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One Mandarin Benefits the Whole Clan: Hometown Favoritism in an Authoritarian Regime*

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Abstract

We study patronage politics in authoritarian Vietnam, using an exhaustive panel of ranking officials from 2000 to 2010 to estimate their promotions' impact on infrastructure in their patrilineal hometowns. Favoritism is pervasive across all ranks, even among officials without budget authority. Promotions of officials strongly improve hometown infrastructure including roads, marketplaces, and irrigation. In contrast to democracies' pork-barrel politics, elected legislators are not influential. Favoritism is likely motivated by officials' social preferences for hometowns rather than by political considerations, because favors are narrowly targeted to small communes, and are stronger where local culture emphasizes the family bond.

Keywords: favoritism, patronage, authoritarian regime, political connection, hometown, infrastructure.

JEL Classifications: O12, D72, H72

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“One person becomes a mandarin,¹ his whole clan benefits.”

- Vietnamese proverb

“Even the blind favor the people they know.”

- Indian proverb

“When a man gains power, his chicken and dogs all go to heaven.”

- Chinese proverb

I. Introduction

Studies of corruption, defined as officials’ and bureaucrats’ abuse of the privileges of public office for private gain, often consider such gains in terms of personal and family benefits. In other cases, the misuse of public office is manifest as favoritism towards certain associated groups. In democracies where there is electoral accountability for office holders, favoritism has often been studied in the form of pork-barrel politics, whereby politicians and officials direct resources to favor certain groups in order to win their votes and political support. This strategic quid-pro-quo behavior has been a central topic in the political economic literature, and is substantiated by a significant body of evidence (e.g. Ferejohn 1974, Shepsle and Weingast 1981).

However, in authoritarian regimes where the state is barely accountable to voters, politicians gain power not via competitive elections. To get appointed to an office, they have an incentive to please their superiors rather than any group of citizens. This lack of electoral incentives opens up a number of questions regarding the political economy of autocracies. For example, do officials favor any group of citizens at all? Which parts of the political hierarchy can direct public resources towards favored groups, given that authority is highly concentrated in the hands of a few people at the top? How is such favoritism actually exercised? What are the motives of such favoritism when elections do not

¹ The term “mandarin” refers to bureaucrats of the historical Vietnamese monarchist court.

matter? These questions have important implications for the design of anti-corruption institutions.

Our paper addresses these issues by examining the effects of public officials' political promotions on public infrastructure in their hometowns in single-party Vietnam. The term "hometown" refers to each official's commune of patrilineal origin. It is important culturally but not politically, since officials are by no means political representatives of their hometowns. We collect an extensive dataset of political promotions and estimate their effect on infrastructure in the hometowns of officials. We refer to it as *favoritism*, as this is a form of favors given by officials to their remote relatives regardless of merit.

Most studies since Ferejohn's (1974) seminal work explain patronage politics in democracies, particularly the political strategies to distribute pork in exchange for votes and political supports. Notable empirical evidence includes Levitt and Snyder (1995) in the U.S; Chattopadhyay and Duflo (2004), Banerjee and Somanathan (2007), Keefer (2010) and Keefer and Khemani (2009) in India, and Hicken (2001) in Thailand. In addition, Besley, Pande and Rao (2012) shows that elected officials favor their own villages and castes, which in turn support them in elections.²

In authoritarian regimes, where more than half of the world population are living, anecdotal examples abound of the excessive favors that dictators bestow on their hometowns. Sirte was a small and unknown village in Libya until the early 1970s when it suddenly received massive government investments, to become home of the Libyan parliament and most government departments relocated from Tripoli in 1988. The town was not chosen at random: it was the birthplace of Colonel Gaddafi, Libya's autocrat for 42 years. In a similar vein, Félix Houphouët-Boigny, the dictatorial president of Côte d'Ivoire from 1960

² Favoritism also relates to the burgeoning literature on the value of political connection through socio-economic relations, such as Khwaja and Mian (2005).

until his death in 1993, moved the official capital city from Abidjan to the ten-times smaller town of Yamoussoukro, his birthplace, in 1983. The new capital received massive public investments, including the completion in 1989 of the \$300-million Basilica of Our Lady of Peace of Yamoussoukro, constructed on an area even larger than that of St. Peter's Basilica in Vatican City.

A few recent studies have uncovered evidence of authoritarian patronage, all in the form of ethnic favoritism by African top autocrats. Burgess et al. (2013) and Kramon and Posner (2012) provide empirical evidence of favoritism towards common ethnic groups by top autocrats in Kenya. Under nondemocratic institutions, Kenyan presidents directed public resources disproportionately towards their ethnic groups to build roads (Burgess et al 2013) and improve education (Kramon and Posner 2012). After democratization, road construction favoritism disappeared, while education favoritism remained equally prevalent. In a similar vein, Franck and Rainer (2012) find that authoritarianism aggravates ethnic favoritism.

Does patronage in authoritarian regimes go beyond ethnic lines? If so, which forms would it take in other contexts outside Africa where ethnicity does not play a prominent role? Ethnicity in Africa can be interpreted as a salient form of social proximity. In other cultures, social proximities can be more saliently manifested in relations defined by religions, families, hometowns, or classes. Similarly, does patronage exist below top leaders? If it does, whom do lower-ranked officials favor and why? To understand these aspects of nondemocratic politics, we need information on officials of different ranks in an authoritarian context where social proximity is not set rigidly along ethnic divides.

Vietnam provides such a context. A single party, the Communist Party of Vietnam (CPV), has ruled the country since 1975. It selects, controls and appoints positions in all political, executive and legislative bodies, and elections are in truth non-binding approval votes on the state (Malesky and Schuler 2009).

Government officials are thus accountable to the selectorate within the Party and are insulated from the population. The original Vietnamese ethnic (Kinh) constitutes 86% of the population of this ethnically homogenous society, and control most important political positions.

In Vietnamese culture, the home commune of patrilineal origin is a significant part of each person's identity, as it represents the traditional geographical root of a person's patrilineage, in many cases up to hundreds of years in genealogical records. Social proximity exists among relatives from the same hometown even if they are genealogically four or five generations remote from one another. For high-ranked officials, those bonds are more likely of social rather than economic nature. Even among officials born in their hometowns,³ they must have moved away to cities early, and in any case no later than they ascended to positions at provincial level or higher (we only consider hometowns in rural area.) The widening gap between living standards in Vietnamese cities versus rural areas makes it unthinkable for successful officials to plan to retire in their hometown. Any affiliation between officials and hometowns likely originates from Vietnamese cultural and social norms. Such norms are captured by the old saying, "one person becomes a mandarin, his whole clan benefits."

Favoritism towards one's hometown is widely known in Vietnam as the usual fruit of combined efforts of both high-ranked officials and local officers. Typically, a commune leader from a newly promoted official's hometown starts the process by suggesting to the official certain projects that could benefit the commune, usually in the form of infrastructure construction. In most cases, these projects are not at all under the official's authority. Nevertheless, the official can use his new political capital to influence province and district governments in decisions on the commune's budget and project funding, in favor of such projects

³ We have verified that most members of the Politburo were either born in a different place, or left their hometown at a young age. Unfortunately, full biographical information is not available for all officials in our sample.

for his hometown. Due to the large amount of public investment in infrastructure at all levels during the last decade, this mechanism has become rampant, and has been constantly depicted on popular press. Both the public and the State regard this form of hometown favoritism as highly undesirable because it distorts public resource allocation.

We examine the outcome of favoritism in public infrastructure in communes, given its key role in development. The United Nations regards infrastructure as one of the most important foundations for achieving its Millennium Development Goals. Shioji (2001) suggests that a 10% increase in infrastructure investment improves regional income by 1 to 1.5% in the long run. Fast-growing Vietnam and China invest nearly 10% of their national incomes in this critical foundation (Sahoo 2012).⁴

In this empirical project, we collect data on all officials in ranking office during the period 2000-2010. Ranking officials include all members of the Party Central Committee, all government positions of the deputy minister rank and above, all provincial leaders and all members of the legislative National Assembly. We then match their hometowns to infrastructure data on communes, as surveyed by the Vietnam Household Living Standards Survey (VHLSS.) Our empirical strategy employs commune-official pair fixed effects and year dummies to eliminate endogeneity biases by time-invariant omitted variables. Further, we run placebo tests for the effect of officials' promotions on communes neighboring their hometowns to ensure that there is no evidence for time-variant omitted variables and reverse causation.

We focus on the commune, the lowest administrative level in Vietnam, to precisely capture hometown bonds. There are more than eleven thousand communes in the country, and each is home to only a few thousand people on

⁴ Interestingly, Persson and Zhuravskaya (2009) reports that Chinese provincial leaders who build their careers within the province tend spend less on infrastructure and more on education and health, which reflects local preferences.

average. Given their tiny size, no single commune can harness any significant level of political or popular support for a ranking official in provincial or national government. Because communes play no role in the political selection process, existing theories of clientelism would not predict politically motivated favoritism by officials. We further consider lower-level officials, whose political promotions depend solely on their superiors' decisions and whose political survival has no relation to the recipients of favors (say, as supporters in an armed conflict.) Therefore, the Vietnamese context of officials' home communes provides an ideal setting for mitigating concerns about strategic political behavior, leading to an the interpretation of favor as rooted in social preferences.

Using this approach, we find strong evidence of favors addressed to officials' hometowns across several types of infrastructure, most notably road access to villages and marketplace construction. Promotions also increase the chances that a commune will benefit from the State's support for poor communes, through a program supposed to select communes purely based on their level of hardship. Favoritism is detected only for home communes and not for home districts, while even the latter is still too small a geographical unit to provide any significant political support. The effects hold even for the sample of very poor communes, where officials are most unlikely to retire or gain any economic benefits. This pattern suggests that the main motive of favoritism is a form of social preference directed towards each official's hometown.

The distribution of favoritism reveals the power structure within an authoritarian regime, a topic often considered a black box to outsiders. Contrary to pork-barrel politics in democracies, members of the legislative National Assembly do not have much influence on their hometowns' budget, despite their formal role in budgetary approvals. In contrast, favoritism is pervasive among executive officials. The effect is stronger when the age of the hometown's commune chair is closer to the official's age, and where the provincial

institutional environment allows for more discretionary policies. These findings suggest that favoritism works through informal channels based on specific forms of political power and institutional settings.

This finding also enriches the recently burgeoning literature on family culture and civic institutions. In his seminal study of a small village in Southern Italy, Edward Banfield (1958) pioneered the concept of amoral familism, by which strong family values could inhibit and hinder civic behaviors. This view posits that familism gives rise to corruption and fosters deviance from norms of merit. Measuring familism from World Values Survey data across countries, Lipset and Lenz (2000) shows strong association between familism and corruption, and Alesina and Giuliano (2011) provides empirical support that strong family ties imply lower civic engagement and political participation. In our specific context where Vietnamese officials bring material benefits to their hometowns, the influential Confucian values regarding patrilineal origins play a role similar to that of family ties in the aforementioned studies, in that they can be in conflict with good governance standards. We do find that favoritism is more pervasive in regions where the family and services to others are considered more important, as measured in the World Value Survey.

The paper is organized as follows. Sections II to V present the political background of Vietnam, data description, testable hypotheses, methodology and empirical results, respectively. Section VI discusses the results and concludes.

II. Context of the Study

A. Political background

The Constitution of the Socialist Republic of Vietnam states that, “the Communist Party of Vietnam [...] is the leading force of the State and the Society.” In practice, the Communist Party of Vietnam (CPV) has held a

monopoly of power since Vietnam's reunification in 1976. CPV members account for less than 4% of the population. In the Vietnamese political structure, the three most important bodies (by the order of actual power) are the CPV, the Government, and the National Assembly. The CPV is headed by a General Secretary, and its leadership includes a 15-member Politburo and a 150-member Central Committee. These are the most powerful people in Vietnam, in charge of making all key personnel and strategic decisions for the country.

The Government, headed by a Prime Minister and several Deputy Prime Ministers, is the executive branch of the state. Functionally, the Government consists of more than 30 ministries and ministry-level agencies. The cabinet includes the State Bank's Governor, the Chief Justice of the Supreme People's Court and the Prosecutor General of the Supreme People's Procuracy.⁵ Geographically, the Government includes 64 provincial authorities called Provincial People's Committees. There are three levels of the local authorities: provincial, district and commune. The lower-level People's Committees report to the higher-level People's Committees.

The National Assembly (NA) is the legislative branch of the state. It consists of roughly 500 delegates elected from electoral districts based in the 64 provinces. All laws and budget decisions are prepared by the Government before they are sent to the NA for discussion and ratification. In practice, the CPV controls all key positions in the NA, and runs the NA to rubberstamp most proposed laws. The CPV also closely controls the nomination and election process for the NA (those controlling practices are documented by Malesky and Schuler 2009). About 80% of the delegates are members of the CPV. Although the NA's de facto power has increased in recent years, it is still very limited compared to that of the CPV and the Government.

⁵ The judiciary in Vietnam has limited power and depends heavily on the Government and CPV.

Similar to other authoritarian regimes, the ruling party selects, appoints, and influences the filling of all government and political positions. The nominal process is supposed to work as follows. In an election year, based on lists of nominations by the incumbent Politburo and Central Committee, the CPV's Congress meet and select the Central Committee, which then selects the Politburo and ranking positions. The CPV then nominates candidates for the NA, including its key positions, and citizens vote among those candidates. Afterwards, elected delegates of the NA, 80% of whom are CPV members, vote to approve the Prime Minister and cabinet members nominated by the CPV in a single, uncontested list. Finally, the Prime Minister and Cabinet Members appoint all other positions in the Government. The CPV controls closely the selection of candidates, the communication between candidates and constituents, the election locations and procedure, and the counting of the votes. The CPV's Central Committee effectively decides who fills ranking positions in the Central and Provincial Governments and in the NA. In this system, the popular votes count little, and small entities like communes hold no political power over ranking officials.

Under Vietnam's single-party rule, there is little separation between the State and the CPV, and thus little distinction between politicians and bureaucrats. In practice, starting from very low ranks, such as the heads of communes, officials in the Government need to be members of the CPV in order to hold office and get promotions. Ranking members of the CPV and elected delegates of the National Assembly receive their salaries from the same system and source as do government bureaucrats.

It is useful to understand the ways in which Vietnamese government officials may direct public investments in infrastructure toward their preferred communes. Subject to the level of funding required, the decision to build public infrastructure is made in different stages by provincial, district and then commune officials. These are the officials who can directly favor projects for certain communes.

Officials at the central level, such as members of the Central Committee of the CPV, of the Government Cabinet or of the National Assembly, usually do not have the formal, hierarchical authority to make decisions on local infrastructure. They must exercise their personal influence on local officials, who have the authority in this matter, in order to obtain government projects for their preferred communes. The only exception to this is Program 135, the State's "poor commune support program" which aims to promote the development of especially difficult communes by, among other things, investing in commune infrastructure. The selection of "'especially difficult communes'" is made by the Central Government under the advice of a joint committee of several related ministries.

During the study period, Vietnam experienced significant economic growth and a drastic reduction in poverty. Real GDP increased by 6.5% per year on average from 2001 to 2010. The percentage of people living on less than two dollars (PPP) per day fell from 68.7% in 2002 to 38.5% in 2008.⁶ The government's budget, while always in deficit, was strongly supported by the growing economy, strong exports (thanks particularly to revenue from crude oil) and development aids. Consequently, the government expanded all forms of infrastructure construction, including in particular those in communes and districts, an attempt widely seen as instrumental for poverty alleviation. This period therefore holds particular interest for a study of a determinant of infrastructure in rural Vietnam.

B. Cultural and social background

Culture is known as an important informal institution that sanctions political and economic behaviors (Helmke and Levitsky 2003, Tabellini 2010). The phenomenon of strong connections among extended families is a cultural norm not unique to Vietnam. The importance of kinship networks in both traditional

⁶ World Bank, World Data Bank, accessed August 8, 2011

and post-traditional societies has been long studied inter alia by Radcliffe-Brown (1922) and Mitchell (1965). The diverse ways in which these networks exhibit and operate across different societies have attracted more recent studies. For example, Angelucci et al. (2012) have stressed the importance to informal insurance of social networks based on the extended family in rural Mexico. The literature on social networks also identifies family links as a key factor in job searches (see Ioannides and Loury's 2004 review).

In our context, the family links manifested in the form of connections to a hometown are a strong point of reference in Vietnamese culture. In their traditionally heavily patriarchal society, rooted in a long history of Confucian influences and a cult of ancestral worship, social norms put particular emphasis on patrilineal links in the family and society (Hunt 2002). Since Confucius, filial virtues, mostly defined within a patriarchal family, have been considered the building blocks of a stable society. Therefore, all links based on common patriarchal roots are sacred and command great respect. It is quite common to observe large loans and transfers within the extended patrilineal family, and especially contributions towards "public goods" such as religious ceremonies and ancestral temples that help glorify common patrilineal ancestors.

The hometown, defined as the origin of a person's patrilineal clan, is thus truly important to most Vietnamese. It highlights a person's connection to his or her extended patrilineal family, composed of all those who share one's patrilineal ancestors (Nguyen and Healy 2006). Bonds are easily forged among people of common hometown even if they are genealogically many generations remote from each other. Hometowns are so important that this information figures in all national identity cards, while there is no information on place of birth.

In the traditional Vietnamese Confucian culture, government officials resemble the successful mandarins of the old days. Historically, the selection, promotion and ascent to power of mandarins were heralded with major celebrations in their

hometowns. Once selected, mandarins would usually try to direct favors to their hometowns in acknowledgment of the benevolent blessings they must have received from their ancestors, and in sustaining the tradition of filial virtues. Anecdotal evidence points out that these practices are still very common today.

The Vietnamese context thus opens the door to our study of the role of officials' social preferences towards their hometowns. The connections between individuals and their hometowns are prevalent and important according to the existing social norms. They are also distinct from political motivations, since hometowns are of negligible political importance. Moreover, because of the long wars in Vietnam, most ranking officials must have either been born far away from their hometown, or have moved away at a young age as part of waves of war refugee migrants in both the North and the South; they also must be at present based in a large city away from their rural hometowns. Therefore, officials' links with their hometowns are mostly based on cultural and social factors.

III. The Data

A. Data collection

As in most authoritarian countries, data on officials and their family backgrounds in Vietnam are scarce. Available information is highly scattered and skewed toward top officials, leading to potential selection issues. Our question requires data on the full population of ranking officials, which makes data collection more difficult. From 2009 to 2011, our data collection team identified, checked and matched officials from three major sources: the Communist Party's information on all members of the Politburo and Central Committee (which is publicly available on its websites), the National Assembly's (the legislature) information on all of its members (also publicly available on its website) and the Yearbooks of Administrative Organizations' information on Central and Provincial Government

officials starting from the rank of deputy minister (Central Government) and vice chair of Provincial People's Committees (Provincial Government). These are the three major political bodies of Vietnamese politics. The sources cover the period from 2000 to 2010; start and end dates are based on official term dates. In practice, start and end dates that differ from term dates (e.g. an early promotion) are unusual. This puts together an exhaustive dataset of all ranking political promotions in the country during this 11-year period.

Since important officials typically hold more than one position in these organizations, we make sure to match all individuals across the three groups, if necessary by obtaining extra information from other sources. We pay special attention to clarifying information on each official's hometown, understood as the commune of patrilineal origin in the Vietnamese legal context. This legally defined information appears, for example, on individual's identity cards, and needs not correspond to one's birthplace. In the very few cases in which different hometowns are listed in different sources, we include all verifiable hometowns in the dataset. We exclude officials whose hometowns cannot be traced to the commune level (even when they are traceable to the district level).

Official data on commune budget are not available in Vietnam. Fortunately, data on local infrastructures and public goods can be obtained from the Vietnam Household Living Standard Survey (VHLSS, a World Bank-led survey project in Vietnam, part of the Living Standards Measurement Surveys.) The survey is technically supported by the World Bank, and regarded as the most reliable data on living standards in the country. The VHLSS, which includes a commune survey and a household survey, is conducted every two years (2002, 2004, 2006 and 2008) from a random, representative sample of about 2200 communes out of about 11,000 communes in the country. The commune survey is conducted with several commune officials, while the household survey is conducted with a random sample of households in the commune. Our analysis exploits data from

both surveys, including commune characteristics (i.e. area, population, average income, average expenditure, geographical zone, rural/urban classification), presence and quality of various types of infrastructure in the communes (i.e. roads, marketplaces, utilities, irrigation systems, schools, clinics/hospitals, cultural centers, radio stations, bank branches) and commune chairman characteristics (i.e. age, gender, education, years in position, previous position).

We then match each official to his or her commune of patrilineal origin. Only rural communes are included so as to avoid the complexity of infrastructure development in urban areas. We exclude the top 4 positions in the country, namely the General Secretary of the Communist Party of Vietnam, the President, the Prime Minister and the Chairman of the National Assembly, to focus on the pervasiveness of favoritism beyond the top. This results in a sample of 422 officials and 351 communes, out of 1,791 officials in the collected three sources. These 422 officials hold a total of 678 positions, consisting of 119 positions (17.6%) in the Party Central Committee, 102 positions (15.0%) in the Central Government, 290 positions (42.8%) in the National Assembly and 167 positions (24.6%) in Provincial People's Committees. All 60 Vietnamese provinces, excluding the 3 major cities, are covered in this sample.

From those matches, we construct our *main sample*, in which each observation combines an official, his rural home commune and a year for which this commune figures in the VHLSS (2002, 2004, 2006 or 2008). We include communes that are connected to at least one official in this period. This main sample consists of 1,542 observations, relatively evenly distributed over the years (376, 393, 398 and 375 observations for 2002, 2004, 2006 and 2008, respectively).

B. Data description

Table 1 summarizes data patterns. In Panel A, we describe politicians in the matched sample as well as the full collected dataset of politicians. Given that VHLSS covers only a random sample of all communes in the country, we can match roughly one quarter of collected politicians to communes available in the VHLSS. This proportion is around 20% for Central and Provincial Governments, for which our data source contains more missing data in terms of hometown: 30% for the National Assembly and 35% for the Party's Central Committee. This is approximately the coverage rate of VHLSS for rural communes, which we are interested in. (The VHLSS oversamples rural areas compared to urban areas.)

[Insert Table 1 here]

As discussed, this period is marked by the inflation of key positions in Vietnamese politics. The size of the Central Committee increased by 26.4% between 2002 and 2007, from 148 to 187 (starting from an even lower number in its 8th term), an expansion that was matched by the number of Central Government positions (46.9%, from 128 in 1997-2002 to 188 in 2003-2007). In contrast, the size of the National Assembly was reduced from 499 in 2003-2007 to 456 in 2008-2011. Most members of the Central Committee hold more than one key position as counted in our data; the majority of them hold at least 3. Meanwhile, the majority of the legislature members do not hold any other key position. Across the matched and total samples, we see roughly similar shares of different types of positions.

Among those that have at least one connection as shown in Panel A, there are roughly two positions connected to each commune. Panel B further shows that on average each commune has 1.2 politicians in office throughout the 2000-2010 period. The survey waves of 2004 and 2008 witnessed the majority of promotions, corresponding to new terms of the Central Committee in 2007, the Government

(starting in 2003-2004) and most strongly, the National Assembly (starting in 2003 and 2007). These waves are therefore largely responsible for the identification in our regressions. Our empirical strategy uses a measure of power capital, understood as the accumulated number of positions connected to a commune, regardless of whether a politician remains in that position. Panel B shows that power capital accumulates fastest for the National Assembly and more slowly for Government and Central Committee positions. On the other hand, the coverage of our sample is fairly stable over time in terms of administrative units (commune, district or province), area and population. We observe a stark increase in the share of good-quality roads, suggestive that the effect of promotions will be most remarkable for road quality.

Communes with connections to politicians are different from the full VHLSS sample in a number of ways. The former are smaller in area, but more densely populated and less likely to be poor. When it comes to basic infrastructure, they are on average better endowed with good-quality roads, marketplaces and radio stations, consistent with the findings on favoritism. Given the concern of selection bias in the group of communes connected to at least one politician, our empirical strategy remains conservative insofar as it only uses the sample of matched communes, and aims to estimate the Average Treatment Effect on the Treated.

IV. Testable Hypotheses and Empirical Design

A. Testable predictions

Given the Vietnamese political context, where most ranking officials are not personally involved in district-level budget decisions, favors must be brokered between each official and the local budget allocator. The official is endowed with great political capital thanks to his high rank, and cares about the welfare of his

hometown. The budget allocator wants political help from the ranking official, in return of infrastructure investment in the official's hometown.

We will spell out three key testable hypotheses, derived from a formal model available in the online appendix. Under the negotiated deal, the official could influence infrastructure in his hometown. Given little accountability and checks on officials, we first expect testable **Hypothesis I**: hometown favoritism is widespread among officials.

Second, since the negotiation outcome depends on the official's power and the budget allocator's discretion in allocating infrastructure projects, we should find evidence supporting **Hypothesis II**: hometown favoritism depends positively on the official's rank in the authoritarian hierarchy and on the home province's discretionary power.

Third, favoritism should be most present when most valued by the official, i.e. when the hometown bonds of the official are strongest. **Hypothesis III** thus states that favoritism decreases as we move from the home commune to neighboring communes or to the home district. Furthermore, it is stronger when local culture puts more value on family ties and support.

B. Empirical Design

We investigate the effect of officials on hometowns by matching all ranking officials in our database to their home communes if included in the VHLSS, and regress commune infrastructure indicators on the official's power indicator. Each observation represents an official-commune pair in a specific year.

Since the link between communes and officials is potentially influenced by several omitted unobservable factors, endogeneity biases may arise in several ways. Certain static factors, such as a province's richness and power, may correlate with better infrastructure and education, and also the capacity to produce

more high-ranked officials. Other potential time-variant factors may influence promotions and local infrastructure as well. Good provincial performances may reward officials with promotions, and accelerate infrastructure improvements.

We deal with static sources of endogeneity by including location-specific fixed effects to absorb all time-invariant omitted factors. The fixed-effect specification implies that we are identifying the effect of promotions on improvements of infrastructure. We also include commune-official pair fixed effects to control for time-invariant factors that exert influence on both officials' promotion and their preferences towards hometowns. For instance, this fixed effect can correct the downward bias introduced when practical officials care less about hometowns but get promoted more frequently.

Regarding rewards for performances, a dynamic source of endogeneity, we should note that officials in our sample are not directly responsible for the performances of home communes, as explained in section II. Given their high ranks, even if their immediately preceding positions had been in local governments, they must have been at provincial level. Therefore, if such time-variant factors are driving the results, we must be able to detect similar effects in neighboring communes in the same province. We thus perform “placebo tests” that can potentially confirm or refute our causal interpretation by using infrastructure in communes in the same district as the outcome. Other placebo tests also explore leads of the explanatory variables in the regressions, for which we predict that local infrastructure improvements do not precede promotions.

Given those considerations, our benchmark regression is the following:

$$Infrastructure_{cpt} = \beta PowerCapital_{p,t-L} + \gamma X_{cpt} + \delta_t + \delta_{cp} + \varepsilon_{cpt}.$$

The indices c , p , and t respectively represent the home commune c of official p in year t . L denotes the possible lag after a promotion. Commune-level *Infrastructure* indicates either the quality of roads to villages, or the presence of local radio stations, preschools and schools, irrigation, water systems, or

marketplaces. The vector $\mathbf{X}_{cpt}$ regroups observable controls, which include population size, average income, and a dummy for five different geographical zones. The fixed effects by year and by commune-official pair are respectively denoted as δ_t and δ_{cp} ; and ε_{cpt} is the error term. The sample includes all rural commune-official matched pairs, spanned over the whole period 2000-2010.

The right-hand-side variable *PowerCapital* adds up all ranking positions ever held by each official until year $t-L$. The fixed-effect specification using this measure thus estimates the impact of a change in *PowerCapital*, i.e. an official's move to a new position, while it ignores the eventual departure from previous offices. In Vietnam, while the ascension to a new position is a significant change, leaving a ranking position before retirement mostly means a switch to another, usually more important one. It does not prevent the official from having strong influence on his previous office, even in the case of retirement. In one recent case, for instance, a former Minister of Education had relinquished that position to become Deputy Prime Minister; however, he still exerted particularly strong influence on the Ministry of Education. In other words, the relative importance of an official in the government is best measured by the accumulation of the important, ranking positions he has held over time.

The estimate of β in this framework is interpreted as the treatment effect averaged over all officials for whom we observe a new ranking position (a change in *Power Capital*) during the considered period. The fixed effects control all time-invariant factors of the pair commune-official, including geographical conditions of the commune (distance to large cities, major rivers etc.), background conditions of the official (gender, education, etc.), year of participation in the ruling party and year of first-ranking position. The year-fixed effect further dilutes concerns about macroeconomic changes that could affect both new promotions and infrastructure construction.

V. Empirical results

We employ this benchmark empirical strategy to different data subsamples to address the following questions: (i) Does favoritism arise in an authoritarian regime? (ii) Who is powerful in the political hierarchy? and (iii) What is the motive of favoritism? These questions correspond to Hypotheses I, II and III discussed in Section IV.A. We report the results for each question below.

A. Does favoritism arise in an authoritarian regime?

More precisely, we ask if officials other than top leaders exercise favoritism in an authoritarian regime. We first present our estimations of the impacts of an official's promotion to a ranking position on the construction of various types of infrastructure in his rural home commune in Table 2, using the main sample discussed in Section III, which excludes the top leaders (General Secretary of the CPV, President, Prime Minister and Chairman of the National Assembly). We find strong positive effects on several outcomes, some with a lag, including the construction of local radio stations and the improvement of local roads within a year of the promotion, the construction of preschools and irrigation systems, the introduction of clean water access with a one-year lag and the construction of commune marketplaces with a two-year lag.

[Insert Table 2 here]

The effects are immediate for the construction of local radio stations and the improvement of local roads. As shown in column (1), a native official's new promotion increases the probability of having a local radio station by an estimated 3.5 percentage points. Column (2) shows a similar effect of 6.2 percentage points on local road quality. Road access quality is measured for a village randomly sampled in the commune, so this result is interpreted as the impact of an official's promotion on the proportion of villages with higher-grade road access.

A new promotion affects other outcome variables with lags. With a one-year lag, we find positive impacts of the promotion on the presence of preschools and irrigation systems as well as clean water access, as presented in columns (3) to (5). The effects are 2.5 percentage points, significant at 10%; 6.4 percentage points, significant at 10% and 4.9 percentage points, significant at 5%, respectively. With a two-year lag, there is strong evidence of impact on the presence of commune marketplaces, with an estimate of 5.9 percentage points at 5% significance. The different lags observed for different outcome variables are consistent with the time required for clearing the land for different types of infrastructure. Establishments of local radio station and quality improvements of existing village roads can be easily completed within one year because they do not require land clearance, a lengthy and frequently controversial process in Vietnam. All other types of infrastructure require land clearance and take more time to build. Marketplaces require particularly more time because they are usually located in populated areas and require relocation of many households.

The main sample used in Panel A includes communes where some types of infrastructure were already present at the beginning and throughout the period from 2002 to 2008. Excluding these communes from the main sample with respect to each type of infrastructure gives us a more informative estimate of the impact of an official's new promotion on the construction of the respective type of infrastructure in his rural home commune. Panel B of Table 2 reports the benchmark regression results using such refined samples.

Not only do the estimates derived from these refined samples remain statistically significant despite much smaller sample sizes (with the exception of pre-school construction), they are also expectedly much larger than those derived from the main sample reported in Panel A. The estimated impact on local road quality increases from 6.2 percentage points in Panel A to 9.3 percentage points in Panel B. For local radio stations, it increases from 3.5 to 16.1; irrigation systems –

6.5 to 12.6, clean water access – 4.9 to 8.9; commune marketplaces – 5.9 to 12.6; and the preschools estimate soars to 31.8% (imprecisely estimated). These differences reflect the fact that many infrastructures are already in place at the beginning of the period in the main sample used for Panel A; therefore, the actual impact on the probability of getting each new infrastructure (with lag) can be as large as 10% or even higher.

The results presented in both panels of Table 2 are consistent with the claim of widespread favoritism among Vietnamese officials, shown in the form of newly bestowed infrastructure projects in their home communes. Given that our sample does not include top leaders, this finding provides support for Hypothesis I (non-top officials in authoritarian regimes also exercise favoritism.)

Table 3 reports further checks on the effect of an official's new promotion on other types of outcome variables, including commune average income, expenditure and population, all with a one-year lag, and the immediate inclusion into the State's "poor commune support program," controlling for year, zone and commune-official or province fixed effects. Column (1) reports the effect on aggregate infrastructure in the home commune, calculated as the total number of existing infrastructure items as surveyed by the VHLSS (detailed in data appendix.) The estimate is 0.202, significant at 5%, suggesting that the promotion increases the probability of any new infrastructure construction by as much as 20.2 percentage points. Column (2) shows that the promotion has a significant effect of 1.7 percentage points on the commune's inclusion into the State's "poor commune support program," while, interestingly, the commune average income – the key criterion established by the law – does not even predict such inclusion. In other words, the official's promotion improves the hometown's chance of benefiting immediately from the program, in line with the centralized nature of the program as discussed in Section II. However, columns (3) and (4) show that there is no evidence that an official's new promotion improves (or reduces) his

rural home commune's living standards in terms of its average income and expenditure. Both estimates are less than 1 percentage point and not statistically significant. Similarly, the promotion does not affect the commune population as presented in column (5).

[Insert Table 3 here]

For robustness checks, we explore alternative specifications using different controls, different fixed effects, different lags and different observation units for two key outcome variables: local road quality and the presence of commune marketplaces. These are arguably the two most important variables to economic development in communes. Table 4 summarizes this exercise.

[Insert Table 4 here]

In Panel A of Table 4, we explore the effect of a native official's promotion on local road quality (detailed in the data appendix) under various specifications. Column (1) shows the benchmark specification with immediate effect, controlling for commune average income and population, as well as year, zone and commune-official fixed effects as presented in Table 2. Columns (2) to (4) verify the robustness of the results with different controls, including no fixed effect, year-fixed effect only and commune-official fixed effect only. Columns (5) to (7) vary the time lag from a year before the promotion to two years after. Column (5) runs a placebo test that includes *Power Capital* at one year after the year of observation of infrastructure: before the year of the promotion, we should not expect a positive effect on the outcome. Results from column (5) pass this test, as the coefficient of the 1-year forward value of *Power Capital* is not statistically significant at conventional levels. Columns (6) and (7) use *Power Capital* at one and two year(s) before the year of observation (its one-year and two-year lag values.) The result with a one-year lag is significant at 10%, while the result with a two-year lag is not, suggesting that the improvement in local road quality happens mostly in the immediate time window after the promotion.

In our benchmark regressions, the unit of observation is a combination of an official, his home commune and a year. In columns (8) and (9) we use other observation units to verify that the results are not driven by over-weighting or under-weighting certain communes. Column (8) uses a finer observation unit by combining a position (an official can have multiple ranking positions), the corresponding home commune and a year. Column (9) uses a coarser observation unit of a commune in a year, with the treatment variable *Power Capital* adding up all ranking positions accumulated by all officials coming from that commune. The impact estimates using these observation units are very close to the benchmark estimate, and statistically significant at 5%.

We employ similar robustness checks for the outcome variable, commune marketplaces, in Panel B of Table 4. Column (1) shows the benchmark specification with a two-year lag and the full set of controls. Columns (2) to (4) test the results with different controls and show that the effect on marketplaces is robustly significant. Columns (5) to (7) vary the time lag from one year forward to a two-year lag. There is no evidence of effect in any of these columns, suggesting that the tendency of commune marketplaces to be constructed a few years after promotions is due to their relatively larger scale of construction. Columns (8) and (9) use alternative observation units. The coefficients in columns (2) to (4) and (8) to (9) are close to the benchmark estimate, even when some are not statistically significant at conventional levels due to small sample sizes.

One may worry that the evidence thus far arises from the official's better information on the targeted commune, which prompts the budget allocator to allocate more resources to that commune. This alternative explanation is a strong argument against most findings regarding favoritism and pork-barrel politics (e.g. Kramon and Posner 2012.) In our context, this story is inconsistent with several details. First, better information should have been shared independently of the official's power, and thus before his promotion. Many officials in the sample had

already held some ranking positions, and could have well transferred their information. Because we find no effect prior to promotion, information sharing is unlikely to be the cause behind the effect on infrastructure. Second, most officials had not lived in their hometowns for an extended period, so the amount of information available to them that could improve the efficiency of public investments in those hometowns is unlikely to be better than that of local budget allocators. Third, infrastructure projects in our analysis are widely considered necessary in all communes, so further knowledge of local conditions is unlikely to affect the decision to undertake such constructions. Finally, we do not find that promotions have negative effects on other types of public infrastructure, suggesting this is unlikely about reallocation of resources across different infrastructures.

B. Who has the power to give favors?

Next we investigate the pervasiveness and degree of favoritism among different groups of Vietnamese officials, including members of the National Assembly, Central Government and Provincial Government. While existing literature on favoritism in autocratic regimes has mostly addressed top-level officials, who have both the political interest and the power to favor certain groups within the population (e.g. Burgess et al 2013), our sample covers not only the very few at the top but also a large number of mid-level officials. This investigation helps shed light onto the power structure of different groups of Vietnamese political elites, as shown in Table 5. Columns (2)-(8) compare the effects of an official's new promotion on home commune road quality, one of the two key outcome variables,⁷ using the benchmark regression in subsamples of non-chaired, all,

⁷ We also ran similar tests using the presence of commune marketplaces. The results from these tests are qualitatively similar to those presented above.

non-National Assembly positions, Central Government positions, Provincial Government positions and some combinations of these subsamples.

[Insert Table 5 here]

In democracies, members of parliament are the key players in pork-barrel politics (Shepsle and Weingast 1981, Bickers and Stein 2000). In authoritarian regimes, members of parliament may play a different role since the Central Government and ruling party make major decisions (Malesky, Schuler and Tran 2012). In Vietnam, a regular, non-chaired member of the National Assembly without another ranking position in the CPV or Government can hardly use his parliamentary membership as leverage for any real benefits. Column (2) shows that an official's new promotion to such a non-chaired position in the National Assembly has no detectable effect on his home commune road quality. Even when we extend this subsample to all National Assembly positions in column (3), the impact estimate is still negligible. On the contrary, in the subsample of non-National Assembly positions in column (4), which includes all remaining Central Government, Provincial Government and Party's Central Committee positions, we find a large impact estimate of 10.0 percentage points, significant at 1%. This difference in statistical significance level is not driven by sample sizes, as the number of observations in columns (2)-(4) are roughly even. Overall, these results are consistent with our view that the parliament has little power within the Vietnamese political hierarchy and therefore its members have limited bargaining power to redirect resources to their hometowns.

Columns (5)-(7) report the effect of an official's new promotion on his commune road quality in a subsample of Central Government positions, a subsample of Provincial Government positions and the combined subsample. All three point estimates are large, being 17.3, 8.2, and 9.3 percentage points, respectively, compared to the benchmark estimate of 6.2 percentage points. Furthermore, we find that a promotion to a Central Government position has a

larger and statistically stronger impact on home-commune road quality than a promotion to a Provincial Government position (17.3 compared to 8.2 percentage points), even though provincial leaders have direct control over budgetary allocations to communes. This result suggests the existence of an informal channel of influence through exchanges of personal favors (i.e. between a Central Government member and a local leader in this context) as described in our theoretical model, and the considerable political power of the Central Government that allows it to affect public decisions beyond its jurisdiction.

Finally, column (8) reports the effect of an official's new promotion on his commune road quality in the subsample of "middle-ranking" positions. We ask if the effects of an official's new promotion on his commune road quality found in columns (4)-(7) are largely driven by only a few top-level officials, or if the observed hometown favoritism is much more pervasive among Vietnamese political elites. To do so, we construct a subsample of "middle-ranking" positions, which excludes not only the top 4 positions as in the benchmark sample but also all Deputy Prime Ministers, Vice Presidents, members of the Politburo and chair-holding members of the Central Committee. The estimate of impact on improvement in local road quality in this subsample is 7.2 percentage points and significant at 5%. Although this estimate is, as expected, lower than that of 9.3 percentage points in the subsample of all non-National Assembly positions, it provides clear evidence that favoritism is not limited to only top-level officials, as shown in the existing literature, but is pervasive also in the midrange of Vietnamese politics.

Together, the results from Table 5 show that hometown favoritism is a phenomenon widespread across different groups and ranks of Vietnamese officials, consistent with Hypothesis I. The magnitude of such favoritism varies substantially among different ranks and divisions within the government, consistent with Hypothesis II. In particular, we find that even Provincial

Government officials are more powerful than members of the legislative National Assembly. Central Government officials, who have no authority over commune budget, turn out to be the most powerful in directing these public resources toward their hometowns. This pattern underlines the importance of informal authority and the inconsequence of legislative bodies in less democratic countries.

We now ask which institutional environments are more likely to encourage or prohibit the sort of favoritism discussed above, using a measure of provincial governance. As we discussed in section IV.A, favor in the form of hometown infrastructure is likely negotiated between ranking officials and district budget allocators. Consequently, when local budget allocators have more flexibility in crafting policies, they can better commit to and honor quid-pro-quo deals with ranking officials, in order to channel resources toward their hometown budgets. We test this hypothesis with the use of provincial governance indicators taken from the Vietnam Provincial Competitiveness Indices (PCI), a set of survey-based indices of industries' governance perceptions that has been systematically constructed with the help from the UNDP since 2006 (see details in Malesky (2006) and subsequent reports.) Among the available indicators, we select three that are relevant to the discretionary power of provincial leadership, including the index of provincial leadership proactiveness, the index of the lack of informal costs to business and the transparency score of the province. We synthesize a composite measure of provincial discretionary policies, abbreviated as PDP, as the proactiveness score minus the score on lack of informal costs, minus the transparency score, and take its average over the period of 2006 to 2008, the period during which the PCI overlaps with our sample. As in previous subsections, the sample is divided at the median of the PDP scores. Table 6 reports benchmark regression results for the two subsamples.

[Insert Table 6 here]

Panels A and B of Table 6 present the benchmark regression results with subsamples of communes in provinces with above-median PDP scores (i.e. where provincial leaderships have more discretionary power) and those with below-median PDP scores, respectively. The effects of a native official's promotion on two key outcome variables – local road quality and presence of commune marketplaces – in each subsample as shown in columns (2) and (6) of each panel confirm our hypothesis that more flexible provincial institutional environments better allow ranking officials to influence new infrastructure construction in their home communes. In the subsample with higher PDP scores, the estimates for road quality and marketplaces are both large (7.1 and 8.5 percentage points, respectively) and significant (at 5%), while in the other subsample, the effects are not statistically significant at conventional levels. These results suggest that discretionary authority facilitates favoritism.

C. What is the motive of hometown favoritism?

In existing studies of political favoritism, the identification of the motive of favoritism represents a formidable challenge. Officials may favor friends and relatives because of their social preferences for their kin, or strategic calculations in building and profiting from a political base. For instance, pork-barrel politics are mostly explained in terms of rewards to political constituencies, and ethnic favoritism by certain dictators arguably serves to build a coalition of support (Padro-i-Miquel 2007). In our context, we assess the relative importance of these two motives by comparing favoritism at the commune and the district levels.

Political versus non-political motives: As argued in Proposition 3, moving from the commune to the district dilutes the social preference motive, since the larger population is less related to its officials. In contrast, the political motive is reinforced because a larger district can leverage greater political support for its

officials. We thus test for the political support mechanism by replicating the set of benchmark regressions on samples that match ranking officials to their home districts instead of their home communes. Table 7 summarizes the results from this exercise.

[Insert Table 7 here]

Each observation used in Panel A of Table 7 combines a ranking official, his home district and a year for which VHLSS data for at least one commune in that district are available. The value of each outcome variable at the district level is then calculated as the average among all the surveyed communes in the district. The resulted estimates are all well below 1 percentage point and are not statistically significant at conventional levels. They thus refute the explanation that ranking officials grant favors to their home districts in exchange for political support at the local level. In Panel B of Table 7, we estimate the impact of an official's new promotion on infrastructure construction in non-home communes in his home district, using a sample in which each observation combines a ranking official, a non-home commune in his home district and a year for which VHLSS data for the commune are available. Again, all the resulting estimates are close to zero and not statistically significant. They suggest that the observed favoritism is driven by officials' social preferences toward their hometowns rather than by their desires for political support. This is consistent with Hypothesis III.

We may ask whether an official's non-political motive is the result of economic calculations. For example, if the official owns property in his home commune and intends to retire there, it will be in his economic interest to provide the commune with better infrastructure. This explanation, however, is unlikely to hold for the poorest, most underdeveloped group of rural communes in Vietnam, where basic services and infrastructures are lacking, and the value of land is trivial. Indeed, it is extremely unlikely that retired officials would move away from the capital and big cities where their families have been enjoying high living standards to a

remote, backward place with poor schools, no hospital and only rural jobs in the foreseeable future. Table 8 summarizes the main regression results using this subsample of communes where income is poorer than the sample's median. Most of the coefficients reported are statistically significant and comparable to the benchmarks. That the effects exist even for the poorer home communes suggests that economic self-interest is not the driving force of favoritism. Instead, an official is likely driven by his social preference toward his hometown, either for social recognition or by his own altruism.

[Insert Table 8 here]

Connection: If favoritism is based on the preference of ranking officials, we should expect that the social distance between the official and his rural home commune determines the magnitude of favoritism. We use the age gap between the official and the commune chairperson as a proxy for social proximity, as people with similar ages tend to go to school at the same time, communicate with each other better and build stronger bonds.⁸ In Table 9, we report the results from the benchmark regressions with subsamples divided according to the age gap between the official and his home commune's chairperson, using the sample median of a 10-year age gap as the division threshold.

[Insert Table 9 here]

Panels A and B of Table 8 present the benchmark regression results for the subsamples of communes where the age gap is below and above 10 years, respectively. Panel A shows that a commune benefits greatly from a native official's promotion when the commune chairperson and the official are of the same generation: the estimate for improvement in local road quality is 10.0 percentage points, significant at 1%, and that for commune marketplaces is 6.1%, though not statistically significant due to small sample size. All coefficients in

⁸ VHLSS is fortunately one among the very few surveys of the World Bank's Living Standards Measurement Surveys that includes information on commune officials.

Panel A are considerably larger than their counterparts in Panel B, where the commune chairperson is not of the same generation as the official. In fact, the only significant effect in Panel B is that of local road quality, but even that effect is only two thirds of the corresponding effect found in Panel A. The evidence suggests that commune chairs play an active role in the mechanism at work, and all the more so when they are closer to the promoted native officials.

Cultural values: We further investigate whether favoritism is associated with related cultural characteristics of the hometowns, in particular the level of altruism directed towards the extended patrilineal family. In light of the explanation that officials' favoritism is chiefly motivated by their social preferences towards their patrilineal origin, we expect higher levels of favoritism in areas where the local culture emphasizes altruistic deeds and family values, because officials are more likely to share those values, and under family pressure to act accordingly. To measure those cultural traits, we construct a family value index (FVI) by summing the answers to two questions in the World Value Survey's wave 4, 2001: the importance of the family, and of services to others (detailed in the online appendix.) Table 10 presents the benchmark regression results in the subsamples of high versus low FVIs.

[Insert Table 10 here]

Panel A shows a strong effect of a native official's promotion on local road quality in high FVI regions – at 9.7 percentage points – while that in low FVI regions is only 2.3 percentage points. We find similar patterns for the presence of radio stations (immediate), preschools and irrigations (one-year lagged); while the results for marketplaces are not distinguishable between the two samples. Overall, the evidence suggests that favoritism is more prominent in regions that place more value on altruism and the family.

Commune needs: If favoritism is principally motivated by an official's social preferences for his hometown, we expect the effect to be declining in the

commune's average income, as the official is less willing to give to his wealthier relatives. This decline should be similar for the two key infrastructures in our paper, measured as local road quality and presence of commune marketplaces. On the other hand, one may expect the benefits per capita of a marketplace to be increasing in the population size, thanks to the economies of scale of such a service. Therefore, the effect on marketplace construction is expected to be increasing in the commune population size. Since the economies of scale are much less clear in the case of village roads, we need not expect a relationship between the effect on local road quality and the commune population size.

We investigate the relationship between the favoritism effect and a commune's baseline variable denoted as x_c , namely average income or population size, by modifying the specification in section IV.B to allow for potentially heterogeneous effects of officials' promotion on infrastructure improvements:

$$Infrastructure_{cpt} = \beta(x_c)PowerCapital_{p,t-L} + \gamma(x_c)\mathbf{X}_{cpt} + \delta_t(x_c) + \delta_{cp}(x_c) + \varepsilon_{cpt}.$$

We estimate the function $\beta(x_c)$ using semiparametric local linear regressions of the benchmark specification, and plot it against x_c in Figure 1 (detailed in online appendix.)

Figure 1's top plots report the variations of favoritism according to average income for local road quality (left) and presence of commune marketplaces (right). Both plots clearly show a sharp drop in favoritism at a certain level of income, consistent with the explanation regarding social preferences directed towards hometowns in need. The bottom plots show the analogous variations according to population size. While it is hard to recognize a trend in the effect for local road quality, we can see clearly the increasing effect for the presence of commune marketplaces for the most important range of values of population size. The findings from these figures support our explanation regarding the directed social preference motive of government officials.

VI. Concluding Remarks

In this paper, we attempt to show a causal link between the promotion of officials to ranking positions in high office and infrastructure developments in their home communes. Using a fixed-effect model on panel data of commune infrastructure, we find evidence of widespread favoritism in the construction of different types of infrastructure including roads, marketplaces, irrigation, schools, radio stations, safe water access and access to the State's "poor commune support program." The magnitude of favoritism depends on the position of the official, the respective provincial environment, the connection between the official and his rural home commune, and the local cultural importance of helping one's family. While middle-ranking officials in the Government have significant ability to exercise favoritism, non-chair members of the legislative National Assembly do not. This power difference is in stark contrast to the politics that we have known in democracies. Further, ranking officials without formal, hierarchical authority over local budgets can evidently direct resources to their hometown budgets, suggesting that favoritism is exercised through informal influence. Communes better connected to promoted native officials and in provinces where provincial leaderships have more discretionary power tend to reap more benefits from favoritism.

We observe that officials target their favors narrowly to their small home communes instead of distributing them over their whole home districts. The entire population of a commune is politically negligible in the Vietnamese context, and unlikely to matter to the official's career. It is thus improbable that the findings are due to reverse causation or to strategic behaviors in building political support bases. We also use year- and commune-official fixed effects to eliminate concerns of time-invariant unobservable factors affecting both the promotion and the outcomes. Therefore, the results suggest a form of social preference towards

social relatives that prevails in environments with low transparency, high discretionary power on the part of local officials and a strong social connection between ranking officials and their relatives along social lines such as ethnicity, race, clan or geographic origins.

The important question of efficiency has been left out in this paper, as it is in most related studies. It is not exactly clear how the favoritism pattern identified here affects the efficient allocation of public resources, an issue discussed by Hsieh and Klenow (2009). Apart from the intuitive interpretation that it could cause serious misallocations of public resources, one might also speculate that officials possess better information about their home communes and therefore can direct public resources to more efficient use in them. This information channel presents a formidable challenge to the broad literature on favoritism and patronage politics. Testing this efficiency gain or loss represents an interesting avenue for future research. In our study, it is unlikely that favoritism leads to a more efficient use of resources. Even if promoted officials know their communes' needs, it is unlikely that they do better than local budget authorities in suggesting more efficient allocation. Besides, were it to exist, their information advantage should have materialized even before the promotion, and should have spilled over to neighboring communes as well. These two predictions are not supported by our empirical results; however, we remain cautious in making claims about efficiency.

In the context of Vietnam, the relevant social preferences towards social relatives are closely linked with Confucian values that stress filial virtues and affinity to patrilineal origins. The paper has shown that variations in those values can predict the measured favoritism, and hints that certain cultural and traditional norms can be at odds with modern governance standards. It is thus different from ethnic-based favoritism, as evidenced from Africa, which could also arise as strategic behaviors to gather political support from same-ethnic recipients of favor (Burgess et al 2013, Padro-i-Miquel 2007). It remains an open question for future

research whether social preferences or strategic behaviors are more important in explaining favoritism across the world.

Standard economic theory would predict that marginal incentives for corruption for personal gains will diminish as office holders become richer. It implies that in the long run, growth and stable politics will reduce corruption rates. Our results challenge this view. Because of their willingness to abuse power to channel public resources to social connections, ranking officials may maintain an appetite for corruption far beyond their own consumption and accumulation of wealth. This motive of favoritism runs independently of quid-pro-quo political support, and could thus be present in developed countries as well (Hyytinen, Lundberg and Toivanen 2007), although in such cases political concerns would confound the empirical association between power and favoritism. Socially motivated favoritism should be an important consideration in designing measures against corrupt behaviors on the part of public officials, not only in authoritarian regimes but also in countries where democracy and transparency are less than perfect.

References

- Alesina, Alberto and Paola Giuliano (2011). "Family Ties and Political Participation." *Journal of the European Economic Association*, 9(5), 817-839.
- Angelucci, Manuela, Giacomo De Giorgi, and Imran Rasul (2012). "Resource Pooling within Family Networks: Insurance and Investment." Unpublished paper. University College London.
- Banerjee, Abhijit and Rohini Somanathan (2007). "The Political Economy of Public Goods: Some Evidence from India." *Journal of Development Economics*, 82(2), 287-314.
- Banfield, Edward (1958). *The Moral Basis of a Backward Society*. Chicago: Free Press.
- Besley, Timothy, Pande Rohini, and Vijayendra Rao (2012). "Just

- Rewards? Local Politics and Public Resource Allocation in South India.” *World Bank Economic Review*, 26(2), 191-216.
- Bickers, Kenneth N. and Robert M. Stein, (2000). "The Congressional Pork Barrel in a Republican Era." *Journal of Politics*, 62(4), 1070-86.
- Burgess, Robin, Rémi Jedwab, Edward Miguel, Ameet Morjaria, and Gerard Padro-i-Miquel (2013). Chattopadhyay, Raghavendra and Esther Duflo (2004). “Women as Policy Makers: Evidence from a Randomized Policy Experiment in India.” *Econometrica*, 72(5), 1409-1443. Ferejohn, John (1974). *Pork Barrel Politics: Rivers and Harbors Legislation, 1947–1968*. Stanford University Press.
- Franck, Raphaël and Ilia Rainer (2012). “Does the Leader’s Ethnicity Matter? Ethnic Favoritism, Education and Health in Sub-Saharan Africa.” *American Political Science Review*, 106(2), 294-325. Helmke, Gretchen and Steven Levitsky (2003). *Informal Institutions and Comparative Politics: A Research Agenda*. Cambridge University Press.
- Hicken, Allen (2001). “Parties, policy and patronage: governance and growth in Thailand.” In José Edgardo L. Campos ed., *Corruption: The Boom and Bust of East Asia*, pp. 163–82. Quezon City, Philippines: Ateneo de Manila Press.
- Hsieh, Chang-Tai and Peter J. Klenow (2009). “Misallocation and manufacturing TFP in China and India.” *Quarterly Journal of Economics*, 124(4), 1403-1448.
- Hunt, Peter Cody (2002). *An Introduction to Vietnamese Culture For Rehabilitation Service Providers in the U.S. Center for International Rehabilitation Research Information and Exchange*. (Accessed at <http://cirrie.buffalo.edu/culture/monographs/vietnam/> on November 9, 2012.)
- Ioannides, Yannis and Linda D. Loury (2004). “Job Information Networks, Neighborhood Effects, and Income Inequality.” *Journal of Economic Literature*, 92, 1056-1093.

- Keefer, Philip and Stuti Khemani (2009). "When Do Legislators Pass on Pork? The Determinants of Legislator Utilization of a Constituency Development Fund in India." *American Political Science Review*, 103(1), 99-112.
- Khwaja, Asim and Atif Mian (2005). "Do Lenders Favor Politically Connected Firms? Rent Provision in an Emerging Financial Market." *Quarterly Journal of Economics*, 120, 1371-1411.
- Kramon, Eric J. and Daniel N. Posner (2012). "Ethnic Favoritism in Primary Education in Kenya." Unpublished paper. University of California, Los Angeles.
- Levitt, Steven D. and James M. Snyder, Jr. (1995). "Political Parties and the Distribution of Federal Outlays." *American Journal of Political Science*, 39(4), 958-80.
- Lipset, Seymour Martin and Gabriel Salman Lenz (2000). "Corruption, Culture and Markets" in *Culture Matters: How Values Shape Human Progress*, eds Lawrence E. Harrison and Samuel P. Huntington. New York: Basic Books.
- Malesky, Edmund (2006). "The Vietnam Provincial Competitiveness Index 2006" Vietnam Competitiveness Initiative Policy Paper No. 11. Available at SSRN: <http://ssrn.com/abstract=1669715>.
- Malesky, Edmund and Paul Schuler (2009). "Paint-by-numbers Democracy: The Stakes, Structure, and Results of the 2007 Vietnamese National Assembly Election." *Journal of Vietnamese Studies*, 4(1), 1-48.
- Malesky, Edmund and Paul Schuler (2011). "The Single-Party Dictator's Dilemma: Information in Elections without Opposition." *Legislative Studies Quarterly*, 36(4), 491-530.
- Mitchell, J. Clyde (1969). *Social Networks in Urban Situations: Analysis of Personal Relationships in Central African Towns*. Manchester University Press
- Nguyen, Binh Thi Thanh and Dana Healy (2006). *Aspects of Vietnamese Culture*. The Gioi Publishing.

- Padro-i-Miquel, Gerard (2007). "The Control of Officials in Divided Societies: The Politics of Fear." *Review of Economic Studies*, 74(4), 1259-74.
- Persson, Petra and Ekaterina Zhuravskaya (2011). "Elite Capture in the Absence of Democracy: Evidence from Backgrounds of Chinese Provincial Leaders." Paris School of Economics working paper.
- Radcliffe-Brown, Alfred (1922). *The Andaman Islanders*. Cambridge University Press.
- Sahoo, Pravakar, Ranjan Kumar Dashban, Geethanjali Nataraj (2012). "China's Growth Story: The Role Of Physical And Social Infrastructure," *Journal of Economic Development*, 37(1), 53.
- Shepsle, Kenneth A. and Barry R. Weingast (1981). "Political Preferences for the Pork Barrel: A Generalization." *American Journal of Political Science*, 25(1), 96-111.
- Shioji, Etsuro. 2001. "Public Capital and Economic Growth: A Convergence Approach." *Journal of Economic Growth*, 6(3), 205-27.
- Tabellini, Guido (2010). "Culture and Institutions: Economic Development in the Regions of Europe." *Journal of the European Economic Association*, 8(4), 677-716.

Tables and Figures

Table 1. Descriptive statistics

Panel A. Ranking officials

Official group/subgroup	Start year	End year	No. of officials		No. of positions*		Average** no. of positions	Median** no. of positions	No. of communes	
Central Committee	2002	2011	90	21%	119	18%	2.67	2	86	25%
Central Committee 9th	2002	2006	43	10%	43	6%	3.14	3	43	12%
Central Committee 10th	2007	2011	76	18%	76	11%	2.82	3	72	21%
Central Government	1997	2011	72	17%	102	15%	2.29	2	68	19%
Government from 2000 yearbook	1997	2002	23	5%	23	3%	2.65	2	23	7%
Government from 2004 yearbook	2003	2007	43	10%	43	6%	2.47	2	42	12%
Government from 2009 yearbook	2008	2011	36	9%	36	5%	2.56	2	36	10%
Provincial Government	2000	2010	105	25%	167	25%	1.92	2	97	28%
Government from 2000 yearbook	2000	2004	37	9%	37	5%	2.65	3	37	11%
Government from 2004 yearbook	2004	2006	67	16%	67	10%	2.19	2	64	18%
Government from 2009 yearbook	2006	2010	63	15%	63	9%	1.92	2	61	17%
National Assembly	2003	2011	252	60%	290	43%	1.58	1	224	64%
National Assembly 11	2008	2007	138	33%	138	20%	1.83	1	130	37%
National Assembly 12	2008	2011	152	36%	152	22%	1.70	1	144	41%
Total	1997	2011	422	100%	678	100%	1.61	1	351	100%

Panel B. Communes

Commune statistics	Benchmark sample					VHLSS rural commune population				
	2002	2004	2006	2008	Overall	2002	2004	2006	2008	Overall
Sample coverage										
Number of communes	311	323	328	309	343	2213	2238	2276	2191	2554
Number of districts	196	207	208	197	215	556	570	575	582	610
Number of provinces	55	59	59	57	60	55	59	59	57	60
Commune statistics										
Average area	26.9	27.0	26.7	29.0	27.4	39.4	35.9	39.7	41.3	39.1
Average population	9794	9689	9658	9714	9713	9039	8631	8647	8836	8787
Average annual PC income ('000 VND)	4848	5220	6864	10272	6780	4104	5184	6888	10572	6672
% with poverty classification	13.2	13.7	14.0	12.6	13.4	19.2	20.9	19.4	18.0	19.4
Commune existing infrastructure										
% with radio station	-	81.7	86.9	85.4	84.7	-	77.0	80.7	80.6	79.5
% with good quality road	50.8	67.8	73.2	76.7	67.2	43.3	58.5	63.9	69.6	58.9
% with preschool	-	96.9	98.8	97.4	97.7	-	96.8	96.4	97.7	97.0
% with irrigation system	-	70.2	70.1	68.5	69.6	-	66.5	67.3	67.2	67.0
% with clean water supply	61.4	58.8	58.3	58.0	59.1	61.6	60.8	59.4	61.6	60.8
% with market place	-	70.0	70.7	68.3	69.7	-	62.2	63.6	62.9	62.9
Average politicians per commune										
promoted this year or the year before	0.13	0.69	0.18	0.63		-	-	-	-	
promoted/in office this year or earlier	0.29	0.77	0.83	1.21		-	-	-	-	
promoted/in office between 2000-10	1.21	1.22	1.21	1.21	1.21	-	-	-	-	-
Average power capital per commune*	0.32	1.03	1.21	1.96	1.13	-	-	-	-	-
from Central Committee positions	0.13	0.12	0.12	0.35	0.18	-	-	-	-	-
from Central Government positions	0.07	0.20	0.20	0.31	0.19	-	-	-	-	-
from Provincial Government positions	0.11	0.32	0.49	0.49	0.35	-	-	-	-	-
from National Assembly positions	0.00	0.40	0.39	0.82	0.40	-	-	-	-	-

Note:

* Numbers of unique officials & numbers of positions x terms in each group/subgroup (each subgroup represents term)

** Average/median numbers of positions x terms held by an official in each group/subgroup throughout the 2000-10 period

*** Power capital of a commune in a year is the accumulated number of positions x terms held by officials coming from that commune up to that year

Table 2. Officials' power and home commune infrastructure**Panel A. Main sample**

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	0.0346 [0.0201]*	0.0620 [0.0242]**	0.0247 [0.0127]*	0.0643 [0.0356]*	0.0485 [0.0197]**	0.0590 [0.0239]**
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,155	1,533	1,157	1,155	1,528	1,157
R-squared	0.738	0.578	0.575	0.587	0.726	0.772

Panel B. Subsamples, excluding communes that already have corresponding infrastructure

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean Water	Marketplace
Power Capital	0.161 [0.0885]*	0.0932 [0.0373]**	0.318 [0.309]	0.126 [0.0650]*	0.0886 [0.0363]**	0.126 [0.0563]**
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	289	895	59	620	856	473
R-squared	0.463	0.426	0.413	0.322	0.441	0.449

Note: In this table, we estimate the impact of an official's new promotion to a ranking position on the construction of each type of infrastructure in his/her home commune by relating the number of ranking positions accumulated by the official to the presence of each infrastructure in the commune, using different lags, controlling for commune current average income per capita and population size, and including year, zone, and commune x official fixed effects. Panel A reports salient results for each different lag on the main sample. Panel B replicates the Panel A regressions on a subsample excluding communes where the corresponding infrastructure was present throughout the period. Panel B reports similar salient results from these subsamples. Robust standard errors in brackets are clustered at commune x year level. Statistical significance is denoted by *** ($p < 1\%$), ** ($p < 5\%$), and * ($p < 10\%$).

Table 3: Favoritism in other home commune outcomes

	(1)	(2)	(3)	(4)	(5)
Time lag	1-year lag	Immediate	1-year lag	1-year lag	1-year lag
Dependent variable	Aggregate infrastructure	Poor commune support program	Commune average income	Commune average expenditure	Commune population
Power Capital	0.202 [0.0881]**	0.0169 [0.00833]**	0.0106 [0.0275]	-0.00438 [0.0188]	-0.00526 [0.00733]
Commune controls	Yes	Yes			
Year FE	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes		Yes	Yes	Yes
Province FE		Yes			
Observations	1,148	1,532	1,542	1,542	1,533
R-squared	0.769	0.434	0.688	0.779	0.953

Note: This table reports further checks on the effect of a native official's new promotion on other type of outcome variables, including commune average income, expenditure, population, inclusion into the State's "poor commune support program", and aggregate infrastructure, most with a one-year lag and controlling for year, zone, and commune x official or province fixed effects. Columns 1 and 2 control for current average income per capita and population size. Robust standard errors in brackets are clustered at commune x year level. Statistical significance is denoted by *** ($p < 1\%$), ** ($p < 5\%$), and * ($p < 10\%$).

Table 4: Alternative specifications and robustness checks

Panel A: Robustness checks with dependent variable Good Road

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Time lag	Immediate	Immediate	Immediate	Immediate	1-year forward	1-year lag	2-year lag	Immediate	Immediate
Specification	Benchmark	No FE	Year FE	Com-Official FE	Benchmark	Benchmark	Benchmark	Com-Position unit	Commune unit
Power Capital	0.0620 [0.0242]**	0.0673 [0.0125]***	0.0213 [0.0136]	0.146 [0.0181]***	0.0126 [0.0248]	0.0426 [0.0245]*	0.0367 [0.0266]	0.0563 [0.0237]**	0.0523 [0.0214]**
Commune controls	Yes				Yes	Yes	Yes	Yes	Yes
Year FE	Yes		Yes		Yes	Yes	Yes	Yes	Yes
Zone FE	Yes				Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes			Yes	Yes	Yes	Yes		
Commune x Position FE								Yes	
Commune FE									Yes
Observations	1,533	1,542	1,542	1,542	1,533	1,533	1,533	2,480	1,262
R-squared	0.578	0.018	0.049	0.563	0.576	0.577	0.576	0.570	0.579

Panel B: Robustness checks with dependent variable Marketplace

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Time lag	2-year lag	2-year lag	2-year lag	2-year lag	1-year forward	Immediate	1-year lag	2-year lag	2-year lag
Specification	Benchmark	No FE	Year FE	Com-Official FE	Benchmark	Benchmark	Benchmark	Com-position unit	Commune unit
Power Capital	0.0590 [0.0239]**	0.0252 [0.0176]	0.0353 [0.0189]*	0.00949 [0.0188]	-0.0163 [0.0271]	-0.0287 [0.0272]	0.0284 [0.0233]	0.0483 [0.0195]**	0.0326 [0.0217]
Commune controls	Yes				Yes	Yes	Yes	Yes	Yes
Year FE	Yes		Yes		Yes	Yes	Yes	Yes	Yes
Zone FE	Yes				Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes			Yes	Yes	Yes	Yes		
Commune x Position FE								Yes	
Commune FE									Yes
Observations	1,157	1,166	1,166	1,166	1,157	1,157	1,157	1,870	951
R-squared	0.772	0.002	0.004	0.765	0.771	0.771	0.771	0.765	0.778

Note: Panel A explores the effect of a native official's new promotion on local Good road under various specifications, including using different controls and fixed effects, with different lags, and using different observation units. Panel B explores the effect of a native politician's new promotion on presence of commune Marketplaces under various specifications, including using different controls and fixed effects, with different lags, and using different observation units. Commune controls include current average income per capita and population size. Robust standard errors in brackets are clustered at commune x year level. Statistical significance is denoted by *** ($p < 1\%$), ** ($p < 5\%$), and * ($p < 10\%$).

Table 5: Favoritism by different level of real budget authority

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Subsample	Benchmark	Non-chaired National Assembly	All National Assembly	Non National Assembly	Central Government	Provincial Government	Central & Provincial Government	Medium- ranking
Power Capital	0.0620 [0.0242]**	0.0189 [0.0471]	0.0281 [0.0467]	0.1 [0.0333]***	0.173 [0.0792]**	0.0824 [0.0597]	0.0930 [0.0441]**	0.0715 [0.0358]**
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,533	861	904	829	267	393	648	832
R-squared	0.578	0.582	0.574	0.602	0.558	0.602	0.579	0.582

Note: This table reports benchmark regression results for key outcome variable Good Road using subsamples divided by different groups of Vietnamese political elites, including non-chaired National Assembly positions, all National Assembly positions, non-National Assembly positions, Central Government positions, Provincial Governments positions, and medium-ranking positions (i.e. ministers, deputy ministers, and the equivalent, provincial leaders, and ordinary members of the Central Committee). Commune controls include current average income per capita and population size. Robust standard errors in brackets are clustered at commune-year level. Statistical significance is denoted by *** (p < 1%), ** (p < 5%), and * (p < 10%).

Table 6. Favoritism by the flexibility of the provincial institutional environment**Panel A. Subsample of communes in provinces with above-median PDP scores**

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	0.0629 [0.0311]**	0.0710 [0.0319]**	0.0226 [0.0216]	0.0762 [0.0536]	0.0474 [0.0281]*	0.0853 [0.0379]**
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	606	798	608	607	793	608
R-squared	0.705	0.581	0.535	0.560	0.657	0.768

Panel B. Subsample of communes in provinces with below-median PDP scores

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	0.00858 [0.0262]	0.0496 [0.0364]	0.0226 [0.0158]	0.0626 [0.0484]	0.0500 [0.0279]*	0.0342 [0.0297]
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	549	735	549	548	735	549
R-squared	0.781	0.592	0.625	0.639	0.790	0.785

Note: In this table, Panel A reports the benchmark regression results for the subsample of communes in provinces where provincial leaderships have more discretionary power, as measured by the Provincial Discretionary Policies' scores (PDP). Panel B reports the benchmark regression results for the subsample of communes in provinces where provincial leaderships have less discretionary power, as measured by the provinces' PDP scores. Commune controls include current average income per capita and population size. Robust standard errors in brackets are clustered at commune x year level. Statistical significance is denoted by *** (p < 1%), ** (p < 5%), and * (p < 10%).

Table 7. Favoritism for home district

Panel A. Sample in which ranking officials are matched to their home districts

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	-0.00568 [0.00649]	0.00351 [0.00718]	-0.00001 [0.00503]	0.00335 [0.0127]	0.00634 [0.00817]	0.00300 [0.00889]
District controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,972	5,270	3,972	3,972	5,271	3,972
R-squared	0.827	0.715	0.568	0.702	0.790	0.782

Panel B. Sample in which ranking officials are matched to other communes in their home districts

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	-0.00571 [0.00500]	0.00731 [0.00666]	0.00292 [0.00390]	0.00998 [0.00955]	-0.00213 [0.00537]	-0.00222 [0.00711]
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	17,620	23,548	17,632	17,605	23,535	17,632
R-squared	0.714	0.577	0.514	0.621	0.729	0.768

Note: In this table, Panel A reports the benchmark regression results using a sample in which each observation combines a ranking official, his/her home district, and a year. The outcome variables are calculated as the average over the surveyed communes in that district. These regressions estimate the impact of an official's new promotion on infrastructure construction in his/her home district. Panel B reports the benchmark regression results using a sample in which each observation combines a ranking official, a commune in his/her home district that is not his/her home commune, and a year. These regressions estimate the impact of an official's new promotion on infrastructure construction in other communes in his/her home district. Controls include current average income per capita and population size. Robust standard errors in brackets are clustered at commune x year level. Statistical significance is denoted by *** ($p < 1\%$), ** ($p < 5\%$), and * ($p < 10\%$).

Table 8. Favoritism within subsample of communes with below-median average household income

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	0.0826 [0.0346]**	0.0621 [0.0339]*	0.0174 [0.0178]	0.0964 [0.0564]*	0.0340 [0.0242]	0.0842 [0.0372]**
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	569	761	570	569	760	570
R-squared	0.727	0.611	0.574	0.610	0.753	0.732

Note: This table reports the benchmark regression results for the subsample of communes with below-median average household income, as measured in 2002. Commune controls include current average income per capita and population size. Robust standard errors in brackets are clustered at commune x year level. Statistical significance is denoted by *** ($p < 1\%$), ** ($p < 5\%$), and * ($p < 10\%$).

Table 9. Favoritism by age gaps between ranking officials and home communes' chairs

Panel A. Subsample of ranking officials and home communes' chairs whose age gaps are below median

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	0.0427 [0.03]	0.101 [0.0372]***	0.0160 [0.0155]	0.0673 [0.0551]	0.0411 [0.0265]	0.0608 [0.0441]
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	561	778	561	561	775	561
R-squared	0.836	0.662	0.636	0.667	0.784	0.801

Panel B. Subsample of ranking officials and home communes' chairs whose age gaps are above median

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	0.0122 [0.0278]	0.0679 [0.0379]*	0.0197 [0.0248]	0.0446 [0.0634]	0.0438 [0.0388]	-0.000900 [0.0411]
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	594	755	596	594	753	596
R-squared	0.779	0.645	0.637	0.656	0.765	0.818

Note: In this table, Panel A reports the benchmark regression results for the subsample of ranking officials who are more likely to have close relationships with their home communes' leaderships, as measured by the age gaps between the officials and their home communes' chairs (i.e., age gaps of 9 and below). Panel B reports the benchmark regression results for the subsample of ranking officials who are less likely to have close relationships with their home communes' leaderships, as measured by the age gaps between the officials and their home communes' chairs (i.e., age gaps of 10 and above). Commune controls include current average income per capita and population size. Robust standard errors in brackets are clustered at commune x year level. Statistical significance is denoted by *** (p < 1%), ** (p < 5%), and * (p < 10%).

Table 10. Favoritism by family values

Panel A. Subsample of communes regions with above-median family value index

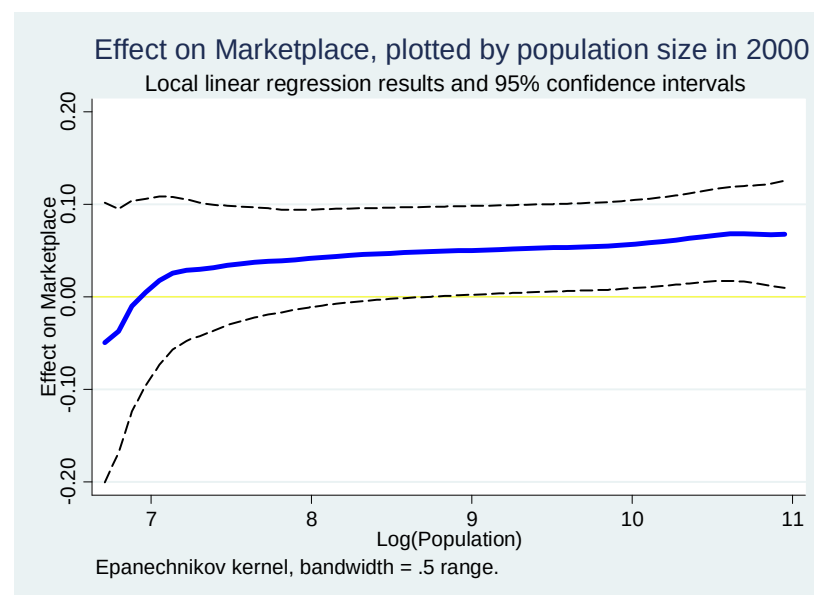
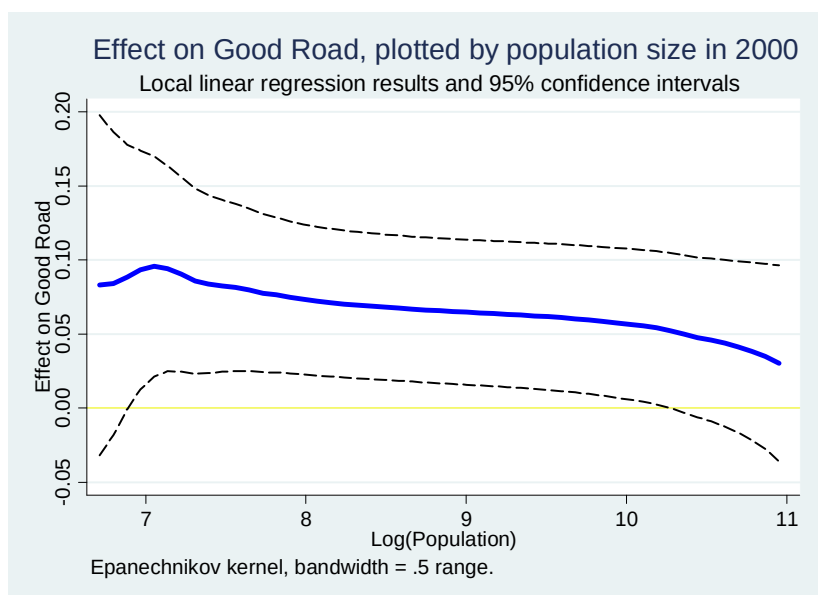
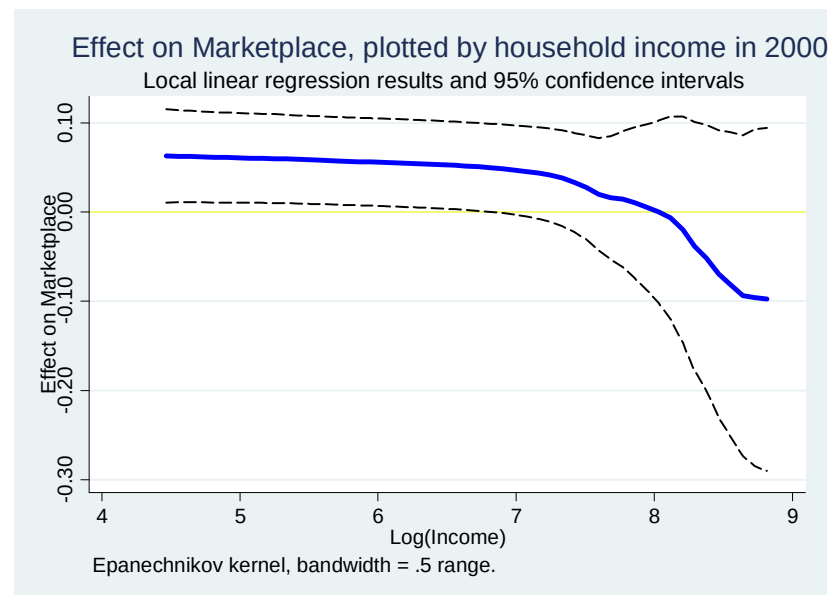
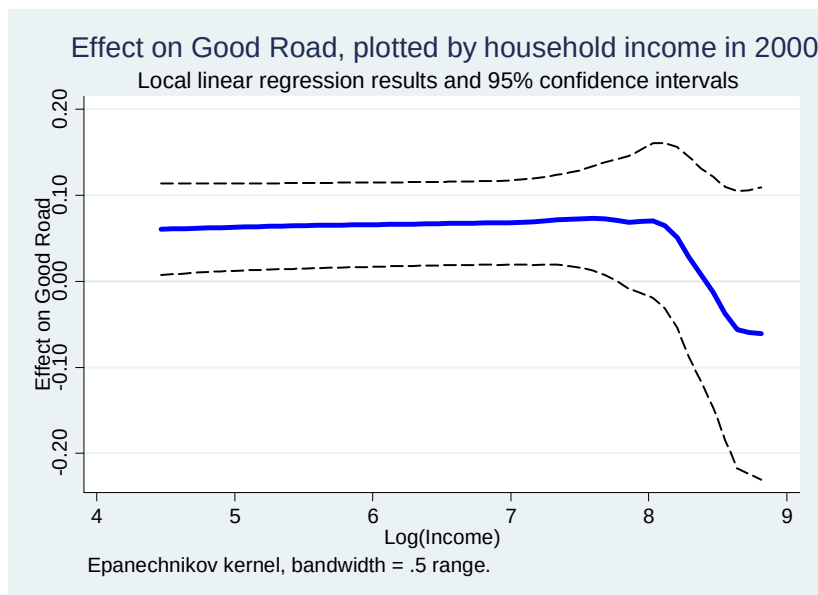
	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	0.0495 [0.0283]*	0.0969 [0.0344]***	0.0318 [0.0145]**	0.105 [0.0540]*	0.0293 [0.0235]	0.0567 [0.0393]
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	544	723	544	544	722	544
R-squared	0.705	0.588	0.347	0.587	0.741	0.773

Panel B. Subsample of communes regions with below-median family value index

	(1)	(2)	(3)	(4)	(5)	(6)
Time lag	Immediate	Immediate	1-year lag	1-year lag	1-year lag	2-year lag
Dependent variable	Radio station	Good Road	Preschool	Irrigation	Clean water	Marketplace
Power Capital	0.0266 [0.0281]	0.0233 [0.0349]	0.0174 [0.0194]	0.0320 [0.0464]	0.0670 [0.0305]**	0.0545 [0.0299]*
Commune controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Zone FE	Yes	Yes	Yes	Yes	Yes	Yes
Commune x Official FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	611	810	613	611	806	613
R-squared	0.772	0.576	0.619	0.588	0.709	0.775

Note: In this table, Panel A reports the benchmark regression results for the subsample of ranking officials coming from regions with above-median family value index (FVI), defined as the sum of World Value Survey answers on the importance of family ties and services to others (higher FVI means more important). These regions are Red River Delta, North East, and North Central. Panel B reports the benchmark regression results for the subsample of ranking officials coming from the remaining regions, which have below-median FVI. Commune controls include current average income per capita and population size. Robust standard errors in brackets are clustered at commune x year level. Statistical significance is denoted by *** ($p < 1\%$), ** ($p < 5\%$), and * ($p < 10\%$).

Figure 1. Effects of a native official's new promotion by commune household income and commune population in 2002



One Mandarin Benefits the Whole Clan: Hometown Favoritism in an Authoritarian Regime*

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Online Appendix Not Intended for Publication

I. Data Appendix

This appendix describes the data, sources, and variables used in "One Mandarin Benefits the Whole Clan: Hometown Favoritism in an Authoritarian Regime," (Do, Nguyen and Tran).

Data on Ranking Officials

We collect data on four groups of ranking officials: (1) Communist Party's Central Committee members, (2) Central Government officials, (3) Provincial Government officials, and (4) National Assembly's members. For each official, we record his position, its begin and end years, his year of birth, and the commune of his patrilineal hometown. One official can appear multiple times in the dataset if he held multiple positions or the same position in multiple terms during the period from 2000 to 2010.

Data on Central Committee members come from the official website of the Communist Party of Vietnam <http://www.cpv.org.vn/cpv/index_e.html>. The data cover all members of the 9th Central Committee (2002-2006) and the 10th Central Committee (2007-2011).

Data on Central and Provincial Government officials come from the 2000's, 2004's, and 2009's Yearbooks of Administrative Organizations, published by the Ministry of Interior Affairs. The data cover all officials starting from the rank of deputy minister (Central Government) and vice chair of Provincial People's

Committees (Provincial Government). However, we only include Provincial Government officials whose patrilineal hometowns are in the same provinces as their positions. These officials represent 70% of total Provincial Government officials.

Data on National Assembly members come from the Vietnam National Assembly's official website <<http://www.na.gov.vn/htx/English/C1330/#0TwLzt4Nw9UO>>. The data cover all members of the 11th National Assembly (2003-2007) and the 12th National Assembly (2007-2011).

Finally, we exclude 4 top positions in the country from the dataset to focus on the pervasiveness of favoritism beyond the top. These 4 positions are the General Secretary of the Communist Party of Vietnam, the President, the Prime Minister, and the Chairman of the National Assembly. For a subsample of "middle-ranking" positions, we further exclude all Deputy Prime Ministers, Vice Presidents, members of the Politburo and chair-holding members of the Central Committee.

Power Capital

Total number of ranking positions (excluding the above 4 top positions) held by an official connected to a commune (in commune-level regressions) or a district (in district-level regressions) between 2000 and the year of the observation. An official is considered connected to a commune (district) if his patrilineal origin is in the commune (district). In Vietnam, a person's patrilineal origin is legally recorded, shown on the identity card, and needs not correspond to his birthplace or residence.

Commune Characteristics and Infrastructures

We obtain data on commune characteristics and infrastructures from the Vietnam Household Living Standard Survey (VHLSS). The VHLSS, technically

supported by the World Bank, is conducted every two years (2002, 2004, 2006, and 2008) at both commune and household levels from a random, representative sample of about 2,200 communes out of about 11,000 communes in the country. The commune survey is conducted with several commune officials, while the household survey is conducted with a random sample of households in the commune.

We extract data from both surveys, including commune characteristics (i.e. area, population, average household income, average household expenditure, geographical zone, rural/urban classification), presence and quality of various types of infrastructure in the communes (i.e. roads, marketplaces, utilities, irrigation systems, schools, clinics/hospitals, cultural centers, radio stations, bank branches) and commune chairman characteristics (i.e. age, gender, education, years in position, previous positions).

Finally, we only keep communes classified as rural in the dataset, so as to avoid the complexity of infrastructure development in urban areas.

Radio Station

Binary indicator of the presence of a radio station in the commune in the year of observation. Data are available for 2004, 2006, and 2008.

Good Road

Binary indicator of better road access (i.e. asphalt or concrete roads) to a randomly selected village in the commune in the year of observation. Data are available for 2002, 2004, 2006, and 2008. When it is used as dependent variable, the result could be interpreted as impact on the proportion of villages with good road access in the commune.

Preschool

Binary indicator of the presence of a preschool in the commune in the year of observation. Data are available for 2004, 2006, and 2008.

Irrigation

Binary indicator of the presence of an irrigation system in the commune in the year observation. Data are available for 2004, 2006, and 2008.

Clean Water

Binary indicator of commune's access to clean water supply in the year of observation. Data are available for 2002, 2004, 2006, and 2008.

Marketplace

Binary indicator of the presence of a market place in the commune in the year of observation. Data are available for 2004, 2006, and 2008.

Aggregate Infrastructures

Sum of commune's infrastructure dummies, including *Clinic, Hospital, Preschool, Primary School, Middle School, High School, Electricity, Clean Water, Post Office, Cultural Center, Radio Station, Irrigation, Marketplace*. Data are available for 2004, 2006, and 2008.

Poor Commune Support

Binary indicator of commune's inclusion into the State's "poor commune support program" in the year of observation. Data are available for 2002, 2004, 2006, and 2008.

Infrastructures at District Level

At district level, each outcome variable is the average of the corresponding commune-level variable, taken over all surveyed rural communes in the same year and district.

Provincial Discretionary Policies (PDP) Score

We construct a composite measure of provincial discretionary policies (PDP) using provincial governance indicators taken from the Vietnam Provincial Competitiveness Indices (PCI). The PCI is a set of indices of industries' governance perceptions that has been systematically constructed from surveys of enterprises based in each province. It is the result of a country-wide project conducted since 2006 by the Vietnam Chamber of Commerce and Industry, with the help from the UNDP. The PDP score is calculated based on three indicators: (1) index of provincial leadership proactiveness, (2) index of the lack of informal costs to business, and (3) transparency score of the province. Specifically, $PDP = (1) - (2) - (3)$, averaged over 2006 to 2008, the period during which the PCI overlaps with our dataset.

Family Value Index (FVI)

We construct a family value index (FVI) by summing the answers to two questions in the World Value Survey's wave 4, 2001: (1) the importance of the family and (2) the importance of services to others. Data on those questions are only available for Vietnam in wave 4. The answers are added up, averaged and then ranked by region (the finest administrative information in the WVS). The above-median FVI regions (i.e. placing highest importance on family and service to others) are the Red River Delta, North East, and North Central. The others include North West, South Central, Central Highlands, South East and Mekong

River Delta (the median is computed over the effective sample of connections throughout the paper).

II. A simple conceptual framework

Existing economic theory has analyzed favoritism in auctions (Laffont and Tirole 1991, Burguet and Perry 2007), in the labor market (Prendergast and Topel 1996, Duran and Morales 2011) and in queuing for public resources (Batabyal and Beladi 2008). Ethnicity (Burgess et al 2011), gender (Abrevaya and Hamermesh 2012) and social pressure (Garicano, Palacios and Prendergast 2005) have been considered as bases for favoritism. In this section, we present a simple model to illustrate how hometown-based favoritism works, and predict how officials' power and motives shape the outcomes of this type of favoritism.

The model involves a sequential game between two utility-maximizing agents, the Official and the Budget Allocator.¹ The Official corresponds to newly promoted officials with special links to their place of origin. The Allocator refers to the government unit that has authority over budget allocations to communes. The Official cares about getting additional resource allocation for his commune, which often comes in the form of additional budget infrastructure projects such as roads, markets, schools and clinics. These additional resources can benefit the Official in two ways: by providing him with additional political support from his home commune/district, as observed in the case of pork-barrel politics, and by appealing to his social preference to improve the welfare of his commune/district of origin and his remote relatives living there. This social preference is understood as an inherent cultural trait. Let λ denote the administrative level of the place of birth. λ can be commune, district or province. A higher λ means a larger administrative level, with more potential to provide political support but

¹ For expositional convenience, we refer to the official as male and the local authority as female.

less social affection from the Official. The model allows for the comparison of different λ 's (commune versus district) to gain insight into the Official's motivation.

To achieve his objective, the Official has to work out a deal with the Allocator, who has direct control over budget allocation. The Official can give the Allocator certain favors, such as political promotion, that enhance the Allocator's utility by P , at a cost g for the Official. In return, the Allocator will channel an additional amount B from the budget to the Official's hometown's infrastructure projects, at a cost h for the Allocator. This favored allocation B is valued by the Official at $\pi(B, \lambda) + \sigma(B, \lambda)$, where π represents the utility from additional political support and σ represents the utility from social preference satisfaction. We pay particular attention to B , as it manifests explicit evidence of favoritism between the Official and Allocator.

We assume that the Official's cost function $g(P, r)$ is increasing and convex in P and decreasing in r , where r represents the Official's power such that higher r implies higher power. Next, the Allocator's cost function $h(B, d)$ is increasing and convex in B and increasing in d , where d measures institutional constraints on the Allocator's discretion. We further assume that $\pi(B, \lambda)$ and $\sigma(B, \lambda)$ are both increasing and concave in B .²

The Official is the first mover and makes an offer to the Allocator involving (P, B) . The Allocator will accept if it satisfies her participation constraint, namely that the benefit of accepting is not lower than the cost. As the first mover, the Official can fully appropriate the game's rent by making an offer such that the Allocator is indifferent as to whether to accept or refuse it. The offer then solves the following maximization problem:

² We assume that the costs of direct monetary transfers between the two agents are much higher than the costs of providing favor, so monetary transfers, or bribes, are not realistic options. In practice, exchanges of both bribes and favors may coexist. We refrain from modeling explicit bribes because it would not add insight to our empirical setup.

$$\text{Max}_{(P,B)} \pi(B,\lambda) + \sigma(B,\lambda) - g(P, r) \text{ s.t. } P - h(B,d) \geq 0. \quad (1)$$

We will now state three propositions about the existence, distribution and motives of favoritism. These propositions provide the basis for the subsequent empirical investigation presented in this paper.

Proposition 1: Assume that (A1): $\pi'_B(0,\lambda) + \sigma'_B(0,\lambda) - g'_P(h(0,d),r)h'_B(0,d) > 0$. There exists a unique solution (P^*, B^*) to this model, with positive favored allocation $B^* > 0$, determined by the following equations:

$$\pi'_B(B^*,\lambda) + \sigma'_B(B^*,\lambda) - g'_P(h(B^*,d),r)h'_B(B^*,d) = 0 \quad (2), \quad P^* = h(B^*,d).$$

Intuitively, this proposition shows that if there is positive net marginal benefit of favored allocation B at 0, then a positive level of favoritism will occur. As a result, even in an authoritarian regime where the electoral motivation is absent, if the marginal social motivation is sufficiently large then favoritism will arise. (Proof in the Appendix)

Proposition 2: (a) Assume that (A2a) the marginal cost g'_P is decreasing in r , then the favored allocation B^* is increasing in r ; (b) Assume that (A2b) the marginal cost h'_B is increasing in d , then the favored allocation B^* is decreasing in d .

Result (a) implies that a higher-powered official can exercise more favoritism for his home commune. This relation allows us understand the power structure in a political system through observing the favoritism of different officials. Notice that what matters is the cross derivative of g with respect to P and r , and not the first derivative of g with respect to r . A higher-ranked official can get a better deal because P and r are complements. Result (b) implies that favoritism is more widespread when local authorities have more discretionary power to make a deal. (Proof in the Appendix)

Proposition 3: If the marginal benefits $\sigma'_B(B, \lambda) + \pi'_B(B, \lambda)$ are increasing (decreasing) in λ (A3), then the favored allocation B^* is increasing (decreasing) in λ .

This result shows that the effect of administrative level λ on the value of favored allocation essentially depends on its effect on the marginal benefits (Proof in the Appendix). As discussed previously, it is realistic to assume that at a larger administrative level, social preferences become less important and political motivation more important. At a larger level, social connections arguably become less frequent or salient, so the improved utility derived from more favored allocation is less valuable, i.e. $\sigma'_B(B, \lambda)$ decreases when λ increases. On the other hand, a larger level is more politically influential, so additional favored allocation can potentially bring more benefit, i.e. $\pi'_B(B, \lambda)$ increases when λ increases. Overall, our prior on the effect of λ on the total marginal benefit, namely $\sigma'_B(B, \lambda) + \pi'_B(B, \lambda)$, depends on whether social preferences or political influences are more dominant. Empirically, evidence that B^* is increasing in λ is consistent with $\sigma'_B(B, \lambda) + \pi'_B(B, \lambda)$ being increasing in λ , in which case the social preference effect through σ'_B must have dominated the political motivation effect through π'_B .

We can also consider the special case where the Official is the same as the Budget Allocator, political favor exchange becomes irrelevant and the Official only has to pick B to maximize his net gain of $\pi(B, \lambda) + \sigma(B, \lambda) - h(B, d)$. This problem has a unique solution B^* that satisfies $\pi'_B(B^*, \lambda) + \sigma'_B(B^*, \lambda) - h'_B(B^*, d) = 0$ (as $\pi'_B(B, \lambda)$ and $\sigma'_B(B, \lambda)$ are both decreasing in B while $h'_B(B, d)$ is increasing). As in propositions 2 and 3 above, this unique solution B^* increases when d is lower (assuming that h'_B is increasing in d) and when $\sigma'_B(B, \lambda)$ is higher for every value of B .

This model provides a simple framework for understanding favoritism under various political systems, as previously examined in the existing scientific and journalistic literatures. In institutional environments with strong governance and high accountability, both g'_P (the Official's marginal cost to grant political favor) and h'_B (the Allocator's marginal cost to distort the local budget) are prohibitively high. The resulting amount of budget distorted by favoritism B^* is then minimal, if at all. This applies to strong democracies as well as non-democratic regimes with a well-functioning system of checks and balances on the majority of officials, such as Singapore's – the lack of political incentives in those regimes, i.e. low π'_B , may further dampen favoritism. In effect, it suffices to raise either g'_P or h'_B , i.e. either the accountability of high-rank officials or that of local administrative units, to curb B^* .

The model also shows that while evidence of favoritism from heads of state such as Colonel Gaddafi or President Félix Houphouët-Boigny abound, it is unclear whether favoritism is widespread in these contexts. A strong dictator may only tolerate his own favoritism and punish his coordinates'; this is a case of $g'_P=0$ for the dictator, but very high for everyone else. In such cases, democratization and/or decentralization could increase π' and lower h'_B , both leading to more widespread favoritism. For that reason, favoritism may also be found in democratic countries, such as in certain cases in the U.S. or India where the marginal cost g'_P is low.

The model's application to an authoritarian setting yields key empirical predictions on the effects of officials' promotions on home commune infrastructure, a manifestation of favored budget allocation. First, because of a lack of checks and balances, the marginal costs g'_P and h'_B are expected to be low in Vietnam, so the phenomenon of hometown favoritism is predicted to be widespread among officials, even beyond the top leaders (**Hypothesis I**). Second, hometown favoritism depends positively on the official's power in the

authoritarian hierarchy and on the home province's discretionary power (**Hypothesis II**). Third, hometown favoritism is most present where the attachment between the official and the hometown is strongest. We expect that the marginal social preference σ'_B is close to zero for communes aside from the home commune and that σ'_B for the home district is diluted to a much lower level than that of the home commune. Therefore, favoritism is predicted to decrease as we move from the home commune to neighboring communes or to the home district (**Hypothesis III**). While marginal political interest π'_B may be slightly higher at the district level, we do not expect it in practice to be of a relevant magnitude (as districts barely matter in Vietnamese politics). The subsequent sections will present the data, empirical strategy and results of the tests of these three hypotheses.

III. Proofs of Propositions

Proof of Proposition 1: The Lagrangian of this optimization problem, $\pi(B, \lambda) + \sigma(B, \lambda) - g(P, r) - \lambda[P - h(B, d)]$, implies the first order conditions:

$$\pi'_B(B, \lambda) + \sigma'_B(B, \lambda) + \lambda h'_B(B, d) = 0 \text{ and } -g'_P(P, r) - \lambda = 0.$$

The participation constraint is binding as $P = h(B, d)$.

These conditions yield:

$$\pi'_B(B, \lambda) + \sigma'_B(B, \lambda) - g'_P(h(B, d), r) h'_B(B, d) = 0.$$

This equation has a unique solution B^* because the left-hand side's derivative with respect to B is negative, as:

$$\pi''_{BB}(B, \lambda) < 0, \sigma''_{BB}(B, \lambda) < 0, \text{ and } g''_{PP}(h(B, d), r) [h'_B(B, d)]^2 + g'_P(h(B, d), r) h''_B(B, d) > 0.$$

The Lagrangian is concave in (P, B) because its Hessian matrix is negative definite. Therefore, $(h(B^*, d), B^*)$ is the unique solution to this optimization

problem under constraint. Furthermore, since the left-hand side of this equation is positive when $B=0$, the result of favored allocation B^* must be positive **(QED)**.

Proof of Proposition 2: (a) The partial differentiation with respect to r from equation (2) yields:

$$\begin{aligned} \pi''_{BB}(B^*, \lambda)B^{*'}_r + \sigma''_{BB}(B^*, \lambda)B^{*'}_r = \\ [g''_{PP}(P^*, r)h'_B(B^*, d)B^{*'}_r + g''_{Pr}(P^*, r)]h'_B(B^*, d) + g'_P(P^*, r)h''_{BB}(B^*, d)B^{*'}_r \\ \Leftrightarrow \{\pi''_{BB}(B^*, \lambda) + \sigma''_{BB}(B^*, \lambda) - g''_{PP}(P^*, r)[h'_B(B^*, d)]^2 - g'_P(P^*, r)h''_{BB}(B^*, d)\}B^{*'}_r \\ = g''_{Pr}(P^*, r)h'_B(B^*, d). \end{aligned}$$

The expression in the bracket on the left-hand side is negative while the right-hand side is positive as $g''_{Pr}(P^*, r) < 0$ based on the proposition's assumption. Therefore, $B^{*'}_r$ must be positive, indicating that the solution B^* is increasing in r **(QED)**.

(b) The partial differentiation with respect to d from equation (2) yields:

$$\begin{aligned} \pi''_{BB}(B^*, \lambda)B^{*'}_d + \sigma''_{BB}(B^*, \lambda)B^{*'}_d = \\ g''_{PP}(P^*, r)[h'_B(B^*, d)B^{*'}_d + h'_d(B^*, d)]h'_B(B^*, d) + g'_P(P^*, r)[h''_{BB}(B^*, d)B^{*'}_d + \\ h''_{Bd}(B^*, d)] \\ \Leftrightarrow \{\pi''_{BB}(B^*, \lambda) + \sigma''_{BB}(B^*, \lambda) - g''_{PP}(P^*, r)[h'_B(B^*, d)]^2 - g'_P(P^*, r)h''_{BB}(B^*, d)\}B^{*'}_d \\ = \\ g''_{PP}(P^*, r)h'_d(B^*, d)h'_B(B^*, d) + g'_P(P^*, r)h''_{Bd}(B^*, d). \end{aligned}$$

The expression in the bracket on the left-hand side is negative while the right-hand side is positive as $h''_{Bd}(B^*, d) > 0$ based on the proposition's assumption. Therefore, $B^{*'}_d$ must be negative, indicating that the solution B^* is decreasing in d **(QED)**.

Proof of Proposition 3: Suppose the marginal benefits are decreasing in λ , as in the case where social preferences outweigh political supports (the opposite case is proven analogously.) Let $\lambda_1 < \lambda_2$, so $\sigma'_B(B, \lambda_1) + \pi'_B(B, \lambda_1) \geq \sigma'_B(B, \lambda_2) + \pi'_B(B, \lambda_2)$

for every B , and B_1^* and B_2^* be the corresponding solutions. We now need to show that $B_1^* \geq B_2^*$.

Recall from equation (2) that : $\sigma'_B(B, \lambda) + \pi'_B(B, \lambda) = g'_p(h(B, d), r)h'_B(B, d)$. Denote this expression as $M(B)$. $\sigma'_B(B, \lambda) + \pi'_B(B, \lambda)$ is decreasing in B as $\sigma + \pi$ is concave in B , while $M(B)$ is increasing in B as g and h are convex.

Assume that $B_1^* < B_2^*$, then $M(B_1^*) = \sigma'_B(B_1^*, \lambda_1) + \pi'_B(B_1^*, \lambda_1) \geq \sigma'_B(B_1^*, \lambda_2) + \pi'_B(B_1^*, \lambda_2) \geq \sigma'_B(B_2^*, \lambda_2) + \pi'_B(B_2^*, \lambda_2) = M(B_2^*)$, contradictory to $M(B)$'s increasing in B . Therefore, $B_1^* \geq B_2^*$ **(QED)**.

IV. Semi-parametric method used for Figure 1

We modify the benchmark empirical regression in section IV.B to model the potentially heterogeneous effect of officials' promotions on infrastructure improvements as a non-parametric function of a baseline variable (either commune average income per capita or population size), denoted as x_c :

$$Infrastructure_{cpt} = \beta(x_c)PowerCapital_{p,t-L} + \gamma(x_c)\mathbf{X}_{cpt} + \delta_t(x_c) + \delta_{cp}(x_c) + \varepsilon_{cpt}.$$

Figure 1 plots the estimated function $\beta(x_c)$ in each specific case, based on the baseline variable and the outcome variable (either road quality or marketplaces.) The function $\beta(x_c)$ is estimated from semi-parametric local linear regressions of the outcome variable (local road quality or commune marketplace) at each value of x_c , weighted by a Gaussian kernel with a bandwidth of 10% of the total range of x_c , on the treatment variable of *Power Capital* (with a two-year lag for presence of commune marketplaces), including with the controls and fixed effects in the benchmark regression. The observed pattern is much similar across a wide range of cross-validated bandwidths (see Li and Racine 2006, ch. 2.) To provide an example, in Figure 1's first plot we divide the full range of the log of commune's average income into a 100-point grid, run a local linear regression of village road quality on *Power Capital* with Gaussian kernel weight at each of these points,

using all controls and fixed effects in the benchmark regression in Table 2A, and then report the estimated coefficient of *Power Capital* as a point on the graph.

V. Additional references for online appendix

- Abrevaya, Jason and Daniel S. Hamermesh (2012). "Charity and Favoritism in the Field: Are Female Economists Nicer (To Each Other)?" *Review of Economics and Statistics*, 94(1), 202-7.
- Batabyal, Amitrajeet A. and Hamid Beladi (2008). "Bribery and Favoritism in Queuing Models of Rationed Resource Allocation." *Journal of Theoretical Politics*, 20, 329-38.
- Burguet, Roberto and Martin K. Perry (2007). "Bribery and Favoritism by Auctioneers in Sealed-Bid Auctions." *B.E. Journal of Theoretical Economics*, 7(1), 23.
- Duran, Miguel A. and Antonio J. Morales (2011). "Favoritism in the Matching Process: The Rise and Spread of Favoritism Practices in the Labor Market." Unpublished paper. University of Málaga.
- Garicano, Luis, Ignacio Palacios-Huerta, and Canice Prendergast (2005). "Favoritism Under Social Pressure." *Review of Economics and Statistics*, 87(2), 208-216.
- Laffont, Jean-Jacques and Jean Tirole (1991). "Auction Design and Favoritism." *International Journal of Industrial Organization*, 9(1), 9-42.
- Li, Qi and Jeffrey Scott Racine (2006). *Nonparametric Econometrics: Theory and Practice*. Princeton, NJ: Princeton University Press.
- Prendergast, Canice and Robert H. Topel (1996). "Favoritism in Organizations." *Journal of Political Economy*, 104, 958-78.