

## Chapter 6

### Pandering Upward: Tax Incentives and Credit Claiming in Authoritarian Countries

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**Abstract:** Both countries and subnational governments commonly engage in competition for mobile capital, offering generous incentives to attract investment. Previous work has suggested that the competition for capital can be politically beneficial to incumbent politicians in democratic societies. Building off theories of electoral pandering, this work argues that such incentives allow politicians in democracies to take credit for firms' investment decisions or escape blame if firms do not come. For these reasons, empirical work has found that politicians facing greater electoral competition are more likely to offer tax incentives to investors. Critically, however, all of the credit claiming analysis has been performed in democratic countries. An important anomaly for the pandering story is the strong empirical finding that authoritarian countries offer greater tax incentives to foreign investors than their democratic counterparts, both in terms of variety and size of the reductions. In this piece, we explore the reasons for this puzzle, arguing that the authoritarian anomaly is conditioned by whether the authoritarian country has strong mechanisms and guarantees of meritocratic promotion for subnational leaders. In these countries, the upward accountability generated by the promotion mechanism substitutes for the downward accountability to voters. By contrast, regimes characterized by personalism, where promotion is based more on loyalty than performance, use less. To explore these insights more deeply, we employ rigorous causal inference designs and precise micro-level data to test the logic of our pandering upward argument in Vietnam, an archetype of the single-party system, and Putin's Russia, an example of increasing personalism.

In July 2005, Vietnam's Ministry of Finance cited thirty-three provinces which had provided super incentives, tax incentives beyond those permitted under central law (Burke and Nguyen 2005, Vu Long 2005). Such incentives include tax holidays as long as twenty years, free land rental for foreign invested projects, and lower profits taxes (Thai Press Reports 2006). These policies tended to be one-off gifts to new investors. As an official from the province of Binh Duong's Department of Planning and Investment (DPI) noted, "Incentives are merely cosmetic and are thus unsustainable," - a bit like putting lipstick on a pig (MPDF 2004). Eventually, these incentives were declared invalid by the General Department of Taxation (GTD) and the Vietnamese government moved to terminate all of the fence-breaking incentives.<sup>1</sup>

Contrasting the super incentives with the experience in Binh Duong, a hotbed of foreign investment activity that accounts for over a quarter of Vietnam's FDI attraction and output and did not offer targeted incentives, the official continued "What's most important is to create a transparent and enabling business environment," (MPDF 2004, 2). The official's anecdotal analysis of the incentives is consistent with more rigorous empirical analysis, which found that the use of these "fence-breaking" incentives was uncorrelated with investment attraction and implementation. In short, investors did not appear to consider super incentives in their long-term decisions (Vu 2007, Malesky 2008a). More surprisingly, super incentives did not even appear to lead to higher profitability among foreign firms, the disproportionate recipient of most incentives in Vietnam. Despite the significant discounts on taxes and land fees registered to investors over the time period, the average foreign investors was over four times more profitable in provinces without super-incentives (23.8 Billion VND per year) than with them (5.5 Billion VND per year) (Malesky 2008a).

The story of the thirty-three fencebreakers presents an important puzzle for the larger theoretical argument we have made thus far in the book. In almost every way, the story mirrors the general pattern

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<sup>1</sup> Although they maintained national incentives and continued to allow provinces a great deal of discretion in offering a range of fiscal incentives for investors locating in industrial zones or areas designated as underdeveloped areas. We exploit the variation in these targeted policies in our tests below.

we observed in our detailed empirical analyses of the United States. As in Chapter 3, we find intense competition to lure investment between subnational governments contributed to the allocation of a variety of targeted incentives to fiscal investors. And as in Chapter 4, these incentives appear to be highly ineffective. There were not correlated with actual investment attraction or performance, which was predominantly explained by infrastructure, human capital, proximity to markets, and the general regulatory environment (Vu 2007).

The key difference, however, is that Vietnam is an authoritarian single-party regime with the top leadership selected internally by elite party members in the Central Committee and the elections to the Vietnamese legislature are highly manipulated, far from the democratic elections we observed in our analysis of gubernatorial and city elections in the United States (Malesky and Schuler 2010). In this sense, the presence of fiscal incentives offers a sharp challenge to the electoral competition story articulated thus far in the book.

To see the conundrum, it might be helpful to briefly review the logic of our argument. In Chapter 2, we argued that incentives were a form of political pandering with politicians using the incentives to identify themselves in voters' minds with large and important investment projects, allowing them to take credit for attracting the investment, or escape blame if the investor ultimately chose a different locality. Even though politicians are aware that the direct effects of incentives are highly uncertain and can even be costly, they can rely on the fact that rationally ignorant voters (Tullock 2005, Downs 1957) deem incentives to be effective. Politicians take advantage of this asymmetric information advantage to claim credit or deflect blame in the competition for investment projects. In survey experiments, we showed that voters do indeed reward politicians who offer incentives, whether or not the company actually came to locate in the locality. Then, in Chapter 6, we demonstrated that U.S. mayors, who were subject to direct elections, offered more lucrative incentives to firms than city managers, who only were connected to voters indirectly through the oversight of the elected city council. Thus, we concluded that electoral competition is a key driver of the proliferation of fiscal incentives in the U.S. and throughout the world.

If electoral pandering is the answer, then what explains the widespread use of fiscal incentives in Vietnam? Indeed, the story of Vietnam is actually reflective of a larger, global pattern. Scholars, who have looked closely at incentives have concluded that that authoritarian countries offer greater tax incentives to foreign investors than their democratic counterparts, both in terms of variety and size of the reductions (Li 2006, 2009, Klem et al. 2012).

In this chapter, we explore the reasons for this puzzle. Using cross national data, we demonstrate that the authoritarian anomaly is conditioned by whether the authoritarian country has strong mechanisms of meritocratic promotion for subnational leaders. In these countries, the upward accountability generated by the promotion mechanism substitutes for the downward accountability to voters. In other words, the higher incentives observed in authoritarian countries is resulting from the pandering of subnational leaders to their central benefactors. By contrast, regimes characterized by personalism, where promotion is based more on loyalty performance, use less. To explore these insights more deeply, we employ rigorous causal inference designs and precise micro-level data to test the logic of our pandering upward argument in Vietnam, an archetype of the single-party system, and Putin's Russia, a prime example of growing personalism.

### **6.1. Pandering Upward in Single-Party Regimes**

To begin to answer the puzzle of authoritarian incentives, it is helpful to engage in a bit of brush clearing. A dynamic and growing literature has begun to demonstrate that the residual category of “non-democracy” obscures more than clarifies. In this section, we explore the wide variety of authoritarian regime types and they very different relationships they imply between state and citizens. Next, we drill down deeper into arguably the most successful form of authoritarianism, measured by political stability, regime duration, and economic performance – the single-party system, which includes both single-party states and hegemonic regimes.

After exploring a variety of reasons for single-party success, we highlight a less prominent feature of many of these regimes – within party promotion of leadership positions based on concrete indicators of performance, including in many countries, FDI attraction targets. Daniel Bell (2014) has called this feature, political meritocracy, in his analysis of Singapore and China. While scholars have provided evidence that promotion in some single-party regimes is based on economic performance, serious concerns have been raised about the quality of the data used in promotions and the distortionary activity that is often employed to meet targets. We suggest that this imperfect meritocracy creates an analogous asymmetric information problem to the one we observed in democracies. In this case, however, the principals are central elites and the agent are subnational officials who want to claim credit for meeting FDI attraction targets, but who, like their counterparts in democratic systems, recognize that incentives may be superfluous and inefficient. In other words, single-party systems generate opportunities for pandering upwards, which is why they overuse incentives and solely account for the anomalous relationship between authoritarianism and fiscal incentives pointed out by other scholars.

### *Varieties of Authoritarianism*

Included in the catch-all grouping of non-democracies are constitutional monarchies ruled by kings or sultan where succession is determined by family lineage (e.g. Brunei, Jordan); military juntas, where rule is monopolized by a small collective of military leaders (e.g. Thailand, Egypt); single-party states where opposition parties are outlawed and a vanguard party rules in the name of the citizens (e.g. Vietnam, China); and hegemonic/dominant parties where multi-party elections are allowed but manipulation, patronage, and fear conspire to keep the opposition from taking offices (e.g. Malaysia, Singapore) (Geddes 1999, Brooker 2000).

Within each of these categories, we also see variation in the level of personalism, defined as power consolidation by a single individual (Svolik 2012), where political decisions are dominated by a small group around the top leader and loyalty to him/her determines ascent to the top ranks (Weeks 2014, Geddes et al. 2015). While the elite leader could have a military background or may have formed a party

as a tool of power (Slater 2004), military and party institutions do not have independent decision-making authority. The discretion of the top leader is the paramount decision-making mechanism (Bratton and van de Walle 1997, Geddes 1999, Hadenious and Teorell 2007). North Korea is an excellent example of a personalist single-party system, while Russia under Putin today provides an excellent example of a hegemonic party system with strong personalist tendencies (Isacs and Whimore 2013). We return to the role that personalism plays in the use of incentives below.

### *The Success of Single-Party States*

Among various forms of autocracies, single-party regimes stand out for their performance across a number of key metrics. Single-party states are more durable than juntas and personlist regimes with lower failure rates and longer terms in office (Geddes 1999, Magaloni and Kricheli 2010, Geddes et al. 2015). They are more resilient in the face destabilizing threats, such economic crises and rise of popular opposition (Smith 2005, Brownlee 2007, Magaloni and Kricheli 2010). They generate higher levels of economic growth (Gandhi 2008; Keefer 2007) and private investment attraction (Wright 2008, Gelbach and Keefer 2011) and even score better in quality of governance (Charron and Lapuente 2011). Political leaders in one-party regimes are less likely to experience coups (Boix and Svobik 2013; Svobik 2012), and consequently stay longer in office (Gandhi and Przeworski 2007, Geddes 2008, Maglioni and Kricheli 2010).

Two competing theories have been offered to explain the relative success of single-party systems (Maglioni and Kricheli 2010). First, scholars argue that authoritarian ruling parties serve as a cooptation or distributive device; the rulers are able to co-opt opposition elites, distribute shares of spoils to key constituents, reward supporters, or arguably, provide a forum for collective action for other elites to hold a top leader accountable (Diaz-Cayeros et al. 2001, Lazarev 2005, Brownlee 2007, Magaloni 2008, Blaydes 2010, Gandhi 2008, Gehlbach and Keefer 2011). A second branch of the literature focuses on the benefits of party organization, including the hierarchical committee system, manipulability of cadres (i.e. the party controls groups of deployable personnel with largely interchangeable skills), and top-

bottom control over agents, is preserved (Schurmann 1968; Selznick 1952). Svobik's (2012) work is especially important on this point by illustrating how successful regime parties selectively recruit the ideologically close elements at grassroots level, and repress the ideologically distant ones. Because authoritarian parties control political appointments and maintain hierarchies of services and benefits, they are able to attract the ideologically proximate segments of population as long as old cadres retire at a sufficiently high rate. Retirement is obligated through mandatory retirement ages, which open up space at the top and thereby convince new recruits that their loyalty will be rewarded.<sup>2</sup> Authoritarian parties also deter defection by encouraging sunk investment among grassroots members.

#### *Meritocratic Promotion and Local Incentives in Single-Party Regimes*

A key feature of the party organization system is how officials are promoted and advanced in the single-party systems. Low-level members are forced to invest in party service, meet party goals, and these credentials pay off in terms of party promotion but have little value elsewhere. Party goals are outlined and complicated systems put in place to decide whether officials have achieved these goals. This interjurisdictional yardstick competition promotes party objectives and breeds loyalty to the party as long as sufficient space is opened up for advancement (Maskin et al. 2000; Lazarev 2005). While performance is rewarded in many regimes, the critical difference between single-party states and other authoritarian systems is that published standards, formal review institutions like the Chinese Party Organization Committee, and clear promotional ladders from functionary to elite levels make these performance criteria more credible (Magoloni 2008, Reuter and Turovsky 2012, Reuter forthcoming, p. 13, 79).

Daniel Bell (2014) recently has been a vocal advocate for the benefits of such political meritocracy in Singapore and China, arguing that this is a better of selecting elite officials than democratic polities. Evans and Rauch (1999) have also observed that developing countries with more Weberian bureaucracies, particularly characterized by meritocratic promotion, had higher levels of

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<sup>2</sup> This insight plays a critical role in our analysis of Vietnam below.

economic growth and investment attraction than competitors with more patrimonial and personalist-based systems. Testing these theory in China, scholars have documented correlations between economic performance and promotion to higher office (Li and Zhou 2005, Chen et al. 2015; Landry 2008; Landry and Lu 2015). On average officials who have exceeded performance targets for GDP growth and revenue attraction have been the most likely to be promoted. Critically for us, Yu Zheng (2012, 2015) highlights the widespread use of FDI attraction targets for many provincial leaders in China.

Of course, dispute rages about whether meritocracy is an appropriate way to describe these systems of cadre promotion. Scholars have offered concerns about validity of the criteria used, the problem of weighting performance on multiple (Jia et al. 2015), often contradictory indicators (economic growth and environmental protection), and the strength of the relationship between performance on these indicators and promotion, especially at elite levels (Shih et al. 2012). More damningly, scholars have shown that these indicators are often fabricated (Wallace 2014) or lead to distorted efforts of local officials (Gang 2009, Ghanem and Zhang 2014, Png et al. 2015). Most relevant to our work, Chen and Kung (2015) show that local officials in China disproportionately direct public resources toward ostentatious, white elephant projects that signal their local development achievements at strategic times so that they might be rewarded for promotion. Ultimately, these gratuitous public works projects pay little dividends and actually detract from economic growth.

It is precisely the uncertainty regarding the promotion criteria that drives the analogy with pandering in competitive regimes. In democracies, as we described in Chapter 2, the voters are the principle and the politician is the agent. In the case of single-party regimes with internal promotion criteria, the orientation of subnational officials is inverted. Their main principles are high-ranking party officials who can promote them to new positions in other provinces or central government, or nominate them for higher party offices. As with voters, however, central politicians who set the promotion criteria do not have as accurate information as the subnational politicians about the relationship between policy choice and the outcomes they desire. In fact, Chenggang Xu (2011) argues that this is the secret to Chinese economic success, which he terms regional decentralized authoritarianism. Central elites lay



forth criteria, such as GDP growth, revenue growth, FDI attraction, and blue sky days, but they remain agnostic about how subnational officials achieve these objectives (Huang 2013). On the one hand, this space allows for a great deal of local experimentation that can identify solutions to critical national issues (Xu 2011, Coase and Wang 2012). On the other hand, RDA can generate distortions when local officials attempt to use state investment and manipulation to generate spikes in growth directly prior to key promotional periods (Guo 2009, Wallace 2014, Chen and Kung 2015).

In many single-party states, there is documented evidence that attraction for foreign investment is directly or indirectly part of promotion criteria for local officials.<sup>3</sup> All of these statement incentivize attraction, but do not offer details on how best to achieve it in the limited time an official is in office. Local officials can choose whether to prioritize infrastructure, land clearance, governance reforms, or education and human capital improvements. The standard policies to lure investment may be expensive and time consuming (i.e. infrastructure), may not pay dividends in before the local politician leaves office (human capital), or may antagonize rivals and subordinates in the province by depriving them of rents (governance reforms). Even more importantly, local officials may have trouble claiming credit for investment attracted by infrastructure and human capital developed by their predecessors.

Thus, as in democracies, subnational officials in single-party regimes are motivated to offer tax incentives that tie them directly to the locational choice of a foreign company. Because central elites in the party have prioritized incentive attraction in promotion, and because of the asymmetric information the official possesses over the central official in regards to the relationship between policy and outcome (Chibber 2002), offering an incentives means that the official can claim credit for the attraction whether or not the fiscal incentives actually influenced the choice of foreign company. This leads to our first and most general hypothesis:

*H<sub>1</sub>: Countries with single-party systems are more likely than other authoritarian regimes to offer tax incentives to foreign companies.*

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<sup>3</sup>On authoritarian Taiwan and Korea see Cheng et al. (1998); For a comparison of authoritarian development states Doner et al. 2005) On China see Zheng (2012, p12, fn13). [On Singapore, see Krause 1987, p. 55 and Mauzy and Milne \(2002, p. 193\). On Vietnam, see \(Jandl 2014\)](#)

When this motivation is removed, because of term limits or retirement age, and officials no longer are eligible for promotion, they are more likely to choose policies that are closer to their private preferences ((Li and Zhou 1005, p. 1747; Liang 2015, p. 291, Smart and Sturm 2011). In this case, we believe that subnational officials know that incentives are ineffective and distortionary and are likely to reduce the use of incentives and favor other policy options. Thus, we expect:

*H<sub>2</sub>: When officials are no longer eligible for promotion, they will reduce their use of incentives compared to peers who remain eligible.*

### *Personalism and Tax Incentives*

In sharp contrast to authoritarian systems with quasi-meritocratic elements, personalist systems actually dampen the motivation for local officials to offer tax incentives to firms. A flurry of recent work has demonstrated that personalist leaders, because they have effectively silenced domestic opposition and consolidated power (Svolik 2012), behave dramatically different in their interactions with other countries and international actors (Weeks 2008, 2014).

Magaloni et al. (2013) offer two interrelated definitions of personalism. First, personalist regimes face fewer checks on executive power, allowing them more discretion over policy and personal choices. A second that is more difficult to pin down is the depth of association of a regime with a particular individual. An autocratic regime overseen by a single ruler is highly personalist, but could be seen as less personalist over time as successful successions mean a variety of different individuals have served at the top. Alternatively, more elite decision makers with formal or informal powers reduce personalism and further decrease it as a single regime experiences (regular) leadership changes. The less a particular regime is tied to specific individuals, the less personalist it becomes.

Magaloni et al. (2013) emphasize in their coding that personalism is inherent in all authoritarian regimes, and should be coded as supplementary rather than in individual type. Thus, a country like China can vary in its level of personalism, from highly personalized during the Mao period to minimal levels of personalism under Hu Jintao, while never changing its status as a single-party regime. Geddes et al.

(2014) also allow for personalism to be combined with other types of regimes by coding hybrids, so that a country such as Indonesia under Suharto could exemplify both personalistic and party-based traits.

Similarly, Svobik's (2012) approach allows for the consolidation of leadership into an established dictator across all types of authoritarian regimes.

In personalist systems, loyalty to the top leader trumps performance of officials (Geddes 1999, Weeks 2014). Whereas competent leaders could potentially pose a challenge, less competent subnational officials owe their advancement to a single individual and are less likely to threaten or disobey the regime (Egorov and Sonin 2011), even when it may be in their voters' interests (Reuter and Robinson 2012). In heavily personalist systems, subnational officials will prioritize mobilizing public support for the top leadership, suppressing embarrassing displays of dissent, and promoting the leaders authority over economic growth. Reuter (forthcoming, p. 79-85) offers a slightly different take, arguing that top personalist leaders may value competence, but that promises of promotion and a share of regime spoils are not credible in the absence of clear standards and pathways forward. While the explanations differs, scholars tend to agree that personalism undermines local performance incentives.

*H<sub>3</sub>: In authoritarian regimes characterized by high degrees of personalism, subnational leaders will offer significantly less incentives than in other authoritarian states.*

## **6.2. Comparing Incentives between Democracies and Non-Democracies**

In this section, we explore cross-national patterns to ask whether the observed patterns are consistent with our theoretical logic above. First, in general, do non-democracies actually provide more generous tax incentives than democracies? Second, do we observe greater incentive activity in single-party regimes? Third, is there an association between countries with quasi-meritocratic promotion and incentive usage? And finally do personalist regimes demonstrate reduced incentive usage among subordinate officials.

As we pointed out in Chapter 2, it is not easy to compare incentive regimes across countries, because most incentives are firm-specific and reporting standards differ dramatically across countries. Two methods have been used by scholars studying comparative incentives. The first approach is to

simply count up the variety of incentives that are legally allowable under the country’s tax regime. Li (2006, 2015) uses U.S. Foreign Commercial guides on incentives to create a six-point scale measuring how many of the various forms of incentives are used, including: value added tax, corporate income tax, property tax, licensing fees, import duties, and sales tax (Li 2006, 69). Li refers to this measure as “generosity,” but that is a bit of misnomer, because it specifically does not capture how generously each of these packages were applied. It doesn’t differentiate between the scales of the tax incentives that are legally allowed. A 20% CIT reduction is coded exactly the same as a 2% cut. Similarly, tax holidays ranging from six months to ten years are coded equally as an additional point on the six point scale.

An alternative approach is to generate an effective tax rate based on the publically available incentives that calculates what firms entering the country could legally be provided by politicians attempting to woo them. This is still a noisy estimate, because we don’t know whether every new entrant was actually granted the incentive package, and, as the Vietnamese fencebreaking indicates, government officials have been known to surpass the official guidelines. Klemm et al. (2012) use this approach to calculate an effective tax rate for 45 countries between 1996 and 2008. We present both the Klemm et al (2012) and Li (2006) data in Table 6.1.

**Table 6.1: Average Generosity of Tax Regime**

Variables	Authoritarian (n=193)		Democracy (n=332)		Difference	P-Value
	Mean	SD	Mean	SD		
Statutory Corporate Income Tax	30.1%	7.0%	27.8%	8.1%	2.29%	0.00
Present Discounted Value of Depreciation Allowance	24.4%	8.3%	20.5%	8.1%	3.87%	0.00
Average Effective Corporate Tax Rate	21.4%	8.4%	23.0%	9.6%	-1.60%	0.05
Marginal Effective Corporate Tax Rate	12.3%	23.3%	14.1%	42.7%	-1.83%	0.58
Average Tax Rate under Best Regime	11.1%	12.7%	14.2%	13.4%	-3.09%	0.01
Number of Possible Incentives	3.78	2.03	2.00	0.00	1.78	0.00

Source: Klemm et al. (2012) and Li (2006).

Table 6.1 divides the Klemm country-years into countries coded as democratic or authoritarian according to the Cheibub et al. 2009 scheme, which makes a simple distinction based on whether there

has been a reversal of power in a free and fair election.<sup>4</sup> The first row shows that the official corporate income tax (CIT) is significantly higher for authoritarian country-years than democratic observations (30% v. 27%). The rest of the table, however, shows that the official CIT is illusory, as foreign firms entering authoritarian countries pay significantly lower taxes when fiscal incentives are taken into account. Row 2, for instance, shows that authoritarian countries allow for higher depreciation allowances on invested capital. Row 3 illustrates that the effective CIT of the average firm, once tax incentives are accounted for, is also significantly lower (21% v. 23%). The same direction is true of the marginal rate paid by the newest entrants, although it is not statistically significant. Most importantly, however, the best effective tax rate, which simulates the best possible CIT offered given the official incentive policies on the book is a full 3% points lower for authoritarian countries than democracies and highly statistically significant ( $p < .01$ ). Indeed, under the best regime, authoritarian countries pay only 11% CIT, which is consistent with the Li (2006) finding that authoritarian states offer a greater variety of incentive policies (3.78 policies) than democracies (2 policies).

#### *Tax Policies by Type of Authoritarian Country*

As we noted above, however, there is a compelling comparative politics literature that has established that authoritarian countries vary significantly in their institutional designs, which has critical implications for their economic and foreign policies. In particular, we hypothesized (H1) that single-party regimes with well-developed mechanisms for advancement and promotion in the government hierarchy might more likely to use fiscal incentives, as lower-level officials took advantage of the asymmetric information that they possessed over central leaders in regards to the true relationship between incentive utilization and investment attractions. By contrast, we argued that personalist regimes (H3) where

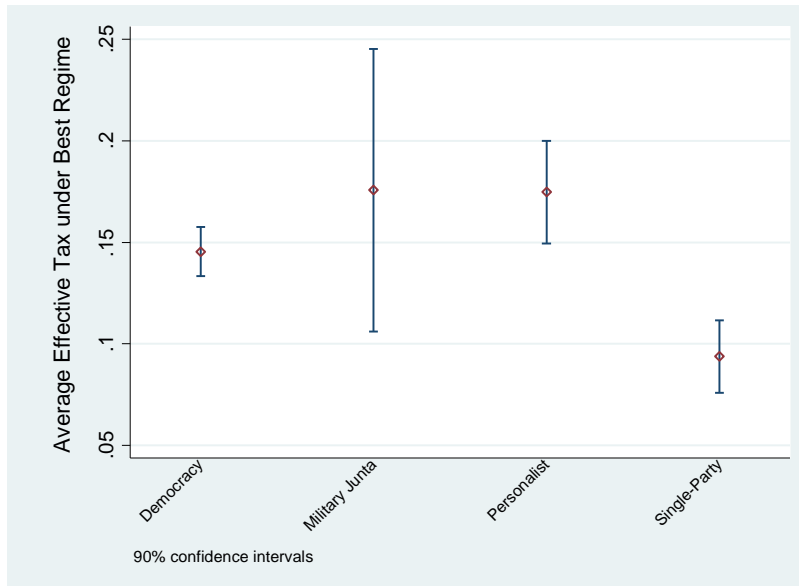
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<sup>4</sup> Most countries do not change in the Cheibub et al. schema, but a few have democratic and non-democratic spells throughout the period: Pakistan (25% observations are democratic), Peru (58%), Senegal (60%), Mexico (67%), Nigeria (73%), Indonesia (75%), Ecuador, Kenya, Thailand (83%).

promotion was primarily based on loyalty to an established dictator, and where advancement promises were less credible, would be less likely to use fiscal incentives.

Figure 6.1 provides an initial look into whether our theoretical expectations are upheld by further sub-dividing the Klemm et al. (2012) country-years into the classic types of authoritarian regimes first proposed by Geddes (1999) and refined by Geddes et al. (2015).<sup>5</sup> The graph clearly shows that the democratic-authoritarian gap in the best effective tax rate was entirely driven by the countries classified as single-party systems, which offer a best CIT of 9.3% compared to 17% in military and personalist dictatorships/monarchies. Democratic countries offer best rates of about 14.5% on average. The plots hide a great deal of the underlying variation in best rates among regime types, so Figure 6.2 plots the full kernel densities of single-party regimes compared to all other authoritarian types. Again, our expectations are upheld, authoritarian countries offer significantly better tax regimes for investors.

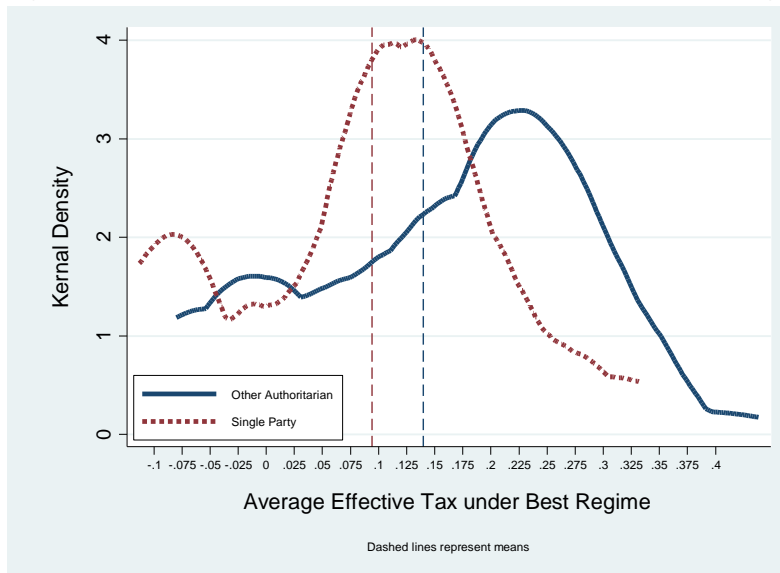
**Figure 6.1. Best Effective Tax Rates under Different Types of Authoritarian Regimes**



Note: Monarchies are dropped because the Klemm et al. (2012) data on best effective tax regime only includes one Monarchy – Morocco. Classifications are based on the Geddes et al. (2014) coding system, but personalism is re-coded to include any hybrid that has a personalist element according to the authors.

<sup>5</sup> Due to insufficient observations we do not employ the hybrid categories of Geddes and simply aggregate countries by their dominant type. Similarly, personalist regimes includes all countries coded as hybrids with a personalist element.

**Figure 6.2. Full Distribution of Best Effective Tax Rates (Single-Party v. All Authoritarian)**



Note: Klem et al. (2012) data on best effective tax regime. Classifications are based on the Geddes et al. (2014) coding system.

The simple difference in means analysis is potentially suspect due to omitted variable bias. Most importantly, we have not accounted for the global trends in greater incentives which might be associated with changes in regime type. Secondly, we have not addressed important confounders, such as the size of the country’s economic, population size, and the presence of federal institutions (Li 2009). Table 6.2 tests whether our main correlations hold once we address these reasonable concerns.

In Model 1, we present the same bivariate analysis from Table 6.1. Model 2 subjects the correlation to year fixed effects in order to address any trending over time, and the correlation appears robust. Model 3 adds reasonable controls for population, GDP per capital, and federalism. Once these controls are added, the democratic advantage disappears entirely. Model 4 then subdivides the authoritarian category by adding dummies for single-party and personalist dictatorships with military junta held as the reference category.<sup>6</sup> Even with a full set of controls we again find that single-party regimes offer best CITs that are about nine percentage points lower than other authoritarian regimes. This relationship appears to be a function of institutional design and not underlying differences in democratic accountability. In Model 5, when we add a continuous measuring of democracy from Polity IV, which captures differences in participation, representation, and constraints on executive decision-making, the

<sup>6</sup> We are forced to drop the category Monarchy as Klem only codes the tax regime for one monarchy, Morocco.

coefficient hardly budges. Models 6 through 10 further test the strength of this relationship by throwing away all democracies and focusing solely on non-democracies. Here, we find that single-party states have effective CITs that are 5 percentage points lower than those offered by juntas. Model 8, 9 and 10 exchange the Geddes et al (2014) coding of single-party for the Wright (2008), Hadenius and Teorrel (2007), and Svobik (2012) measures of single-party systems. These checks only strengthen the ultimate differences between single-party regimes and authoritarian alternatives.

We find also find evidence consistent with hypothesis (H3) that personalist regimes employ less tax incentives. In Model 8, they demonstrate that personalist regimes have effective CITs about 10 percentage points higher than juntas on average. This figure jumps around considerably, however, as we use different operationalizations of personalism. Authors in the literature have disagreed quite profoundly over which countries fall under this rubric (Geddes et al. 2014, Magaloni et al. 2013), although all agree on the personalism of Russia after 2006. More fine-grained approaches may be necessary to sort out the countervailing influence of personalist leaders.



**Table 6.2: Multiple Regression Analysis of Relationship between Authoritarian Type and Best Effective Tax Rate**

<i>Dependent Variable = Effective Corporate Income Tax under Best Regime</i>	<b>All States</b>					<b>Only Authoritarian</b>					
	<b>Bivariate</b>	<b>Year FE</b>	<b>Controls</b>	<b>Party</b>	<b>Personal</b>	<b>Simple</b>	<b>Year FE</b>	<b>Controls</b>	<b>Polity</b>	<b>HT</b>	<b>Svolik</b>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Democracy=1	0.031*** (0.012)	0.032*** (0.012)	0.001 (0.014)	-0.062*** (0.017)	-0.005 (0.021)						
Single Party=1				-0.093*** (0.018)	-0.047** (0.021)	-0.052** (0.021)	-0.053** (0.021)	-0.053*** (0.018)	-0.109*** (0.028)	-0.257*** (0.029)	-0.243*** (0.029)
Personalist=1					0.094*** (0.022)	0.079*** (0.021)	0.078*** (0.022)	0.101*** (0.018)	0.049 (0.034)	0.062*** (0.018)	0.073*** (0.018)
GDP per Capita (ln)			0.006 (0.008)	0.006 (0.008)	0.008 (0.008)			0.024*** (0.007)	0.018** (0.007)	0.024*** (0.006)	0.025*** (0.006)
Population (ln)			-0.011** (0.004)	-0.010*** (0.004)	-0.011*** (0.004)			-0.022*** (0.005)	-0.023*** (0.006)	0.013** (0.005)	0.012** (0.005)
Federal System=1			0.079*** (0.014)	0.064*** (0.014)	0.066*** (0.013)			0.055*** (0.020)	0.061*** (0.021)	0.010 (0.017)	0.013 (0.018)
Polity IV									0.002 (0.002)	-0.001 (0.002)	0.000 (0.002)
Constant	0.111*** (0.009)	0.111*** (0.010)	0.227** (0.114)	0.300*** (0.110)	0.236** (0.109)	0.129*** (0.020)	0.131*** (0.021)	0.281** (0.115)	0.401*** (0.152)	-0.293*** (0.111)	-0.292** (0.114)
Year FE	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Observations	525	525	445	433	433	181	181	178	178	178	178
R-squared	0.013	0.022	0.112	0.155	0.189	0.217	0.238	0.467	0.527	0.656	0.642
rmse	0.132	0.132	0.128	0.123	0.120	0.108	0.110	0.0928	0.0878	0.0748	0.0764

Note: OLS regression standard errors in parentheses (\*\* p<0.01, \* p<0.05, \* p<0.1). The white panel includes all countries, while the shaded panel limits analysis to authoritarian countries. Regime type is coded from Geddes et al. (2014) except for models 10 and 11, which replace with Hadenius and Teorrel (2007), and Svolik (2012) coding respectively.

### *Promotion and Upward Pandering*

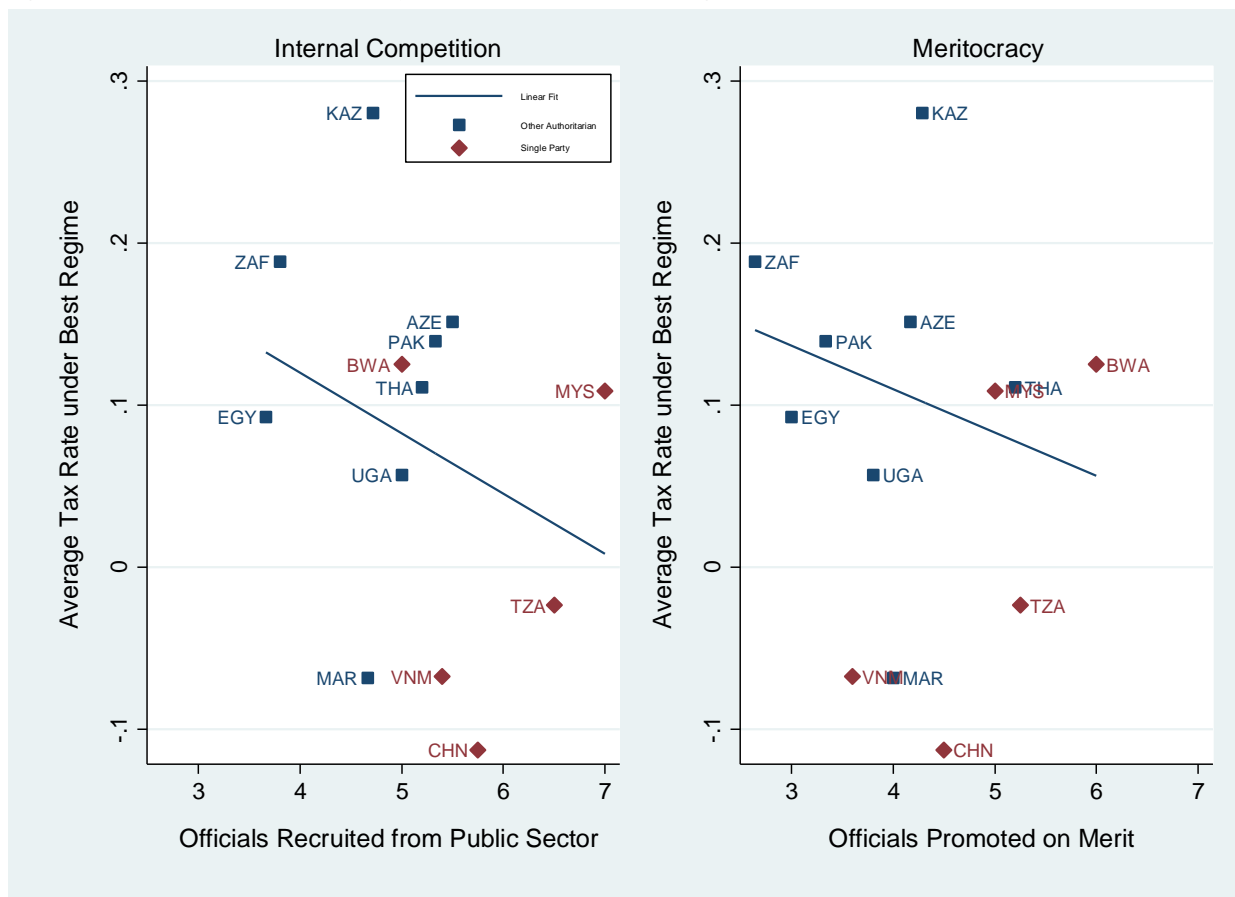
Single-party regime and personalist regimes are somewhat blunt measures for the conceptual logic of our theory, which was really driven by the idea of imperfect, meritocratic promotion. Many single-party regimes do allow the possibility for internal advancement based on an uncertain and shifting set of metrics. The incentive for promotion coupled with the uncertain relationship the metrics used for promotion and true performance of subnational officials creates similar motivations for pandering. If our theory is correct, we should observe that single-party regimes are more likely to offer more credible opportunities for internal advancement based on imperfect, meritocratic metrics. Secondly, we should find that these characteristics are associated with lower effective CITs.

Authoritarian countries are black boxes and it can be difficult to know whether meritocratic promotion exists in practice. Evans and Rauch (2004) developed a nice measure of Weberian bureaucracies, but unfortunately, this data is only available for a handful of authoritarian countries. Fortunately, however, the Quality of Government Institute in Stockholm Sweden recently conducted an expert survey of political analysts around the world, which asked them to score the country that they cover on these exact same conditions (Teorell et al. 2011). These measures have perception bias, dependent as they are on local experts. Nevertheless, there is plenty of illustrative variation. We plot two of the questions from the survey in Figure 6.3 for the twelve countries for which the Klemm and QoG expert survey overlap.

While only illustrative due to the small sample size and non-random selection of countries, the relationships are consistent with our expectations. In the left panel, we plot the relationship between the best CIT and experts' answers to the question, "Senior public officials are recruited from within the ranks of the public sector?" In the right panel, we plot answers to the question, "When recruiting public sector employees, the skills and merits of the applicants decide who gets the job?" Both questions are coded on a seven-point scale with one indicating strong disagreement and seven indicating strong agreement.

There are two things to notice about the graph. First, single-party regimes are coded by experts as significantly more likely to recruit officials from the public sector ( $5.73 > 4.73$ ,  $p = .007$ ) and also to promote officials based on merit ( $5.73 > 4.73$ ,  $p = .023$ ). Second, there is an inverse correlation evident in both graphs. Although it is not statistically significant due to the small sample size, it is clear that countries that score well on these mechanisms of meritocracy have lower effective tax rates.<sup>7</sup>

**Figure 6.3. Political Meritocracy and Tax Incentive Usage**



Note: Klemm et al. (2012) data on best effective tax regime. Diamonds are single-party regimes and blue is all other regimes according to Geddes et al. (2014). Teorell et al. (2011) expert survey. Left panel plots the relationship between the best CIT and experts' answers to the question, "Senior public officials are recruited from within the ranks of the public sector?" In the right panel, we plot answers to the question, "When recruiting public sector employees, the skills and merits of the applicants decide who gets the job?"

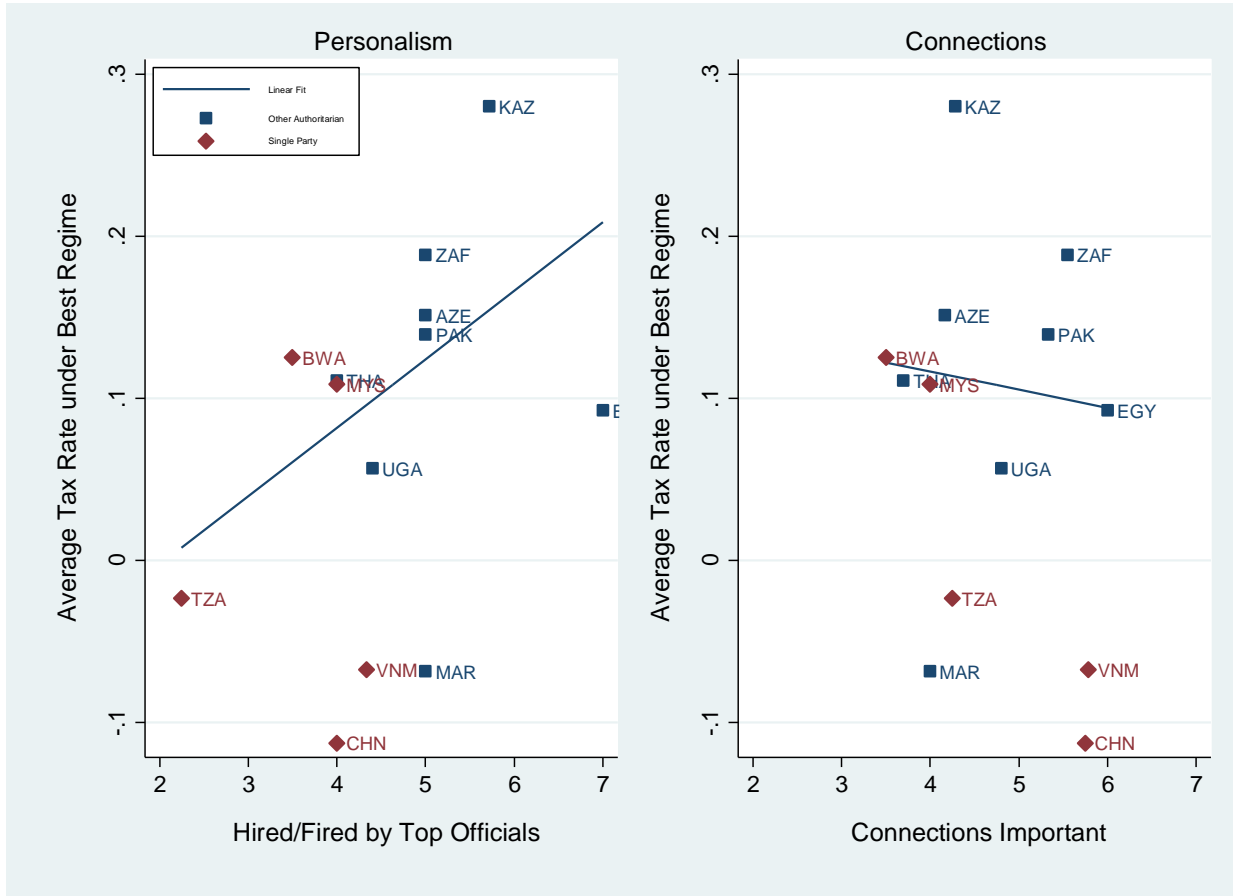
<sup>7</sup> The two-stage process is actually borne out using instrumental variables regression and mediation analysis, even with the small sample size. In the first stage, single-party regimes are more likely to have meritocratic promotion, and the effect of meritocratic promotions passes entirely through the recruitment and promotion mechanisms. See Online Appendix G.

By contrast, Figure 6.4 looks at personalist mechanisms drawn from the same survey. The left panel studies the relationship between the best CIT and expert answers to the question, “The top political leadership hires and fires senior public officials?” The right panel looks at answers to the question, “When recruiting public sector employees, the political connections of the applicants decide who gets the job?” Again, both questions are measured on a seven-point average scale. The first thing to notice about this picture is that while there is a negative relationship between single-party and personalist promotion practices, the top leader has much less influence over personnel decisions than in other types of authoritarian regimes ( $3.61 < 5.13$ ,  $p = .006$ ). By contrast, there is no relationship between single-party and personnel connections. Especially in Vietnam, experts believe that connections are critical for advancing in the bureaucracy. Further and consistent with our theory, we see a positive relationship between personalism and the best CIT. When official promotional prospects are based on loyalty to the top leader, they do not appear to compete by offering enormous tax incentives.<sup>8</sup> There is no relationship, however, between the importance of political connections and the size of tax incentives. Again, this illustrates how different conceptualizations of personalism can radically change the answer to this vital question. When we define personalism as consolidated control of the elite leader, we see the expected relationship. When the definition is relaxed to include broader ideas of connections and loyalty, the relationship is obscured.

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<sup>8</sup> This is again borne out by mediation analysis. See Online Appendix G.

**Figure 6.4. Personalist Promotion and Tax Incentive Usage**



Note: Klemm et al. (2012) data on best effective tax regime. Diamonds are single-party regimes and blue is all other regimes according to Geddes et al. (2014). Teorell et al. (2011) expert survey. Left panel studies the relationship between the best CIT and expert answers to the question, “The top political leadership hires and fires senior public officials?” The right panel plots, “When recruiting public sector employees, the political connections of the applicants decide who gets the job?”

### *Discussion of Cross-national Results*

Previous work has demonstrated a relationship between authoritarian countries and the use of fiscal incentives to lure investment. The observed correlation, however, depends upon quite blunt measures of incentives and authoritarianism. The dependent variable accounts for the variety of the incentives, but not the actual generosity in terms of the scale of the next tax reduction. And the independent measure of authoritarianism does not take into account the widely varying incentives faced by public officials in different types of authoritarian regimes.

Once we address these issues of conceptualization and operationalization, a very different pattern emerges. First, the difference between authoritarian and democracies is entirely accounted for by the subset of authoritarian countries with single-party regimes, which offer significantly more generous incentives than both their peers and democracies. Pushing the data a bit further in the mechanisms behind the effect of single-party regimes, we find that the association appears to be due to features of the promotional system. Single-party regimes are more likely to promote bureaucratic officials from within the party using meritocratic benchmarks. Moreover, the personal decisions of the top leader are much less influential in the hiring and firing of lower-level subordinates. Thus, consistent with our theoretical discussion above, there appears to be evidence that meritocratic promotion combined with uncertainty about the true relationship between fiscal incentives and FDI attraction may be leading to pandering upwards toward elite officials responsible for promotion decisions.

At this stage, the conclusion is highly speculative. First of all, institutions are not exogenously assigned and thus our analysis could be driven by unobserved features of the economy associated with both single-party regimes and the selection of incentives. Second, the test of mechanisms was based on a very limited sample of countries from an expert survey where the respondents may not have complete knowledge about promotional activities outside of their region of expertise, leading to anchoring bias and measurement error which could be generating our correlations. In the next two sections of the paper, we

attempt to account for these methodological shortcoming by drilling more deeply into two quantitative case studies of Vietnam and Russia that allow us to more directly test our theoretical mechanisms of meritocratic promotion and upward pandering.

### **6.3. Meritocratic Promotion and Pandering Upward: A Regression Discontinuity Approach in Vietnam**

To test out pandering up hypothesis theory more directly, we take advantage of a quasi-experiment in Vietnam. As the figures above illustrate, Vietnam is a useful case for our theory. It is a single-party, authoritarian regime that scores highly on the expert analyses of meritocracy from the Quality of Governance Survey. Indeed, Daniel Bell (2014, 195) singles out Vietnam in his best-selling book on political meritocracy in China as the most likely case of success outside of China, because of it is a “large and diverse country that is committed to peaceful form of social and economic modernization under the guidance of meritocratically selected leaders.” Moreover, Vietnam has a similar deep-rooted party system and a history of local experimentation across its 63 provinces (Bell 2014, 195-196; Malesky 2008b, Jandl 2013). Vietnam therefore represents a critical case for our theory, because has the size, subnational authority, and institutional design where we are most likely to observe it.

Even better from a research perspective, Vietnam, like a lot of countries with regime parties, ensures healthy recruitment by maintaining frequent turnover of top party positions, so that new recruits can move up through the party ranks and achieve the higher benefits of office (Liang 2015). To accomplish this, many single-party regimes insist upon a retirement age and term limits for both senior and junior officials (Manion 1993, Svolik 2012). Vietnam has had such an official retirement age of 60 for public since the 1992 Constitution, but its implementation was uneven with some officials allowed to work beyond age 60 in unimportant positions (Vo 1994, Pham 2000). When it became clear that the ambiguity was being abused by some local officials, the Vietnamese Communist Party (VCP) issued an unusually strong reprimand to those in non-compliance in 2000 (Pham 2002) and clarified the retirement rules in 2003. According to the clarifying decision, government officials in Vietnam are obligated to

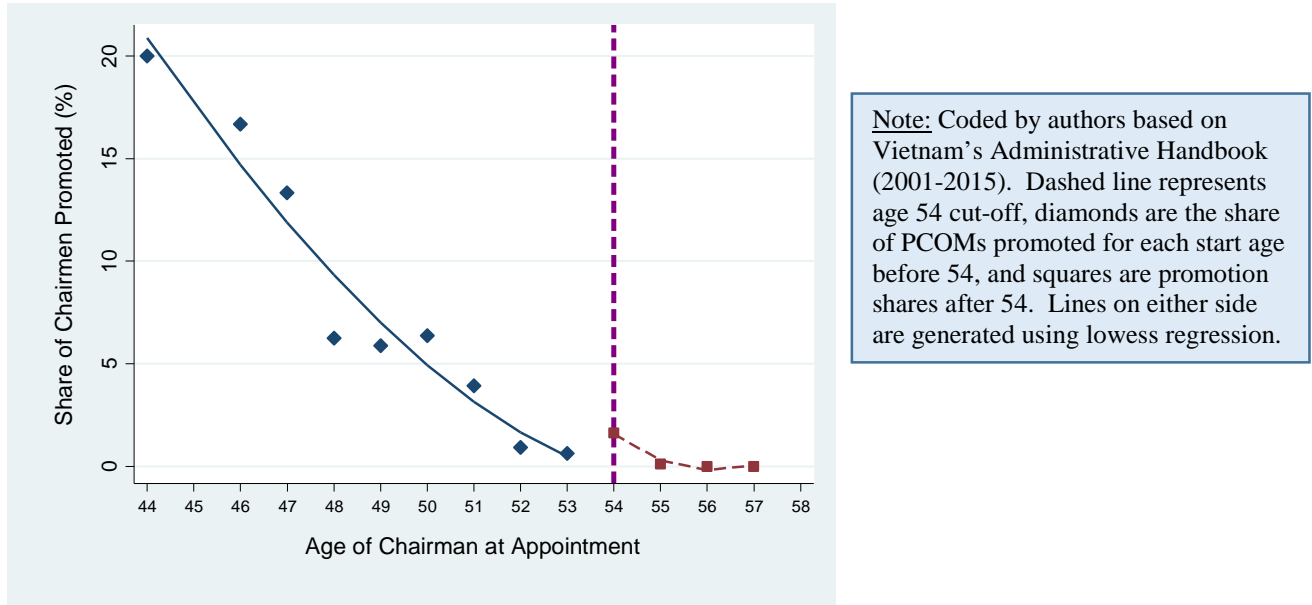
retire by the age of 60. They may take an appointment if they are between two and five years away from retirement, but they cannot be reappointed after they hit the retirement age of 60 (Khai 2003). Because officials within one year of retirement age cannot be reappointed and terms are five years, this means that officials age 59 when their term ends are also ineligible. Thus, only officials age 53 and younger are eligible for promotion. Importantly for our research design, Provincial People's Committee Chairmen (PCOMs), the governor equivalent of Vietnamese provinces with the same status as a Minister in the central government and the subnational official with legal authority over tax incentives, are subject to this law. New decisions by Prime Minister Nguyen Tan Dung (2010) reinforced the cut-off for promotion eligibility at age 53.

Because terms are five years, PCOMs entering office above the age of 53 have no opportunity for retirement after they serve out their final term. This can be seen quite vividly in Figure 6.5, which plots the share of PCOMs promoted for all 102 officials observed between 2006 and 2015. We define promotion as appointment to a central level government ministry or agency, appointment to Party Secretary in the same province or elsewhere, or appointment to a PCOM of one of the five national-level cities, which hold the same rank as a province but are considered to be more prestigious because of their larger wealth and population. The x-axis depicts the age of the official when they started their most recent five-year term. The histogram in the background shows the number of PCOMs who started at each age. Diamonds depict the promotion probability for officials below the threshold, while red squares show the promotion possibility for those 54 and above. Clearly, promotion probability declines precipitously with age, with zero officials on the far side of 54 promoted beyond their current tenure.

It is therefore safe to conclude that officials appointed to PCOM after age 54 have little motivation to try to enhance their promotion prospects by offering tax incentives. As we hypothesized above, if their true beliefs are that incentives are ineffective or distortionary, we should see a decline in the activity incentives as form of upward pandering once their opportunities for promotion are removed.



**Figure 6.5: Promotion Probabilities of People’s Committee Chairmen by Start Year**



*Sharp Regression Discontinuity Specification*

The observation that officials appointed after age 54 face very different career incentives lends itself to a sharp discontinuity design, described formally in Equation 1 below. Our treatment variable is  $R$ , which equals 1 if the official was appointed after turning 54 ( $R=1$  if  $Age \geq 54$ ,  $R=0$  if  $Age < 54$ ). The forcing variable in the analysis is the age at start, which we re-center to zero by subtracting 54. Once concern is strategic appointment or retirement around the threshold that might violate the assumption of no-sorting and thus indicate that the two groups are dissimilar on non-observables. Thankfully, a McCrary (2008) density demonstrates continuity at the threshold between 53 and 54.<sup>9</sup>

Individual People’s Committee Chairmen are indexed by  $i$ , each new firm entrant is indexed by  $f$ , and the entry year in our dataset is indexed by  $t$ , which ranges from 2006 to 2015. All firms entering before 2006 were dropped, so that we could track the entire career of each PCOM, and  $\delta$  introduces entry year fixed effects to account for potential trending in global or country allocation of incentives.

<sup>9</sup> Online Appendix A shows the graph for all People’s Committee Chairmen. The estimated difference in the number of appointments for ages 53 and 53 is very small and the p-value indicates that we cannot not reject the hypothesis of no difference.

$$\begin{aligned}
PR(\text{incentive}_{ift} = 1) \\
= \beta_0 + \beta_1 R_{it} + \beta_2 \text{Age}(-54)_{it} + \beta_3 R_{it} * \text{Age}(-54)_{it} + \gamma PCOM_{it} + \pi Firm_{ft} + \delta_t \\
+ u \qquad \qquad \qquad (1)
\end{aligned}$$

The dependent variable for the analysis is *incentive*, which takes the value of 1 if the new foreign entrant received any form of a tax incentive to help lure it to the province and 0 if it did not. Foreign firms in Vietnam are eligible for a wide range of incentives, ranging from corporate income tax reductions, tax holidays, reductions on land transaction fees, employment incentives where CIT reductions are granted to firms employing females and minorities, and incentives for R&D. Key to our research design is that provincial officials have discretion over the targeted incentives that they can offer to new investors (PwC 2015). As the story of the thirty-three fence-breakers illustrate, most incentives are set at the national level with provincial leaders only formally allocated the ability to set land fee reductions. In practice, however, a large amount of discretion is provided to provincial leaders.<sup>10</sup> First, they have greater control over incentives when firms invest in industrial zones or districts classified as backward by the national government. Second, they have the ability to determine whether enterprises fit eligibility criteria in terms of size, targeted sectors, employment and local origin conditions, and benefits to underprivileged groups such as women or minorities. Provincial leaders have interpreted and applied these quite differently, meaning the same firm can receive highly varying offers from neighboring provinces. Moreover, investors have learned that they can exploit the divergence to win themselves quite lucrative deals. The competition has created a tremendous collective action problem that has sapped Vietnam of critical revenue. As the IMF put it in a recent assessment:

Tax and tariff reductions and exemptions have contributed to a downward trend in revenues as a share of GDP, in contrast to regional experience, resulting in an expansionary revenue stance in cyclically adjusted terms... Staff recommended broadening the tax base by *eliminating*

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<sup>10</sup> Vietnam has had multiple investment laws, which have refined these choices over time. In the most recent investment law (VNA 2014), Section 1, Clause 15 lays out the types of investment available, while Section 2, Clauses 33 and 38 describe the authority of the Provincial People’s Committee and its Chairman. These powers were also seen in the 2005 Investment Law (VNA 20050).

*exemptions, reducing incentives*, introducing a property tax, and including pensions under personal income tax (IMF Article 4, p. 11 & 15).

To measure targeted-incentives for particular foreign investors, we use the annual foreign investment survey of the Vietnamese Provincial Competitiveness Index (PCI), a US-AID funded project that is administered by the Vietnamese Chamber of Commerce and Industry. Each year (2010-2014), the PCI-FDI survey samples about 1,600 foreign firms to perform a comprehensive governance assessment of the country and province where they are located, allowing for a comparison of Vietnam's 63 provinces.<sup>11</sup> The PCI research team ensures that each year this survey is representative of the population of firms in Vietnam through stratified random sampling, returning a response rate of 25% (Malesky 2015, p4-6). Foreign investment in Vietnam is largely dominated by firms from East Asia. The five largest investors, based on national data and the PCI sample include: Taiwan (18.41%), South Korea (15.56%), Japan (15.38%), China (4.83%), and Singapore (3.96%). The sample also includes 560 investors from the European Union, 176 investors from the United States, and 61 from Australia.

The main dependent variable (*incentive*) is taken from the first question (B6.1) of a battery of questions in Section B of the PCI-FDI survey regarding the firm's entry decision (p6), which probes the generosity of incentives in the location where the firm invested. These questions are detailed in Box 6.1 below. We code a firm as receiving an incentive if it answered yes to question B6.1 and zero if it did not. Between 2006 and 2014, 36% of firms received some sort of fiscal incentive. Of those receiving incentives, 75% received a tax holiday (median length=24 months<sup>12</sup>), 42% received a tax reduction (median value =50%), and 24% received land fee reductions. Consistent with our theory that these incentives are often superfluous, 66% of respondents said that they would have invested in the province without the inducement, while 68% said the package they were offered by a competing province was exactly the same as the province where they invested. 23% of respondents acknowledged that the package from the competing province was actually better. In 42% of the cases, the firm agreed to the province's

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<sup>11</sup> Methodological details and background on the PCI-FDI survey can be found at VCCI 2015.

<sup>12</sup> Details on the length and amount of packages were asked between 2010 and 2012, but were dropped in 2013 and 2014.

initial incentive offer without negotiation, indicating that additional adjustment would make little difference in their decision. Finally, firms receiving incentives not any more likely to purchase inputs from domestic providers, but significantly more likely to import inputs from their home country or a third-country supplier, demonstrating that the promise of domestic spillover benefits are unfounded.

### Box 6.1: Questions about Tax Incentives from PCI-FDI Survey (2014)

6. Did the province you eventually selected offer you an investment incentive package?

Yes *(If yes, please tell us a little more about the incentive package in question B6.1 to B6.6)*

No *(Please skip to question B7)*

6.1. Was your firm provided with a corporate income tax holiday?  Yes  No

6.2. Was your firm provided with a corporate income tax reduction?  Yes  No

6.3. Were you provided with a reduction in land use right purchase fees?  Yes  No

6.4. Were these the province's original offers or were they negotiated?  Original offer  Negotiated

6.5. Would you have invested in the province without the tax incentive?  Yes  No

7. If you considered investing in another province, how did the tax incentive (if any) of the other province compare to the one where you invested?

Better

About the same

Worse

Our business did not consider investing in another province.

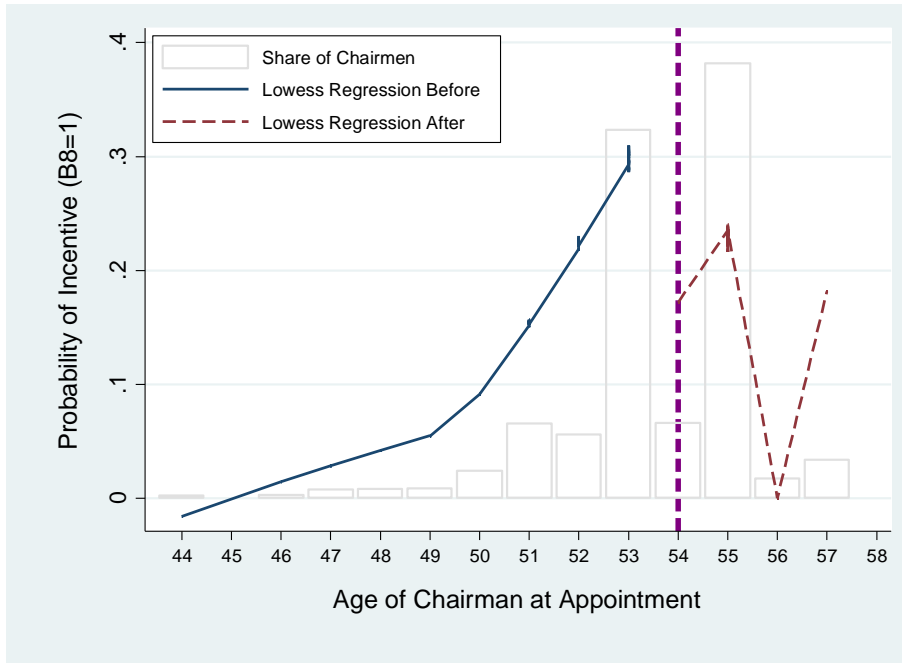
Figure 6.6 provides an initial graphical depiction of our analysis. In the first panel, we present lowess regressions at the firm level. On the x-axis, we plot the age of the PCOM when appointed to their most recent term, the forcing variable in the RDD. The y-axis depicts the probability that the entering FIE received an investment incentive ( $B6.1=1$ ). The histogram depicts share of total People's Committee Chairman for each age group. The dashed line in the graph provides the cut-off of 54 years when the PCOM becomes ineligible for promotion. Lowess regressions lines are plotted before and after the cut-off.

In the second panel, we replicate the analysis at the provincial level. Showing the share of firms at age group that received an incentive. Bubbles are sized by the number of new entrants for each chairman. Here, before and after lines are plotted using a quadratic fit. Both graphs demonstrate that the

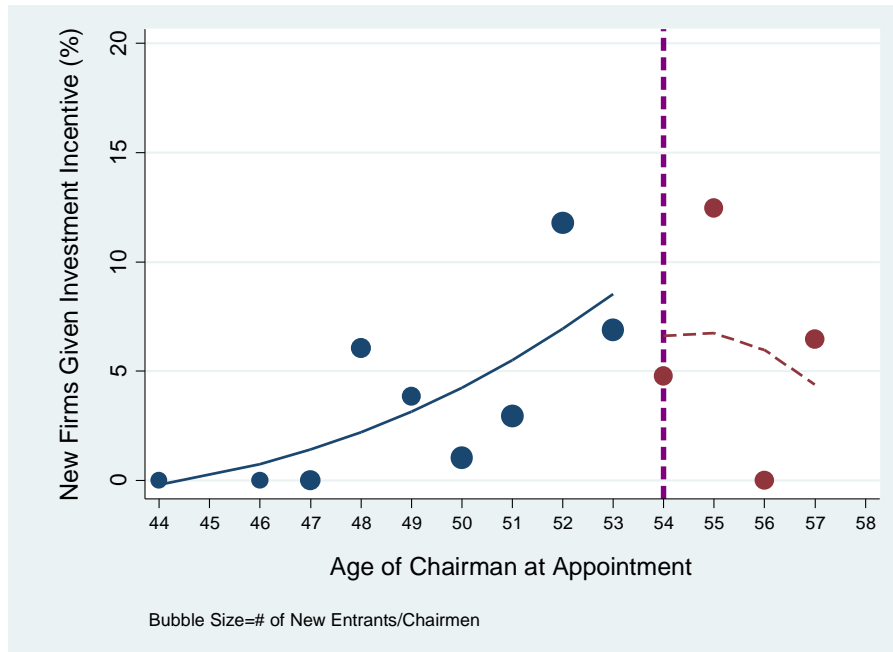
share of entrants granted tax incentives increases up until the threshold. This is consistent with our career advancement story, as officials try to gamble for resurrection, offering generous incentives to maximize their attractiveness in the last years before their eligibility. Results are clearly not driven by the number of new entrants, which is steady prior to the threshold. After the threshold, the results are quite noisy, as there is no clear theoretical relationship between being older one year and offering incentives. Thus, the average use of incentives is lower on average, but bounces up and down as age moves away from the threshold.

**Figure 6.6: Tax Incentive Probabilities of People’s Committee Chairmen by Start Year**

*Panel A: Firm-Level Lowess Regressions*



*Panel B: People’s Committee Chairman-Level Averages Quadratic Fit*



Although control variables are not necessary in a sharp RDD specification (Angrist and Pischke 2010, 256), the flexible specification does allow us to address possible confounders. In particular, there are three potential sources of heterogeneity that might affect our analysis.

First, particular characteristics of PCOMs might be associated with their career advancement. For instance, less well-educated PCOMs might advance more slowly through the bureaucratic ranks and thus have achieved a lower status when retirement calls. If that is the case, education might be correlated with our treatment variable. Alternatively, Vietnamese officials serving in their home province may be less ambitious than their peers who have parachuted in from outside. Remember in contrast to China, a much smaller percentage of PCOMs are promoted and most spend their entire careers in the home province (McCulloch and Malesky 2014). To the extent, that the treatment variable captures career incentives, this might lead to a biased coefficient. To address these concerns, we control for whether the PCOM has an advanced degree ( $MBA=1$ ) and whether they are serving in their home province ( $hometown=1$ ) in a set of robustness tests.

Second, particular firms might strategically target officials who are below retirement age, knowing that they might be more likely to offer incentives. We address this set of confounders by adding a variable measuring the *employment size* of the firm<sup>13</sup> when it entered, and two-digit *sector* fixed effects based on the International Standard Industrial Coding (ISIC) Revision 4 deciding system.

Third, strategic central officials might send soon to be retiring officials to particular provinces where growth is less important or less challenging, again causing the treatment variable to correlated with features of the province. To address this concern, we control for *population size* (ln), provincial *GDP per capita* (millions of VND, ln), registered *FDI capital* (millions of USD, ln), and human capital proxied by the province's secondary school *graduation rate*.

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<sup>13</sup> Firms' sizes range from 1 to 300,000 employees. The average firm in the sample has 160 employees with a standard deviation of 4267, but this conceals a sizable skew. Most FIEs are on the small size. The median firm has 4 employees and 66% have under 10 employees

The above variables are included in the regressions. More generally, however, we also tested for balance between our treatment group (must retire=1) and control group (eligible for promotion, but age at appointment  $\geq 50$ ) on a range of potential confounders. In total, we looked at 106 potential confounders covering seven major categories: 1) personal characteristics of the PCOM; 2) quality of provincial infrastructure (i.e. roads, telecom, internet, industrial zones); 3) development, covering economic development (GDP, industrial output, construction) and business development (number and performance of private and foreign companies); 4) human capital, measuring population, employment, and educational quality; 5) geography, covering distance from Hanoi and location Vietnam's seven different geographical regions which vary widely in landscape, climate, and culture; 6) institutions and governance, including regulatory burdens, property rights, transparency, and corruption; 7) change rates in economic development, human capital, and governance in the year before PCOM took office. The latter category is particularly important, because it accounts for whether particular provincial leaders were selected particularly to ride upon previous provincial glory or help correct for performance.

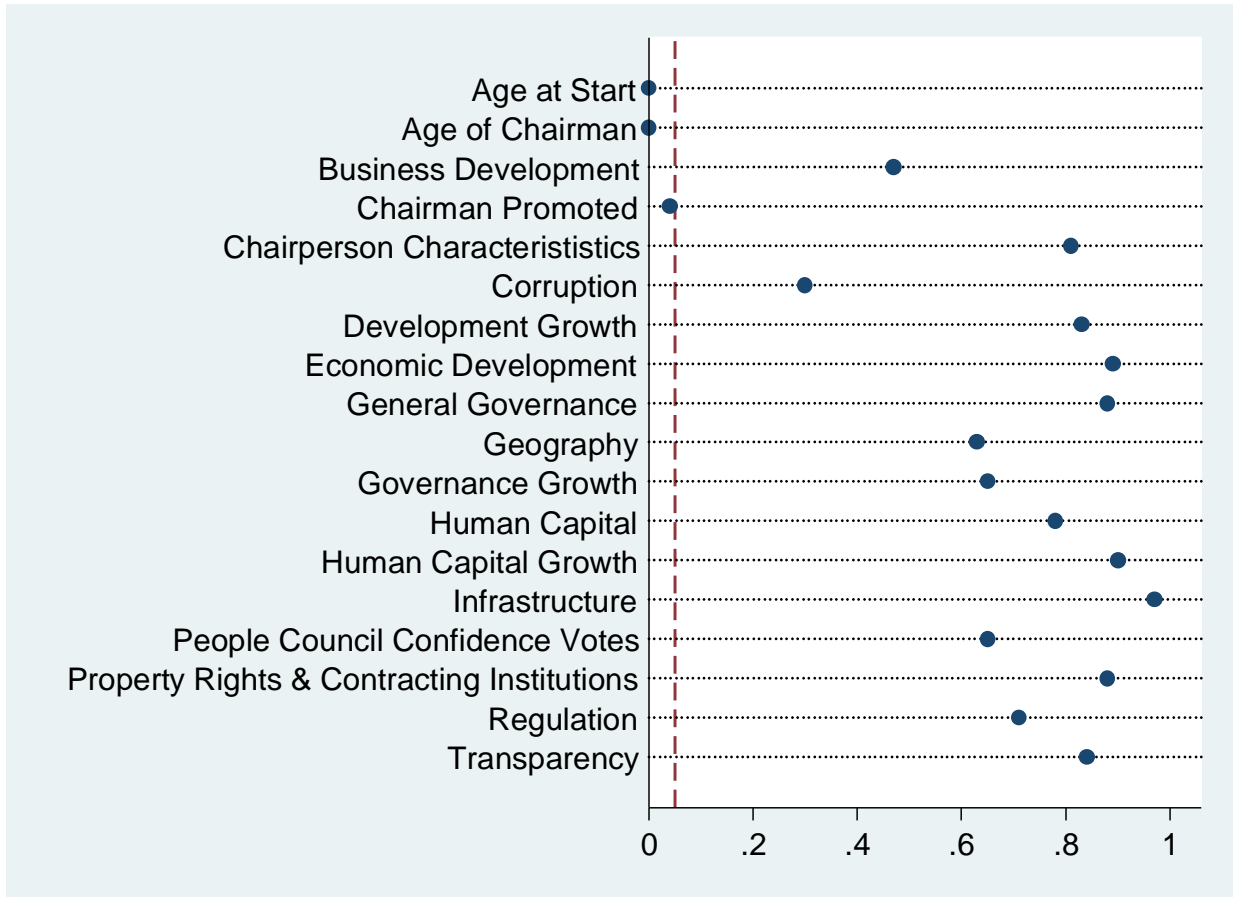
The full set of 106 balance tests and sources for each variable are presented in Appendix B. Looking at a variety of different significance measures (student's t-test, Wilcoxon sum-rank Z-test, and Fischer's exact p-test) we do not find a single potential confounders that is significantly associated with the treatment variable. The approach is limited because our sample of PCOMS is quite small measures are too fine-grained. For instance, we have 30 measures of governance alone. Like the proverbial blind men describing parts of the elephant, all of these individual tests, however, might be too nuanced, capturing small perturbations, but overlooking the larger movements in an underlying latent variable. Therefore, we run multivariate analysis of variance (MANOVA) estimations on the large baskets of indicators described above (Warne 2014). These p-values of these MANOVA estimations are plotted in Figure 6.7. The red dashed line at 0.5 separates confounders that vary significantly with the treatment from those that do not appear consequential. Again, none of the potential baskets of confounders is close to statistical significance.



Critically, there are three measures that do have significant p-values. These include: age at start of term, which was our forcing variable; 2) age at time of the survey, which of course is related to the forcing variable mechanically; and 3) the share of PCOMs promoted at the end of their term, which is the career incentive that drives our entire theoretical intuition. The fact that these three variables are significant is important, because they confirm the assumptions of our research design. Moreover, they indicate that the statistical insignificance of the other confounders does not result from lack of statistical power.

The balance tests along with the McCrary density test provide confidence that the basic assumptions of the RDD are upheld. In less scientific jargon, it appears that we can treat retirement age as a reasonable natural experiment for assessing our pandering upward theory. In almost every way, provincial leaders slightly above the cut-off year of 54 appear to be like the leaders slightly below. They have similar levels of education, career backgrounds, similar constellations of firms in their provinces, and work in similar provinces. While it is impossible to randomize career incentives and ambition across individuals, the artificial retirement gets us pretty close to a randomized experiment. All observable characteristics are essentially the same, and the only thing that obviously varies is the possibility of promotion.

**Figure 6.7: Balance Tests of Key Confounders**



Note: Blue dots represent p-values from MANOVA analyses of grouped variables. The y-axis supplies the title of each grouping. A full list of indicators under each title can be found in Online Appendix B. Dashed line represents  $p=.05$  from the MANOVA analysis. For dots below that number, we reject the null hypothesis that the treatment and control are different on that set of criteria.

### *Results of the Regression Discontinuity*

Table 6.3 presents the main results of the RDD analysis. For this table, we calculate the optimal bandwidth of 3.63 using the Imbens and Kalyanaraman (2012) procedure. Since our provincial ages are measured as integers and our oldest PCOM was appointed at 57, in practice this implies a four-year bandwidth ranging from age 50 to age 57. All firms associated with provincial leaders younger than fifty were dropped from our analysis, leaving us with 1,829 firms that entered the country between 2006 and 2014. We employ a probit specification and calculate the marginal probabilities, however, all results are substantively similar with a linear probability model. Because multiple firms are entering the province of the same leader and therefore cannot be considered independent draws, we cluster standard errors at the chairman level.

The table is divided into two panels. The first panel runs the traditional regression based estimation approaches to RDD. In Model 1, we start with the standard difference-in-means approach, which includes only the treatment variable (retire) and the forcing variable (age at start), but does not include their interaction term. The jump at the intercept in this stripped down approach is estimated to be a 14.8% lower probability of offering a tax incentive. As the intercept for officials younger than 54 is estimated rather than observed, it is advisable to interact the treatment and the forcing variable, so that the differences in the slopes on both sides is taking into account when estimating the discontinuity. Thus, Model 2 adds the interaction term. Focusing on the shift in intercept, we again see a 16.8% lower probability of incentives for those about to retire. To make sure we don't confuse a discontinuity with non-linearity (Angrist and Pishke 2009, 254) we follow Lee and Lemuix (2007) and test that our results are robust to include a quadratic transformation of the forcing variable (in Models 3-6.) Model 4 adds entry year fixed effects to capture differences in the business environment faced by firms entering in different time frame. Finally, Model 5 adds the confounds highlighted above (leader characteristics, firm characteristics, and province characteristics) and Model 6 includes two-digit sector fixed effects. The shaded panel applies the more complex estimation approaches suggested by Imbens and Kalyanaraman (2012), Kaiser (2014), and Catteno et al. (2016).

**Table 6.3: Regression Discontinuity Analysis of Promotion Probability and Tax Incentive Usage**

<i>Dependent Variable = Offered Any Incentive to Foreign Entrant</i>	<b>Regression Specifications</b>						<b>Alternative Approaches</b>			
	<b>Diff-in-Means</b>	<b>Interactions</b>	<b>Quadratic</b>	<b>Entry Year FE</b>	<b>Controls</b>	<b>Sector FE</b>	<b>Optimal BW</b>	<b>CV-BW</b>	<b>CTV</b>	<b>CTV<sup>2</sup></b>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Must Retire=1	-0.148** (0.058)	-0.168*** (0.036)	-0.131*** (0.043)	-0.157*** (0.053)	-0.193*** (0.049)	-0.256*** (0.040)	-.186* (.067)	-0.211*** (.079)	-0.154*** (0.142)	-0.197*** (0.142)
Age at Start -54	0.044** (0.017)	0.105*** (0.019)	-0.002 (0.087)	0.110 (0.108)	-0.004 (0.114)	-0.036 (0.094)				
Must Retire* Age at Start		-0.121*** (0.029)	0.069 (0.161)	-0.149 (0.201)	0.105 (0.215)	0.193 (0.189)				
Entry Year Fixed Effects	No	No	No	Yes	Yes	Yes	No	No	No	No
Sector Fixed Effects	No	No	No	No	No	Yes	No	No	No	No
Controls	No	No	No	No	Yes	Yes	No	No	No	No
Observations	1,829	1,829	1,829	1,767	1,690	1,542	1,829	1,829	1,829	1,829
Chairmen Clusters	81	81	81	68	53	24				
Pseudo R-Squared	0.00680	0.0150	0.0164	0.0427	0.0434	0.0757				
Pbar	0.231	0.231	0.231	0.239	0.249	0.270				
Log Likelihood										
Kolmogorov-Smirnov									0.788***	0.788***
Rank Sum Z-test									26.005***	26.011***

Models 1 to 6 use probit with marginal probabilities presented and robust standard errors, clustered at People's Committee Chairmen, in parentheses (\*\* p<0.01, \* p<0.05, \* p<0.1). Controls include whether the chairman is serving in his hometown, years of education, possess MBA=1, serving in central committee=1, firm size and sector, provincial GDP per capita, population, number of FDI projects, and high school graduation rate. Alternative approaches are employed in the shaded panel. Imbens-Kalyanaraman optimal bandwidth procedure (Model 7) and cross-validation bandwidth procedure (Model 8 implemented using STATA's rdcv package (Kaiser 2014). Cattaneo et al. (2016) implemented using STATA's rdandinf procedure (Model 9). Model 10 runs rdandinf with a quadratic transformation of the forcing variable.

Across all of the specifications, we observe the same pattern, retiring PCOMs are less generous in their allocation of fiscal incentives to incoming FIEs. In our preferred estimation Model 5, which we believe is sufficiently parsimonious and conservative, we find that retiring leaders are 15.7% less likely to offer incentives than similarly situated peers in other provinces. This result is consistent with our theory that career incentives of provincial leaders are associated with upward pandering in single-party systems.

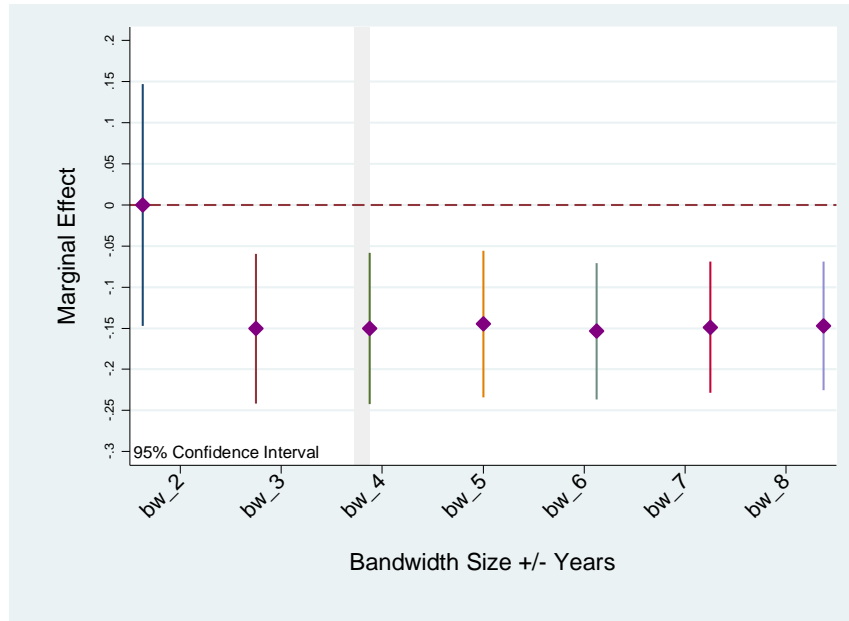
### *Robustness Tests*

With RDD, two design choices can potentially influence results and pose a threat to causal inference – bandwidth and cut-off value. First, we might be concerned that choice of bandwidth could potentially eliminate observations at the high or low end, and therefore influence results. To test whether this was a problem, we re-ran our preferred Model 5 multiple times with bandwidth sizes ranging from two to eight years. We maintain the same cut-off of 54 years. The coefficients on the treatment variable for each estimation are plotted in Panel A of Figure 6.8. The figure demonstrates that our findings are quite robust. All coefficients are negatively signed and similarly sized. The exception is bandwidths of two, where the difference is effectively zero with a very large standard error.

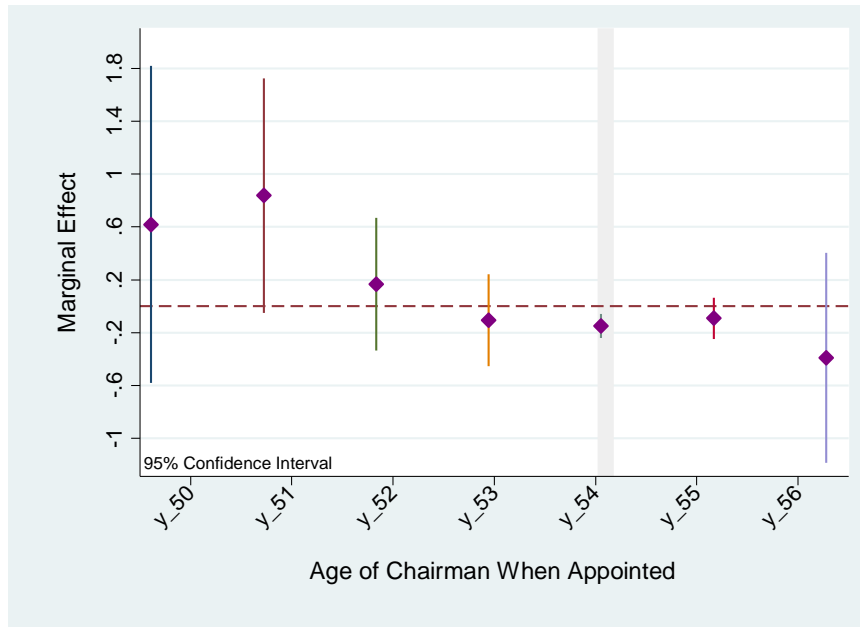
Panel B addresses the cut-off value with a placebo test. To make sure our results are a function of the actual retirement age and not some other age-related factor, we again re-ran Model 3, but replaced the cut-off value with every year between 50 and 56. Again, we assume the optimal bandwidth of 3.6 years. Only for the cut-off year of 54 do we observe the same significantly negative value, which provides strong confirmation for our theory. Years above 54 are not statistically different from zero. Years below 54 are positively signed and insignificant. As we noted above, this is also consistent with our theory, as officials attempt to bolster their retirement choices before in their last years of eligibility.

**Figure 6.7: Sensitivity of Main Results**

*Panel A: Alternative Bandwidths*



*Panel B: Alternative Cut-Off Dates*



Note: Panel A replicates Table 6.3 (Model 5), but alternates the number of years around the cut-off data of 54 used in the sample. Panel B replicates the same model, but alternates the cut-off year. Diamonds represent coefficient estimates and range bars represent 90% CIs.

### *A Closer-Look at Incentives*

In Table 6.4, we move away from the blunt measure of fiscal incentives and focus on more fine-grained measures of what firms actually received. The first column is derived from Question B2, which asks firms to compare the incentive they received from the province where they located to the incentive offered by the competing provinces. Respondents were less likely to say that the competition offered a worse incentive. In other words, retiring leaders rarely tried to match the offers of their competition. Digging deeper, respondents in provinces with retiring PCOMS were 29% less likely to receive a tax holiday, 69% less likely to receive a CIT reduction, and 13% less likely to receive land fee reductions, although the last number falls slightly short of significance. For firms in retiring locations that did receive some incentives, the generosity was also less. CIT reductions were lower, lasted for shorter periods, and tax holidays were also shorter in length. A final piece of evidence from Table 6.4 is that there is no difference between PCOMS about whether the tax incentive was offered originally or negotiated, which indicates that these results are derived from PCOM decisions and not strategic interactions with investors.

**Table 6.4: Alternative Measures of Incentives**

<b>Dependent Variable</b>	How did offer from competing province compare to this one ?	Did you receive a Tax Holiday?	Legth of Holiday	Did you receive a tax reduction?
Coding	1. Better; 2) The Same; 3) Worse	Yes=1/No=0	Months (ln)	Yes=1/No=0
	(1)	(2)	(3)	(4)
<i>Must Retire=1</i>	-0.220 (0.129)	-0.290*** (0.111)	-1.244* (0.638)	-0.692** (0.285)
<i>Age at Start -54</i>	0.124** (0.052)	0.181** (0.074)	1.016** (0.447)	0.263 (0.287)
<i>Must Retire*Age at Start</i>	-0.013 (0.058)	-0.209** (0.098)	-1.247 (1.223)	-0.057 (0.309)
Entry Year Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	548	613	131	356
Pbar/Mean DV	1.85	0.514	3.59	0.418
	<b><u>Reduction Size</u></b>	<b><u>Reduction Length</u></b>	<b><u>Land Fees</u></b>	<b><u>Offered/Negotiated</u></b>
<b>Dependent Variable</b>	Size of Reducation	Length of Reducation	Were you provied with a reduction in Land Use Fees?	Was this the province's first offer or negotiated?
Coding	Percentage Points	Months	Yes=1/No=0	First Offer=1/Negotiated=0
	(5)	(6)	(7)	(8)
<i>Must Retire=1</i>	-22.576** (9.979)	-14.730** (6.455)	-0.131 (0.079)	0.153 (0.141)
<i>Age at Start -54</i>	12.699 (9.704)	4.769 (4.734)	0.063 (0.053)	-0.126* (0.074)
<i>Must Retire*Age at Start</i>	-11.453 (14.211)	0.780 (6.545)	-0.106 (0.084)	0.143 (0.114)
Entry Year Fixed Effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	369	315	545	416
Pbar/Mean DV	18.97	21.69	0.247	0.291

Models replicated 6.3 (Model 3) using alternative measures of tax incentives. Robust standard errors, clustered at People's Committee Chairmen, in parentheses (\*\*\*) p<0.01, \*\* p<0.05, \* p<0.1). Controls include whether the chairman is serving in his hometown, years of education, possess MBA=1, serving in central committee=1, firm size and sector, provincial GDP per capita, population, number of FDI projects, and high school graduation rate.

### Summary of Vietnam Analysis

Our theory predicts that single-party regimes with imperfect meritocratic promotion are the most likely suspects for upward pandering. To test this theory directly, we took advantage of the retirement age in Vietnam, which exogenously assigns People's Committee Chairman close to the age of 54 into two groups. Those younger than 54 are still eligible for promotion, while those just on the other side have zero probability of promotion. Critically, officials above and below the line are roughly identical on over 100 potential individual, firm-level, and provincial-level confounders on average. By taking away the incentives for credit claiming, we hypothesized that officials who must retire would no longer be motivated to offer generous fiscal incentives to potential investors. These officials would be more



concerned about the fiscal health of their localities, and would favor investment attraction without superfluous giveaways.

To test our theory, we used a regression discontinuity design around the age 54 cut-off, finding that retiring officials were 16% less likely to offer fiscal incentives. In particular, they were 28% less likely to offer Tax Holidays and 69% less likely to offer CIT reductions. These results were robust to a range of specification choices, bandwidth alterations, and placebo testing.

In essence, we find evidence consistent with our theory that when subnational officials in single-party regimes no longer have an incentive for promotion they lose interest in upward pandering and follow their true preferences. Understanding single-party regimes is important, as these countries represent the most economically successful and durable types of authoritarian countries.

#### **6.4. Testing the Personalism Hypothesis in Putin's Russia**

Our second empirical case study explores the relationship between personalism and tax incentives. In contrast to single-party regimes, personalist regimes depend on allegiance to an elite leader, who has consolidated power around him or herself. As a result, signaling economic performance is less important than engaging in acts of loyalty toward the top leadership. As we noted above stamping out popular discontent and mobilizing electoral victories whether through electioneering or outright fraud are more valuable. Thus, in countries characterized by pluralism, we expect less use of fiscal incentives.

Russia since 2000 provides a fascinating location to test this hypothesis in more depth, because it not only offers a prime example of personalist leadership under Vladimir Putin (Geddes et al. 2015), but because, according to most experts, it is characterized by growing personalism over time (Shetsova 2007, Baturu and Elkink 2015). Critically for us, this personalism became firmly established by a specific institutional change in 2005 that replaced the direct election of governors of Russian regions with appointments by central authorities connected to the Kremlin (Sharutdinova 2010). We take advantage of this structural break to test our theory using an interrupted time series design.

##### *Personalist Authoritarianism under Putin*

Due to the murkiness of authoritarian politics, some confusion exists about how to properly code the current Russian brand of authoritarianism. Hadenious and Teorell (2007) characterize Russia since 2000 a hegemonic party system under United Russia (UR), because UR has always controlled less than 75% of seats in parliament (2008=64.4%; 2011=50.2%) and because the chief executive has been elected with less than 75% of the vote (Putin won 64% of votes in 2012). Svoboda (2012) doesn't consider the country to be authoritarian until 2005, but then lists the country as a contested autocracy, as opposed to an established autocracy, for similar reasons. In contrast, Geddes et al. (2015) code the country as strictly personalist throughout the time period and specifically do not classify it as a single-party or hegemonic party regime. Magaloni et al. (2013) agree with the hegemonic party coding throughout, but argue that

the multiparty systems becomes infused with personalism beginning in 2007, which not coincidentally coincides with the removal of regional elections.

Among Russian specialists, there is increasing consensus around the idea that executive control over the judiciary, legislature, and regions has expanded (Gel'man, Ryzhenkov, and Brie 2006, Goode 2007) which is consistent with growing personalism. Shevetsova (2007, p. 40) puts it most elegantly. Since he took office in 1999, Vladimir Putin slowly “set about building his ‘pyramid of power,’ emphasizing subordination, strengthening the role of the bureaucracy, bringing the members of the security services into the government, centralizing control, and eradicating opposition.”<sup>14</sup> Increasing personalism in Russia has been best documented empirically by Baturo and Elkind (2015), who use a network analysis of appointments and proximity to Putin, they are able to document the precise timing of changes in his ability to exert control and consolidation of power. They conclude, “We find that as early as 2004, the Russian regime can be regarded as personalist, and is strongly so from 2006 onward” (p75).

As with the Magaloni et al. (2013), the 2006 date coincides precisely with the removal of elections for governorships in regions.<sup>15</sup> According to Russian scholars, gubernatorial elections were quite competitive prior to the 2005 removal. Incumbent Russian governors possessed a range of administrative instruments that they used to win elections and were able therefore able to carve some independent policy space. Out of 72 elections between 2001 and 2004, Kremlin-backed (United Russia) candidates successfully challenged incumbent governors in only 15 races (Goode 2007, 376). Moreover, economic performance appeared to matter. Prior to this date, scholars. Konitzer (2005) showed that economic performance played major role in elections.

In sharp contrast, there is evidence that promotion was based on loyalty after the 2005 elections (Konitzer and Wegen 2006, Goode 2007, Sharafutdinova 2010). Indeed, in a comprehensive analysis of

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<sup>14</sup> Quoted in Baturo and Elkind (2015), p. 80

<sup>15</sup> Standard measures of constraints on executive decision making also decline around this time too. See Online Appendix D for details.

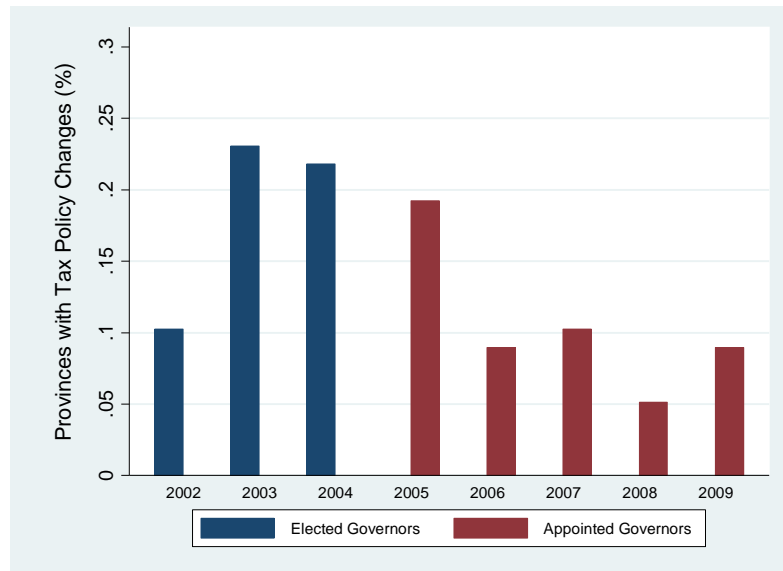
gubernatorial appointments after 2005, Reuter and Roberston (2012) document that a wide range of indicators of economic performance are uncorrelated with the decision by the Kremlin to reappoint governors. Most important by far was the ability of the incumbent governors to mobilize votes for the United Russia Party and Putin in particular (p 1032). Frye et al. (2014) document the efforts to mobilize vote on Russian factory floors after this time. In explaining the pattern of stuffed ballots in Russian election post-2006, Myagkov et al. (2009, p.136) similarly conclude.

Absent the usual signals that a true democracy, imbedded in a market economy, provides, the Kremlin needs ways to judge the loyalty and competence of those outside its walls, and elections serve that purpose. A weak showing, relative to the past, on the part of Putin, Medvedev, or United Russia in some oblast, rayon, or precinct signals a governor or local apparatchik who needs replacement if not outright incarceration. (2009, 136)

A more recent study, which looked at the reappointment of vice-governors charged with the economic portfolio in Russia draws a related but more nuanced conclusion by studying regional variation in the quality of electoral competition. While they confirm the strength of personalist appointments in the more authoritarian Russian regions with minimal electoral competition, they also find that vice-governors are more likely to be held accountable for poor economic performance in those same authoritarian regions. They conclude that in Russian regions where United Russia faces the greatest electoral competition, economic performance plays a secondary role to the ability to mobilize votes for the regime, again demonstrating the importance of loyalty (Reuter and Buckley 2015).

The bottom line is that the 2005 switch to gubernatorial appointments increased the role of personalism in the promotion and reappointment of Russian leaders. It is thus an ideal opportunity to explore how the exogenous increase in personalism increased the use of fiscal incentives among Russian governors. The aggregate effects of this phenomenon can be observed in Figure 8 below, where we see the sharp drop off in the share of Russian governors presiding over changed tax law after appointments began. In the four years prior to the change, 14.7% of Russian regions altered their tax policy as opposed to 9.8% afterward, as statistically significant difference ( $p=.03$ ).

**Figure 6.8: Share of Russian Regions Changing Tax Policy by Year**



Note: Data on tax policy changes from Szakonyi and Nazrullaevay (2015).

### *Model Specification and Data*

The ideal specification for H3 would compare the changes in the use of incentives between elected and non-elected Russian governors in a difference-in-differences framework. This strategy, however, is unfortunately unavailable because the switch was applied to all regions at the same time, thus eliminating a potential control group. As a second best alternative, we propose Equation 2 below, where we employ an interrupted time series analysis with panel fixed effects (Cook and Campbell 1970, McDowall et al. 1980). Following Reuter and Robertson (2012), the treatment variable is  $y_{2005}$ , which takes the value of 1 if  $year \geq 2005$  and 0 if  $year < 2005$ . To some extent, this creates a slight bias against finding a relationship as there is likely a lag between the removal of elections and its effect on policy. Our estimation strategy treats the relationship as immediate.

$$PR(incentive_{gt} = 1) = \beta_0 + \beta_1 y_{2005_{it}} + \gamma Region_{gt} + \pi Governor_{gt} + \delta_g + u \quad (2)$$

One threat to causal inference is that appointed governors may vary dramatically in observable and unobservable features from their elected peers. For instance, it may take more competence, talent, or entrepreneurialism to win an election in Russia than to finagle an appointment. To avoid this selection

bias, we limit our analysis to only the 111 governors who both were elected at any point prior to the institutional change, and who served as appointed governors after 2006, reducing our n from 780 governor-years to 485 governor years. Moreover, we introduce governor fixed effects ( $\delta$ ), so that the counterfactual we compare is the appointed governors to themselves. In essence, we hold constant all the time invariant personality features of governors to understand how their behavior was altered after institutional features changed their incentives. Since most governors only served in one location this also indirectly applies regional fixed effects. The exception is promotion to Moscow or St. Petersburg, which we address by dropping in robustness tests. As the governor fixed effects only address time invariant features, we also test the robustness of our findings to vectors of time-variant regional variables  $\gamma$ , thought to be important in the literature, such as infrastructure (road density), urbanization (share of population in urban areas), and regional investment risk ratings. Time-variant governor characteristics ( $\pi$ ) include variables found to be important in the extant literature, such as the governor's attachment to the region, measured as the number of years the governor has served in the locale (ICSID 2015). This variable also captures region-governor time trends.

The dependent variable for the analysis comes from Szakonyi and Nazrullaevay (2015), who used a database of regional texts to construct a dataset of all laws passed from 2000–2008, which were related to investment initiatives in Russia's regions. Laws under regional jurisdiction include laws (1) on property, profit, land, and transportation taxes (only 4 types of taxes), (2) on the participation of regional governments in investment funds, (3) on the use of public-private partnerships, (4) on investment tax credits, (5) on direct subsidies to firms, and state guarantees, and (6) on the provision of expertise in the implementation of the proposed project. Based on only major regional laws, the authors constructed a variable called *tax policy changes*, which is 1 when (1) an entirely new bill on legislation was passed, or (2) over 50% of the main legislation was revised, and 0 otherwise.

In our analysis, we use *tax policy change* to test our story of tax incentives. Although, it is not a direct measure of firm-level targeting as in Vietnam, it does reflect changes in the governing laws that

authorized the use of tax incentives. We expect that, we will see a decline in these authorizations as governors no longer find it useful to employ targeted incentives.

### *Results*

Our main results are presented in Table 5 below. Three models are presented. In Model 1, we study the main specification with only governor fixed effects and no time-variant controls. In Model 2, we add time variant controls. In Model 3, we drop Moscow and St. Petersburg, a standard robustness check in the literature on subnational political economy in Russia.<sup>16</sup> The coefficient on the treatment variable is significant in all three model. In Model 3, the fully specified equation we find an 8% reduction in the probability of tax changes after governors were switched from elected to appointed leadership. As a further placebo test, the next three models (4-6) run the same specifications, but alter the dependent variable to include other economic policy changes, such as shifts in regulations or infrastructure outlays. Importantly, we see no difference among Russian governors after election on these alternative policies, which strengthens our confidence in the tax incentives as pandering story.

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<sup>16</sup> As with the Vietnamese analysis, we subject our findings to a placebo test in Online Appendix E. The results indicate that previous periods are not significant in a negative direction, indicating that our 2005 is an exogenous shock and we have simply picking up a portion of a pre-existing downward trend in tax incentive usage.

**Table 6.5: Change in Tax Policy after Institutional Change**

<i>Dependent Variable = Policy Change</i>	<b>Tax Change</b>			<b>Other Economic Policy Changes</b>		
	<b>Bivariate</b> (1)	<b>Controls</b> (2)	<b>Drop Metros</b> (3)	<b>Bivariate</b> (4)	<b>Controls</b> (5)	<b>Drop Metros</b> (6)
Post 2004=1	-0.083** (0.036)	-0.072* (0.039)	-0.080** (0.039)	0.043 (0.035)	0.054 (0.038)	0.051 (0.038)
Years Governor in Region		-0.008 (0.039)	-0.009 (0.039)		0.006 (0.038)	0.006 (0.038)
Road Density		-0.001 (0.001)	-0.001 (0.001)		-0.001 (0.001)	-0.001 (0.001)
Urban Share (%)		0.012 (0.022)	0.014 (0.022)		-0.008 (0.021)	-0.008 (0.021)
Investment Risk Rating		0.122** (0.050)	0.104** (0.051)		0.025 (0.049)	0.029 (0.049)
Constant	0.171*** (0.025)	-0.770 (1.542)	-0.837 (1.536)	0.092*** (0.024)	0.593 (1.507)	0.572 (1.500)
Governor FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	485	481	472	485	481	472
R-squared	0.117	0.135	0.138	0.095	0.097	0.098
rmse	0.341	0.341	0.341	0.333	0.335	0.335

Linear probability models with standard errors in parentheses (\*\*\*) p<0.01, \*\* p<0.05, \* p<0.1).

In Table 6.6, follow up the analysis by looking at the specific types of tax policies that were affected. We find that the coefficient is significant in eleven of the twelve specifications, but is imprecisely estimated. The large standard errors results from the small share of regions in our sample who made any changes on these specific tax laws. This can be seen in the coefficients on the constant in the unadjusted models, which recovers the share of pre-treatment regions changing policy. These range from 2.7% to 14.7%, indicating the share of region-years in the pre-treatment period which experienced one of the tax policy changes. Not surprisingly, the only areas where we observe significant change is where there was sufficient activity prior to 2005 to observe changes afterward, such as with property taxes.



**Table 6.6: Specific Tax Policies and Tax Incentives in Russia**

<i>Dependent Variable = Policy Change</i>	<b>Profit Tax</b>		<b>Property Tax</b>		<b>Land Tax</b>		<b>Investment Fund</b>		<b>Tax Credits</b>		<b>Subsidies</b>	
	<b>Bivariate</b>	<b>Controls</b>	<b>Bivariate</b>	<b>Controls</b>	<b>Bivariate</b>	<b>Controls</b>	<b>Bivariate</b>	<b>Controls</b>	<b>Bivariate</b>	<b>Controls</b>	<b>Bivariate</b>	<b>Controls</b>
	(1)	(2)	(3)	(4)	(5)	(6)						
Post 2004=1	-0.007 (0.032)	0.011 (0.035)	-0.078** (0.033)	-0.060* (0.036)	-0.020 (0.014)	-0.011 (0.015)	-0.013 (0.023)	-0.006 (0.026)	-0.006 (0.020)	-0.003 (0.022)	-0.004 (0.028)	0.009 (0.031)
Years Governor in Region		-0.001 (0.034)		-0.007 (0.036)		-0.002 (0.015)		0.000 (0.025)		0.000 (0.022)		0.027 (0.031)
Road Density		-0.001 (0.001)		-0.001 (0.001)		-0.000 (0.000)		-0.000 (0.000)		-0.000 (0.000)		-0.000 (0.001)
Urban Share (%)		0.034* (0.020)		0.019 (0.020)		0.008 (0.008)		-0.016 (0.014)		-0.011 (0.013)		-0.011 (0.017)
Investment Risk Rating		0.052 (0.045)		0.075 (0.047)		-0.005 (0.019)		-0.016 (0.033)		-0.022 (0.029)		0.016 (0.040)
Constant	0.101*** (0.023)	-2.265 (1.387)	0.147*** (0.023)	-1.156 (1.435)	0.027*** (0.010)	-0.430 (0.594)	0.056*** (0.017)	1.228 (1.023)	0.040*** (0.014)	0.845 (0.891)	0.073*** (0.020)	0.536 (1.228)
Governor FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	494	474	494	474	494	474	494	474	494	474	494	474
R-squared	0.123	0.146	0.121	0.134	0.131	0.140	0.113	0.121	0.115	0.122	0.098	0.109
rmse	0.302	0.307	0.311	0.317	0.128	0.131	0.221	0.226	0.192	0.197	0.265	0.271

Linear probability models with standard errors in parentheses (\*\*\* p<0.01, \*\* p<0.05, \* p<0.1).

### *Summary of the Russian Analysis*

Our theory predicted that personalized authoritarian regimes would have less need for targeted incentives, which was consistent with cross-national analysis. To test H3 more directly, we looked to local-central relations in Russia. Although Russia was already on its way to personalization, the impact of personalization was unambiguously increased with the cancellation of regional elections in 2005. Using an interrupted time series approach to study how individual governors responded to the alteration in their career motivations, we find significant reductions in the tax policy and the legal policies underlying targeted incentives. These findings are consistent with our belief that personalization reduces the need for upward pandering to elite officials based on imperfect economic promotion criteria.

It is important to note that we are not saying that personalized promotion is normatively superior to imperfect meritocracy. As numerous Russian scholars have demonstrated (Reuter and Robertson 2012, Reuter and Buckley 2014, Beazer 2015), using loyalist criteria for retention and promotion also removes the motivation for new policies that could enhance economic performance in the short to medium term, including investment in infrastructure, human capital, and general economic governance reforms. Along similar lines, personalist promotion by definition favors loyalty over competence, meaning that there are larger proportion of low quality leaders in high-ranking positions (Egorov and Soni 2011). Finally, pandering does not go away under personalist promotion. The asymmetric information gap between principles and agents remain, as does the need to personally associate oneself with successful outcome criteria. The increase in ballot-box stuffing in Russian elections (Myaganov et al. 2009, Rundleet and Svolik 2015), for instance, may be a symptom of resorting to modes of electoral victory for which they have the greatest ability to claim credit.

### **Concluding Thoughts**

This chapter began with a puzzle. The theory of electoral pandering we explored in the book is at odds with the empirical fact that authoritarian countries offer more on average than democracies. In this chapter, we extended the logic of our story to authoritarian regimes by theorizing that pandering is

possible in authoritarian regime when the principal (central elites) face the same asymmetric information disadvantage that voters do in electoral systems – the agent (subnational or lower level officials) understand the relationship between policy and outcome in attracting FDI better than they do. Thus, when motivating lower level officials to pursue investment or growth by offering high-level positions, they also encourage credit claiming behavior, whereby subnational officials attempt to associate themselves directly with the entrance of new firms. We test the logic of this argument cross-nationally and empirical case studies of Vietnam and Russia. In doing so, we make several contributions to the extant literature.

First, we offer nuance and rigor to the debates about the global race to attract investments and the utility of tax incentives in that effort. We are not convinced in the sufficiency of the prevailing logic that the authoritarian tax incentives substitute for governance and property rights protection (Li 2006), explaining why investors might prefer authoritarian locations over more secure democratic environments. This argument is based purely on the investor's sourcing decisions and does not take into account the preferences of local actors who must craft the incentive policy. This chapter helps flesh out why some authoritarian states might choose tax incentives, even when they appear to be damaging to long term fiscal stability (IMF 2014)

Second, we contribute to the burgeoning literature on authoritarian regimes by showing that the necessary conditions for upward pandering exist only in one type of authoritarian regime – single-party states with quasi-meritocratic institutions. We demonstrate the cross-national correlation and test the theory most directly by illustrating how aging Vietnamese officials with no opportunity for future promotion quickly abandon the use of tax incentives once they become ineligible for promotion. The lack of need to claim credit for attracting firms allows them to pursue their true preferences, which is economic growth of their home region without damaging revenue giveaways. This finding helps us better understand how single-party organization works and why it is considered to be the most stable and economically successful form of authoritarianism (Kricheli and Magaloni 2008).

Third, we show that regimes that do not have quasi-meritocratic promotion do not experience the over-use of incentives as there is little relationship between economic performance and advancement. Thus, the entire authoritarian empirical finding of greater use is accounted for by single-party states. In fact, personalist regimes, where loyalty trumps performance in retaining and advancing the careers of officials, and where performance based promotion is not credibly guaranteed, actually offer far less in incentives. We show this most clearly in our interrupted time-series approach, which demonstrates that after subnational elections were removed, the very same governors were 7% less likely to exploit tax policy changes in working with investors. This finding adds to the growing evidence that the authoritarian institutions literature must embrace the way personalism affects decision-making in order to explain the behavior of such countries in economic and foreign policy making (Geddes 1999, Magaloni et al. 2013, Weeks 2014).

Fourth, we contribute to the growing debates about political meritocracy (Bell 2014), illustrating the strong influence of imperfect meritocratic promotion on the choices made by local officials. On the other hand, it offers a warning. While promotional institutions like cadre evaluation can be extremely beneficial, they can also generate perverse incentives that, in the case of incentives, sap governments of needed fiscal revenue and generate inequality as the tax base must be expanded to cover the revenue gaps (IMF 2014). We pick up this question in the next chapter.

Finally, the extension of this work to additional countries with different political climates and less democratic institutions helps us contend with alternative mechanisms driving incentive use. Our work has shown that electoral pandering shapes incentive use, but an alternative argument is that elected politicians may be harnessing the power of incentives to extract campaign contributions for electoral gain. Extending our work to authoritarian regimes allows us to more closely focus on how political accountability through non-democratic promotion shapes incentive use. There is no reason to believe that campaign contributions motivations would affect our analysis in this chapter. Thus we find evidence that is consistent with the general logic of pandering.



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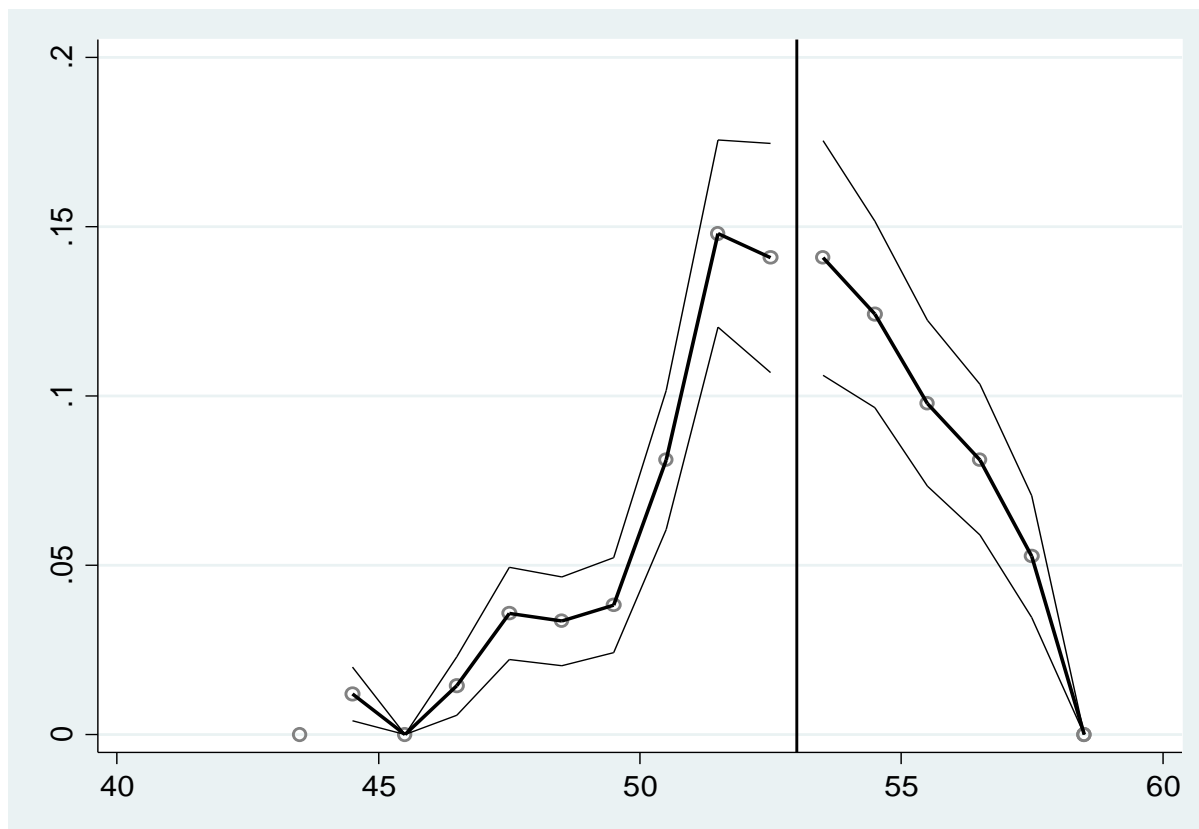
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## **Online Appendix**

### Appendix A: McCrary Density Test of Age at Start



McCrary, Justin. "Manipulation of the running variable in the regression discontinuity design: A density test." *Journal of Econometrics* 142.2 (2008): 698-714.

## Appendix B: Balance between Officials Eligible for Promotion and Who Must Retire Vietnam

Potential Confounders	Source	Survey Question	Must Retire (n=42)		Promotion Eligible (n=50)		P-Value	Significance Tests			MANOVA	
			Mean	SD	Mean	SD		T-Statistic	Wilcoxon Z	Fisher's P	F	p
<b>Forcing Variables</b>												
Age when Appointed Chairman	NGTCHC		55.32	1.08	51.62	1.12	0.00	-15.88	-6.97	0.00	82.35	0.00
Current Age of Chairman	NGTCHC		56.85	1.48	53.68	2.22	0.00	-7.84	-4.42	0.00		
Chairman Promoted (Yes=1)	NGTCHC		9.5%	29.7%	26.0%	44.3%	0.04	2.05	1.14	0.25		
<b>People's Committee Chairperson</b>												
<i>Characteristics</i>												
Chairman has MBA (Yes=1)	NGTCHC		0.0%	0.0%	6.0%	24.0%	0.11	1.62	1.81	0.07	0.50	0.81
Member of Central Committee (Yes=1)	NGTCHC		9.5%	29.7%	8.0%	27.4%	0.80	-0.26	-0.26	0.80		
Chairman Serving in Hometown (Yes=1)	NGTCHC		61.9%	49.2%	64.0%	48.5%	0.84	0.21	0.29			
Years of Education	NGTCHC		15.90	2.27	16.08	2.05	0.69	0.40	0.09	0.98		
Leader Does Not Favor Foreign Invested Enterprises (Share of Firms)	PCI	H3	37.0%	10.4%	36.6%	8.8%	0.84	-0.20	-0.49	0.92		
Leader Does Not Favor State Owned Enterprises (Share of Firms)	PCI	H4	34.1%	5.3%	33.6%	4.6%	0.65	-0.45	0.28	0.92		
<i>People Council Confidence Votes</i>												
Share of High Confidence Votes	ONA		73.6%	11.8%	73.3%	11.8%	0.93	-0.08	0.23	0.92	0.62	0.65
Share of Medium Confidence Votes	ONA		21.6%	10.6%	22.6%	9.4%	0.72	0.36	0.12	0.75		
Share of Low Confidence Votes	ONA		4.9%	4.5%	4.4%	5.2%	0.75	-0.32	-0.63	0.43		
Abstention in Confidence Votes	ONA		0.6%	1.9%	2.0%	5.0%	0.17	1.39	0.50	0.52		
<b>Infrastructure</b>												
Number of Electricity Outages	PCI	E3	27.90	17.69	25.52	15.65	0.54	-0.62	-0.63	0.17	0.21	0.97
Telephones per Capita	GSO	Infrastructure	64.28	41.08	60.02	35.38	0.63	-0.49	-0.02	0.42		
Share of Road Asphalted	GSO	Infrastructure	6.9%	1.7%	7.0%	1.8%	0.64	0.46	0.50	0.62		
Internet Subscription Rate	VNIC		6.0%	7.7%	5.5%	6.6%	0.74	-0.33	1.03	0.26		
Share of IZ Land Allocated	MPI	PCI Hard Data	49.6%	23.7%	51.7%	26.2%	0.76	0.30	0.25	0.65		
Number of Industrial Zones	MPI	PCI Hard Data	4.90	5.50	4.76	6.70	0.94	-0.08	-0.16	0.81		
<b>Development</b>												
<i>Economic Development</i>												
GDP per Capita (ln)	GSO	PCI Hard Data	3.24	0.58	3.13	0.42	0.40	-0.85	-0.08	0.65	0.33	0.8903
Share of Country's Industrial Output	GSO	Industry	1.67	2.55	1.67	3.58	1.00	-0.01	-0.48	0.85		
Output from Construction Sector (Billions of VND)	GSO	Industry	12874.65	26719.80	10939.95	18830.49	0.75	-0.32	0.26	0.85		
Nominal Provincial GDP (Billions USD)	GSO	PCI Hard Data	45225.42	61158.48	41391.45	79300.22	0.82	-0.23	0.02	0.42		
Inflation (GDP Deflator)	GSO	PCI Hard Data	10.19	5.94	9.95	5.48	0.85	-0.18	-0.71	0.42		
<i>Business Development</i>												
Private Enterprises per 1000 Citizens (ln)	GSOC	LHDN	5.64	0.96	5.27	0.73	0.10	-1.68	-0.59	0.42	0.98	0.47
Private Enterprises per 1000 Citizens	GSOC	LHDN	2.37	1.57	2.31	3.79	0.94	-0.08	-0.63	0.42		
Retail Sales (Billions of VND)	GSO	Industry	34046.99	48316.32	44742.04	106941.50	0.63	0.49	0.40	0.85		
Number of FDI Projects (ln)	GSO	Investment	3.81	1.96	3.95	1.95	0.78	0.28	0.52	0.67		
Capital Size of FDI Projects (Billions of VND, ln)	GSO	Investment	3.81	1.96	3.95	1.95	0.78	0.28	0.52	0.67		
Average Trade Fairs Held in Province	MOIT	PCI Hard Data	8.91	4.17	10.11	4.91	0.22	1.25	1.31	0.32		
Private Service Providers/Total Service Providers	GSOC	nganh_kd	1.0%	0.8%	1.0%	0.8%	0.88	0.16	0.32	1.00		
Average Enterprise Profit (Billions VND)	GSOC	kqkd9	6.05	1.26	6.04	1.02	0.95	-0.07	-0.72	0.66		
<b>Human Capital</b>												
Population (1000s)	GSO	LHDN	1347.24	1162.49	1476.18	1203.42	0.69	0.40	0.77	0.65	0.61	0.78
Population (1000s, ln)	GSO	LHDN	6.92	0.50	7.11	0.38	0.10	1.65	2.01	0.10		
Services Provided - Vocational Training Centers (% Good or Very Good)	PCI	E8	35.3%	7.7%	37.2%	8.5%	0.28	1.09	1.35	0.13		
Literacy Rate	GSO	Education	92.4%	7.8%	93.8%	5.1%	0.42	0.81	0.12	0.85		
Net Migration into Province	GSO	Population & Employment	-0.16	9.31	-1.34	5.76	0.56	-0.59	-0.32	0.85		
Skilled Labor in Workforce (%)	GSO	Population & Employment	15.3%	6.8%	14.5%	5.7%	0.62	-0.50	0.04	0.85		
Services Provided - General Education (% Good or Very Good)	PCI	E7	53.4%	9.1%	53.7%	8.4%	0.88	0.15	-0.14	0.62		
Highschool Graduation Rate (%)	GSO	Population & Employment	97.1%	2.1%	97.0%	2.5%	0.89	-0.14	0.00	0.85		
Employment Rate	GSO	Population & Employment	58.9%	4.2%	58.8%	3.1%	0.90	-0.13	-0.37	0.85		
<b>Geography</b>												
Distance from Hanoi (km)	GSO	Administrative Unit	821.17	733.35	946.24	760.03	0.43	0.80	0.24	0.49	0.77	0.63
Distance from Hanoi (km, ln)	GSO	Administrative Unit	6.10	1.34	6.21	1.37	0.69	0.39	0.08	0.55		
Central Highlands Region	GSO	Administrative Unit	2.4%	15.4%	10.0%	30.3%	0.14	1.48	0.34	0.73		
North Southeast Region	GSO	Administrative Unit	7.1%	26.1%	16.0%	37.0%	0.20	1.30	2.22	0.03		
South Central Coast Region	GSO	Administrative Unit	14.3%	35.4%	8.0%	27.4%	0.34	-0.96	-0.32	0.75		
Northern Mountains Region	GSO	Administrative Unit	26.2%	44.5%	18.0%	38.8%	0.35	-0.94	-1.04	0.30		
Mekong Delta Region	GSO	Administrative Unit	23.8%	43.1%	20.0%	40.4%	0.66	-0.44	-1.24	0.21		
Red River Delta Region	GSO	Administrative Unit	16.7%	37.7%	20.0%	40.4%	0.69	0.41	0.27	0.79		
North Central Coast Region	GSO	Administrative Unit	9.5%	29.7%	8.0%	27.4%	0.80	-0.26	0.26	0.79		

Must Retire=1 if >=54; Promotion Eligible=1 if >=50 & <54; Sources: (NGTCHC) Niên giám tổ chức hành chính Việt Nam (Vietnam Administrative Handbook). Multiple Years. Statistical Publishing House: Hanoi, Vietnam

<<http://www.nxbthongke.com.vn/?page=bookdetail&id=517>>; (PCI) Provincial Competitiveness Index. Multiple Years. Province level Dataset. Vietnam Chamber of Commerce and Industry Vietnam, Hanoi, Vietnam. <<http://www.pcivietnam.org/du-lieu-pci-c16.html>>; (ONA) Office of National Assembly 2012. Dataset on Provincial People's Council Confidence Voting. Supplied Directly to Author; (GSO) General Statistical Office. Multiple Years. Statistical Handbook Online <<https://www.gso.gov.vn/Default.en.aspx?tabid=766>>; (GSOC) General Statistical Office Enterprise Survey. Multiple Years. <<http://catalog.ihns.org/index.php/catalog/3209/study-description>>; VNIC. Multiple Years. Report on Vietnam Internet Resources. Hanoi, Vietnam

<<http://www.vnnic.vn/sites/default/files/whitebook/ReportOnVietnamInternetResources2014.pdf>>; MPI (Ministry of Planning and Investment); MOIT (Ministry of Industry and Trade); MONRE (Ministry of Natural Resources and Environment). Data listed as PCI Hard Data was supplied directly to the PCI research team by the sources and is available in the PCI provincial datasets.

## Appendix B2: Balance between Officials Eligible for Promotion and Who Must Retire Vietnam

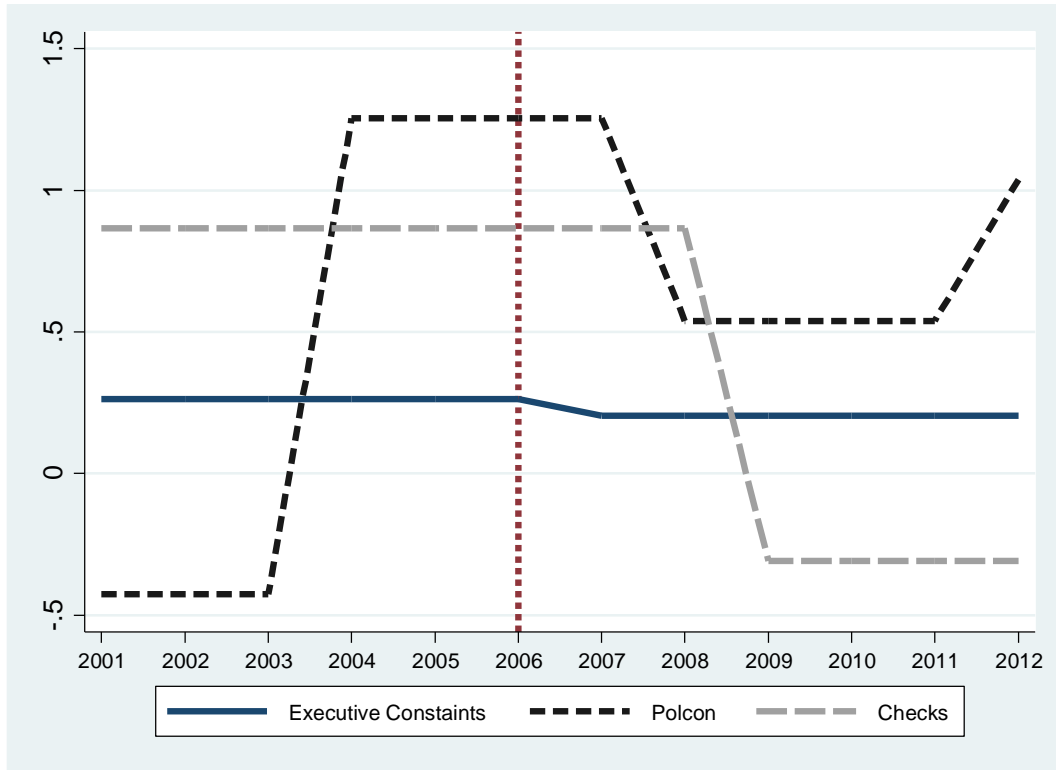
Potential Confounders	Source	Survey Question	Must Retire (n=42)		Promotion Eligible (n=50)		P-Value	Significance Tests			MANOVA	
			Mean	SD	Mean	SD		T-Statistic	Wilcoxon Z	Fisher's P	F	p
<b>Institutions &amp; Governance</b>												
<i>General Governance</i>												
Final Score in PCI Governance Ranking	PCI	Annual Report	58.05	3.28	58.55	3.44	0.48	0.70	0.87	0.62	0.22	0.88
Ranking in PCI Governance Index	PCI	Annual Report	31.85	16.86	30.09	15.86	0.61	-0.52	-0.83	0.32		
Attitude of Provincial Government toward Private Business (% Good or Very Good)	PCI	H1	43.5%	6.4%	44.1%	8.4%	0.71	0.38	0.80	0.62		
<i>Regulation</i>												
Time Spent to Comply with Governr Regulations ( >10%)	PCI	D6	23.9%	8.6%	22.2%	7.1%	0.30	-1.05	-1.00	0.13	0.62	0.71
Negotiations with Tax Authority Are Normal (% Agree or Strongly Agree)	PCI	D14.3	42.7%	8.1%	44.0%	6.2%	0.37	0.90	1.07	1.00		
Total Inspections (Median)	PCI	D1	1.24	0.34	1.31	0.34	0.38	0.87	1.12	0.44		
Firms Registered within 1 Month	PCI	C5	15.1%	6.6%	15.7%	6.7%	0.64	0.47	0.68	0.32		
Days to Register Business	PCI	C1	10.65	2.29	10.60	2.06	0.91	-0.11	0.33	0.62		
Registration Officials Have Professional Knowledge (Yes=1)	PCI	C3.1.3	39.8%	8.0%	40.0%	6.8%	0.91	0.11	-0.87	0.85		
<i>Property Rights &amp; Contracting Institutions</i>												
Land Use Rights Certificate (Share of Firms Holding (%))	PCI	B4	66.0%	13.3%	69.7%	10.8%	0.14	1.50	1.12	0.32	0.39	0.88
Share of Land with Land Use Rights	MONRE	PCI Hard Data	85.3%	9.9%	87.4%	9.3%	0.29	1.07	0.71	0.62		
Wait for Land Title (Median Days)	PCI	B4.2	45.04	32.76	41.51	18.64	0.52	-0.65	0.70	0.38		
Expropriation Risk (Mean on 1-5 scale)	PCI	B4.3	2.59	0.22	2.62	0.23	0.50	0.68	1.94	0.05		
Share of Cases in Local Courts Filed by Private Firm (%)	SPC	PCI Hard Data	76.1%	21.6%	78.8%	16.0%	0.50	0.68	0.15	1.00		
Used Courts or Other Legal Institutions to Resolve Disputes (%)	PCI	G6	24.7%	12.9%	23.5%	10.5%	0.70	-0.39	0.26	0.67		
<i>Transparency</i>												
Average Access to Provincial Legal Documents (1-5)	PCI	F1.1-1.12	3.03	0.11	3.07	0.15	0.21	1.25	-0.06	0.62	0.42	0.84
Average Access to Provincial Planning Documents (1-5)	PCI	F1.1-1.12	2.40	0.12	2.43	0.18	0.39	0.87	0.80	0.62		
Average Website Openness (1-20)	PCI	PCI Hard Data	21.53	5.31	22.44	6.09	0.46	0.75	0.85	0.32		
Transparency Sub-Index (PCI)	PCI	Annual Report	5.83	0.39	5.88	0.50	0.58	0.55	0.81	1.00		
Relationship is Necessary to Obtain Provincial Documents (%)	PCI	F2	67.3%	7.2%	66.5%	7.5%	0.61	-0.52	-0.92	0.62		
<i>Corruption</i>												
Percentage of Revenue in Informal Payments (% >10%)	PCI	G10	9.3%	5.4%	8.1%	3.9%	0.21	-1.27	-1.07	0.62	1.24	0.30
Corruption Control Sub-Index (PCI)	PCI	Annual Report	5.96	1.04	6.16	0.80	0.29	1.06	1.21	0.13		
Commissions on Government Contracts(%)	PCI	G13	51.0%	7.8%	50.3%	10.6%	0.72	-0.36	-0.32	0.62		
Firms in my line of business pay bribes (% Strongly Agree or Agree)	PCI	G9	56.4%	10.2%	56.5%	8.4%	0.96	0.05	-0.61	0.32		
<b>Growth in Year Before Chairman's Tenure</b>												
<i>Development Growth</i>												
Avg. GDP Growth	GSO	PCI Hard Data	11.0%	5.6%	11.9%	5.3%	0.49	0.69	0.57	0.79	0.36	0.83
Avg. Growth in FDI Projects	MPI	PCI Hard Data	27.1%	60.0%	25.7%	32.0%	0.92	-0.11	0.08	0.64		
Avg. Growth in FDI Capital	MPI	PCI Hard Data	321.5%	890.2%	412.8%	801.6%	0.70	0.39	1.18	0.65		
Avg. Growth in Employment	GSO	Population & Employmen	1.4%	1.2%	1.1%	1.2%	0.42	-0.81	0.52	0.30		
Avg. Growth in Private Enterprises	GSO	Investment	19.8%	16.8%	20.5%	7.0%	0.85	0.19	0.56	0.30		
<i>Human Capital Growth</i>												
Avg. Growth in Population	GSO	Population & Employmen	1.0%	0.8%	0.9%	0.7%	0.93	-0.08	0.75	0.10	0.27	0.90
Avg. Change in Literacy	GSO	Population & Employmen	0.4%	0.5%	0.4%	0.6%	0.86	0.18	-0.12	0.85		
Avg. Change in Graduation Rates	GSO	Population & Employmen	2.4%	4.0%	2.9%	3.8%	0.57	0.56	-0.21	0.85		
<i>Governance Growth</i>												
Avg. Change in PCI Scores	PCI	Annual Report	-0.21	1.81	-0.07	1.45	0.67	0.42	0.67	0.13	0.43	0.65
Avg. Change in PCI Rank	PCI	Annual Report	-0.14	6.21	0.32	6.24	0.73	0.35	-0.20	0.62		

Must Retire=1 if >=54; Promotion Eligible=1 if >=50 & <54; Sources: (NGTCHC) Niên giám tổ chức hành chính Việt Nam (Vietnam Administrative Handbook). Multiple Years. Statistical Publishing House: Hanoi, Vietnam

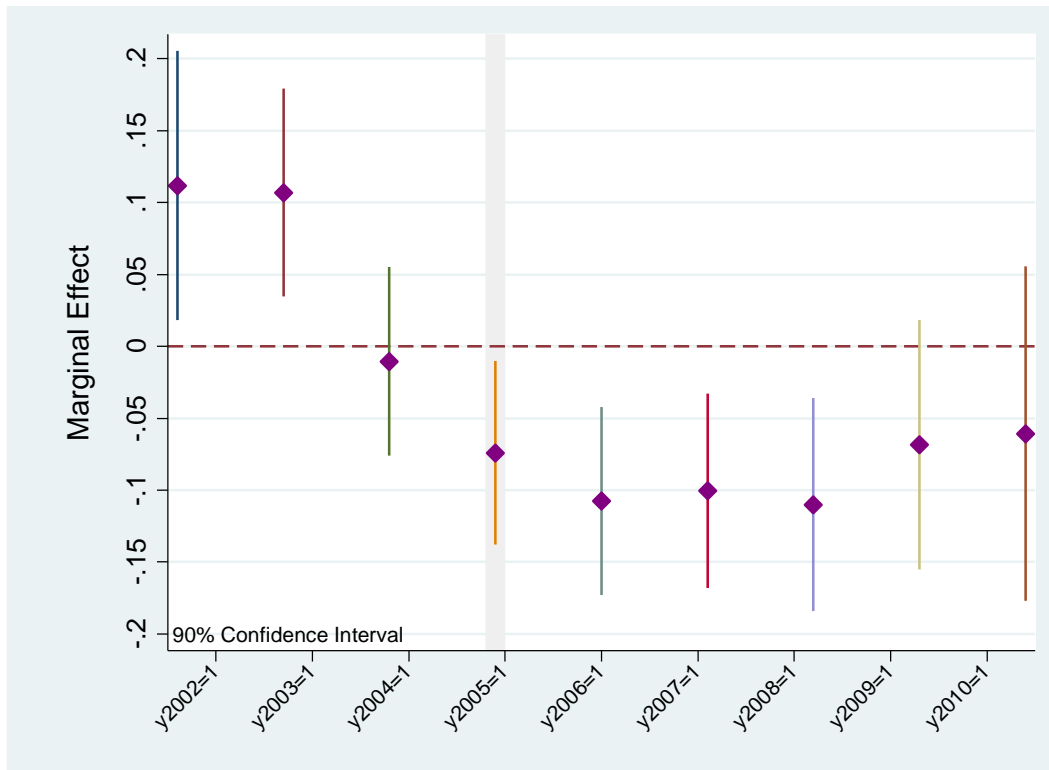
<<http://www.nxbthongke.com.vn/?page=bookdetail&id=517>>; (PCI) Provincial Competitiveness Index. Multiple Years. Province level Dataset. Vietnam Chamber of Commerce and Industry Vietnam, Hanoi, Vietnam. <<http://www.pcvietnam.org/du-lieu-pci-c16.html>>; (ONA) Office of National Assembly 2012. Dataset on Provincial People's Council Confidence Voting. Supplied Directly to Author; (GSO) General Statistical Office. Multiple Years. Statistical Handbook Online <[https://www.gso.gov.vn/Default\\_en.aspx?tabid=766](https://www.gso.gov.vn/Default_en.aspx?tabid=766)>; (GSOC) General Statistical Office Enterprise Survey. Multiple Years. <<http://catalog.ihns.org/index.php/catalog/3209/study-description>>; VNINIC. Multiple Years. Report on Vietnam Internet Resources. Hanoi, Vietnam

<<http://www.vnnic.vn/sites/default/files/whitebook/ReportOnVietNamInternetResources2014.pdf>>; MPI (Ministry of Planning and Investment); MOIT (Ministry of Industry and Trade); MONRE (Ministry of Natural Resources and Environment). Data listed as PCI Hard Data was supplied directly to the PCI research team by the sources and is available in the PCI provincial datasets.

### Appendix D: Standard Measures of Executive Constraints in Russia over Time



### Appendix E: Placebo Test of Russian Analysis



This graph replicates the fully specified Russian Incentives Model, but alternates the cut-off year. Diamonds represent coefficient estimates and range bars represent 90% Cis.

Appendix F: Mediation Analysis of Single-Party Regime and QoG Survey of Meritocracy and Personalism

Equation	Obs	Parms	RMSE	"R-sq"	chi2	P
q2_e	467	1	.8355856	0.1635	91.29	0.0000
q2_a	467	1	.7807782	0.0146	6.91	0.0086
q2_d	467	1	.9786096	0.0203	9.66	0.0019
q2_b	467	1	.8979659	0.0169	8.02	0.0046
best_eatrp20	467	5	.1238794	0.1512	83.22	0.0000

	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
q2_e					
gwf_party	.9488876	.0993111	9.55	0.000	.7542413 1.143534
_cons	4.439417	.0428646	103.57	0.000	4.355403 4.52343
q2_a					
gwf_party	.2440133	.0927972	2.63	0.009	.0621343 .4258924
_cons	4.151359	.0400531	103.65	0.000	4.072856 4.229861
q2_d					
gwf_party	-.3615014	.1163099	-3.11	0.002	-.5894645 -.1335383
_cons	4.757297	.0502016	94.76	0.000	4.658904 4.85569
q2_b					
gwf_party	.3022028	.1067252	2.83	0.005	.0930254 .5113803
_cons	4.403772	.0460647	95.60	0.000	4.313487 4.494057
best_eatrp20					
q2_e	-.0279919	.0084448	-3.31	0.001	-.0445434 -.0114405
q2_a	-.0226991	.0128461	-1.77	0.077	-.047877 .0024787
q2_d	.0192383	.0074904	2.57	0.010	.0045574 .0339192
q2_b	-.0088967	.0101606	-0.88	0.381	-.028811 .0110177
gwf_party	-.0267002	.0170638	-1.56	0.118	-.0601446 .0067442
_cons	.3110986	.1088526	2.86	0.004	.0977514 .5244457