**Pass the Bucks: Investment Incentives as Political Credit-Claiming Devices
Evidence from a Survey Experiment**

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Abstract:

Both countries and subnational governments commonly engage in competition for mobile capital, offering generous location incentives to attract investment. The use of tax incentives is a paradox, whereby fiscally strained governments offer lucrative tax treatment to firms, yet the economics research has consistently shown tax incentives have little impact on the investment decisions of businesses. In this paper we construct a formal model of firm specific tax incentives that focuses on how politicians take credit or minimize blame for firms' investment decisions. We test the empirical implications of this model using an internet survey, which employs a randomized experiment to test how voters evaluate the performance of incumbent U.S. governors. Our findings illustrate the key political benefit of offering tax incentives for politicians. Politicians can use these incentives to take credit for investment flowing into their districts.

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1. Introduction

In 2007, then Alaskan Governor Sarah Palin, with the support of Sean Parnell, the Lieutenant Governor, spearheaded a successful initiative to raise taxes on oil companies. Current Alaskan Governor Sean Parnell, recently proposed a $250 million tax incentive scheme that dramatically reduces tax liabilities on new investment in the oil industry. When questioned by the media and criticized by existing oil firms regarding his flip-flop on incentive schemes, Governor Parnell answered that the new credits would generate employment in Alaska and "I'm not going to let them take that money to Nigeria" (Cokerham 2010).

This is far from an isolated incident. Numerous U.S. states have simultaneously increased taxes and slashed spending while offering highly lucrative tax incentives to entice new firms. A critic of tax incentives and Appalachian hiking enthusiast, South Carolina Governor Mark Sanford, defended a $900 million tax credit for a proposed Boeing production facility by highlighting the new jobs this policy would generate in South Carolina. The District of Columbia, Virginia, and Maryland are all currently in a subsidy bidding war for the Northrop Grumman's new corporate headquarters offering millions in up-front incentives and tax credits. Indeed, all fifty states now offer some form of tax incentives to lure new investment (Davis 2004).

This list of U.S. states offering incentives mirrors the global competition to attract foreign investment. Numerous countries, and organizations such as the World Bank, embrace the benefits of investment of by multinational corporations (often called Foreign Direct Investment, FDI).[1] And countries are increasingly attempting to attract FDI by offering lucrative tax incentive packages to firms (Li 2006).

In many countries, tax incentives are provided by the central government with states and municipalities serving as secondary providers of financial support. In the United States, however,

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[1] See Jensen (2006).

states largely control the policy levers necessary to attract FDI.[2] Many states have even gone as far as establishing offices in foreign countries, so that by 2002, U.S. states had established 175 foreign offices to promote trade and investment.[3] Analogous to competition between countries, governors of U.S. states have become increasingly active in attempting to woo foreign capital by using tax incentives to distinguish their states from competitors (Davis 2004).

This use of tax incentives is a paradox. Fiscally strained governments offer lucrative tax treatment to firms, yet numerous studies have documented that these incentives have little impact on the investment decisions of these businesses or are too generous relative to the economic benefits. What explains the use of these incentives? As summarized by the Tax Foundation:

> "States often overpay, granting such generous tax abatements that their already resident taxpayers must pitch in more just so that state "economic development" officials can make headlines rolling out the red carpet for a newcomer."[4]

In this paper, we directly address this economic paradox by exploring the political benefits of offering tax incentives. We hypothesize that tax incentives, while economically inefficient, can be employed by politicians as a method for winning reelection. Specifically, our project examines how voters reward and punish politicians for investment and the offering of tax

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[2] While most countries have foreign investment promotion agencies, in the United States investment promotion is done by U.S. states and cities. In 2007, the United States U.S. Department of Commerce's International Trade Administration launched the "Invest in America" initiative. Invest in America engages in investment promotion activities, such as public events but has no authority to directly provide tax incentives or other location subsidies to firms. For a list of world investment promotion agencies see waipa.org.

[3] Le et al (2002), cited in Bobonis and Shatz (2007)

[4] William Ahern. Economic Development Teams in VA, MD, and DC Bid for Northrop Grumman Headquarters. *The Tax Foundation,* February 15, 2010.

incentives. We develop a model of politicians "pandering" to voters as an explanation for the extensive use of tax incentives. Thus, even in states that are certain to attract investment, or certain not to attract investment, politicians have the incentive to offer lucrative tax incentives.

We test this model using a survey experiment embedded in a nation-wide internet survey that explores the voting intentions of individuals for U.S. governors. Our main finding is that while attracting new investment has large benefits to incumbent governors (winning a project raises votes for a governor by about 20%), the size of the vote bonus is enhanced by the use of incentives and voter type. These results are robust to the inclusion of individual-level and state-level control variables, as well as state fixed effects.

Governors are rewarded at higher levels for new investment if the government offered tax incentives. Among the general population, offering an incentive offers an additional 1.4% votes in favor of the governor. Partisan voters, however, are less susceptible to changing their voting intentions for the governor, while independent voters are substantially persuaded by the use of tax incentives. The vote bonus for independents from governors winning projects with the use of incentives is 5.6%. More strikingly, however, the use of incentives protects against downside risk. The vote bonus for the use of incentives is actually higher for a governor whose states lost the project (about 3.5% from all respondents, 11.2% from independents). Thus, whether or not the policy was effective, the tax incentive allows the governor to take credit for investment attraction that may be only loosely tied to her actions; and, if need be, deflect blame for a loss by claiming that she was engaged in the negotiation and actively working on behalf of citizens.

No other policy action by a governor can play this immediate role. Long-term investments in infrastructure, education, or regulatory reform that have been shown to most influence location decisions, are likely to bear fruit years afterward, perhaps after the governor's political career is over. Moreover, the diffuse nature of these other policies and the involvement of multiple actors obfuscate the ability of a politician to singularly claim credit for their success. Incentive schemes solve both these problems. They are announced in close proximity to the

timing of the investment decision, and are attached in the public's mind to the politician who initiated them. Moreover, governors, who offer investment incentives, can also deflect the blame from not attracting investment, thereby minimizing the political consequences of not attracting investment.

Thus, rather then voters processing the use of tax incentives through the lens of a cost-benefit analysis and preferring investment with no incentives to all other outcomes, we find a systematic bias towards rewarding politicians for offering tax incentives. Given that we also find little evidence of punishment for the overuse of incentive schemes, the offer of lucrative tax incentives amounts to a dominate strategy. Thus, even if tax incentives have no impact on investment decisions and firms have already decided on their location, governors in states "winning" or "losing" the new investment can maximize their chances of winning reelection by offering tax incentives. We stress that this policy will be enacted even if politicians have perfect information that these incentives have zero impact on the firm's location decision.

Our paper proceeds as following. First, we begin by briefly outlining the existing literature on tax competition and how the competition for investment can lead to economically inefficient politics. Furthermore, we highlight that much of the scholarship has focused on the economic costs and benefits to changing tax rates on capital, without exploring the political dynamics underlying these changes. In Section 3, we briefly review the recent literature on globalization and mass behavior, and link this to our study of U.S. governors. We argue that the United States is an excellent laboratory to examine how voters assign blame or reward politicians for economic policy related to globalization. In Section 4, we construct a formal model of special tax incentives, focusing on the decision by incumbent politicians to offer firm specific incentives to investors. Unlike existing models in public finance, our model directly focuses on the relationship between tax incentives and reelection, while allowing for incentives targeted to specific firms. Not only is this a more realistic model of tax competition, it also provides important insights in the politics of taking credit and minimizing blame for investment location

decisions. We note that this model is general enough to capture a number of different types of "pandering" behavior by politicians. In Section 5, we introduce our research design, explain our data from the Cooperative Congressional Election Survey (CCES) including our unique survey experiments, and discuss our empirical results. Section 6 concludes by assessing the implications of our findings for the political economy research agenda.

2. Competing for Mobil Capital

There is a large and growing literature on the competition for international capital. Within the public finance literature, a number of influential works model how governments, maximizing the utility of the representative household, set taxes in a world of mobile capital. Starting with insights from Tiebout (1956) and Oates (1972), classic models such as Zodrow and Mieszkowski (1986) and Wilson (1986) examine government tax rate setting under conditions of capital mobility. This competition for capital can lead to downward pressure on tax rates and revenues, yet this does not require all governments to charge the same tax rate.[5] Such competition can indirectly result in the under provision of public goods (Wildasin 1989), or it can help constrain excessive government taxation (Brennan and Buchanan 1980).[6]

Political scientists have built upon this public finance literature, explaining corporate tax-rate setting under different institutional settings or partisan compositions of government. This includes work identifying that statutory corporate taxes have converged across OECD countries, yet the effective tax rates and corporate tax receipts have remained relatively stable over time (Swank and Steinmo 2002). Hays (2003) and Swank (2004, 2006) find evidence for tax policy

[5] See Wilson (1999) and Wilson and Wildasin (2004) for a review of this literature.

[6] Corporate taxation can also be used as a "backstop" for individual income taxation. Higher corporate tax rates relative to income tax rates reduces the incentive for the "reclassification of labor income as business income in search of a lower effective tax rate" (Slemrod 2004, 1171).

competition, yet, this form of tax competition and diffusion is more nuanced than the traditional race to the bottom literature.[7] Basinger and Hallerberg (2004) find that domestic political institutions, operationalized by the number of veto players, and the partisan composition of government temper tax competition.

We believe that the existing scholarly literature has largely ignored two related points. First, governments have the ability to offer tax incentives that are specific to individual firms. Second, politicians will use tax policy, not necessarily to maximize investment, but to maximize the probability of reelection. These two seemingly obvious points help us understand a number of puzzles in the existing literature on tax incentives. Specifically, a growing economics consensus points out that: 1) tax incentives are ineffective in luring investment to a particular location and 2) the large sizes of these incentives are economically suboptimal for states, sometimes representing a net transfer to investors.[8]

The ineffectiveness of these tax incentives have been documented by a number of studies. One high profile study is Wells et al's (2001) examining of the repeal of tax incentives in Indonesia, despite the growing regional competition for investment. The authors find that repealing incentives had no adverse consequences for the attraction of foreign investment. Most recently, Bobonis and Shatz (2007) explore the agglomeration effects of investment, where attracting new investment has a positive impact on attracting more investment. This finding seemingly supports the use of tax incentives to prime the first waves of investment, which will have positive spillovers for future investment. Yet they directly test the impact of tax policies on

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[7] Recent work by Pinto and Pinto (2008) explores how the complementariness of foreign capital with domestic labor and domestic capital affect tax policy. Thus partisan incumbent governments (representing domestic capital or domestic labor) have differing incentives on the tax rates charged to multinationals.

[8] For an overview see Oman (2000).

investment location and find that incentives have "little influence over the location of FDI" (Bobonis and Shatz 2007, 39).

These tax incentives, even if they are purported to sway location decisions, such as the work of Buettner and Ruf (2007), often appear excessive relative to their direct benefits. In an extensive review of the literature, Morisset and Pirnia (1999) find that tax incentives cannot overcome major obstacles to investment, such as poor infrastructure, and the costs often exceed the benefits. Blomstrom and Kokko (2003) argue that while scholars have documented the positive spillovers of foreign direct investment, government incentive policies to maximize these spillovers are inefficient.

Examples of excessive incentives are easy to find. Moran (1998) documents a number of high profile incentives to attract manufacturing investment in the United States, Alabama's successful wooing of a Mercedes-Benz plan. The amount of subsidies offered exceeded $200,000 per employee. Thomas and Wishaadle (2009) show that since 2002, U.S. states have offered seventeen incentive packages in excess of $100 million each. More generally, according to Head et al. (1999), tax incentives are often large enough to offset any of the gains from foreign direct investment.

Despite academic skepticism, national governments and subnational units (states, provinces, etc) continue to provide generous tax incentives to mobile firms. In the United States, all fifty states provide some form of tax incentives (Davies 2004). While these tax incentives seem to point to tax competition among states, as noted above, it is striking that many of these tax incentives appear excessive relative to the capital investment, jobs created, and the other direct benefits of the investment.

These findings run counter to the models of Zodrow and Mieszkowski (1986) and Wilson (1986), where governments lower taxes to maximize the benefits to the representative household. Existing theoretical work has provided some insights into why politicians use of these inefficient (and often ineffective) instruments. For example, Robinson and Torvik's (2005) argue that

"white elephant" development projects often have a negative social surplus. Politicians enact these policies despite the costs as an inefficient mechanism for redistribution. Thus, in the language of the tax competition literature, the policies are favored by politicians for the redistributive consequences to a subset of households, not the impact on the representative household.

Another literature that deviates from the conventional thinking about tax incentives is the work on tax incentives as signals. One argument is that taxation can also reveal information about the host government, such as the productivity of the country (Bond and Samuelson 1986). Another alternative is that tax incentives can provide information on the type of politician in office to future investors (Besley and Case 1995). Both of these models can lead to levels of tax incentives that are inconsistent with models of tax setting in a perfect information environment. In Section 4, we build on the theory of taxes as signals, but focus our model on most likely target for political signaling – the voter - by constructing a model of location specific tax incentives and their benefits political benefits to incumbent governments.

3. Globalization and Governors

In this paper, we examine how the attracting of investment affects the political fortunes of incumbent governors of U.S. states. Why focus on U.S. states? Our project is a broad theory that applies across countries, yet we believe American states are an excellent laboratory for examining how investment affects politicians' electoral fortunes. States offer substantial variation on incentive policies and performance in attracting investment, while holding constant political institutions, culture, and other non-observed factors that can lead to unobserved heterogeneity and bias results.

We focus on governors rather than members of the House or Senate for two reasons. First, while members of Congress certainly engage in activities to increase investment, their efforts predominantly take the form of informal suasion. They have little control over formal

state-level policy levers that voters can see and associate with an investment project. Secondly, voters have a limited ability to assign credit when multiple politicians operate within the same state. Large investment projects create revenue, employment opportunities, and business spillovers that reach beyond an individual congressman's electoral district, and policies to attract these activities are often the results of legislation that requires the support of many legislators. By contrast, governors' activities to attract investment are clearly attributable to a single actor, allowing voters to assign responsibility to the governor for her performance.[9] Third, governors across the country are visibly active in attempting to attract investment, traveling abroad on commercial visits and using the powers of their office to offset investor start-up costs, such as tax holidays, property tax reductions, and other incentives. Governors are perceived to be the actors most responsible for attracting investment, and voters have the ability to reward governors for their performance.

How do voters evaluate the performance of U.S. governors? Wolfers argues that if voters are rational, defined as the efficient processing of information, they will reward governors for economic outcomes that reflect her actions, but filter from their assessment economic events that reflect influences outside the politician's locus of control (Wolfers 2002, 1).

Wolfers differentiates between first and second generation political business cycle models. In the former, voters interpret a strong economy as evidence of competent leadership, but fail to distinguish signal from noise. In the latter, efficient inference leads voters to distinguish between good outcomes reflecting competence and good outcomes reflecting pre-election policy manipulation.

Cohen and King (2004) argue that voters recognize the limitations of state governments to affect the state economy. They argue that voters often focus their attention on their ability to

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[9] See Hellwig and Samuels (2008) for a cross-national analysis of how institutions affect the attribution of responsibility.

generate jobs for the state's economy. Their hypothesis is that state publics will hold governors accountable for the employment situation in the state, but the *absolute* level of unemployment will be less relevant to state voters than the level of state employment compared to the national unemployment level - the *relative* level of unemployment. They present empirical evidence consistent with their hypothesis.

In related paper, Arceneaux (2006) argues that in federal systems, such as the United States, citizens are expected to sanction politicians for policy decisions over which their level of government has responsibility. He argues that in order for voters to attribute responsibility over an issue, the information about the issue must be highly accessible and the level of government perceived to be responsible should coincide with the level of government that is actually responsible. He tests this theory using original survey data collected following the November 2002 elections in locations that had simultaneous elections at national, state, and local levels of government. Arceneaux finds that citizens do appear capable of making distinctions in terms of what different levels of government do, and these distinctions structure where they attribute credit or blame for policy outcomes. The data suggest that the issue upon which voters are attributing blame must be easily accessible and the level of government perceived to be functionally responsible for the issue should coincide with the level of government that is actually responsible.

These studies all identify the importance of state economic conditions for the reelection prospects of governors. As we highlight, we believe this is generalizable outside of the U.S., where models of economic voting provide. Yet existing theoretical work hasn't fully explored the relationship between the policy of elected officials and how this maps onto the voting intentions.

4. Theory: Tax Incentives and Pandering to the Public

In this section, we build a model of investment promotion in a country that holds elections for political office. There are three players in this game, an incumbent politician I, a challenger C and a representative voter V. The incumbent politician chooses from among two policies. In our particular case, Policy 1 refers to "providing investment incentives" and Policy 2 refers to "not providing incentives." We denote these policies with $x \in \{1,2\}$.

These policies can vary in their effectiveness for investment attraction. . Specifically, we assume that implementing policy x generates an income of $y = \pi_x + \varepsilon$ where ε is an i.i.d random shock with distribution $N(0, \sigma_\varepsilon^2)$. At the end of the first period, the voter observes the policy implemented and the associated income generated by the policy. The incumbent then runs for reelection against a challenger. The winner of the election chooses the second period policy, the income is realized and the game ends. Put another way, a politicians enacts a policy, but the outcome of the policy is both a combination of how the policy affects investment and other factors. The policy may have been necessary to attract investment, or the policy could have had no impact on investment decisions.

The incumbent is risk neutral and cares about two things, holding office and the level of income generated for voters. This assumption regarding politicians' desire to generate income for voters is akin to politicans sincerely caring about the welfare of individuals. Some readers may be concerned that this is a strong assumption, but as we show below, despite politicians valuing the income generated for voters, they may still select inappropriate policies. We return to this point later in this section.

We denote the value the incumbent attaches to office-holding by $k > 0$. The overall utility of the incumbent when an income level of y is realized is given by $v = \tau y + k$, where

$\tau \geq 0$. Voters that care about only income are also risk neutral. The total payoff for the players are the sum of utilities from these two periods where δ represents the common discount factor.

For simplicity, we assume that politicians have fixed beliefs about the correct policy, although different politicians may hold different beliefs. Thus, politicians have beliefs over (π_1, π_2). A type-β politician believes that $(\pi_1, \pi_2) = (\beta, 1 - \beta)$ where $\beta \in [0,1]$. Beliefs about these two policies for a given politician do not change throughout the game. This allows us to focus on the voters' beliefs and preferences on which our empirical tests are based.

The voter is uncertain about the efficacy of the two policies. A voter of type -μ has private beliefs: $\pi_1 \sim N(\mu, \sigma^2)$ and $\pi_2 \sim N(1 - \mu, \sigma^2)$ where $\mu \in [0,1]$. The voter's type is randomly drawn from a cumulative distribution $G: [0,1] \rightarrow [0,1]$. Thus, voters, while uncertain about how effective tax incentives are for attracting investment vary in their prior beliefs about the effectiveness of these policies. We assume that voters believe that there is some positive relationship between tax incentives and investment, and not that tax incentives will have any sort of negative impact on investment decisions. This assumption is supported by a 2005 Polimetrix survey that found that over 70% of U.S. respondents believed tax incentives were a very important determinant of firm location choice.[10] Similarly, politicians' types are drawn from the distribution $F: [0,1] \rightarrow [0,1]$. We assume that both of these distributions are differentiable.

The strategy of the incumbent in the first period is a function of her type relative to the policy set: $\pi: [0,1] \rightarrow \{1,2\}$. For simplicity, we assume that politicians exit office in the second period; thus, we do not explicitly deal with the choice of the elected official in the second period. The strategy of the voter will be based on three things: her type, observed policy, and observed income level. The voter will use these to make choices between the incumbent and the challenger.

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[10] See Polimetrix (2005) for details.

Hence, formally it is specified as $\psi: [0,1] \times \{1,2\} \times \mathbb{R} \to \{0, C\}$. We assume that the voter will vote for the incumbent in case of a tie.

We show that even if the incumbent politician uses a strategy that depends on personal beliefs of the effectiveness of investment incentives, reelection pressures create a bias towards the more popular policy among the voters. Thus, politicians that have a sincere concern about the welfare of voters and have perfect information on the effectiveness of tax incentives my choose a "bad" policy due to reelection pressures.

In our equilibrium specification, the voter will vote for the incumbent if and only if the realized income is greater than some value, which depends on the voter's types and the implemented policy. Similarly the incumbent will use a cutoff strategy and chooses a policy if and only if he believes it to be sufficiently effective.

Proposition 1 *Let* $\rho = \dfrac{\sigma^2}{(\sigma^2 + \sigma_\varepsilon^2)}$*. There exists* τ, k *and* $\beta^* \in (0,1)$ *for which the following pair of strategies constitute a perfect Bayesian equilibrium*

$$x^*(\beta) = \begin{pmatrix} 2 & \text{if} & \beta \in [0, \beta^*] \\ 1 & \text{if} & \beta \in (\beta^*, 1] \end{pmatrix} \tag{1}$$

$$\psi^*(\mu, x, y) = \begin{pmatrix} I & \text{if} & y \geq y_x(\mu) \\ C & \text{if} & y < y_x(\mu) \end{pmatrix} \tag{2}$$

where

$$y_1(\mu) = \mu + \left(\frac{2}{\rho \left[\frac{1}{2} - \mu \right]} \right)$$

and

$$y_2(\mu) = (1 - \mu) + \left(\frac{2}{\rho \left[\mu - \frac{1}{2} \right]} \right)$$

Proposition 2 *Some incumbent types implement the more popular policy even if they believe that it is less effective.*

In equilibrium, the voter votes for the incumbent if and only if the income level generated is greater than some threshold. More intuitively, the state of the economy matters, and this is a function of both policy choice and outside factors. As we know from the literature on economic voting, during periods of poor economic performance, incumbents are often kicked out of office, and during economic booms, politicians are more likely to win reelection.

What is important here is that this threshold level is different for the two policies. We present this graphically in Figure 1, illustrating voters' choices given different economic conditions (y) and a choice between high tax incentives (x=1) or low tax incentives (x-2). When income is high (greater than y=2) the Incumbent (I) wins reeelection under both policies and if income is low (less than y=1) voters vote for the Challenger (C). Yet, there is an interval (2>y>1) of performance where policy choice affects voter choice, and where voters elect politicians only when tax incentives are high (x=1).

(Figure 1 about Here)

In other words, during a recession, while there is a bias against voting for an incumbent, a voter that believes tax incentives are a good policy choice is more willing to reelect a politician who offers tax incentives than a politicians who does not enact these incentives. Thus, a voter is more willing to accept poor economic performance by an incumbent, provided the incumbent enacts policies that are in line with the voter's beliefs about the appropriate policy. This difference between these two thresholds will be critical for our theory.

$$\Delta_y = |y_1(\mu) - y_2(\mu)| = |1 - 2\mu| \left(1 + 2\frac{\sigma_i^2}{\sigma^2}\right)$$

The first thing to note in this equation is that a voter will vote for the incumbent at lower levels of income generated, if she thinks that the policy chosen was correct. In particular, if the voter thinks that providing incentives is a better choice, the incumbent will be rewarded for "demonstrating effort." Thus, given that voters believe there is a positive relationship between

tax incentives and investment location choice there is a bias towards rewarding politicians for tax incentives.

The second point to note is about how the information level of the voter affects this difference. If the voter has strong prior beliefs about the relative effectiveness of the policies, the more sensitive the voter's choice is to the policy rather than performance. This may seem obvious, but is worth highlighting. Voters that have essentially no beliefs, or even interest, about the policy will vote based primarily on income generated. Voters that have stronger beliefs about the type of policy that is most appropriate are more likely to use the information about the politician's policy choice when casting the vote.

To summarize this voting dynamic, if the income level is below a certain threshold, the voter will vote for the challenger no matter what policy is chosen. Similarly, if the income generated is higher than the maximum of the thresholds, the voter will vote for the incumbent. Hence, we would not expect a large vote bonus from offering an incentive if the FDI project is won.

From this simple model we derive three testable implications, all directly related to the relationship between investment, fiscal incentives, and voting for U.S. governors.

Our first hypothesis is that voters will reward politicians for investment that comes into their district. In our model, this relates to the income generated, which is a function of both policy choice and a random shock. Consequently, investors may select a state based on policy choice, but a number of other factors also influence this decision. Regardless of the determinants of investment, our hypothesis states that politicians will be systematically rewarded for attracting investment. This is a simple hypothesis, but one that (to our knowledge) has not been tested within a survey experiment framework.

H1: Voters are more likely to reelect governors who attract investment to their state.

Our second hypothesis relates to the costs and benefits of providing fiscal incentives. In our theoretical model, we show that tax incentives can influence voting decisions. Voters have

prior beliefs about these incentives, but these incentives are demonstratable efforts at attracting investment. While the actual attraction of invesmtent influences voting, the choice of offering tax incentives can also affect voting decisions. Our model shows that politicians can use tax incentives to claim credit for new investment locating in their district. Thus, rather than punishing politicians for offering tax incentives, voters are systematically more likely to reward politicians that enact tax incentives in connection with attracting investment. This leads to our second hypothesis.

H2: Voters are more likely to reward governors who attract investment and offer fiscal incentives.

A core component of our model is the beliefs of voters. Some voters may be more attentive to policies when they believe specific policy choices to be important, are informed about the policy views of politicians, and intend to use these beliefs in their voting decisions. Other, more ideologically-oriented voters, may not use information about these policies (or even the income generated to cast their vote). For example, Basinger and Lavine (2005) find that more partisan voters are more likely to utilize partisan cues when voting for members of Congress, while non-partisan voters are more likely to rely on simple cues such as economic performance and "are motivated to expend additional cognitive resources to compensate for the reduced value of partisan cues (p169)"

Therefore, we hypothesize that independent voters have the incentives to pay closer attention to investment policies when making voting decisions. Below, we provide empirical evidence that independent voters are *more* likely than partisan voters to claim knowledge of incentive politics for investment attraction. As a result, not only are independent voters more likely to pay attenton to policy choice; specific policy choices are more likely to affect whether they vote for an incumbent. This leads to our third hypothesis.

H3: Ideologically independent voters are more likely than partisan voters to reward the use of incentive policies.

Our last point, while uncontroversial on the surface, has important implications. Politicians in states that attract investment are likely to win reelection no matter what the policy. In the context of our model, once a threshold is passed, incumbent politicians can select policies that conform to the their personal beliefs, assured that voters will reelect them. This implies a counter-intituitive prediction. Policy choice is most important in states that fail to win the competition for investment.

H4: The vote bonus from offering an incentive is strongest for governors losing investment projects.

5. Empirical Analysis

The theoretical model in the previous section provides clear predictions on the relationship between investment, tax incentives, and voting. Our empirical analysis builds on the existing observational studies on tax incentives, yet our research design offers a number of advantages over existing work. First, given the increasing trend of offering tax incentives to attract investment, it is difficult to harness observational studies, even those at the individual level, to test our model. Other theoretical and empirical issues such as endogeneity complicate statistical identification. Specifically germane is the issue of unobserved heterogeneity among governors. Particularly entrepreneurial governors may be the most popular and the most likely to offer investment incentives, leading to a correlation without a direct causal relationship.

Second, we directly examine if these policies are relevant for voters. In a recent study of trade, Guisinger (2009) finds voters have little knowledge of individual trade policy and that trade has very little impact on vote choice. We address this issue in the context of attracting investment by focusing on how the offering of tax incentives affects the intentions of individual voters. Aggregate analysis at the state level, such as correlations between investment incentives and public approval, are hampered by problems of ecological inference, conflating how different types of voters respond to similar policies.

These limitations to causal inference can be mitigated through an experimental approach. Specifically, we utilize a survey experiment to randomize treatment across individuals. This allows use to clearly test the causal mechanism linking policy and the perceptions on individual voters. In addition, rather than focusing just on vote choice, we utilize a question that directly asks how a policy (tax incentives) *changes* the probability of voting for the incumbent. Consequently, we can clearly isolate how attracting investment and tax incentive policy affects the probability of an individual voting for the incumbent governor.

Our empirical analysis utilizes a survey experiment placed in a nationally representative survey of Americans. This survey is part of the Cooperative Congressional Election Survey (CCES), an internet based survey administered by YouGovPolimetrix in October of 2009 of 13,800 respondents. Respondents are asked a battery of demographic questions, queries on voting and partisanship, and tests of the respondent's ability to identify how their elected officials voted on specific pieces of legislation. Our team added sixteen questions to a nation-wide 1,974-respondent subsample of the CCES.

Our main question is a straightforward survey experiment on how attracting an investment project and offering tax incentives affected the respondent's intention to vote for the governor. We provided only very limited information on the investment project, specifically the number of jobs created, so that the respondent recognized the event as influential on the state's economy. We offered no other information, including no negative information on the investment for three reasons. First, our theoretical model explores how politicians take credit for positive economic outcomes. Second, the slight framing effect in favor of investment is the best approximation of how a politician would present the project, offering us insight into how politicians claim credit for positive outcomes or deflect blame from not achieving them. Third and most critically for our design, the positive depiction of the investment has no impact on the ability of a voter to separate their approval of the investment from their approval of the incentive

policy, which is the ultimate goal of our research design. Thus, our survey experiment is a realistic test of how politicians claim credit for economic outcomes.

The survey experiment divides the sample into four groups with each respondent having a 25% probability of receiving one of four treatments. These treatments consisted of two dimensions, investment attraction and tax incentives. Our question reads as follows with the two treatments in parentheses:

Your state competed with a number of other states over a new manufacturing plant that will create 1,000 jobs.

With the support of the governor, your state offered a tax incentive (break/reduction) package *that was* [*greater/equal or less*] than that of the other states. If your state [*receives/does not receive*] this investment, how would this effect your evaluation of your governor's performance in office?

1) I would be much more likely to vote for the governor in the next election.
2) I would be slightly more likely to vote for the governor in the next election.
3) My vote choice would not be altered.
4) I would be slightly less likely to vote for the governor in the next election.
5) I would be much less likely to vote for the governor in the next election.

As a result, our survey experiment includes four groups. One group that is treated with an incentive that is greater than other states, and the state received the investment [greater incentive/received investment]. One group with that offered greater incentives, but didn't receive investment [greater incentive/did not received investment]. The final two groups consist of respondents treated with states that offered equal or less incentives than other states, and either received or did not receive the investment [less incentive/receives investment][less incentive/does not receive] investment.

Table 1 demonstrates that the randomization process worked and that with a few very small exceptions, discussed in more detail below, the four treatment samples do not differ dramatically from one another across any factors. This indicates that the treatments were uncorrelated with the characteristics of the voters and can therefore be assessed directly.

(Table 1 about Here)

As a first-cut, we provide a comparison of means of these four groups based on collapsing our dependent variable from a five-point Likert scale. We invert this scale with scores of 5 representing "much more likely to vote for the governor" and 1 as "much less likely." This allows us to construct Table 2 based on the two different treatments for the entire sample of 1974 respondents. The vertical axis displays the investment treatment, while the horizontal axis displays the incentive treatment. The parentheses below the numbers in each cell depict 90% confidence intervals.

As is to be expected, respondents who learned their state won the investment project were more likely to reward their governor than those that did not. Winning the investment increases the likelihood of voting for the governor (checking 4 or 5 on our scale) by about 20%, pushing the average value on our five-point scale up from 2.85 to 3.37. This result was statistically significant at the 95% level of confidence, providing confirmation for H1. Offering an investment incentive also has a statistically significant but substantively small impact in isolation. About 2.4% more voters say they are likely to vote for the governor after hearing an incentive was offered, increasing the mean vote scale from 3.05 to 3.15. This would appear to offer tentative confirmation for H2.

Peering a bit closer at Panel A of Table 2, however, reveals that the impact of incentives is conditional on whether or not the project was won, as suggested by H4 For states that attracted investment, the difference in the likelihood of voting for the governors barely exceeds zero. For states that lost the project, however, 3.5% of voters would shift their vote in favor of a governor who offered an investment incentive, raising the average score from 2.76 to 2.95. This result is significant at the 0.90 level and appears to indicate that voters, as a whole, are supportive of greater investment, but may not be responsive to credit-claiming on the part of elected officials. Rather, they respond more positively to visible effort in losing causes, tentative confirmation of our fourth hypothesis.

(Table 2 about Here)

On the other hand, looking for credit-claiming across the entire electorate may be too ambitious. Party affiliation is quite strong and, depending on the state, a significant portion of the electorate may not be motivated to alter their vote choice at all, much less because of a single incident of investment attraction. According to our data, about 62% (35% Democrat v. 27% Republican) self-identify as strong or weak members of a particular party. Due to their affiliations these, voters may be pre-committed for or against a particular incumbent and there is little a politician can do to change that. Indeed, party identification has been among the strongest determinants of vote choices in repeated analyses at national and local levels (Bartels, 2000; Hetherington, 2001). As every political consultant worth his paycheck knows, the battle for election lies in the middle of the distribution among voters who are likely to change their mind. Although true independents are a relatively small portion of the electorate (about 12.5%), if we include those who self-identify as independent but leaning toward a particular party (8% Democrat v. 15% Republican), we are able to carve out a reasonable sub-sample of 453 observations for analysis.

Panels 2, 3, and 4 analyze the impact of the treatments individually on Democrats, Republicans, and Independents respectively. While all three groups reward the attraction of investment (Republicans more weakly then the others), the impact of investment incentives is only significant among independent voters.

Among investment recipients, 44% of independents whose state offered incentive packages claimed they were more likely to vote for the governor, as opposed to 39% who were told their state did not offer an incentive. This leads to a 0.13 difference in mean scores on our Likert scale, which is just shy of traditional standards of statistical significance. For independents as well, incentives offered in losing efforts pay a higher dividend. While they have a marginal impact on favorable votes (about 2.2%), their most important impact is shifting 19% of the negative voters to the neutral category, thereby significantly increasing the overall vote scale by 0.37 points. Substantively, this is an important result, and it lends further credibility to our

experimental treatment. All voters were given information about the investment project,

providing details on employment creation, with no negative information about the project. Yet,

as suggested by H3, only independent voters significantly responded to the treatment on tax

incentives.[11]

5.1. Ordered Probit Analysis

The use of a mean score across the Likert scale assumes that one-point shifts across each

of level of the scale are equivalent. This assumption may be cavalier, as a shift from a score of 2

(slightly less likely to vote) to 3 (no difference), may be very different from a shift from 4

(slightly more likely) to 5 (much more likely).   To address this problem, many social science

scholars have adopted the use of the ordered probit (*oprobit*) specification for regression analysis

(McKelvey and Zavoina 1975). Use of this specification also helps addresses problems of

heteroskedasticity in multiple regressions, and eliminates the possibility of a predicted probability

for a particular unit on the scale that is larger than one.

(Table 3 about here)

We address the problems of improper model specification in Table 3, which displays an

ordered probit analysis of the two treatments on voter choice. Model 1 displays the results for the

entire sample. Once again, both the FDI and incentives treatments are significant at the 95%

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[11] Petrokin (2009) argues that "leaners" are just as partisan and unlikely to be persuaded as those

who self-indentify as weak members of a particular party. If this is true, including "leaners" is

likely to bias the impact of our treatments toward zero, just as with the inclusion of highly

partisan candidates in Table 2. Unfortunately, there is little we can do to resolve this problem.

Self-identified independents represent a very small group (179 observations), providing less than

50 observations per cell. Randomized treatments on such small groups offer insufficient

statistical power.

level. All else equal, receiving an investment project increases the probability of a vote for governor by 18.2% (6.7% (option 4); 11.5% (option 5)), while offering an incentive increases the likelihood of a vote for governor by 3.3%

While these results are quite strong, one concern is that responses to the treatment may be correlated with characteristics of the respondent, leading to omitted variable bias. By design, randomized survey experiments are meant to side-step this problem by ensuring that voter characteristics are orthogonal to the treatment. Nevertheless, sampling error and non-response bias can sometimes lead to small differences in voter characteristics across treatments. In Table 1, some differences in respondent characteristics across treatments, such as homeownership and taking an economics class, were slightly larger than the 3% sampling error that is standard in public opinion surveys. Another worry is that treatments may be influenced by characteristics of the respondent. For instance, unemployed respondents may respond differently to the promise of jobs than those in more secure career paths. Alternatively, voters with strong political differences from the governor may view her actions differently than those closer on the ideological spectrum. In general, the experimental setting should mitigate against biases caused by omitting these factors, however, clustering of these attributes within particular states could bias results slightly.

To make sure our results are not the artifact of unbalanced sampling or omitted variable bias, Models 2, 3, and 4, control for potential confounding variables. Model 2 adds control variables capturing the unbalanced covariates discussed above, as well as partisan affiliation of the respondents relative to the governor (measured as the distance between the respondent's self-identification and pinpointing of the governor on a seven-point partisan scale). Model 3 controls for two perceptions of economic performance. Unemployment gauges whether a respondent is in need of work and might be particularly interested in the employment creation cited in the experiment's stem. Economic performance is a five-point Likert scale from the common content portion of the survey, measuring whether respondents feel the economy has become (5) much worse or (1) much better over the past year. Unsurprisingly, 70% of respondents believe the

economy worsened in the year prior to the survey distribution (2008-2009). Finally, Model 4 controls whether the respondent is male and whether he/she self classifies as white.

The multiple regression results give us great confidence in our experimental results. Only one of the control variables is significantly correlated with the likelihood of voting for the governor. The farther that a voter is ideologically from the governor, the less likely she is to change her vote on her behalf. Nevertheless, including these covariates has virtually no impact on the substantive size of the coefficients for the two treatments.

Model 5 adds two state-level additional control variables that are thought to be critical in the electoral performance of incumbent governors – the previous year's approval ratings and unemployment. One might imagine that the impact of our treatments on vote choice will vary depending on the economic climate in particular states and the incumbent governor's overall popularity. In states with highly unpopular governors, the treatment may be too weak to sway vote choices. The opposite may be true in states with very popular governors or excellent economic performance over the past year. How much more certain can a voter be that s/he would vote for the incumbent? Neither of these state-level controls is statistically significant at conventional levels. Once again, our core variables are not strongly affected by the inclusion.

The two controls above are insufficient to rule out state-level effects. There is a possibility that our results may be driven by unobservable factors among a small group of states where changes in voter choice are most likely. State fixed effects in Model 6 allow us to address unobserved state-level heterogeneity, ensuring that our results are not an artifact of large swings in only a handful of states. Our results are robust to this change in specification, but it is worth noting that the inclusion of state effects increases the substantive effect of the investment treatment. Models 7, 8, and 9 re-run the fully-specified Model 6, but restrict the analysis to Independents, Democrats, and Republicans respectively. All three groups are positively affected by the attraction of new investment, but Independents more so than the other two groups. Investment has less impact on Republican voting than the national average. When it comes to

incentives, there are even starker differences. Incentives only have a positive impact on voting

for the governor among independent voters. All else equal, we find that incentives increase the

probability of voting for a governor by 9.1% (4.4% (option 4); 4.7% (option 5)). The impact for

Democrats and Republicans is not significantly different from zero, and is even slightly negative

among Republican voters.

5.2. Conditional Effects of Incentives

   Our theory of pandering predicted that voters might respond differently to investment

incentives if their state won the project than if they lost it. Moreover, drawing on the economics

literature, voters may not be willing to pay for investment through tax reduction that they believe

the state would have won anyway. These redundant incentives for investment have sometimes

been deemed "corporate welfare" by their critics. To test the conditional effect of investment

incentives, we interact the two treatments in Table 4. Model 1 performs the analysis for the full

sample, Model 2 limits the observations to independents. Figure 2 helps illustrate the predicted

probabilities resulting from the analysis.

<center>**(Table 4 and Figure 2 about Here)**</center>

   In both models, the first coefficient on receipt of the project demonstrates that when

incentives are equal to other states, the impact of attracting investment is strongly positive,

increasing the likelihood of voting for the governor by 20.9% among all voters and 23.6% among

independents. The second coefficient illustrates that when the state loses the project, the impact

of incentives is also strongly positive, increasing the vote for the incumbent governor by 5.4% in

the full sample and 11.3% in the independent group. The multiplicative interaction between the

two treatments, however, is negative and significant at the 95% level. This indicates that

incentives are less effective at generating votes when the state has successfully attracted the

project. This counter-intuitive result can be observed in Figure 2. When the project is won,

incentives actually cost the incumbent governor a marginal 0.25% of the vote among all

respondents. For independents, incentives offer some opportunities for credit claiming, increasing votes for the governor by 5.6%, but this is less than half of their impact on votes garnered in the losing effort.

The fact that incentives pay political dividends even in losing efforts is important, because it provides a clear dominant strategy for governors. Win the project and the governor receives the vote bonus of the FDI and the slightly smaller vote bonus of the incentive, especially from independents. Lose the project and voters will still reward the public effort of a governor to lure the project.

A final empirical consideration is whether it is safe to generalize across states. The large substantive size of state fixed effects in these models leads to the hypothesis that the impact of the use of incentives to claim credit by politicians may be contingent on state-level economic and political factors. In Model 3, we explore this conditional hypothesis by interacting state governor approval numbers at the time of the survey with the two treatments.[12] The model demonstrates that governor approval negatively conditions investment incentives. In other words, highly popular governors benefit less from investment incentives than unpopular governors.

Figure 3 charts the interaction effect between incentives and approval. On the y-axis we plot the probability of changing one's vote for the governor. On the x-axis is governor approval in 2009. The solid line charts predicted probability of changing one's vote in favor of the governor without any incentive, while the dashed line charts the probability for states that offer incentives. Panels are separated by whether the state won or lost the investment. The chart shows persuasively that whether a state wins or loses the project, the vote bonus of offering the incentive declines with popularity. In both cases, governors with approval rating above 65% are better off not competing for investment projects with incentives.

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[12] Interactions with state unemployment figures were substantively small and not statistically different from zero. Note that approval numbers are only available for 33 states.

(Figure 3 about Here)

This result indicates that offering incentives works best as part of a gambling for resurrection strategy, whereby unpopular governors have a higher incentive to engage in economically risky policy that might play well with voters.

5.3. Information about Incentives

One potential concern when assessing the results of our core experiment is that it may artificially create knowledge of state-level investment incentives that does not exist in reality. If, in actuality, voters do not know whether their states have offered investment incentives, the ability for politicians to use them as credit-claiming mechanisms would be severely impinged. Substantial debate exists in the empirical literature about the true policy knowledge of respondents. Aldrich et al. (1989), in a seminal paper, found that voters were more knowledgeable about foreign affairs than they had been previously given credit, but specific incentive packages may be even too nuanced for informed voters. Furthermore, focal points, a common substitute for limited policy information may not be available on such a narrow issue (Lupia and McCubbins 1998)

To analyze this issue, a separate item in the survey instrument asked voters to answer a simple yes/no query about whether they had knowledge of their state's investment incentives. On average, about 25% of respondents claimed they had such knowledge. To put this number in perspective, it is roughly equivalent to the proportion of respondents who say they attend church regularly. It is not a large figure, but is sizable enough to offer sufficient rewards for credit-claiming.

More importantly, however, there are significant differences across the political orientation of candidates, confirming the Basinger and Lavine (2005) results As Figure 4 reveals, independents with a mean of 30.6%, the target audience for credit-claiming, are significantly more likely than Republicans (24.1%) to claim knowledge of state incentives.

Democrats place themselves directly in the middle (25.7%). This mean ranking is robust to multiple regression analysis, controlling for candidate-level characteristics.

(Figure 4 about Here)

Beyond the survey results, where voters may inflate the true knowledge to avoid embarrassment, a simple Lexis-Nexis search of U.S. newspapers reveals 507 stories in the past two years about tax or other incentives offered by individual states over the past two years. Most states also have investment promotion bureaus that publicize incentive policies offered to particular investors online.[13]

5.3. Attribution

Another assumption made by our survey experiment is that voters will reward a state's governor for specific economic policies. Recent work by Stimson (2004:163) reveals that voters have a difficult time attributing economic performance to particular politicians. This is in contrast with the earlier cited work of Arceneaux. Stimson argues that approval ratings of governors are especially correlated with approval of national politicians and national level of economic performance over time. Stimson writes, "Approval and trust are generic, a syndrome of attitudes toward public affairs that only appears to be affected by and directed toward particular people and institutions."

Recent work has explored a politician's "room to maneuver" in setting policies in an ear of global flows of good, services and capital. Despite the skepticism of scholars about the effectiveness of macroeconomic policy, Hellwig et al (2008) show the majority of voters attribute responsibility for economic performance to elected officials, and priming the respondent with information on global market forces has no impact on this evaluation. While some voters, specifically educated voters and Republications, were more likely to attribute economic outcomes

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[13] See here for an example (http://www.expand2nevada.com/globaltrade.html)

to market forces, the majority of voters held their elected officials accountable for economic performance.

In our survey, how much do our respondents associate economic performance with particular politicians? To answer this question, we exploited a second survey experiment. Voters were provided with this prompt:

> Imagine the scenario that by the time of the next election that the economy in your state was [Treatment]. Rate the likelihood that you would vote for the re-election of the following politicians: (Treatment 1: in recovery; Treatment 2: in decline).

Half of the respondents received Treatment 1 that the economy had recovered, and the other half received Treatment 2 that the economic performance had declined. The results are shown in Figure 5.

(Figure 5 about Here)

Unsurprisingly, voters tended to reward incumbent politicians at all levels for economic recovery. For every political office, the likelihood of receiving a positive vote was higher for respondents who received Treatment 1.

Interesting deviations, however, are apparent from Stimson's findings based on observational data, and is more in line with the findings of Arceneaux on differential attribution by voters (2006). First, there is quite a large difference in the bonus awarded to congressman for economic recovery than for other politicians. Congressmen receive a recovery bonus of 0.47 points, compared to about 0.18 for other politicians in the full sample. This difference is significant the .05 level. Secondly, base level support for governors is lower than other politicians. Though the recovery bonus is similar, voters as a whole are more negative about their governors than national level politicians.

These findings help us understand why governors may favor dramatic, but ultimately inefficient, economic policies such as investment incentives. They are one of the few policies

that voters can attribute directly to them, as opposed to general economic trends. Since they are

insufficiently rewarded for general trends, incentives are an attractive option.[14]

6. Conclusion

In this paper we address the paradox of politicians offering generous incentives to attract

investment projects, despite the growing consensus that these policies are economically

inefficient. Rather than focusing on uninformed politicians or distributional, we construct a

"pandering" model where politicians provide these incentives even if they have perfect

information about their ineffectiveness. They use these incentives to take credit for new

investment, reaping electoral rewards for economically inefficient policy.

We test our model through the use of a survey experiment of a nationally representative

sample of 1,974 Americans. We find strong evidence that voters, especially independent voters,

are more likely to vote for incumbent politicians who use tax incentives to attract investment.

Politicians are rewarded more strongly if they offer incentives in a losing effort, leading to a

clearly dominant strategy. Whether or not a state has a chance to win a project, the governor

should demonstrate some public effort by offering an incentive package better than other states.

Finally, we show that the incentive for governors to offer investment is mediated by their

approval rating. Popular governors have less need to gamble for resurrection by pursuing

economically damaging but politically advantageous policies. In addition, we highlight a number

of other provocative findings on the relationship between tax incentives, voters, and credit.

Our findings have broader implications on the relationship between globalization and the

state. While numerous scholars have examined how trade and investment can constrain state

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[14] This is in contrast to Hellwig's (2008) findings in Britain and France that when political leaders

are more constrained in their economic policy choices non-economic issues increased in political

salience.

behavior, little work has focused on how globalization affects political accountability. We find evidence that movement of capital can provide opportunities for politicians to pander to the public and take credit for new investment flowing into their districts. Thus globalization, rather than making domestic politics irrelevant, can lead to increased political activity to take credit for the consequences of globalization. As politicians become more constrained in their ability to make policy choices, such as monetary policy, we may see an increased incentive for highly visible policies to take credit for global market forces.

References

Aldrich, J. H, J. L. Sullivan and E. Borgida. 1989. Foreign Affairs and Issue Voting: Do Presidential Candidates "Waltz Before A Blind Audience?" *American Political Science Review* 83(1): 123-141.

Arceneaux, Kevin. 2006. The Federal Face of Voting: Are Elected Officials Held Accountable for the Functions Relevant to Their Office? *Political Psychology* 27: 731–754.

Bartels, L.M., 2000. "Partisanship and Voting Behavior." *American Journal of Political Science* 44.1, 35–50.

Basinger, Scott J. and Mark Hallerberg. 2004. Remodeling the Competition for Capital: How Domestic Politics Erases the Race to the Bottom. *American Political Science Review*. 98 (2): 261-276.

Basinger, Scott J. and Harold Lavine. 2005. Ambivalence, Information, and Electoral Choice. *American Political Science Review* 99 (2): 169-184.

Besley, Tim, and Anne Case. 1995. Incumbent Behavior: Vote Seeking, Tax Setting and Yardstick Competition *American Economic Review* 85 (1): 25-45.

Blomstrom, Magnus and Ari Kokko. 2003. The Economics of Foreign Direct Investment Incentives. CEPR Discussion Paper 3775.

Bobonis, Gustavo J. and Shatz, Howard J. 2007. Agglomeration, Adjustment, and State Policies in the Location of Foreign Direct Investment in the United States. The Review of Economics and Statistics 89 (1): 30-43.

Bond, Eric. W. and Larry Samuelson. 1986. Tax Holidays as Signals. *The American Economic Review* 76 (4): 820-826.

Brennan, G. and J. Buchanan. 1980: *The Power to Tax: Analytical Foundations of a Fiscal Constitution.* Cambridge University Press.

Buettner, Thiess and Martin Ruf. 2007. Tax Incentives and the Location of FDI:

Evidence from a Panel of German Multinationals. *International Tax and Public Finance* 14 (2): 151-164.

Cohen, Jeffrey E., and James D. King. 2004. Relative Unemployment and Gubernatorial Popularity. *Journal of Politics* 66 (November):1267–1282.

Cockerham, Sean. 2010. "Parnell seeks investment incentives for oil companies." *Anchorage Daily New,* January 15

Davis, Ronald B. 2004. Tax Treaties and Foreign Direct Investment: Potential versus Performance. *International Tax and Public Finance* 11 (6): 775-802.

Easson, Alex. 2004. *Tax Incentives for Foreign Direct Investment.* The Hague: Kluwer Law International.

Hansen, Susan B. 1999. Governors' Job Performance Ratings and State Unemployment: The Case of California. *State and Local Government Review* 31 (Winter):7–17.

Hays, Jude C. 2003. Globalization and Capital Taxation in Consensus and Majoritarian Democracies. *World Politics* 56: 79-113.

Hellwig, Timothy. 2008. Globalization, Policy Constraints and Vote Choice. *The Journal of Politics* 70(4): 1128-41.

Hellwig, Timothy, Eve Ringsmuth and John R. Freeman. 2008. The American Public and the Room to Maneuver: Responsibility Attributions and Policy Efficacy in an Era of Globalization. *International Studies Quarterly* 52(4): 855-80.

Hellwig, Timothy and David Samuels. 2008. Electoral Accountability and the Variety of Democratic Regimes. *British Journal of Political Science* 38 (1): 65-90.

Hetherington, M.J., 2001. Resurgent Mass Partisanship: The Role of Elite Polarization. *American Political Science Review* 95, 619–631.

Jensen, Nathan M. 2006. *Nation-States and the Multinational Corporation: A Political Economy of Foreign Direct Investment.* Princeton: Princeton University Press.

Le, Diep, Eli Miloslavsky, and Howard J. Shatz, *State Foreign Office Database*,

electronic database, Public Policy Institute of California (2003).

Li, Quan. 2006. Democracy, Autocracy, and Tax Incentives to Foreign Direct

Investors: A Cross-National Analysis. *Journal of Politics* 68 (2) 62-74.

Lupia, Arthur and Matthew D. McCubbins. 1998. *The Democratic Dilemma: Can*

Citizens Learn What They Need To Know? Cambridge, Cambridge University Press.

Malesky, Edmund. 2008. Provincial Governance and Foreign Direct Investment in

Vietnam. In *Twenty Years of Foreign Investment in Vietnam. Ho Chi Minh City: Saigon*

Economic Times Press.

McKelvey, R. D., & Zavoina, W. (1975). A Statistical Model for the Analysis of Ordinal Level

Dependent Variables. *Journal of Mathematical Sociology* 4, 103–120.

Morisset, Jacques and Neda Pirnia. 1999. How Tax Policy and Incentives Affect

Foreign Direct Investment. World Bank Policy Research Working Paper 2509.

Oates, Wallace E. 1972. *Fiscal Federalism.* New York: Harcourt Brace Jovanovich.

Oman, Charles. 2000. Policy Competition for Foreign Direct Investment: A Study of

Competition among Governments to Attract FDI. Paris: OECD.

Petrocik, J.R. 2009. Measuring Party Support: Leaners are Not Independents. *Electoral Studies*

28: 562–57

Polimetrix. 2005. American Public Opinion Poll, October 2005.

http://web.mit.edu/polisci/portl/data.html

Robinson, James A. and Ragnar Torvik. 2005. White Elephants. *Journal of Public*

Economics 89: 197-210.

Rodrik, Dani. 1997. *Has Globalization Gone Too Far?* Washington D.C.: Institute for

International Economics.

Slemrod, Joel. 2004. Are Corporate Tax Rates, or Countries, Converging? *Journal of*

Public Economics 88: 1169-1186.

Stimson, James. 2004. *Tides of Content: How Opinion Movements Shape American Politics*.

New York: Cambridge University Press

Swank, Duane. 2002. *Global Capital, Political Institutions, and Policy Change in*

Developed Welfare States. New York: Cambridge University Press.

___. 2006. Tax Policy in an Era of Internationalization: Explaining the Spread

of Neoliberalism. *International Organization* 60: 847-882.

Swank, Duane and Sven Steimo. 2002. The New Political Economy of Taxation in

Advanced Capitalist Democracies. *American Journal of Political Science* 46 (3): 642-

55.

Thomas, Kenneth P. and Fiona Wishlade. 2009. Locational Tournaments in the U.S. and

the EU. Working Paper.

Tiebout, Charles. 1956. A Pure Theory of Local Expenditures. *The Journal of Political*

Economy 64 (5): 416-426.

Wells, Louis T., Nancy J. Allen, Jacques Morisset, and Neda Pirnia. 2001. Using Tax

Incentives to Compete for Foreign Investment: Are They Worth the Costs? FIAS

Occasional Paper 15.

Wildasin, David E. 1989. Interjurisdictional Capital Mobility: Fiscal Externality and a

Corrective Subsidy. *Journal of Urban Economics* 25 (2): 193-212.

Wilson, John Douglas. 1986. A theory of interregional tax competition. *Journal of*

Urban Economics 19: 296-315.

___. 1991. Tax Competition with Interregional Differences in Factor

Endowments. *Regional Science and Urban Economics* 21: 423-451.

Wilson, John Douglas and David E. Wildasin. 2004. Capital Tax Competition: Bane or

Boon? *Journal of Public Economics* 88 (6): 1065-1091.

Wolfers, Justin. 2002. Are Voters Rational? Evidence from Gubernatorial Elections.

Working Paper 1730 Stanford GSB.

Zee, Howell H., Janet G. Stotsky, and Eduardo Ley. 2002. Tax Incentives for Business

   Investment: A Primary for Policy Makers in Developing Countries. *World Development*

   30 (9): 1497-1516.

Zodrow, George R. and Peter Mieszkowski. 1986. Pigou, Tiebout, property taxation,

   and the underprovision of public goods. *Journal of Urban Economics* 19 (3):

   356-370.

Table 1: Sample Characteristics by Treatment Group								
Sample Characteristics	No FDI, No Incentive		FDI, No Incentive		No FDI, Incentive		FDI, Incentive	
(Number of Observations)	*522*		*489*		*509*		*477*	
Likelihood Vote for Governor	*Mean*	*SE*	*Mean*	*SE*	*Mean*	*SE*	*Mean*	*SE*
Five-Point Scale	2.76	0.05	3.37	0.05	2.95	0.05	3.38	0.05
Dichotomous	14.3%	1.5%	36.0%	2.2%	17.9%	1.7%	37.2%	2.2%
Demographics	*Mean*	*SE*	*Mean*	*SE*	*Mean*	*SE*	*Mean*	*SE*
Age	46.7	0.7	46.8	0.7	46.3	0.7	45.0	0.7
Male	43.5%	2.2%	46.2%	2.3%	46.6%	2.2%	44.0%	2.3%
White	71.3%	2.0%	72.1%	2.0%	71.9%	2.0%	73.4%	2.0%
Black or Hispanic	22.0%	1.8%	22.6%	1.9%	22.8%	1.9%	21.2%	1.9%
Church Attendance*	3.85	0.08	3.83	0.08	3.81	0.08	3.88	0.08
Protestant	41.4%	2.2%	40.9%	2.2%	42.4%	2.2%	41.3%	2.3%
Rural Resident	15.9%	1.6%	15.6%	1.6%	13.8%	1.5%	13.4%	1.6%
Urban Resident	36.0%	2.1%	36.3%	2.2%	39.7%	2.2%	36.3%	2.2%
Party Affiliation	*Mean*	*SE*	*Mean*	*SE*	*Mean*	*SE*	*Mean*	*SE*
Democrat	36.8%	2.1%	35.7%	2.2%	34.6%	2.1%	34.8%	2.2%
Republican	24.7%	1.9%	26.7%	2.0%	26.7%	2.0%	32.1%	2.1%
Independent	28.4%	2.0%	27.7%	2.0%	26.5%	2.0%	26.4%	2.0%
Partisan Distance from Gov.	2.26	0.08	2.25	0.08	2.39	0.08	2.17	0.08
Economics	*Mean*	*SE*	*Mean*	*SE*	*Mean*	*SE*	*Mean*	*SE*
Employed Fulltime	38.3%	2.1%	39.4%	2.2%	41.3%	2.2%	37.1%	2.2%
Unemployed or Part-Time	17.0%	1.6%	16.6%	1.7%	18.3%	1.7%	22.0%	1.9%
Union Member	30.8%	2.0%	31.2%	2.1%	30.3%	2.0%	30.3%	2.0%
Homeowner	67.8%	2.0%	69.4%	2.1%	67.0%	2.1%	62.3%	2.2%
Stockowner	46.1%	2.2%	49.5%	2.3%	48.7%	2.2%	45.9%	2.3%
Taken Economics Class	53.8%	2.2%	51.2%	2.3%	53.6%	2.2%	48.6%	2.3%
Economic Performance**	1.99	0.05	2.05	0.05	1.99	0.05	2.03	0.05

*Six point scale, ranging from (1) More than once a week to (6) Never

** Retrospective assessment of economic performance, ranging from (1) Much Worse to (5) Much Better

Table 2: Likelihood of Vote for Governor (By Party Affiliation)

Received Investment		All — Yes	All — No		Independents — Yes	Independents — No		Democrats — Yes	Democrats — No		Republicans — Yes	Republicans — No
	Tax Incentive Greater Then Competitor											
		Yes	**No**		**Yes**	**No**		**Yes**	**No**		**Yes**	**No**
Yes	Yes	3.38 (3.299 3.454)	3.37 (3.294 3.443)	Yes	3.51 (3.356 3.674)	3.38 (3.241 3.529)	Yes	3.41 (3.261 3.560)	3.35 (3.216 3.488)	Yes	3.19 (3.043 3.345)	3.33 (3.171 3.479)
		All (N=1974)			**Independents (N=453)**			**Democrats (N=580)**			**Republicans (N=505)**	
No	No	2.95 (2.870 3.022)	2.76 (2.679 2.833)	No	3.09 (2.951 3.225)	2.72 (2.559 2.886)	No	2.92 (2.779 3.060)	2.78 (2.638 2.923)	No	2.91 (2.757 3.070)	2.78 (2.609 2.950)

90% CI in Parentheses; Comparison of mean response to question: … how would this effect your evaluation of your governor's performance in office?
1) Much less likely; 2) Slightly less likely; 3) Vote choice would not be altered; 4) Slightly more likely; 5) Much more likely

Table 3: Ordered Probit Model of Likelihood of Voting for Governor

Dependent Variable: Likelihood of voting for governor in next election	Full Sample	Socio-Economic	Economic Performance	Demographic Controls	State Controls	State Fixed Effects	Independent (w/FE)	Democrats (w/FE)	Republican (w/FE)
	(1)	(2)	(3)	4)	(5)	(6)	(7)	(8)	(9)
State Received Project	0.576***	0.585***	0.589***	0.590***	0.603***	0.590***	0.751***	0.639***	0.549***
	(0.0516)	(0.0532)	(0.0534)	(0.0534)	(0.0598)	(0.0539)	(0.116)	(0.105)	(0.115)
State Offered Incentive	0.109**	0.106**	0.111**	0.111**	0.118**	0.122**	0.287**	0.0723	-0.0326
	(0.0493)	(0.0506)	(0.0507)	(0.0507)	(0.0564)	(0.0512)	(0.112)	(0.0973)	(0.111)
Homeowner		0.00318	0.00490	0.00148	-0.0267	0.00894	-0.0119	-0.0432	0.145
		(0.0568)	(0.0569)	(0.0571)	(0.0616)	(0.0592)	(0.136)	(0.116)	(0.143)
Economics Class		0.0421	0.0437	0.0329	0.00797	0.0231	-0.0208	0.0361	0.114
		(0.0511)	(0.0514)	(0.0518)	(0.0580)	(0.0534)	(0.117)	(0.107)	(0.112)
Rural		-0.0928	-0.0928	-0.0831	-0.0903	-0.0864	-0.341**	0.153	0.0896
		(0.0764)	(0.0768)	(0.0769)	(0.0885)	(0.0790)	(0.161)	(0.203)	(0.134)
Partisan Distance (ABS)		-0.159***	-0.158***	-0.160***	-0.165***	-0.153***	-0.0863**	-0.0832**	-0.180***
		(0.0150)	(0.0151)	(0.0152)	(0.0169)	(0.0158)	(0.0397)	(0.0361)	(0.0415)
Age		-0.000649	-0.000719	-0.000828	-0.00312	-0.00118	0.00691*	-0.00365	-0.00659*
		(0.00161)	(0.00165)	(0.00165)	(0.0107)	(0.00172)	(0.00399)	(0.00347)	(0.00387)
Unemployed			-0.0788	-0.0735	-0.0798	-0.0717	-0.311**	-0.0174	-0.119
			(0.0678)	(0.0679)	(0.0778)	(0.0702)	(0.154)	(0.134)	(0.151)
State Economic Performance			0.00729	0.00755	0.00520	0.0102	0.0377	0.0677	-0.0808
			(0.0245)	(0.0246)	(0.0262)	(0.0253)	(0.0619)	(0.0505)	(0.0640)
Male				0.0829	0.0941	0.0840	0.204*	-0.0169	-0.0617
				(0.0517)	(0.0586)	(0.0527)	(0.117)	(0.108)	(0.115)
White				-0.0335	-0.0384	-0.0417	-0.0202	-0.0918	0.166
				(0.0604)	(0.0663)	(0.0643)	(0.143)	(0.113)	(0.168)
Governor Approval 2009					0.00173				
					(0.00230)				
Unemployment 2009					-0.00932				
					(0.0194)				
State Fixed Effects	NO	NO	NO	NO	NO	YES	YES	YES	YES
Cut 1	-0.961***	-1.384***	-1.380***	-1.382***	-1.398***	-1.182***	-1.245***	-1.153***	-0.826*
	(0.0480)	(0.101)	(0.126)	(0.134)	(0.298)	(0.211)	(0.418)	(0.305)	(0.455)
Cut 2	-0.641***	-1.051***	-1.047***	-1.049***	-1.075***	-0.847***	-0.752*	-0.794***	-0.575
	(0.0459)	(0.0999)	(0.125)	(0.133)	(0.297)	(0.211)	(0.415)	(0.303)	(0.459)
Cut 3	1.010***	0.664***	0.671***	0.670***	0.654**	0.899***	1.028**	1.087***	1.392***
	(0.0500)	(0.0995)	(0.125)	(0.132)	(0.296)	(0.211)	(0.411)	(0.310)	(0.466)
Cut 4	1.521***	1.191***	1.200***	1.200***	1.211***	1.438***	1.812***	1.591***	1.836***
	(0.0572)	(0.103)	(0.128)	(0.136)	(0.300)	(0.212)	(0.413)	(0.318)	(0.474)
Observations	1974	1905	1904	1904	1541	1904	440	558	491
States	50	50	50	50	33	50	50	50	50
Pseudo R-Squared	0.0270	0.0522	0.0528	0.0534	0.0571	0.0626	0.118	0.0929	0.115
Log Likelihood	-2454	-2304	-2301	-2299	-1850	-2277	-507.6	-636.6	-530.1

Robust standard errors in parentheses. In Model 5, standard errors are clustered at the state level.

*** p<0.01, ** p<0.05, * p<0.1

| Table 4: Interaction of Treatments			
Dependent Variable: Likelihood of voting for governor in next election	**Full Sample**	**Independents**	**Approval**
	(1)	(2)	(3)
State Received Project	0.703***	0.977***	0.205
	(0.0743)	(0.169)	(0.133)
State Offered Incentive	0.233***	0.516***	0.166**
	(0.0726)	(0.159)	(0.0777)
Project*Incentive	-0.228**	-0.470**	0.000756
	(0.104)	(0.225)	(0.00208)
Governor Approval 2009			-0.118
			(0.0978)
Approval*Incentive			-0.00254*
			(0.00144)
Approval*FDI			0.000735
			(0.00269)
Approval*Incentive*FDI			0.00189
			(0.00238)
Homeowner	0.00652	-0.0101	-0.0104
	(0.0593)	(0.137)	(0.0246)
Economic Class	0.0221	-0.0210	0.00889
	(0.0534)	(0.118)	(0.0253)
Rural	-0.0856	-0.343**	-0.0139
	(0.0791)	(0.162)	(0.0321)
Partisan Distance (ABS)	-0.155***	-0.0919**	-0.0489***
	(0.0159)	(0.0404)	(0.00733)
Age	-0.00123	0.00692*	-0.00105
	(0.00172)	(0.00402)	(0.00437)
Unemployed	-0.0685	-0.304**	0.00789
	(0.0701)	(0.154)	(0.0249)
State Economic Performance	0.00919	0.0381	-0.00246
	(0.0253)	(0.0613)	(0.00853)
Male	0.0809	0.190	0.0520**
	(0.0527)	(0.117)	(0.0225)
White	-0.0424	-0.0447	-0.0157
	(0.0643)	(0.144)	(0.0203)
Unemployment 2009			-0.00452
			(0.00730)
State Fixed Effects	YES	YES	
Cut 1	-1.126***	-1.180***	
	(0.212)	(0.427)	
Cut 2	-0.790***	-0.680	
	(0.212)	(0.425)	
Cut 3	0.959***	1.114***	
	(0.213)	(0.421)	
Cut 4	1.498***	1.897***	
	(0.214)	(0.423)	
Observations	1904	440	1541
States	50	50	33
Log Likelihood	-2274	-505.5	-793.1
Pseudo R-Squared	0.0636	0.122	0.0914

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Model 1 and 2 are ordered probit models of likelihood of vote change.

Model 3 is a probit model with dependent variable (Vote change for govern[o]

Model 3 displays marginal probabilities and errors are clustered at state level.

Figure 1: Incentives, Economic Performance, and Voter Decisions
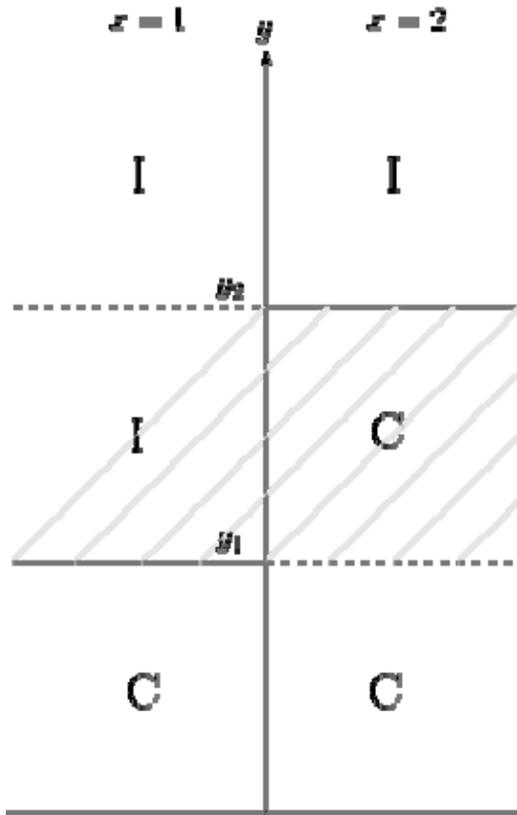
This figure illustrates voters' choices given different economic conditions (y) and a choice between high tax incentives (x=1) or low tax incentives (x-2). When income is high (greater than y=2) the Incumbent (I) wins reeelection under both policies and if income is low (less than y=1) voters vote for the Challenger (C). Yet, there is an interval (2>y>1) of performance where policy choice affects voter choice, and where voters' elect politicians only when tax incentives are high (x=1).

**Figure 2: Predicted Probability of Voting for Governor**
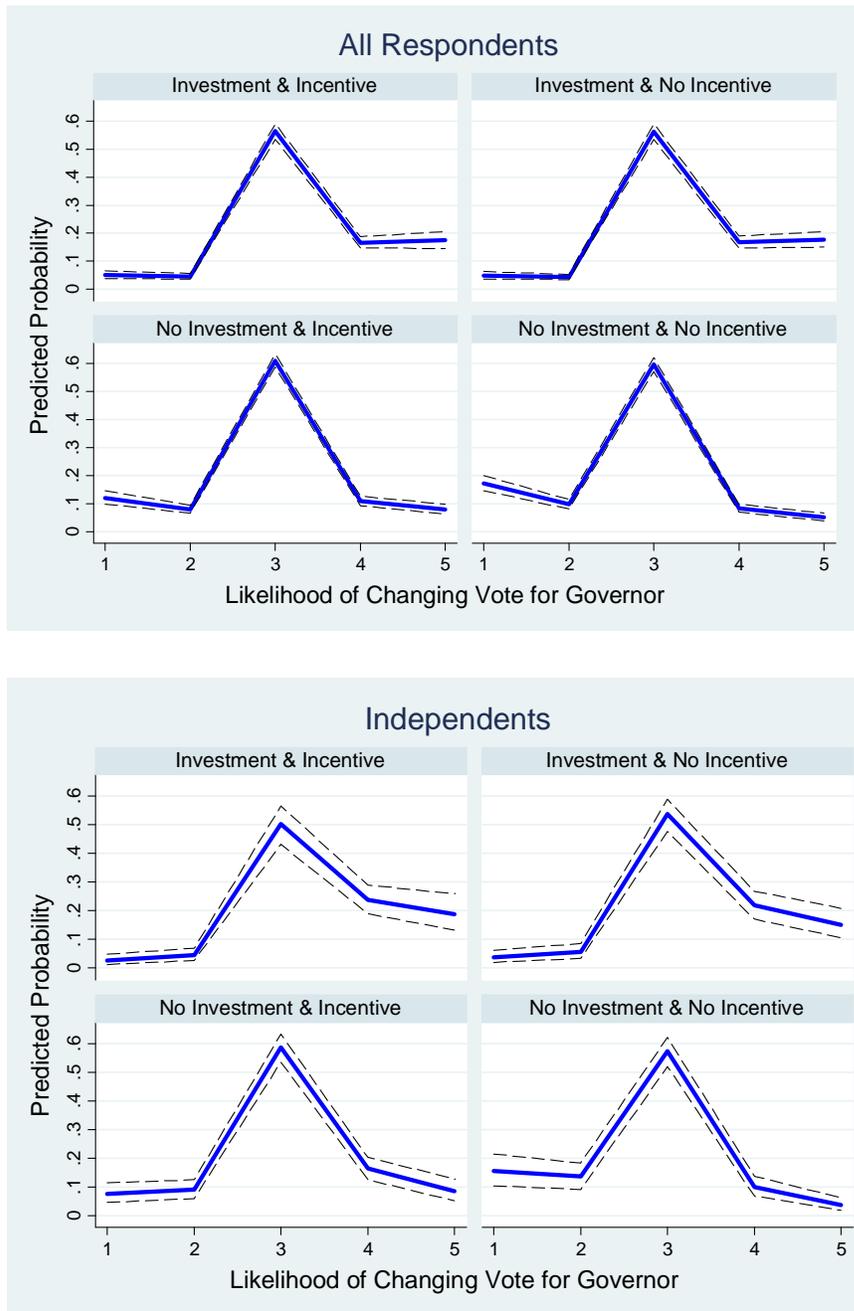
Graphical depiction of results from Models 1 and 2 in Table 4. Dashed lines represent 95% Confidence Intervals. Dashed lines represent 95% Confidence Intervals

**Figure 3: Conditional Effect of Approval Rating on Incentive Effectiveness**
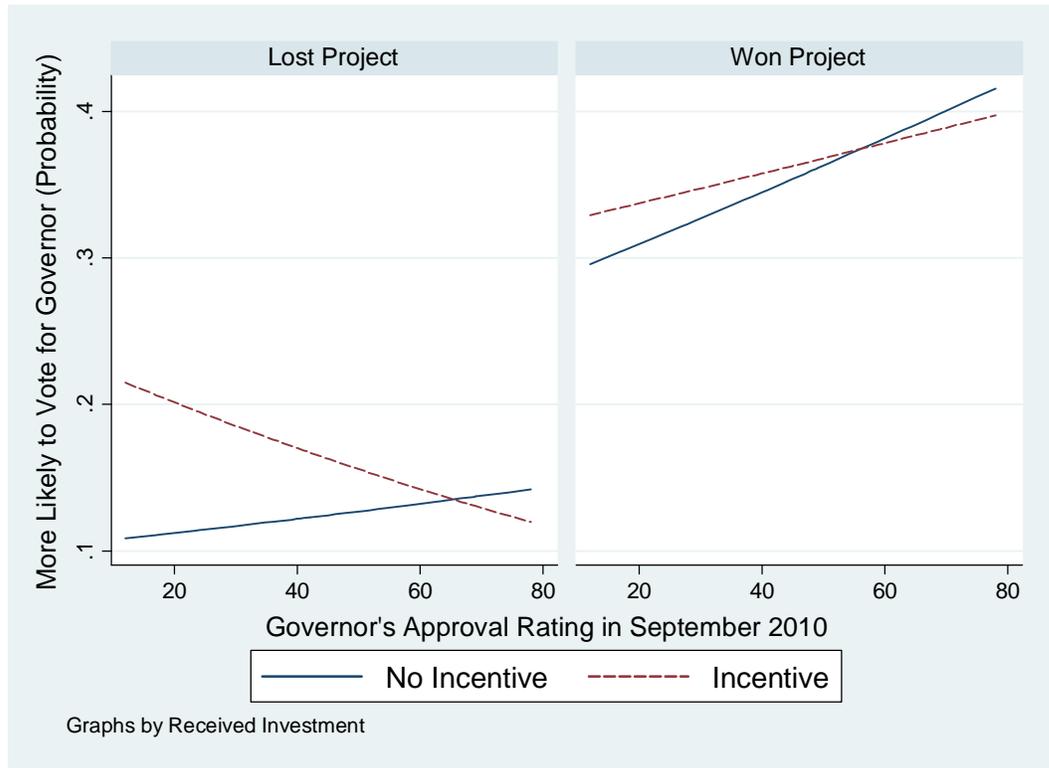
Graphical depiction of results from Model 3 in Table 4.

Figure 4: Respondent Knowledge of Investment Incentives
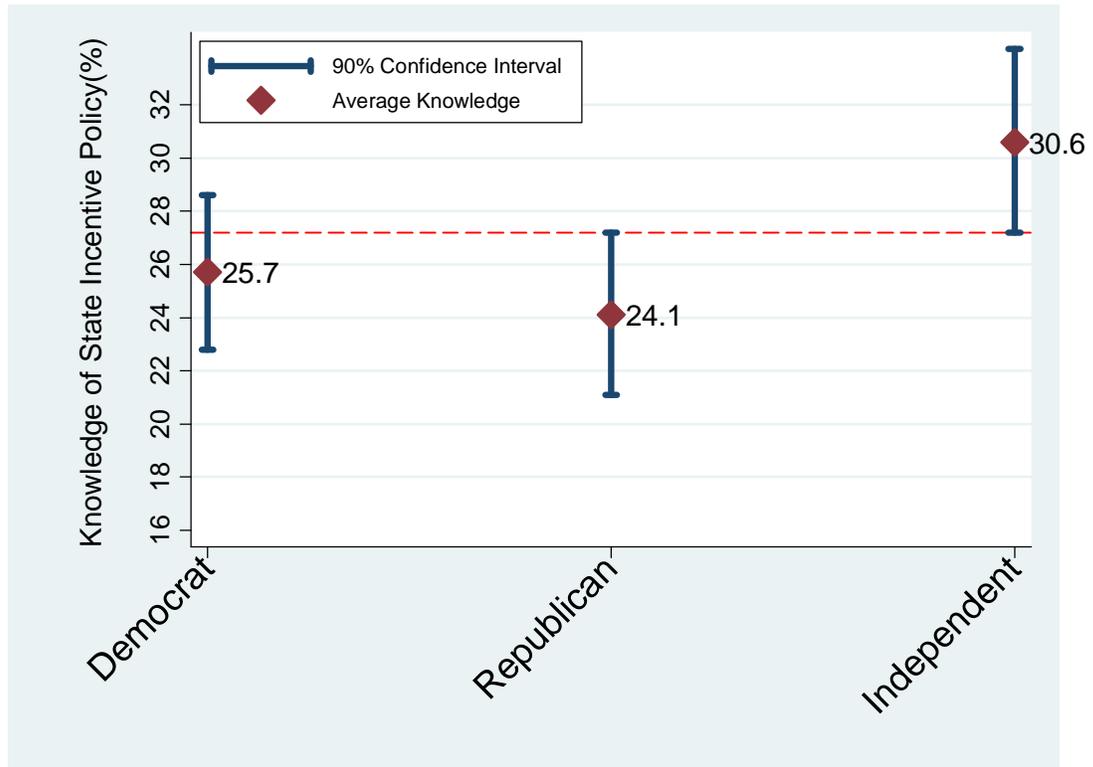
Dashed red line denotes 27.7%, indicating that the incentive knowledge of Democrats and Independents are significantly different at the 0.1 level.

Figure 5: Attribution of Economic Performance
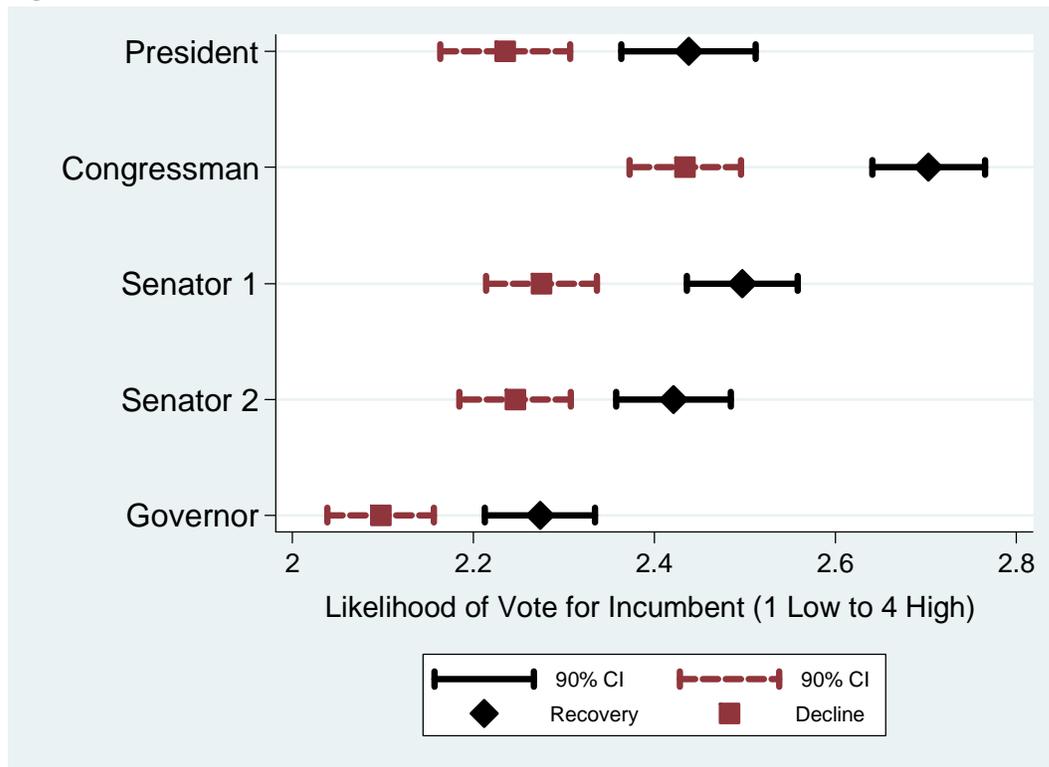
Imagine the scenario that by the time of the next election that the economy in your state was [Treatment]. Rate the likelihood that you would vote for the re-election of the following politicians: (Treatment 1: in recovery; Treatment 2: in decline).

Appendix

Proof of Proposition 1

We first specify voters beliefs which support this pair of strategies as perfect Bayesian equilibrium. Note that we have to speciy two different set of beliefs for the voter: one on the policy choices of the elected official and one on the effectives of the two policies available. First note that since nothing is observed about the challenger, the voter assigns probability $1 - F\left(\frac{1}{2}\right)$ to him implementing policy 1 if elected. The incumbent will implement policy 1 in the secon period if and only if $\beta > \frac{1}{2}$. Since the voter takes incumbent's strategy as given, he assigns a probability $\dfrac{\left[1 - F\left(\max\left\{\frac{1}{2}, \beta^*\right\}\right)\right]}{[1 - F(\beta^*)]}$ to the incumbent choosing policy 1 in the second period if he chooses policy 1 in the first period. Note that the voter knows for certain that the incumbent will implement policy 1 if $\beta^* > \frac{1}{2}$. Similarly, since the incumbent will implement policy 2 in the second period if and only if $\beta \leq \frac{1}{2}$, the voter assigns a probability $\dfrac{F\left(\frac{1}{2}\right)}{F\left(\max\left\{\frac{1}{2}, \beta^*\right\}\right)}$ to the incumbent choosing policy 2 in the second period if he chooses policy 2 in the first period. Note that in this case the voter knows for certain that the incumbent will implement policy 2 if $\beta^* \leq \frac{1}{2}$. As a result of these, we conclude that the voter will vote for the incumbent if and only if he prefers the first period policy to be implemented again. Next we drive the posterior beliefs on the effectiveness of policies. Let us denote a type-μ voter's posterior expectation of π_x when the realized income was y by $E[\pi_x | y, \mu]$. Then, by Bayes' Rule,

we have, $E[\pi_1|y,\mu] = \frac{\sigma^2}{(\sigma^2+\sigma_\varepsilon^2)}y + \left(1-\frac{\sigma^2}{(\sigma^2+\sigma_\varepsilon^2)}\right)\mu$ and

$$E[\pi_2|y,\mu] = \frac{\sigma^2}{(\sigma^2+\sigma_\varepsilon^2)}y + \left(1-\frac{\sigma^2}{(\sigma^2+\sigma_\varepsilon^2)}\right)(1-\mu)$$.

Now we will drive conditions under which the voter chooses the incumbent. We will compare the expected payoffs for voting for the incumbent and the challenger in order to do this. Recall that the voter will vote for the incumbent if and only if he prefers the first period policy to be implemented in the second period. Hence when $x = 1$, the voter will vote for the incumbent the expected income from policy 1 is greater than policy 2:

$$E[\pi_1|y,\mu] \geq 1-\mu$$

$$\rho y + (1-\rho)\mu \geq 1-\mu$$

$$y \geq \mu + \left(\frac{2}{\rho\left[\frac{1}{2}-\mu\right]}\right)$$

Similarly, when $x = 2$, the voter will vote for the incumbent if and only if,

$$E[\pi_2|y,\mu] \geq \mu$$

$$\rho y + (1-\rho)(1-\mu) \geq \mu$$

$$y \geq (1-\mu) + \left(\frac{2}{\rho\left[\mu-\frac{1}{2}\right]}\right)$$

Finally, we have to show that (1) is a best response to (2) for all possible types of politicians, i.e., $\forall \beta \in [0,1]$. Let $\lambda(\beta,x)$ be the belief of a type-β incumbent over the probability of winning the election when he implements policy x in the first period. For instance if he implements policy 1, he will be reelected if and only if

$\rho y + (1 - \rho)\mu \geq 1 - \mu$. A type-$\beta$ believes that $y = \beta + \varepsilon$. Hence, substituting for y, this

probability of reelection is found to be $Pr\left(\varepsilon \geq \left(\frac{1}{\rho}\right)[1 - (2 - \rho)\mu] - \beta\right)$. Let H denote the

CDF of ε, q denote the probability that the challenger implements policy 1 and recall

that G was the CDF for politician types. Then we have

$$\lambda(\beta, 1) = \int_0^A \left(1 - H\left(\frac{1}{\rho[1 - (2 - \rho)\mu]} - \beta\right)\right) G'(\mu)d\mu \tag{3}$$

Hence the expected utility of a type-β incumbent from implementing policy 1 is given

by

$$E(u|\beta, 1) = (\alpha\beta + k) + \sigma[(\lambda(\beta, 1)(\tau\max\{\beta, 1 - \beta\} + k) + (1 - \lambda(\beta, 1))(q\tau\beta + (1 - q)\tau(1 - \beta))] \tag{4}$$

Similarly, we have

$$E(u|\beta, 2) = (\tau(1 - \beta) + k) + \sigma[(\lambda(\beta, 2)(\tau\max\{\beta, 1 - \beta\} + k) + (1 - \lambda(\beta, 2))(q\tau\beta + (1 - q)\tau(1 - \beta))] \tag{5}$$

where

$$\lambda(\beta, 2) = \int_0^A \left(1 - H\left(\frac{1}{\rho[(2 - \rho)\mu - 1]} + \beta\right)\right) G'(\mu)d\mu \tag{6}$$

Let

$$\Delta_E(\beta) = E[u|\beta, 1] - E[u|\beta, 2] \tag{7}$$

$$= \tau(2\beta - 1) + \sigma\Delta_\lambda(\beta)(\tau\max\{\beta, 1 - \beta\} - (q\tau\beta + (1 - q)\tau(1 - \beta) + k)) \tag{8}$$

So (1) is a best response if and only if $\Delta_E(\beta) \leq 0 \quad \forall\beta \in [0, \beta^*]$ and

$\Delta_E(\beta) > 0 \quad \forall\beta \in (\beta^*, 1]$. Note that Δ_E is continuous and is increasing in β. Then all we

have to show is that some β^* exists such that $\Delta_E(\beta^*) = 0$. By Intermediate Value

Theorem, there exists β^* such that $\Delta_E(\beta^*) = 0$ if and only if $\Delta_E(1) > 0 > \Delta_E(0)$. It follows from straightforward algebra that this is true if and only if

$$\tau > k\max\left\{\frac{\partial\Delta_A(0)}{1 - \delta q\Delta_A(0)}, \frac{\partial\Delta_A(1)}{1 + \delta(1 - q)\Delta_A(1)}\right\} \tag{9}$$

Proof of Proposition 2

Recall that $\Delta_A(\beta)$ is the difference between the probabilities of winning the election from implementing policy 1 and policy 2. The advantage from implementing policy 1 may be due to the policy being more effective or due to the fact that the voter prefers policy 1. That is why the right measure to use in order to get comparatie statics regarding to the popularity of the policy among voters would be $\Delta_A\left(\frac{1}{2}\right)$. First note that $\Delta_E\left(\frac{1}{2}\right)$ and $\Delta_A\left(\frac{1}{2}\right)$ have the same sign. We know that Δ_E is increasing in β with $\Delta_E(\beta^*) = 0$. This implies that whenever $\Delta_A\left(\frac{1}{2}\right) > 0$, we have $\beta^* < \frac{1}{2}$. In the same manner one can show that $\Delta_A\left(\frac{1}{2}\right) < 0$, we have $\beta^* > \frac{1}{2}$. This completes the proof.