.

D.3 FDI to Preempt Trade Restrictions

The aftermath of economic crises are usually characterized by a return to protectionism. Surprisingly, the US trade policy did not take a protectionist turn following the Great Recession. Instead, Congress passed three free trade agreements (FTA) with substantive majorities lowering tariffs with South Korea, Colombia and Panama on January 12, 2011. ⁴⁴

We explore whether the sudden increase in FDI after the Great Recession may have played a role in the continuation of the liberal policies in the US Congress. Foreign firms often advocate for free trade in host country as their operations rely on imported input and/or exporting output to foreign countries. Foreign

⁴⁴South Korea FTA passed with 278 Yeas and 151 Nays in the House, 83 Yeas and 15 Nays in the Senate. Colombia FTA passed with 262 Yeas and 167 Nays in the House, 66 Yeas and 33 Nays in the Senate.

firms that invest in the US market with the aim for producing and exporting their products (firms engaging in vertical integration) oppose high tariff barriers that would hinder their exports. Similarly, even foreign firms that produce and sell for the US market (firms engaging in horizontal integration) may oppose high tariff barriers if they supply raw and intermediary materials from other countries. Thus, we assume that FDI have a stake in the passing of liberal trade policies. Anticipating a turn to protectionism after the economic crisis, foreign companies may have engaged in quid-pro-quo relations with the policymakers: they may have directed their investments to protectionist politicians to lobby for future trade liberalization.

The observable implication for this theory is that we should see more FDI in places where members of Congress have voted against trade liberalization. Given that the timing of the recession and the influx of FDI coincide, we have to test for this alternative explanation to show that our story holds against this possibility. We operationalize protectionist tendencies of House members by looking at their voting records in the 109th and 110th Congress.⁴⁵ We obtain this data from Cato Institute's free trade ratings of the individual Congress members. Cato relies on data on the trade-related bill voting patterns of each members from the Library of Congress to compute the number of protectionist votes for each Congress session. The institute further breaks down this measure by looking at voting patterns for bills that discuss trade barriers and subsidies. In the 109th Congress, House members voted on 13 bills and amendments concerning trade barriers and 5 bills concerning trade subsidies. In the 110th Congress, House members voted on 8 bills and amendments concerning trade barriers and 6 bills concerning subsidies. We stack all individual members from both congresses and aggregate at the congressional district level to obtain the share of protectionist votes (also broken down by barrier and subsidy-related voting). We merge this data with the number of FDI in the district between 2009 and 2010 and take its log to use as our dependent variable. We also control for the rate of unemployment and the partisanship of the district representative as they might be correlated with both protectionist voting and FDI in the district. We add state fixed-effects to account for the unobservable variation between states in attracting FDI.⁴⁶

⁴⁵109th Congress convened between January 3, 2005 and January 3, 2007. 110th Congress convened between January 3, 2007 and January 3, 2009.

⁴⁶Some districts experience a change in the partisanship of the representative. For example, Arizona 5th district switched hands from the Republican J.D. Hayworth to the Democratic Harry Mitchell in the 2006

Table A21 presents the results. Contrary to our expectations, protectionist voting in a district doesn't predict FDI it receives in 2009 and 2010. We repeat our regression by substituting protectionist subsidy and barrier-related voting in our subsequent models. The results don't change. These results suggest that the trends we see in FDI after the Great Recession is not driven by a strategic interaction between politicians and foreign investors, at least regarding trade voting.

elections. In such cases, we code partisanship as the party of the last representative. In the Arizona 5th district case, we coded the district as Democratic. Excluding these districts from the analysis doesn't change the results.

E TABLES

Table A1: New Manufacturing FDI Value and Jobs Created in Old and New Counties

	Old Counties			New Counties		
	Mean	Median	SD	Mean	Median	SD
Jobs	129.23	99.00	120.38	116.12	70.00	146.61
Value (2010\$ million)	71.42	21.37	231.26	54.71	23.21	103.07

We exclude SASOL, a \$10 billion investment from a South African company as an obvious outlier.

Table A2: Summary Statistics and Data Sources for Select State-Level Regressions

Statistic	Mean	St. Dev.	Min	Max	Data Source
New Manufacturing FDI (mil) 2009-2011	436	505	0	1,835	Fdi Markets
New Manufacturing FDI (mil) New Counties 2009-2011	128	237	0	1,116	Fdi Markets
New Manufacturing FDI (mil) Old Counties 2009-2011	308	409	0	1,703	Fdi Markets
New Manufacturing FDI (mil) 2006-2008	152	278	0	1,419	Fdi Markets
New Manufacturing Domestic Investment (mil) 2009-2011	662	670	0	2,405	Fdi Markets
Real Incentives (mil) 2009-2011	115	272	0	1,874	Good Jobs First Subsidy Tracker
Tax Incentives (mil) 2009-2011	384	1,140	0	6,796	Good Jobs First Subsidy Tracker
Land Incentives (mil) 2009-2011	41	254	0	1,812	Good Jobs First Subsidy Tracker
Cash Incentives (mil) 2009-2011	58	84	0	321	Good Jobs First Subsidy Tracker
State and Local Real Incentives (mil) 2009-2011	118	274	0	1,876	Good Jobs First Subsidy Tracker
State and Local Tax Incentives (mil) 2009-2011	489	1,201	0	6,987	Good Jobs First Subsidy Tracker
Medicaid Stimulus (mil) 2009-2010	1,198	1,572	55	7,776	US Recovery Accountability and Transparency Board (recovery.gov)
Medicare Spending (mil) 2007	6,173	8,048	425	43,564	Centers for Medicaid and Medicare Services
% Kerry Vote Share 2004	47	10	26	89	Dave Leip's Atlas
% Union Share 2007	11	5	3	25	Bureau of Labor Statistics
GDP per 16+ person 2008	49,199	17,196	31,907	154,890	Bureau of Economic Analysis
% Manufacturing Employment 2008	11	4	1	20	American Community Survey
Population 16+ (mil) 2008	5	5	0	28	U.S. Census Bureau
Δ Employment					
May-December 2008	-56,212	75,045	-431,300	1,700	Current Employment Statistics
% Unemployment Rate 2008	5	1	3	8	Bureau of Labor Statistics

Table A3: Two-Stage Least Squares Regression of Greenfield FDI on Medicaid Stimulus 2009-2010

	FDI (1)	FDI in New Counties (2)	FDI in Old Counties (3)
Medicaid Stimulus	0.17** (0.07)	0.23*** (0.04)	-0.04 (0.05)
2004 John Kerry Vote Share	-1.57 (3.29)	0.01 (2.70)	0.67 (1.86)
2007 Unionization Share	-29.77*** (10.68)	-15.13** (5.95)	-16.99* (10.06)
GDP Per Capita	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Manufacturing Employment	8.87 (12.61)	13.32* (7.37)	-3.42 (6.61)
Working Age Population	-57.14 (52.18)	-134.12*** (24.64)	41.88 (31.05)
2003-2008 Greenfield FDI	0.09 (0.06)	0.02*** (0.00)	-0.01 (0.01)
Employment Growth	-0.00 (0.00)	-0.00*** (0.00)	0.00 (0.00)
Unemployment Rate	15.55 (32.48)	-8.39 (19.68)	7.01 (20.33)
Observations	51	51	51
Region-fixed Effects	yes	yes	yes

The dependent variables in Model 1, 2, and 3 are all greenfield FDI, greenfield FDI in new counties, and greenfield FDI in old counties 2009-2010, respectively. 2003-2008 Greenfield FDI is calculated relative to these three groups. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses. * p<0.10, ** p<0.05, *** p<0.010

Table A4: Placebo Test: Two-Stage Least Squares Regression of 2006-2008 Greenfield FDI on Medicaid Stimulus

	FDI (1)	FDI in New Counties (2)	FDI in Old Counties (3)
Medicaid Stimulus	0.02 (0.04)	0.02 (0.03)	-0.01 (0.03)
2004 John Kerry Vote Share	1.19 (2.25)	-0.59 (1.92)	1.48 (1.58)
Unionization Share	-12.45** (5.76)	-2.59 (3.13)	-9.93 (6.37)
GDP Per Capita	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
Manufacturing Employment	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)
Labor Force	21.68 (15.31)	4.87 (11.70)	21.71 (13.33)
2003-2005 Greenfield FDI	0.09* (0.05)	0.00 (0.02)	0.03 (0.03)
Unemployment Rate	9.18 (40.17)	50.98 (39.23)	-41.13 (27.52)
Observations	51	51	51
Region-Fixed Effects	yes	yes	yes

The dependent variable for the placebo test is the 2006-2008 total value of new manufacturing greenfield FDI in Model 1, total value of new manufacturing greenfield FDI in new counties in Model 2, and old counties in Model 3. 2003-2005 Greenfield FDI is calculated respective to these three groups. Unless otherwise stated, variables are from 2005. Unlike previous regressions, GDP and manufacturing employment is scaled by state labor force. We leave out the employment growth variable from the regressions due to data unavailability. Robust standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table A5: Two-Stage Least Squares Regression of Non-Federal Incentives on Medicaid Stimulus

	Real Incentives (1)	Tax Incentives (2)
Medicaid Stimulus	0.12*** (0.03)	0.39* (0.21)
2004 John Kerry Vote Share	0.68 (1.78)	-14.15 (17.62)
2007 Unionization Share	-2.48 (3.52)	42.66 (64.14)
GDP Per Capita	-0.00 (0.00)	-0.00 (0.01)
Manufacturing Employment	5.51 (4.32)	-21.10 (56.84)
Working Age Population	-21.69** (9.30)	-163.38 (102.87)
Prior State Incentive Spending	0.29*** (0.03)	0.05 (0.18)
Employment Growth	0.00* (0.00)	-0.00 (0.00)
Unemployment Rate	3.22 (12.30)	298.89* (179.21)
Observations	51	51
Region-fixed Effects	yes	yes

The dependent variables consist of 2009-2011 real state and local incentives in Model 1, and tax state and local incentives in Model 2. Prior state incentives spending measures respective incentive spending before 2009. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses. * p<0.10, ** p<0.05, *** p<0.010

Table A6: Two-Stage Least Squares Regression of Cash and Land Incentives on Medicaid Stimulus

	Cash Incentives (1)	Land Incentives (2)
Medicaid Stimulus	0.03** (0.01)	0.10** (0.04)
2004 John Kerry Vote Share	0.44 (0.83)	1.58 (1.77)
2007 Unionization Share	-3.23 (2.23)	-4.11** (1.99)
GDP Per Capita	-0.00 (0.00)	-0.00 (0.00)
Manufacturing Employment	3.01 (2.76)	-0.23 (3.20)
Working Age Population	3.49 (5.49)	-25.16** (11.27)
Employment Growth	0.00** (0.00)	-0.00 (0.00)
Unemployment Rate	1.85 (6.65)	-6.14 (8.97)
Prior State Incentive Spending	0.30*** (0.02)	0.38*** (0.04)
Observations	51	51
Region-fixed Effects	yes	yes

The dependent variable in Model 1 comprise 2009-2011 grants and training reimbursements. The dependent variable in Model 2 comprise 2009-2011 enterprise zones and grants. Prior state incentives spending measures respective incentive spending before 2009. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table A7: OLS Regression of State Greenfield FDI on Incentives in New and Old Counties

	FDI in New Counties (1)	FDI in New Counties (2)	FDI in Old Counties (3)	FDI in Old Counties (4)
State Real Incentives Spending	0.52*** (0.16)		-0.09 (0.15)	
State Tax Incentives Spending		-0.03 (0.04)		0.03 (0.02)
2004 John Kerry Vote Share	3.30 (5.79)	0.97 (5.83)	-0.08 (2.47)	0.59 (2.91)
2007 Unionization Share	-20.23 (16.79)	-8.19 (16.68)	-16.78 (14.42)	-19.90 (14.06)
GDP Per Capita	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Manufacturing Employment	30.81* (17.39)	30.43 (19.67)	-3.79 (8.85)	-3.45 (8.47)
Working Age Population	-72.36* (38.32)	-43.97 (44.38)	33.31 (31.52)	29.37 (32.09)
2003-2008 Greenfield FDI	0.01*** (0.00)	0.01** (0.01)	0.00 (0.02)	0.00 (0.01)
Employment Growth	-0.00* (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Unemployment Rate	16.89 (48.13)	35.43 (55.47)	-1.20 (25.45)	-11.85 (28.13)
Observations	51	51	51	51
Region-Fixed Effects	yes	yes	yes	yes

The dependent variable in the first two models measure the 2009-2011 value of new manufacturing greenfield FDI in new counties. The dependent variable in the last two models measure the 2009-2011 value of new manufacturing greenfield FDI in old counties. The independent variables are state real and tax incentives 2009-2011. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses. * p<0.10, ** p<0.05, *** p<0.010

Table A8: Two-Stage and Ordinary Least Squares Regression of Domestic Greenfield Investment on Medicaid Stimulus

	Domestic Investment (2SLS) (1)	Domestic Investment (OLS) (2)	Domestic Investment (OLS) (3)
Medicaid Stimulus	0.09 (0.14)		
State Real Incentives Spending		0.26 (0.34)	
State Tax Incentives Spending			-0.00 (0.10)
2004 John Kerry Vote Share	-3.25 (9.69)	-2.28 (11.54)	-2.02 (11.01)
2007 Unionization Share	-49.56*** (17.76)	-49.52** (22.63)	-44.41** (19.52)
GDP Per Capita	-0.00 (0.00)	-0.00 (0.01)	-0.00 (0.01)
Manufacturing Employment	25.28 (22.17)	25.07 (27.25)	24.98 (26.03)
Working Age Population	14.81 (51.20)	35.35 (26.35)	44.31 (31.04)
2003-2008 Domestic Investment	0.09 (0.07)	0.09 (0.08)	0.11 (0.07)
Employment Growth	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Unemployment Rate	211.80*** (58.39)	209.31*** (69.35)	207.14*** (70.10)
Observations	51	51	51
Region-Fixed Effects	yes	yes	yes

Model 1 is a 2SLS regression that regresses 2009-2011 new domestic manufacturing greenfield investment on post-recession Medicaid stimulus. Model 2 and 3 are OLS regressions that regress 2009-2011 new domestic manufacturing greenfield investment on 2009-2011 state-sponsored real and tax incentives respectively. Unless otherwise states, variables are from 2008. * p<0.10, ** p<0.05, *** p<0.010

Table A9: Summary Statistics of Demographic Variables for None, Old, and New Counties in County-Level Regressions

	None Counties (N=2799)		New Counties (N=217)		Old Counties (N=47)	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
2008 McCain Share	61	12	57	11	52	14
Population	67,746	179,111	221,928	326,429	959,687	1,673,193
% Foreign-Born	4	5	6	6	10	8
% Urban	38	30	63	27	86	17
% White	84	16	79	16	69	15
% College-Educated	5	5	7	4	9	4
Median Income	25,173	4,926	27,938	5,848	28,239	4,334
% Poverty	11	6	11	5	11	4

All demographic variables are from 2010 Census. * p<0.10, ** p<0.05, *** p<0.010

Table A10: Difference in Means T-tests for None, Old, and New Counties in County-Level Regressions

	New-None		New-Old	
	Diff	p-value	Diff	p-value
2008 McCain Share	-0.037	9.314E-6	0.052	0.023
Population	154,182	5.868E-11	-737,759	0.004
% Foreign-Born	0.020	2.882E-6	-0.042	0.002
% Urban	0.243	2.2E-16	-0.229	3.407E-11
% White	-0.053	3.921E-6	0.105	5.076E-5
Median Income	2,764	9.207E-11	-300	0.688
% Poverty	-0.005	0.215	-0.005	0.483
% College-Educated	0.126	1.77E-5	-0.024	0.001

All demographic variables are from 2010 Census. * p<0.10, ** p<0.05, *** p<0.010

Table A11: Summary Statistics and Data Sources for County-Level Regressions

	Mean	St. Dev.	Min	Max	Data Source
Education Stimulus (Logged)	1.58	1.76	-9.21	7.95	Recovery Act Recipient Reports fedspending.org
Transportation Stimulus (Logged)	-1.14	4.66	-9.21	7.30	Recovery Act Recipient Reports fedspending.org
Energy Stimulus (Logged)	-6.68	4.27	-9.21	7.35	Recovery Act Recipient Reports fedspending.org
Infrastructure Stimulus (Logged)	-6.67	4.35	-9.21	4.83	Recovery Act Recipient Reports fedspending.org
Real Incentives (Logged)	-7.35	3.56	-9.21	4.86	Good Jobs First Subsidy Tracker
Cash Incentives (Logged)	-7.62	3.31	-9.21	3.73	Good Jobs First Subsidy Tracker
Land Incentives (Logged)	-9.01	1.36	-9.21	4.86	Good Jobs First Subsidy Tracker
Tax Incentives (Logged)	-7.56	3.76	-9.21	7.43	Good Jobs First Subsidy Tracker
Competitive County	0.26	0.44	0	1	Dave Leip's Atlas
Governor Eligible to Run	0.31	0.46	0	1	Dave Leip's Atlas
Mass Layoffs (in 100,000s) 2000-2006	0.02	0.09	0.00	2.97	Bureau of Labor Statistics
McCain Vote Share 2008	60.46	12.46	12	92	Dave Leip's Atlas
% Unemployment Rate 2008	5.81	2.05	1.30	22.60	Bureau of Labor Statistics
Labor Force (in millions) 2008	0.05	0.15	0.0000	4.93	Bureau of Labor Statistics
Patent Count (Logged) 2008	-2.96	5.54	-9.21	8.88	US Patent and Trademark Office
M&A Count (Logged) 2008	-6.13	4.70	-9.21	6.07	Thomson Reuters SDC Platinum
Domestic Greenfield Investment 2008	-8.76	2.39	-9.21	8.56	Fdi Markets
Foreign Greenfield Investment (Dummy) 2008	0.04	0.20	0	1	Fdi Markets

Table A12: Multinomial Logit Regression of Greenfield FDI on Stimulus and Real Incentives

	Old_Countries (1)	New_Countries (2)	Old_Countries (3)	New_Countries (4)	Old_Countries (5)	New_Countries (6)
Ln(Real Incentives)	-0.01 (0.15)	0.10*** (0.02)				
Ln(Cash Incentives)			-0.15 (0.10)	0.12*** (0.02)		
Ln(Land Incentives)					0.15 (0.13)	0.04*** (0.01)
Ln(Education Stimulus)	0.03 (0.67)	0.67*** (0.12)	0.07 (0.64)	0.66*** (0.12)	-0.01 (0.65)	0.72*** (0.12)
John McCain Vote Share	0.04 (0.07)	0.01 (0.01)	0.05 (0.07)	0.00 (0.01)	0.04 (0.07)	0.01 (0.01)
Unemployment Rate	1.38* (0.71)	0.08** (0.04)	1.35* (0.71)	0.08** (0.04)	1.36* (0.71)	0.09** (0.04)
Labor Force	0.80 (1.15)	0.04 (0.72)	0.61 (1.05)	0.06 (0.71)	0.76 (1.14)	0.02 (0.73)
Representative Partisanship	-1.90 (1.46)	0.22 (0.15)	-2.12 (1.52)	0.23 (0.16)	-1.82 (1.37)	0.20 (0.15)
Ln(Patent Count)	0.82** (0.35)	0.03 (0.02)	0.87** (0.35)	0.03 (0.02)	0.81** (0.36)	0.03* (0.02)
Ln(M&A Count)	0.12 (0.08)	0.02 (0.03)	0.13 (0.09)	0.02 (0.03)	0.12 (0.08)	0.02 (0.03)
Foreign Greenfield Investment	27.87*** (8.90)	-0.70 (0.48)	26.70*** (9.02)	-0.72 (0.47)	27.19*** (8.72)	-0.61 (0.49)
Ln(Domestic Greenfield Investment)	0.08 (0.09)	-0.02 (0.02)	0.09 (0.09)	-0.02 (0.02)	0.09 (0.09)	-0.01 (0.02)
Observations	3059	3059	3059	3059	3059	3059
State-Fixed Effects	yes	yes	yes	yes	yes	yes

Multinomial logit coefficients estimated via maximum likelihood. The outcome is a categorical variable that indicates none, old and new county status. The baseline category is none counties. Model 1 includes all real incentives, Model 2 includes grants and training reimbursements, and Model 3 includes enterprise zones and infrastructure assistance. All models include state-fixed effects. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table A13: Multinomial Logit Regression of Greenfield FDI on Stimulus and Tax Incentives

	Old_Counties	New_Counties
	(1)	(2)
Ln(Tax Incentives)	-0.13 (0.17)	0.06 (0.04)
Ln(Education Stimulus)	0.27 (0.81)	0.69*** (0.12)
John McCain Vote Share	0.04 (0.07)	0.01 (0.01)
Unemployment Rate	1.41* (0.77)	0.09** (0.04)
Labor Force	0.60 (1.36)	0.04 (0.72)
Representative Partisanship	-1.94 (1.23)	0.19 (0.15)
Ln(Patent Count)	0.83** (0.37)	0.03 (0.02)
Ln(M&A Count)	0.14 (0.10)	0.02 (0.03)
Foreign Greenfield Investment	28.85*** (9.43)	-0.64 (0.51)
Ln(Domestic Greenfield Investment)	0.08 (0.09)	-0.01 (0.02)
Observations	3059	3059
State-Fixed Effects	yes	yes

Multinomial logit coefficients estimated via maximum likelihood. The outcome is a categorical variable that indicates none, old and new county status. The baseline category is none counties. The independent variable is tax incentives. The model includes state-fixed effects. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table A14: Multinomial Logit Regression of Greenfield FDI on Competitive Counties and Mass Layoffs

	(1)	(2)	(3)	(4)	(5)	(6)
	Old_County	New_County	Old_County	New_County	Old_County	New_County
Competitive County=1	-1.13 (0.94)	0.43** (0.17)	-1.31 (0.96)	0.42** (0.18)	0.01 (1.09)	0.27 (0.22)
2000-2006 Mass Layoffs			7.02 (9.84)	4.51 (3.11)	23.64***	2.58 (3.02)
Competitive County=1 × 2000-2006 Mass Layoffs					-9.05*	3.66*
Ln(Education Stimulus)	0.14 (0.68)	0.68*** (0.12)	0.27 (0.82)	0.66*** (0.12)	(5.31) (0.96)	(2.12) (0.12)
Ln(Real Incentives)	-0.04 (0.17)	0.10*** (0.02)	-0.06 (0.16)	0.10*** (0.02)	-0.14 (0.16)	0.10*** (0.02)
John McCain Vote Share	0.06 (0.08)	0.00 (0.01)	0.07 (0.09)	0.00 (0.01)	0.07 (0.10)	0.00 (0.01)
Unemployment Rate	1.45* (0.76)	0.08** (0.04)	1.32** (0.67)	0.06 (0.04)	1.47** (0.60)	0.06* (0.03)
Labor Force	0.71 (1.08)	0.02 (0.72)	-2.37 (5.07)	-1.80 (1.38)	-5.32 (3.67)	-1.55 (1.42)
Representative Partisanship	-2.56 (1.74)	0.25* (0.15)	-2.56 (1.80)	0.28* (0.16)	-3.28 (2.12)	0.29* (0.16)
Ln(Patent Count)	0.88** (0.37)	0.03 (0.02)	0.81** (0.38)	0.03* (0.02)	1.08** (0.45)	0.03* (0.02)
Ln(M&A Count)	0.13 (0.08)	0.02 (0.03)	0.14 (0.10)	0.02 (0.03)	0.15 (0.10)	0.02 (0.03)
Foreign Greenfield Investment	28.38*** (9.57)	-0.72 (0.49)	26.14*** (6.78)	-0.70 (0.49)	27.59*** (4.14)	-0.75 (0.53)
Ln(Domestic Greenfield Investment)	0.09 (0.10)	-0.02 (0.02)	0.11 (0.10)	-0.02 (0.02)	0.18 (0.12)	-0.02 (0.02)
Observations	3059	3059	3059	3059	3059	3059
State-Fixed Effects	yes	yes	yes	yes	yes	yes

Multinomial logit coefficients estimated via maximum likelihood. The outcome is a categorical variable that indicates none, old and new county status. The baseline category is none counties. An election is competitive if the difference in two-party vote share is less than 10 percentage points. All models include state fixed effects. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * p<0.10, ** p<0.05, *** p<0.010

Table A15: Multinomial Logit Regression of Greenfield FDI on Competitive Counties and Governor Term Limits

	Old_Counties	New_Counties
	(1)	(2)
Competitive County=1	-2.08*	0.20
	(1.19)	(0.20)
Eligible to Run=1	-11.17***	-1.63***
	(2.83)	(0.18)
Competitive County=1 × Eligible to Run=1	7.67***	0.69**
	(2.61)	(0.31)
Ln(Education Stimulus)	-0.07	0.68***
	(0.78)	(0.12)
Ln(Real Incentives)	-0.04	0.10***
	(0.18)	(0.02)
John McCain Vote Share	0.03	0.00
	(0.08)	(0.01)
Unemployment Rate	1.74**	0.08**
	(0.80)	(0.04)
Labor Force	0.72	-0.01
	(0.98)	(0.73)
Representative Partisanship	-2.49	0.24
	(1.89)	(0.15)
Ln(Patent Count)	1.08**	0.03
	(0.43)	(0.02)
Ln(M&A Count)	0.13	0.02
	(0.09)	(0.03)
Foreign Greenfield Investment	30.92***	-0.74
	(10.10)	(0.49)
Ln(Domestic Greenfield Investment)	0.06	-0.02
	(0.08)	(0.02)
Observations	3056	3056
State-Fixed Effects	yes	yes

Multinomial logit coefficients estimated via maximum likelihood. The outcome is a categorical variable that indicates none, old and new county status. The baseline category is none counties. An election is competitive if the difference in two-party vote share is less than 10 percentage points. Eligibility to run is determined by whether a governor ran for the subsequent election. All models include state fixed effects. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table A16: First Stage Regression Results for County-Level Local Government Incentives and Education Stimulus

	Education Stimulus Per Capita (1)
Special Education Children	1366.88*** (419.50)
Ln(Real Incentives)	-1.17 (1.93)
Competitive County=0	0.00 (.)
Competitive County=1	-33.91*** (10.09)
John McCain Vote Share	-6.79*** (1.13)
Unemployment Rate	32.34*** (4.54)
Labor Force	-19.93 (52.79)
Representative Partisanship	24.97 (15.61)
Ln(Patent Count)	-0.95 (1.37)
Ln(M&A Count)	2.18** (0.98)
Foreign Greenfield Investment	7.15 (22.42)
Ln(Domestic Greenfield Investment)	0.31 (1.61)
Observations	3049
State-Fixed Effects	yes

The dependent variable is the amount of education stimulus scaled by a county's labor force. The independent variable is the number of special education students in a county divided by the county's school age population. Models include state fixed-effects. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table A17: Two-Stage Least Squares Regressions of Greenfield FDI on Education Stimulus, County-Level

	FDI All Counties (1)	FDI New Counties (2)	FDI Old Counties (3)
Education Stimulus Per Capita	0.00 (0.00)	0.00 (0.00)	-0.00** (0.00)
Ln(Real Incentives)	0.06*** (0.02)	0.06*** (0.01)	-0.00 (0.01)
Competitive County	0.17** (0.07)	0.19** (0.08)	-0.02 (0.02)
John McCain Vote Share	0.00 (0.01)	0.00 (0.00)	-0.00 (0.00)
Unemployment Rate	0.00 (0.03)	-0.03 (0.03)	0.03** (0.01)
Labor Force	1.65*** (0.50)	0.51 (0.41)	1.15*** (0.19)
Representative Partisanship	0.06 (0.06)	0.07 (0.05)	-0.01 (0.03)
Ln(Patent Count)	0.02*** (0.01)	0.02*** (0.01)	-0.00 (0.00)
Ln(M&A Count)	0.03*** (0.01)	0.03*** (0.01)	0.00 (0.00)
Foreign Greenfield Investment	1.65*** (0.34)	-0.55*** (0.21)	2.20*** (0.27)
Ln(Domestic Greenfield Investment)	0.03* (0.02)	0.01 (0.01)	0.02* (0.01)
Observations	3049	3049	3049
State-Fixed Effects	yes	yes	yes

The dependent variables are the log of total greenfield FDI in all counties, new counties and old counties respectively. The independent variables are the amount of education stimulus scaled by a county's labor population. Education stimulus is instrumented by the share of special education children in county's schools. Models include state fixed-effects. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table A18: Multinomial Logit Regression of Greenfield FDI on Education Stimulus to Community Colleges and Real Incentives

	Old_Counties (1)	New_Counties (2)
Competitive County=1	-1.17 (1.04)	0.39** (0.18)
Ln(Education Stimulus to Community Colleges)	-0.06 (0.11)	-0.01 (0.03)
Ln(Real Incentives)	-0.02 (0.16)	0.13*** (0.02)
John McCain Vote Share	0.06 (0.06)	-0.01 (0.01)
Unemployment Rate	1.49* (0.80)	0.08** (0.03)
Labor Force	1.61** (0.79)	1.50* (0.83)
Representative Partisanship	-2.64 (1.66)	0.33** (0.15)
Ln(Patent Count)	0.93** (0.39)	0.10*** (0.02)
Ln(M&A Count)	0.12 (0.09)	0.07*** (0.02)
Foreign Greenfield Investment	27.74*** (10.02)	-0.54 (0.45)
Ln(Domestic Greenfield Investment)	0.09 (0.10)	-0.00 (0.02)
Observations	3059	3059
State-Fixed Effects	yes	yes

Multinomial logit coefficients estimated via maximum likelihood. The outcome is a categorical variable that indicates none, old and new county status. The baseline category is none counties. Education stimulus variable is measured by the subset of state stimulus to local governments allocated to community colleges. All models include state fixed effects. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * p<0.10, ** p<0.05, *** p<0.010

Table A19: Multinomial Logit Results - Different Types of Stimulus

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Old_Counties	New_Counties	Old_Counties	New_Counties	Old_Counties	New_Counties	Old_Counties	New_Counties
Ln(Energy Stimulus)	-0.19 (0.14)	0.06** (0.03)					-0.19 (0.15)	0.05 (0.03)
Ln(Transportation Stimulus)			-0.04 (0.09)	0.07** (0.03)			0.01 (0.10)	0.06*** (0.02)
Ln(Infrastructure Stimulus)					0.04 (0.11)	0.06*** (0.02)	0.05 (0.12)	0.05*** (0.02)
Ln(Education Stimulus)	0.57 (0.60)	0.55*** (0.15)	0.16 (0.66)	0.61*** (0.12)	0.08 (0.68)	0.59*** (0.11)	0.49 (0.59)	0.42*** (0.14)
Ln(Real Incentives)	-0.01 (0.18)	0.10*** (0.02)	-0.04 (0.17)	0.10*** (0.02)	-0.04 (0.16)	0.10*** (0.02)	-0.01 (0.17)	0.10*** (0.02)
Competitive County	-1.22 (0.89)	0.43** (0.18)	-1.15 (0.95)	0.43** (0.17)	-1.10 (0.98)	0.45** (0.18)	-1.21 (0.90)	0.46*** (0.18)
John McCain Vote Share	0.05 (0.08)	0.01 (0.01)	0.05 (0.08)	0.00 (0.01)	0.06 (0.08)	0.01 (0.01)	0.06 (0.09)	0.01 (0.01)
Unemployment Rate	1.42* (0.76)	0.09** (0.04)	1.41* (0.75)	0.08** (0.03)	1.45* (0.78)	0.08** (0.04)	1.44* (0.81)	0.09*** (0.04)
Labor Force	0.27 (0.87)	-0.05 (0.67)	0.75 (1.09)	0.03 (0.72)	0.72 (1.07)	-0.03 (0.71)	0.28 (0.86)	-0.08 (0.66)
Representative Partisanship	-2.63 (1.69)	0.22 (0.16)	-2.51 (1.75)	0.25* (0.15)	-2.60 (1.72)	0.25 (0.15)	-2.72 (1.66)	0.22 (0.16)
Ln(Patent Count)	0.95*** (0.36)	0.03 (0.02)	0.87** (0.37)	0.03 (0.02)	0.87** (0.38)	0.03 (0.02)	0.96** (0.37)	0.02 (0.02)
Ln(M&A Count)	0.18** (0.09)	0.01 (0.03)	0.13 (0.09)	0.01 (0.03)	0.12* (0.07)	0.01 (0.03)	0.17** (0.09)	-0.00 (0.03)
Foreign Greenfield Investment	27.97*** (6.69)	-0.69 (0.48)	26.76*** (9.43)	-0.72 (0.48)	28.76*** (10.20)	-0.73 (0.48)	26.85*** (7.77)	-0.71 (0.47)
Ln(Domestic Greenfield Investment)	0.08 (0.11)	-0.02 (0.02)	0.09 (0.10)	-0.02 (0.02)	0.09 (0.10)	-0.02 (0.02)	0.08 (0.11)	-0.02 (0.02)
Observations	3059	3059	3059	3059	3059	3059	3059	3059
State-Fixed Effects	yes	yes	yes	yes	yes	yes	yes	yes

Multinomial logit coefficients estimated via maximum likelihood. The dependent variables are categorical variables that indicate none, old and new county status. The baseline category is none counties. An election is competitive if the difference in two-party vote share is less than 10 percentage-points. All models include state-fixed effects. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * p<0.10, ** p<0.05, *** p<0.010

Table A20: Multinomial Logit Results - Without Solar Energy

	Old_Counties	New_Counties
	(1)	(2)
Ln(Education Stimulus)	0.32 (0.72)	0.69*** (0.12)
Ln(Real Incentives)	-0.05 (0.18)	0.11*** (0.02)
Competitive County	-1.35 (1.08)	0.44*** (0.16)
John McCain Vote Share	0.06 (0.08)	0.00 (0.01)
Unemployment Rate	1.46** (0.73)	0.08** (0.04)
Labor Force	0.58 (1.09)	-0.05 (0.72)
Representative Partisanship	-2.88 (1.96)	0.29* (0.16)
Ln(Patent Count)	0.85** (0.35)	0.03 (0.02)
Ln(M&A Count)	0.11 (0.10)	0.01 (0.03)
Foreign Greenfield Investment	27.49*** (9.75)	-0.53 (0.49)
Ln(Domestic Greenfield Investment)	0.13 (0.11)	-0.03 (0.02)
Observations	3059	3059
State-Fixed Effects	yes	yes

Multinomial logit coefficients estimated via maximum likelihood. The dependent variable is a categorical variable that indicates none, old and new county status. The baseline category is none counties. An election is competitive if the difference in two-party vote share is less than 10 percentage-points. Model includes state-fixed effects. The sample excludes investment in renewable energy industry. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table A21: Ordinary Least Squares Regression Results for Quid-Pro-Quo Greenfield FDI

	FDI	FDI	FDI
Share of Protectionist Votes	1.44 (2.00)		
Share of Protectionist Votes on Barriers		1.13 (1.59)	
Share of Protectionist Votes on Subsidies			0.66 (0.96)
Republican District	0.58 (0.56)	0.49 (0.49)	0.48 (0.49)
2008 Unemployment Rate	0.13 (0.13)	0.15 (0.13)	0.14 (0.13)
Observations	392	392	391
State-Fixed Effects	yes	yes	yes

The dependent variable is the logged cumulative value of new manufacturing FDI between 2009 and 2010. The independent variables are the share of all protectionist bills, protectionist bills on subsidies, and protectionist bills on barriers in the 109th and 110th Congresses. Robust standard errors are in parentheses and clustered by state. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table A22: Multinomial Logit Results - Without Tax Havens

	Old_Counties	New_Counties
	(1)	(2)
Ln(Education Stimulus)	0.21 (0.62)	0.63*** (0.12)
Ln(Real Incentives)	0.01 (0.13)	0.10*** (0.02)
Competitive County	-0.34 (0.87)	0.47*** (0.17)
John McCain Vote Share	0.02 (0.06)	0.00 (0.01)
Unemployment Rate	1.03** (0.46)	0.06* (0.04)
Labor Force	0.92 (1.20)	-0.05 (0.81)
Representative Partisanship	-1.64 (1.25)	0.34** (0.16)
Ln(Patent Count)	0.67*** (0.26)	0.03 (0.02)
Ln(M&A Count)	0.02 (0.12)	0.02 (0.03)
Foreign Greenfield Investment	23.56*** (4.96)	-0.27 (0.49)
Ln(Domestic Greenfield Investment)	0.14 (0.10)	-0.01 (0.02)
Observations	3059	3059
State-Fixed Effects	yes	yes

Multinomial logit coefficients estimated via maximum likelihood. The dependent variable is a categorical variable that indicates a none, old and new county status. The baseline category is none counties. An election is competitive if the difference in two-party vote share is less than 10 percentage-points. Model 1 and 2 include state-fixed effects. Sample excludes investment from the following countries: Netherlands, Switzerland, Luxembourg, Cayman Islands, Singapore, Panama, Mauritius, Cyprus, Ireland. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * p<0.10, ** p<0.05, *** p<0.010

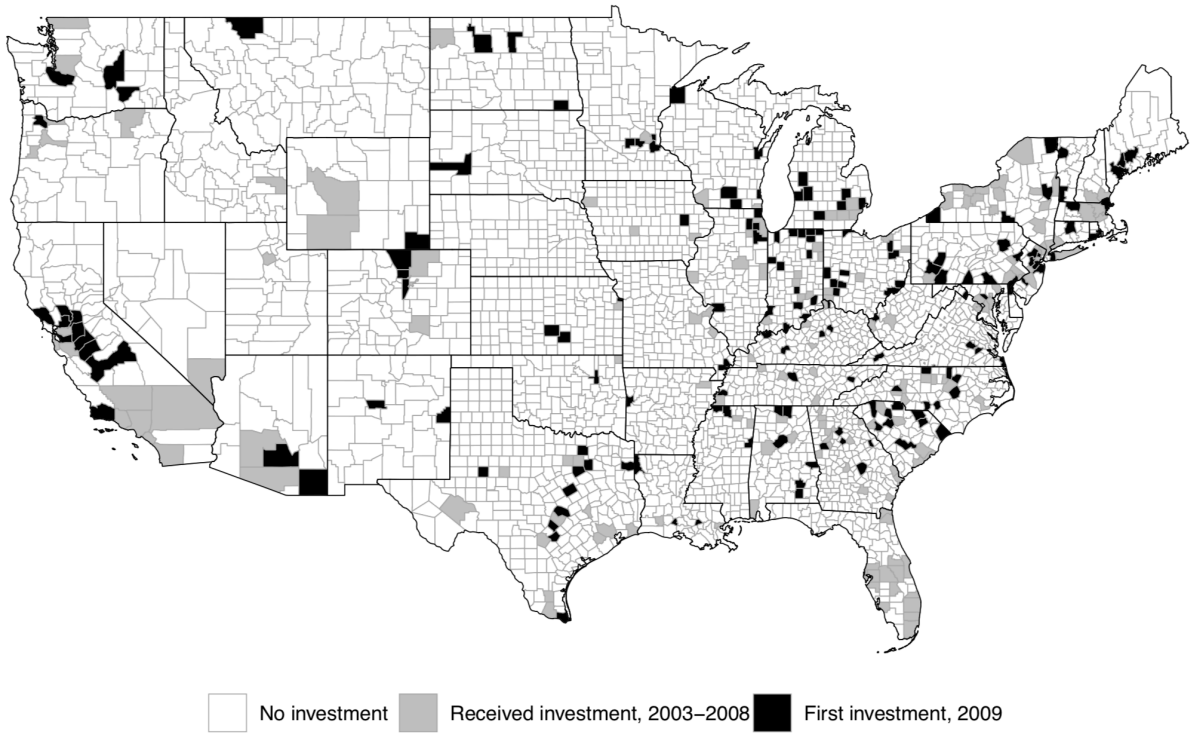
Table A23: Multinomial Logit Results - Including County Market Size

	Old_Counties (1)	New_Counties (2)
Ln(Education Stimulus)	0.31 (0.81)	0.56*** (0.14)
Ln(Real Incentives)	-0.04 (0.17)	0.06 (0.04)
Competitive County	-0.74 (0.88)	0.45** (0.23)
John McCain Vote Share	0.05 (0.09)	-0.00 (0.01)
Unemployment Rate	1.39 (0.90)	0.13* (0.07)
Labor Force	0.57 (1.08)	0.07 (0.76)
Representative Partisanship	-2.12 (1.78)	0.38* (0.22)
Ln(Patent Count)	0.74* (0.41)	0.07 (0.05)
Ln(M&A Count)	0.12 (0.09)	-0.00 (0.03)
Foreign Greenfield Investment	33.19*** (2.23)	-0.77 (0.54)
Ln(Domestic Greenfield Investment)	0.08 (0.09)	-0.03 (0.03)
GDP Per Capita	-0.00 (0.00)	0.00 (0.00)
Observations	1119	1119
State-Fixed Effects	yes	yes

Multinomial logit coefficients estimated via maximum likelihood. The dependent variable is a categorical variable that indicates a none, old and new county status. The baseline category is none counties. An election is competitive if the difference in two-party vote share is less than 10 percentage-points. Model 1 and 2 include state-fixed effects. GDP per capita measure is available only for metropolitan statistical areas. Unless otherwise stated, variables are from 2008. Robust standard errors are in parentheses and clustered by state. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

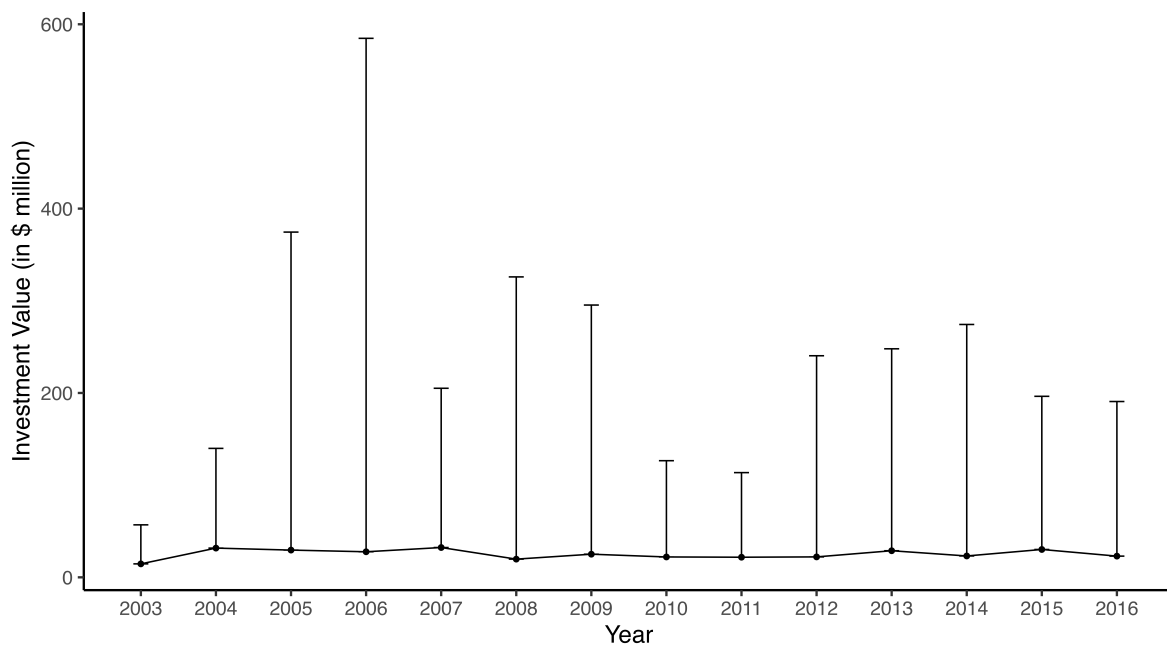
F FIGURES

Figure A1: Greenfield FDI Expansion After Great Recession



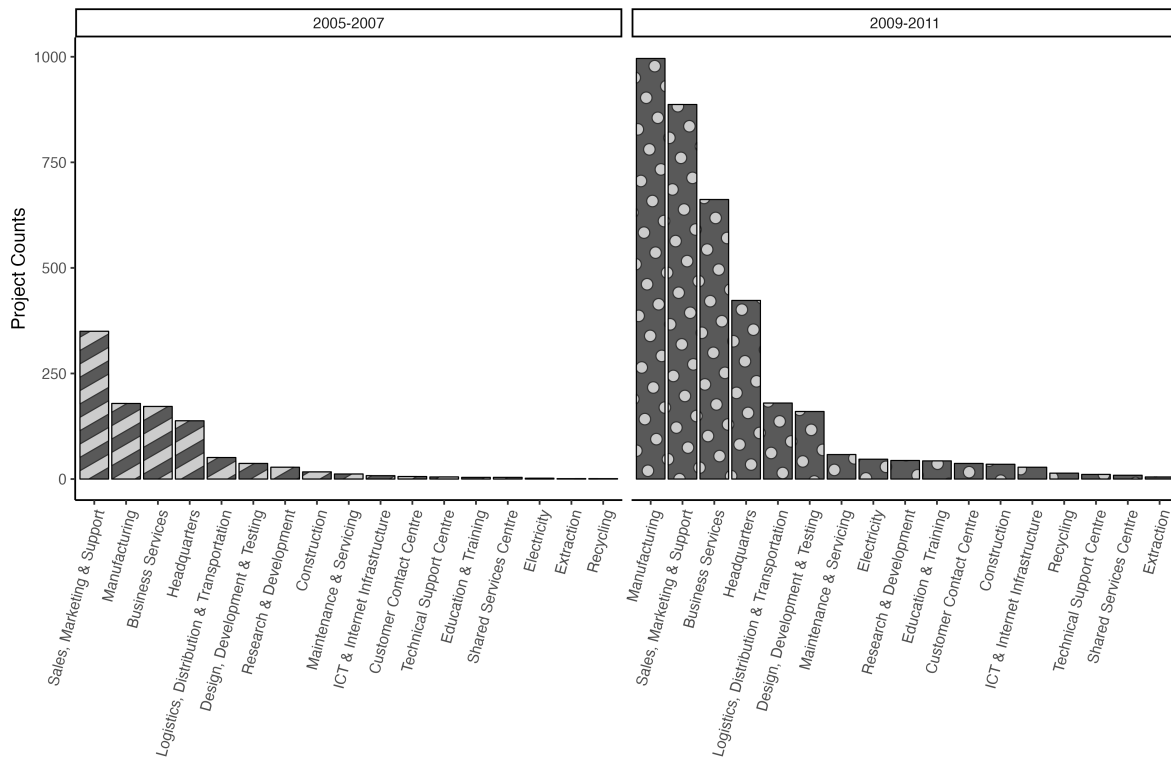
Data Source: fDi Markets database

Figure A2: Manufacturing FDI Project Values, 2003-2016



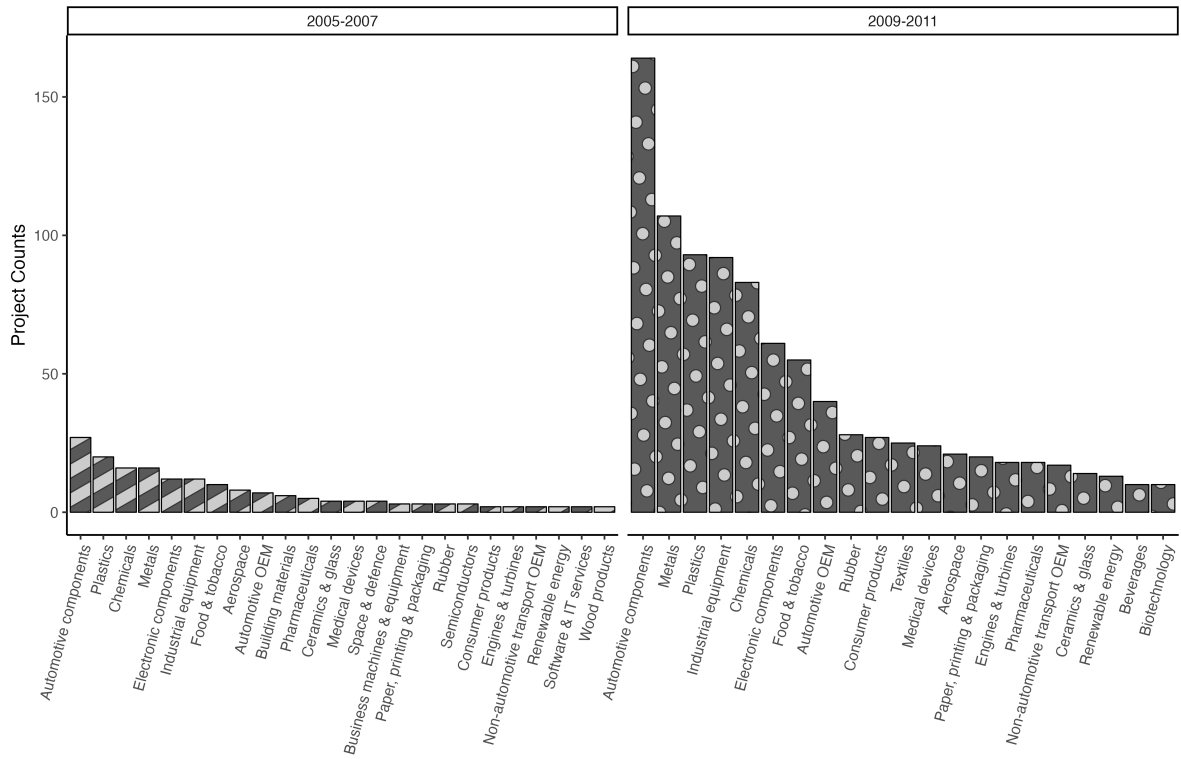
Note: The y-axis indicates the median value of new foreign manufacturing project inflows in 2010 constant million dollars. Bars indicate one standard deviation above median investment value. Figure omits one outlier, a \$10 billion investment by South Africa's SASOL in 2011. Data Source: fDi Markets database

Figure A3: FDI Industry Activities Unchanged Post Recession



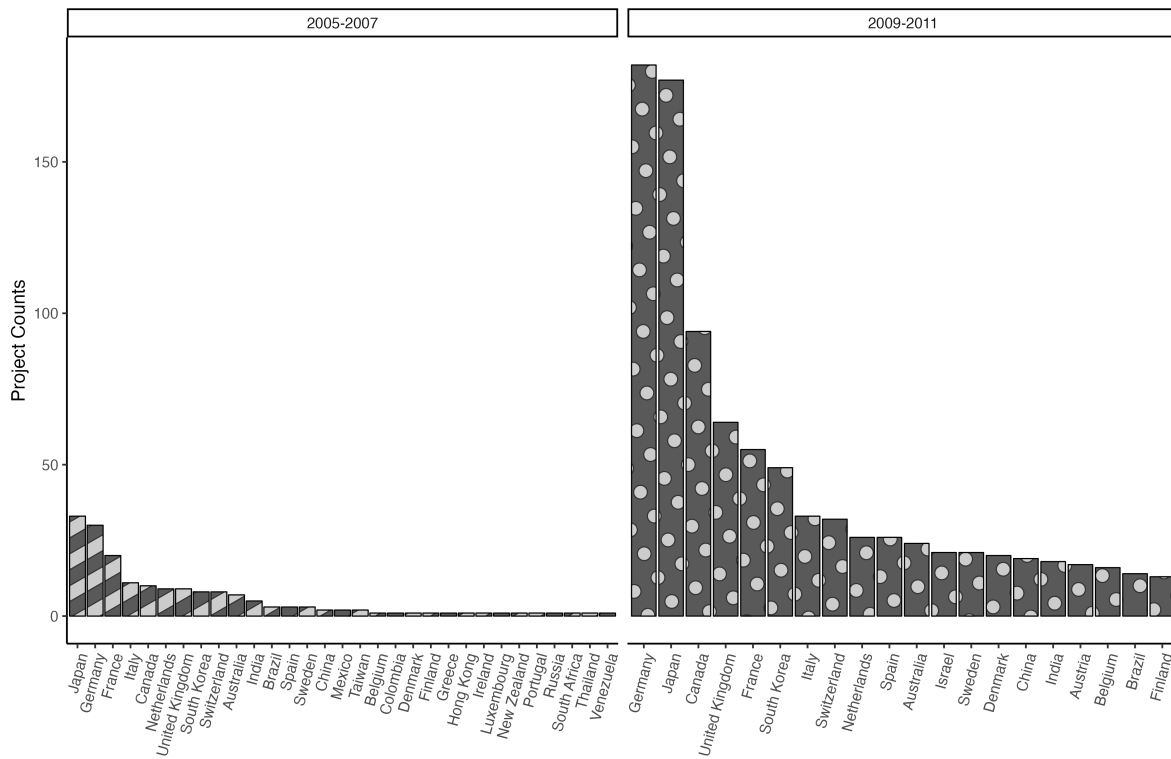
Note: The y-axis indicates the number of new foreign investments in top 20 industry activities. Industry activity refers to specific tasks the project will undertake. For example, a firm in a manufacturing industry may invest to conduct research and development or for sales/marketing. Data Source: fDi Markets database

Figure A4: FDI Manufacturing Industry Composition Unchanged Post Recession



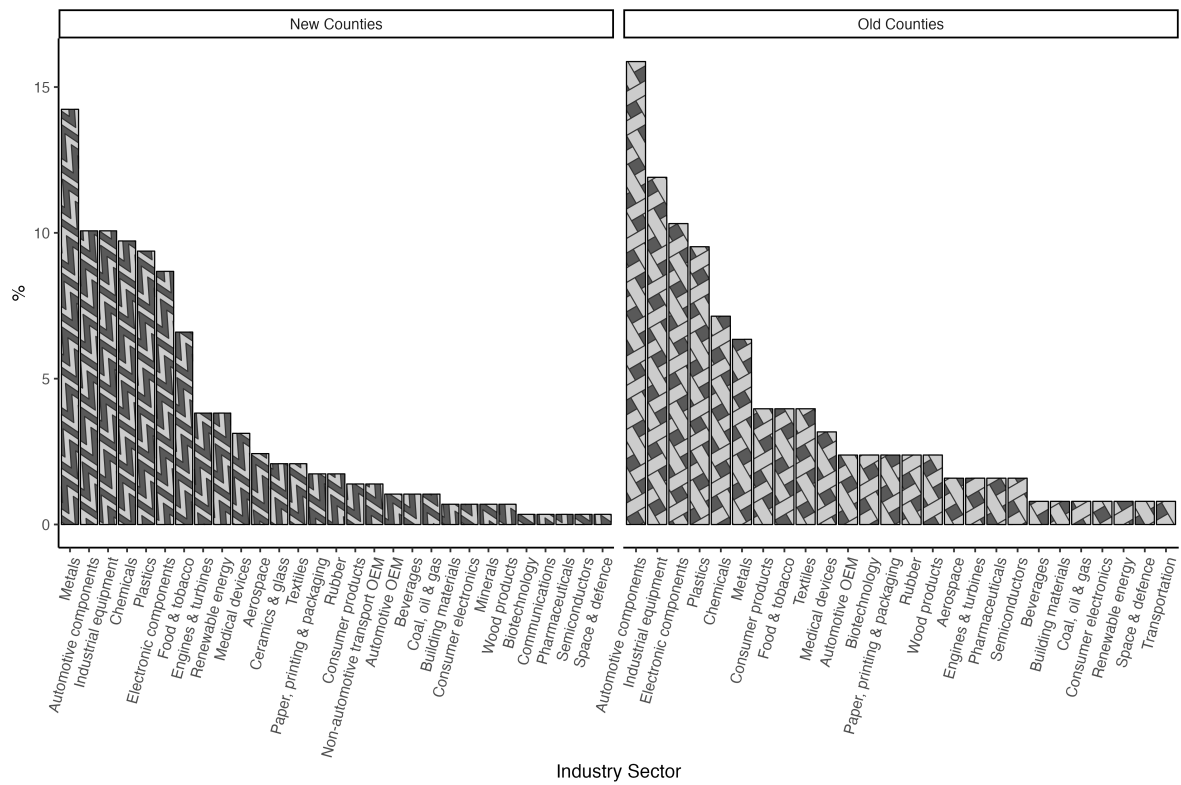
Note: The y-axis indicates the number of new foreign manufacturing investments in the top 20 industry sectors. Data Source: fDi Markets database

Figure A5: FDI Source Country Composition Unchanged Post Recession



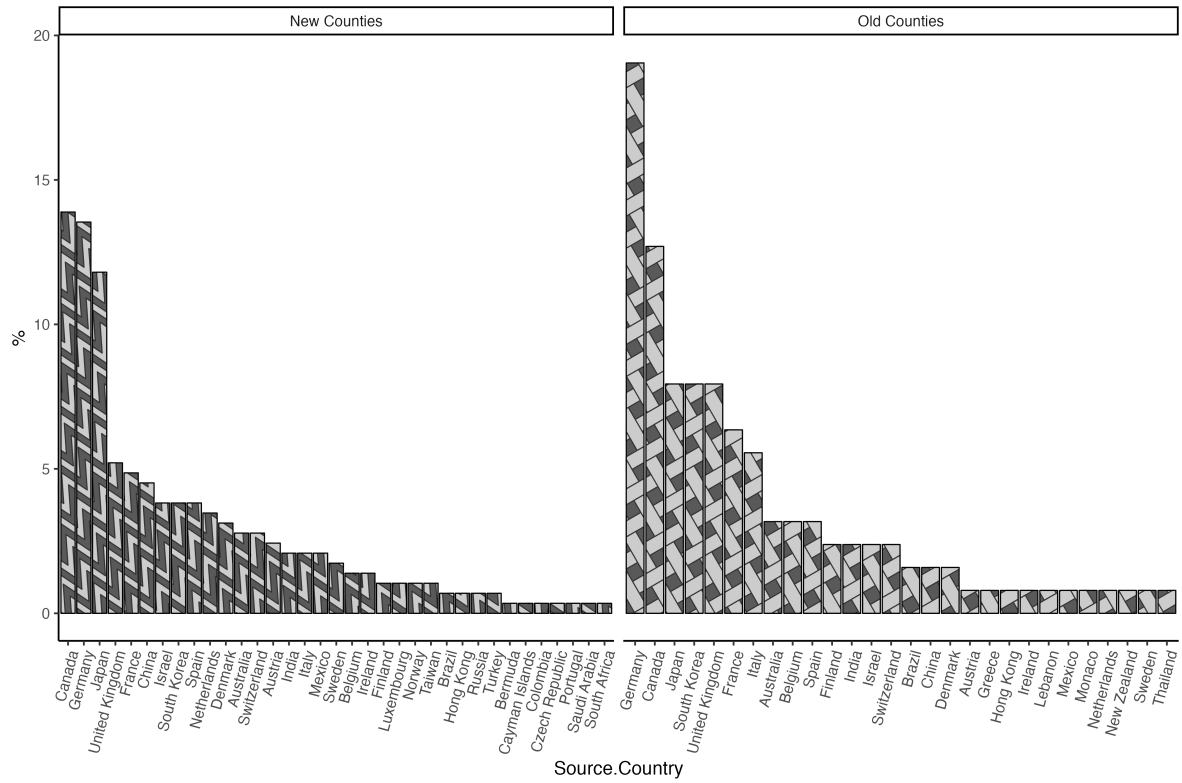
Note: The y-axis indicates the number of new foreign manufacturing investments in the top 20 source countries. Data Source: fDi Markets database

Figure A6: Distribution of New Manufacturing FDI in Old and New Counties by Industry Sector After the Great Recession



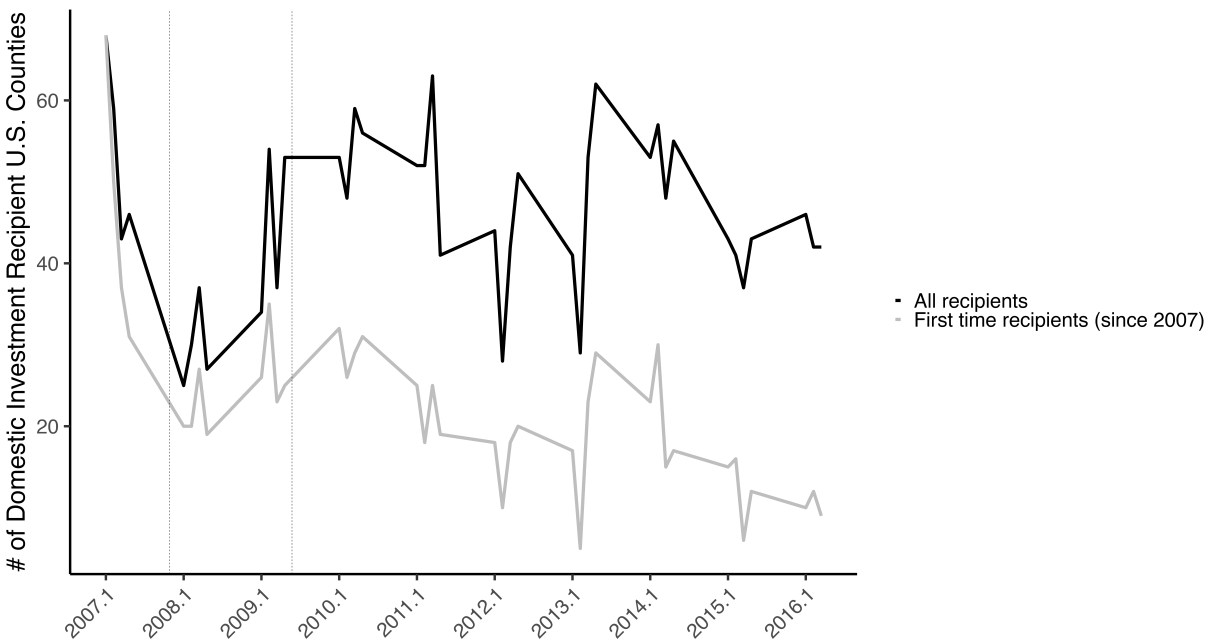
Note: The y-axis indicates the percentage of new foreign manufacturing firms in a certain industry sector. Data Source: fDi Markets database

Figure A7: Distribution of FDI in Old and New Counties by Home Country After the Great Recession



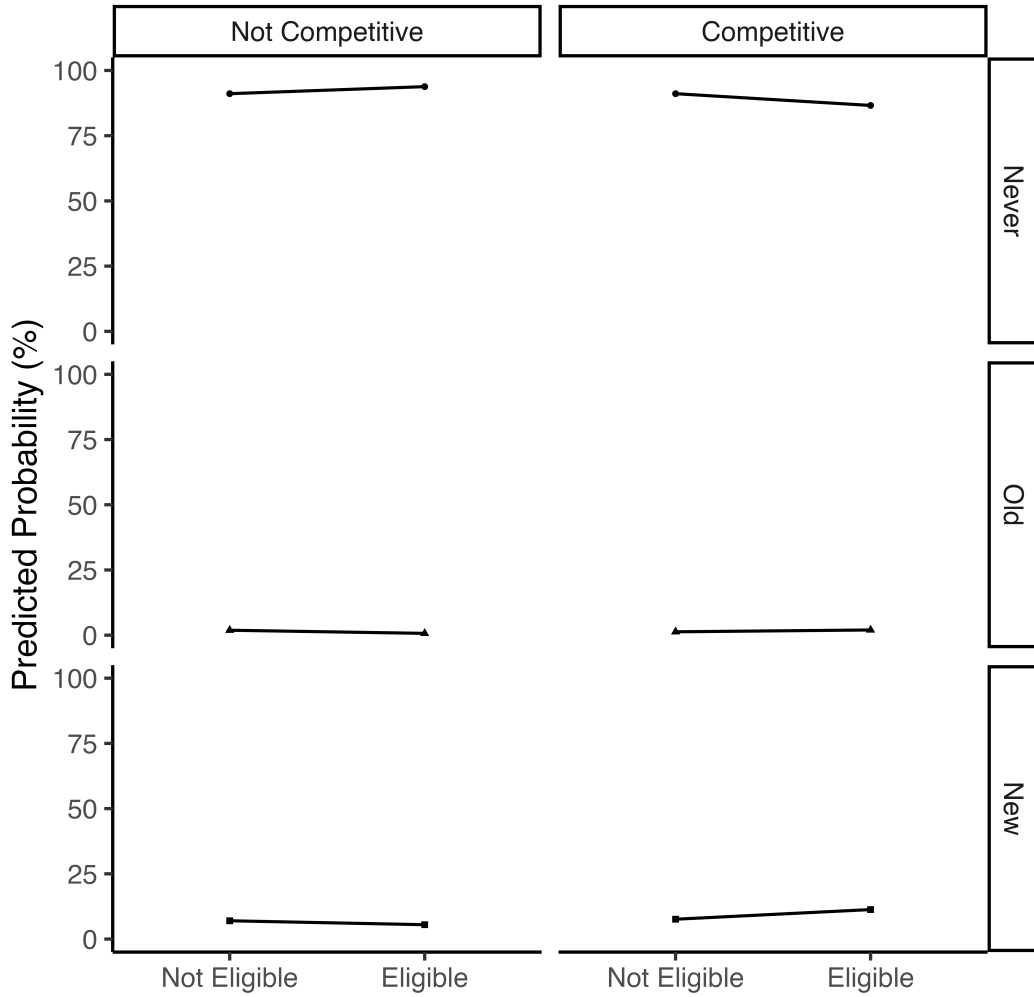
Note: The y-axis indicates the percentage of new foreign manufacturing firms coming from a certain home country. Data Source: fDi Markets database

Figure A8: County Distribution of US Domestic Greenfield Manufacturing Investment, 2007-2016 (Quarterly)



This figure plots the number of US counties that received at least one new domestic greenfield manufacturing investment by quarter. The black line plots the total number of counties that received investment. The gray line is the number the received investment for the first time during the sample. The vertical lines indicate the Great Recession. Data Source: fDi Markets database.

Figure A9: Governors With No Term Limits Facing Competitive Elections Are More Likely to be in New Counties



This figure plots the predicted probability of being categorized as a new county depending on governors' term limits and competitiveness of prior gubernatorial election.

Appendix References

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