Economic Development, and the Retreat of Political Clientelism? An Experimental Study of Modern Banking in Manila, Philippines.

Nancy Hite-Rubin
The Fletcher School, Tufts University

****DRAFT – Feb 2015 ****

Prepared for 2015 UC Berkeley "Brokering Votes: Clientelism in Comparative Perspective" Conference
Center on the Politics of Development,
University of California Berkeley February 27th-28th 2015

DO NOT CITE WITHOUT AUTHOR PERMISSION,
COMMENTS WELCOME ☺
Nancy.Hite@tufts.edu

Why do the poor in lower-income countries consistently eschew programmatic politics in favor of political clientelism? Considerable emphasis is placed upon the nefarious role of clientelism and its persistence in poor countries, wherein this mode of political mobilization is most common among the least wealthy, and thus most marginalized, voters. It is a widely accepted that clientelism retreats as societies develop economically. However, the mechanism by which this transformation unfolds is still up for debate. Some scholars point out that poor voters are "cheaper" to sway through clientelistic strategies, and thus as incomes rise, the cost-benefit calculus for leaders swings in favor of programmatic strategies (Weitz-Shapiro 2013; Susan Stokes, Thad Dunning, Marcelo Nazareno, and Valerie Brusco 2013). Alternatively, others argue that poor voters are more ambiguity averse, and thus rationally prefer the immediate benefits from local brokers over promises for abstract, programmatic policies (Baldwin 2013; Thachil 2014). Whether one accepts the demand- or supply-side view of political clientelism's demise, in either scenario income is the integral driver of change. But what if there were another explanation for this connection; one unrelated to material wealth altogether?

In this article, I argue that poverty and political clientelism are connected via institutional informality; and furthermore, that along with economic development comes a greater degree of formality, and thus the dissolution of such clientelism. Exerting political control in this manner requires expansive informal networks capable of gathering and processing information, and characterized by face-to-face contact. Much of the "work" of clientelism takes place in the informal economy, where both economic and political transactions rely upon affective, personalized and reciprocal relations. The socio-political environment that is most amendable to such a process does not crucially depend upon poverty, but informality. To test this claim, I utilize a field experiment that alters just a single aspect of economic development – the formalization of finance – while holding income constant. What I find is that still-poor voters are less enmeshed in informal financial networks, and consequently pull away from politics. As a result of the greater market formality, they have become more skeptical of political institutions, and are therefore less viable targets for clientelistic power brokers. This finding, that formalizing market institutions alone has this effect, has important ramifications for the study of political clientelism and democracy promotion. We may not need to wait for economic development to run its course, and for incomes to rise above some magic threshold, to break the cycles of political patronage.

To test the hypothesis that market formality alone can dampen political clientelism, I piggyback upon Dean Karlan and Jonathan Zinman's economic development experiment devoted to expanding access to formal credit. Their experiment involved 1,978 low-income residents of the peri-urban slums communities of Manila's capital periphery[1], all of whom had no prior formal banking experience. The treatment

[1] By "Metro Manila", I refer to people residing within the contiguous urban sprawl emanating from the

group received a loan and signed a formal contract with a metropolitan bank. The control group was left to continue informal, and often politically embedded, financial practices. The results of the economic experiment were that the expanding access was sustainable in terms of bank default and profit structuring, but that there was no tangible income effect for participants (Karlan and Zinman 2009). Thus, the ancillary experiment afforded a unique opportunity to test whether market formality, as a component of economic development, has an independent influence on political behavior of these informal business people 2-5 years later. Results from my survey instrument indicate that the individuals who were experimentally brought into more formal economic circumstances became less engaged in politics. The intention to treat effect (ITT) for the study is that people become less interested in electoral and non-electoral political activities, less inclined to discuss political issues, are more skeptical of state institutions, and display lower political efficacy.

I revisit the experimental findings in further depth to tease out the mechanism behind the "disengagement effect." This work combines qualitative evidence with spatial and financial data to verify the mechanism by which formal finance leads to changing political orientation. First, I geo-reference individual data for home neighborhoods, businesses, and financial service centers linked to 1,371 out of the 1,978 original experiment participants. Second, by combining information collected from the financial diaries and field analyses of 273 barangay economies, I rank communities according to how politically charged informal finance is there, based upon a political typology of informal lending practices that I developed through field observation. Since financial diary data was collected at the outset of treatment, I was able to use their financial portfolios to determine which localities were clientelism "hot spots." These "hot spots" are localities wherein informal finance was mediated through power brokers. This enabled me to test a more robust hypothesis – economic formality leads to political disengagement in localities where clientelism dominates. Through a spatial mediation analysis, I show that it is not simply the movement towards formal finance that results in lessened political engagement; the nature of pre-existing politicized financial networks within the barangays is also critical.

These ancillary results further support my thesis, by demonstrating that people who gain access to greater economic formality, and opt out of lending arrangements that are embedded within clientelism, are most effected. This suggests that access to formal financial services is most likely to negatively influence political involvement in societies where political patronage prevails.

The remainder of the article is organized as follows: The following section

---

nation's capital Manila. This area spans about 100 km from east to west, as well as north to south. There are four provinces covered by this study - Manila, Cavite, Laguna and Rizal. The population of Manila province, sometimes referred to as the National Capital Region (NCR), is estimated to be about 12 million (National Statistics Office of the Republic of the Philippines. Retrieved 6 April 2012). Yet, population estimates of the contiguous urban area tend to be higher than 20 million.

provides an overview of the politics of economic informality in the context of the Philippines case study. Interviews with the original project participants, local political elites and various informal moneylenders indicate that informal debts and political relationships are intimately bound up with one another, and that informal finance is often co-opted by politicians who employ debts for political ends. I introduce the term "local money politics," the phenomenon whereby patronage politics dominates informal markets. The next section introduces the ancillary experimental design utilized to test the relationship between informality and political clientelism. Here, the spatial and survey data are introduced, along with the fieldwork methodology used to locate and geo-reference the home neighborhoods, businesses and financial service centers of 1371 out of the 1978 participants. The "Intention To Treat" section covers the main results that treatment assignment resulted in less engagement in politics. The key interpretation of these results is that as informal and traditional banking practices are replaced by modern banking, people have less face-to-face interaction and less incentive to engage with clientelistic politics. The mechanism underlying the "disengagement effect" is further demonstrated through a geo-statistical analysis, which shows that people who replace loans that were especially politically embedded display the greatest treatment effect. In other words, the people who become most removed from politicized, informal lending practices become the most politically disengaged. Finally, the concluding section recaps the findings, and considers a set of broader implications for the dynamic between economic informality and clientelism in the developing world.

Informal Markets and Political Clientelism

In an informal economy like the one studied here, people lead dynamic lives fraught with risk and uncertainty. Life within informal markets translates into low income, few assets, and little savings (Collins 2009; Armendariz and Morduch 2010). This is mainly because these markets do not secure property rights and fail to provide safe means to save, borrow, or invest money. Clientelism thrives within such informal markets, as people must rely upon local political ties to meet economic needs that the informal market does not. The greater the degree of informality for both the market and system of governance, the greater the capacity of power brokers to leverage these needs as a medium to traffic votes.

The connection between poverty and clientelistic practices relies crucially upon informal institutions. From the favelas of Brazil to the wards of Bangladesh, the cells of Uganda and barangays of the Philippines, local power structures tend to gain strength when informal finance is ubiquitous. This is because access to money is integral to everyday survival, and when people do not have formal means of banking they must rely upon personal relationships. Such informal financial markets provide ample opportunity for power brokers to attract, monitor, reward and punish clients. What makes people susceptible to clientelism is not necessarily a deficiency of income, then, but exposure to and dependence upon these informal ties.

Conventional views of Philippine political economy focus on its weak institutions, which thwart economic growth and exacerbate inequalities. Terms like cronyism, booty capitalism,[2] plunder, dynastic politics,[3] machine politics, and clientelism[4] are all employed by various scholars to explain how the Philippines' political system has veered away from the social contract.[5] The idea that personal ties override structured obligations is fundamental to all of this academic discourse. As long as politicians, strongmen and bureaucrats are conditioned and/or sanctioned to place the personal over the public good, social and economic progress will be stifled.

To understand the wedding of informality to political clientelism in the Philippines and other developing societies, we must begin with an analysis of the local political context. In the Philippines, most informal market activity is carried out within the local village, known as a barangay, which is the nexus not only for markets, but politics; it is often the gatekeeper for all formal, legal and financial institutions. Barangays serve as the locus of community participation for most people, since they are far more accessible locally than higher levels of government. Most people in the Philippines survive on very low levels of income and work informally in activities based predominately within their barangay, and thus rarely venture further than five miles from their homes.

The barangay arrived at its current legal status, as the smallest official administrative unit in the Philippines, upon the passage of the Local Government Code of 1991. After the People Power Revolution and reinstatement of political democracy in 1986, the Philippine government granted constitutional status to nearly 42,000 barangays, relinquishing considerable fiscal responsibility and power.[6] The barangay receives transfers from the central government and proceeds from local taxes, licenses and fines. It is required to provide basic public services such as health care, street maintenance, policing, informal banking and waste management. In practice, unpaid local residents are compelled by local social networks to undertake most of these services.

Although some of the barangays were created in 1991, the majority of them have historical roots. When the Spanish colonists arrived in the 16th century, they found many independent villages known as "barangays". Under what is known as the "baranganic"

2 Booty capitalism: (Hutchcroft 1998; Hutchcroft 1991, 2008, 2000; Hutchcroft and Rocamora 2003)
3 Dynastic politics: (McCoy 1993; Guzman 2003) Celoza 1997; Simbulan 2005) (Trocki 1998; San Juan 2007; Junker 1999;
4 Clientelism: (Nowak and Snyder 1974; Scott 1969; Scott 1972; Keefer 2002)
5 These works describe Philippine politics using the following terms: cronyism (Luyt 2007) (Sidel 2000); patronage (; Kasuya 2005; Sidel 2004, 1997) (Tria Kerkvliet 1995;Pinches 1997); bossism (Sidel 2004); pork barrel politics(Kawanaka 2007, 2007) (Gutierrez 1998; Parreño 1998); booty capitalism (Hutchcroft 1998); particularistic (Candler 2014; Hodder 2007; Dumont 2007)
6 see (Republic Act No. 7160, Local Government Code of the Philippines 1991)

system, tribal chieftains already governed indigenous tribes throughout thousands of islands.[7] The Spanish appointed friars to each barangay in an effort to conquer and Christianize the people, renaming each barangay after the priest who had Christianized it. Since these communities were organized by the Spanish colonial administration through local parishes, political activities were also local, and the "friars were the state" (Hodder. 2000 p. 67). Over time, the Spanish extended their authority beyond the Catholic Church, appointing Barangay chiefs, "cabeza de barangay," to govern the units and form a loyal elite under colonial rule. This blending of church, state and economy at the local level is still very much alive. To this day, each barangay holds a fiesta in honor of their patron saint, which is typically one of the biggest events of the year.

After colonization, the barangay maintained its organizational structure while gaining a greater degree of legal recognition. During the American occupation, municipalities were defined more clearly, but the barangay's structure and role as the smallest administrative unit remained unchanged. Throughout the 20th century the Philippines population grew, and many poor agricultural barangays became peri-urban slums.

On the first anniversary of Martial Law on September 21, 1974, authoritarian ruler Ferdinand Marcos issued a decree establishing the barangay as the smallest form of government, making it a focal point – ironically -- for "participatory democracy." The barangays were pressed to mobilize voter participation in elections held by the dictatorship. A decade later, opposition supporters who joined forces to end the Marcos Regime dubbed what had once been called the "Barangay Day" the "National Day of Sorrow" (Ayson 1998). With the People Power revolution in 1986, the Philippines became a democracy once again, and the barangay's role was officially recognized in the constitution five years later.

In a continuation of the pre-colonial and Marcos eras, an elected official, known as the barangay captain, heads the modern barangay. This is typically someone who is relatively well off and has personal ties to people in higher positions of government. The Barangay Hall, the structure where barangay-related business is carried out, is usually both physically prominent and the hub of social life. Although all barangays are guaranteed a sizable budget under the Local Government code, the quality and size of the hall itself varies widely depending upon the captain's unofficial allegiance to certain political parties, and the district's own accountability when it comes to spending. The halls vary from very large, first-rate facilities to makeshift shacks with dirt floors and no running water. This enormous variation does not appear to correlate with the socioeconomic conditions of the barangay citizens, who are consistently very poor.

Barangays throughout the Philippines share the same executive and administrative organizational structure. In addition to the captain, the hall has a legislative council consisting of seven councilors and one youth councilor. The council people, known as

---

7 See (Constantino 1975)

"Kagawads," are responsible for helping the captain run the Hall and deliver public services to the community.[8] The Kagawads and the captain together have nearly complete control over public services that include policing, maintaining the streets and infrastructure, providing health services, waste management, local business registration and finance, and education. In most communities, the Barangay Hall carries out these functions with the help of multiple unpaid volunteer groups.

All barangays are governed by an informal, yet very comprehensive justice system. They are policed by "Tanods," voluntary watchmen with the authority to arrest people for petty crimes and mediate disputes. The legal body, "Lupon Tagapamayapa," consists of a council chosen by the captain and officiated under martial law. The creation of this justice system has effectively transferred power from traditional landholding patrons to the captain, who in turn often forms patronage bonds with municipal government authorities (Silliman 1985). All disputes in the barangay are first brought to the captain, who may elect to have the dispute settled by the members of the Lupon Tagapamayapa. This village-level mediation process is a mandatory precondition for any formal legal arbitration.

Such an informal arrangement gives the barangay captain substantial power, and provides people with considerable incentive to be on good terms with him. It has been suggested that this system "reduces the political significance of local elites by channeling dispute processing through only the barangay captains" (Silliman 1985). Unfortunately, its ultimate effect is not to loosen the grip of patronage politics, but simply to confer the role of patron onto the captain and his chosen successors. The passing of the torch from traditional landholding patrons to barangay officials is particularly pronounced in areas that have transformed from agrarian economies to semi-urban slums, in tandem with the accelerated economic development of recent decades. Often, power was transferred from the right hand to the left, or to a brother or son.

The barangay captain's social influence over everyday life parallels his considerable official authority. Known as the *paterno* to the people, he visits personally with nearly everyone who lives in the barangay. The captain and others greatly involved with the local political structure are typically from the more socially prominent families, and often tied to the local church. One captain in the city of Quezon disclosed that he has over 400 godchildren. In another barangay, the captain is an active member of three churches representing distinct branches of Christianity. The interviewee's explanation was that having additional religious affiliations increases his social circle. Such a blurring of church and state is unsurprising, given that barangays were formed under Spanish rule in order to both govern and Christianize the people.

8Typically, Kagawads are people who have themselves reached the three-term limit for barangay chairman, or have aspirations to run for chairman when the current chairman meets his three-term limit. Sometimes, a Kagawad is placed to maintain order in a "purok," a small subsection of the village. For more on organization of Philippine villages see (Kajisa 2007; Rogers 1985; Durlauf 2002).

The barangay social circle is highly effective at mobilizing “volunteers" to perform public services at no cost. The most prominent volunteer groups are health workers, neighborhood police and street cleaners. People are expected to give back to the community according to their ability. Most of those who volunteer extensively lack formal employment; they find that their participation provides both insurance and material reward. Many whom I interviewed have been working either officially or unofficially for their local barangay for many years. When discussing their motives, they often describe benefits as being both social and material. One person interviewed said that she plans to run as a Kagawad, so that she can have a latrine built outside of her home. Often people explained to me that the very poor seek out local political connections for “dory”, interest-free loans and gifts. Those in more fortunate positions may themselves become politicians in order to emphasize their high financial and social status. This culture of personalistic politics functions to redistribute wealth in a highly discriminatory and arbitrary manner.

The precarious living circumstances across the Philippines often mandate that the poor move to new barangays, where they lack social connections. This is common when typhoons have destroyed squatter communities, or a provincial governor declares an area to be eminent domain for development projects. Many other people move to the outskirts of Manila from more rural provinces, due to economic hardship. Yet another reason is that traditionally, women who marry into a new clan must often move to new barangays. Thus, there are many structural and cultural reasons why a person may not have historical roots in her particular barangay, even though the barangay itself predates the Colonial era. The lack of such roots and connections will significantly circumscribe people’s social, political and informal economic prospects.

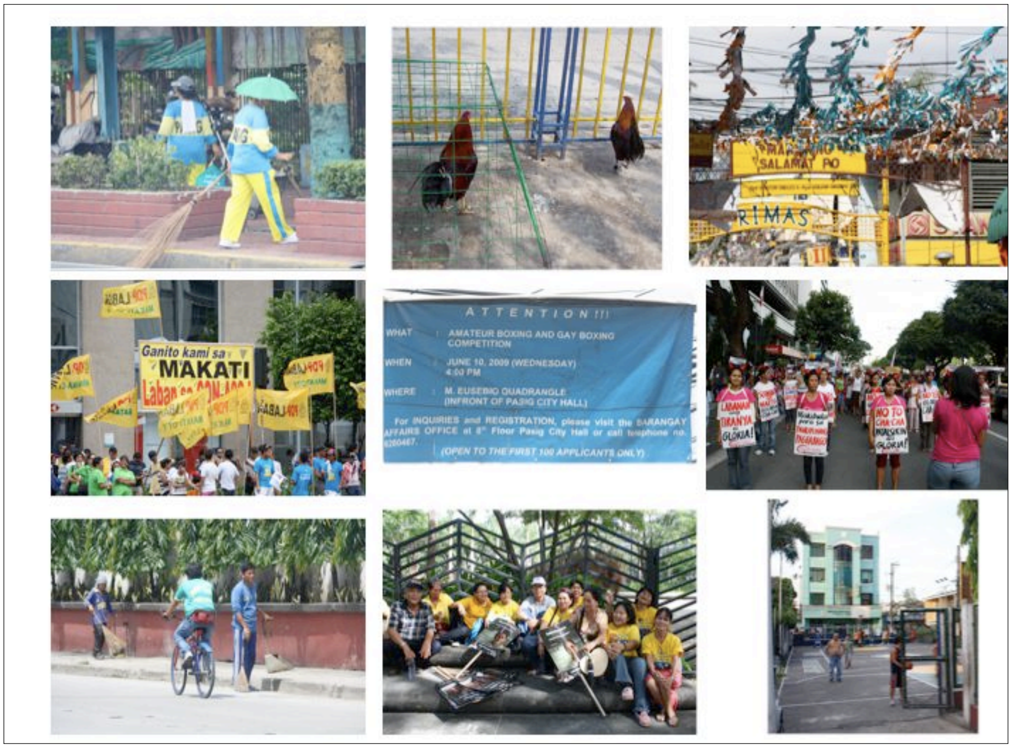


Figure 1: Local non-electoral political participation is prevalent. From upper left: 1. Local, uniformed volunteers cleaning streets in their barangay. 2. Two prize roosters employed for barangay cockfighting event. 3. Barangay Fiesta celebrations. 4. City-level political demonstration 5. Poster announcing city boxing tournament to be held through the Barangay Affairs office. 6. A women's group demonstrating against President Arroyo's proposed constitutional amendment. 7. Two barangay volunteers sweeping, while a citizen patrol volunteer from the adjacent barangay passes on bike. 8. Group photo of Barangay Captain, staff and volunteers. 9 Local residents play basketball at the basketball court in front of the barangay headquarters.

The majority of people living in these barangays are poor, which is both a cause and effect of their socio-political marginalization. Their position on the periphery is essentially equivalent to a "poverty trap," which effectively excludes them from the elite positions in local politics as well as the economy. Such reinforcement of low personal and material status often spirals, leading many of those on the losing end to feel wary of "politics." For these people, the informal market within the barangay provides very little economic opportunity, since local elites control the markets and public services. Far from being considered benevolent arbitrators, these power brokers are often feared and secretly loathed by poor business owners. Individuals often express that they feel inclined to remain on good terms with Kagawads and other political elites, who control *lokal na pera politika* ("local money politics").

The tension between local vendors and the barangay establishment is well illustrated by the lesson I learned one day when trying to locate one individual in a barangay in Paranaque, a municipality south of Manila. I erred by accepting the help of a Kagawad, who easily located the homes of three people I needed to interview. Being introduced by the Kagawad resulted in disaster, since not a single person was willing to speak to me; one even escaped from a back window to avoid confrontation. The problem was not my intrusion into the community per se, but the conviction of local business people that a visit from a Kagawad signifies bad news. This experience illustrates the coercive nature of barangay politics, and the necessity of locating people within the slums without the assistance of elites, no matter how difficult that may be. It is also worth highlighting that this particular reception contrasts drastically with all of the other interviews, where people enthusiastically and generously invited me into their dwellings.

Community involvement can also take less coercive forms while remaining politically relevant; many people participate in social activities directed by the barangay. As mentioned earlier, the Barangay Hall and local church are usually the social focal points for these events. The biggest of these is the Barangay Fiesta, which is held annually in honor of the barangay's patron saint. The entire community is decorated, and all local activity and business is directed towards the event. The fiesta is akin to a localized Carnival. The celebrations often consist of parades, prize raffles, beauty pageants and sports tournaments. Figure 1 provides a few typical snapshots of barangay social and political life. From voluntary street cleaning to athletic tournaments, there are plentiful opportunities for local political engagement that can be both materially and socially appealing.

For many people, economic survival is determined by both local economy and politics of the barangay, which are interdependent. The lack of clear property rights and opportunities within these informal markets reinforces the authority of elites, who are notorious for meddling in the local economy and Lupon Tagamayapa. When people lack formally sanctioned property rights over the means of acquiring capital, they live in the "shadow of the state" and face great uncertainty and vulnerability. My argument expands upon Hernando de Soto's 1989 thesis, which argues that access to property rights is key to transforming people's political lives and improving state institutions. The particular property right most crucial to small business owners, who do not have fixed assets, is their right to borrow, save and invest their income in accordance with the law.

Like poverty, informality is self-reinforcing. When people have neither formal title to the place where they live, nor official employment, nor any assets, they are usually unable to open a bank account. Yet, bank accounts are vital in enabling people to save, invest and build enough capital to acquire formal property in the first place. People who are informally employed do not have the same assurances, and are unlikely to be deemed "bankable" by formal financial institutions. Thus, when such people need money immediately or want to invest, they are required to do so informally, leading them to remain dependent on these financial relationships. Often described as a "poverty trap," this complex cycle of informal economic dependency and lack of formal opportunity is mutually reinforcing, and difficult to disentangle. In this context, my study examines how one such aspect of informality, banking practices, can be transformed by outside forces, and how this may help to overcome the poverty-clientelism dynamic.

In a recent World Bank study, Demirguc-Kunt and Klapper (2012) show that in most developing countries, only 25 to 50 percent of the population have bank accounts. Yet these estimates have risen considerably over the last decade in the wake of the "microfinance revolution," and are expected to continue as billions more people gain access to formal services. The people studied in this banking experiment are paradigmatic of the billions of people whose political and economic lives are changing. The question at hand is how, and to what degree, does such increased market formality crowd out the preexisting, informal institutions of local money politics and political brokerage? As Cleary and Stokes aptly point out, "clientelism only functions when both voters and political brokers are tightly enmeshed in personal networks, networks that allow the brokers to punish individual voters who defect from their implicit contract – to hold them "perversely accountable" for their votes" (Cleary and Stokes 2006, p. 10).

Ancillary Experiment

To test the hypothesis that modern banking may erode the grip of local brokers, I utilize a randomized controlled experiment, jointly designed and carried out by Dean Karlan of Yale University and Jonathan Zinman of Dartmouth College.[9] The idea behind the experiment is simple: from 2004 to 2007, nine commercial bank branches implemented a revised underwriting scheme to randomly accept bank applicants who would otherwise traditionally be rejected for loans. The purpose of the economic development project was to test the viability of banking for the "unbankable." Over the course of three years of regular operations, the banking partners recruited 1,978 individuals; 1,382 received a substantial loan (treatment group), and 507 were not offered a loan (control group). The people in our sample, much like voters targeted by political machines elsewhere, had few to no assets, spotty paperwork, and zero experience with formal banking. The study is double-blind, since neither the bank officers nor the clients were made aware that they were part of a subsidized experiment.[10]

As described in their paper, "Expanding Microenterprise Credit Access: Using Randomized Supply Decisions to Estimate the Impacts in Manila" (2009), the original experiment was designed to test whether individuals assigned to receive formal bank

---

[9] Dean Karlan is President and Founder of IPA, Innovations for Poverty Action, a non-profit research organization dedicated to generating knowledge through randomized evaluations of how to reduce poverty. Jonathan Zinman is a research affiliate of IPA, who focuses on inter temporal choice and household finance.

[10] The experiment was conducted without the explicit knowledge of either the bank employees or bank applicants. The underwriting software was altered, enabling both parties to remain unaware that a given applicant was to be tracked as part of the study. After the micro-banking program was completed, participants of treatment and control were contacted for a follow-up interview. They were not informed at this time of their status as treatment or control. The follow-up interview was approximately 3 hours long, and asked mostly about household economic factors (nutrition, bills, loans). My survey questions on political engagement were inserted in the middle of the survey.

loans were made economically better off than those who continued informal banking practices. Their overall finding is that access to formal banking does not show an income effect, but does correspond to marked improvements in money management. The absence of any wealth effect offers an extraordinary opportunity to identify the role of institutional change in impeding clientelism.

The study sample consists of informally employed people, referred to in the economics literature as "micro-entrepreneurs," whose livelihood depends upon informal credit relationships. These "unbankable" applicants live in pseudo-formal and informal settlements throughout the urban periphery at living standards above what would be considered subsistence level, but still below what many regard as the poverty level.[11] The average size of loans presented to those assigned to treatment was 250 USD, which might equal a household's 6-month salary. The loan represents a life-changing cash advance for individuals whose savings are close to zero, and who generally must rely on informal financial arrangements involving two or three dollars at a time. The formal capital account enabled people to invest in their existing home businesses (buying consumer durables such as stoves, or groceries), start new businesses (for example, street vending), or pay down informal debts (to local money lenders). The people in the study are representative of Filipino society; the wealthy elites (top 10 percent) and poorest of the poor (bottom 10 percent) have been excluded.[12]

The aim of this ancillary experiment is to illuminate how and why people respond politically to market modernization. In order to accomplish this, the field experiment needed to actually change the treatment group's orientation to the market while leaving the control group with the status quo. This required that the people randomly assigned to receive formal bank loans (treatment) become more heavily engaged in formal market activities.[13] In other words, to validate the experimental treatment I must first address how assignment to treatment affects people in both a direct and indirect financial sense. Directly speaking, assignment to treatment benefited from a 100% take-up rate, since every person in that group was immediately offered a loan. The experiment can thus be thought of as a comparison of the lives of 1,610 people who walked home from one of

---

[11] Statistics, comparisons, and definitions of "poverty" are highly contentious (cite Manchester paper): the average family monthly expenditure of just 1,315 pesos—roughly 27 USD—is considered to be the subsistence level. Household size in the Philippines is particularly large relative to the number of income earners, which can distort the interpretation of household consumption rate. Another popular metric for poverty comparisons is the dollar or two dollar per day/per person consumption rate.

[12] It could potentially be confusing that "candidates" are just above subsistence level, yet the sample includes those ranging up to the top 10 percent. This apparent discrepancy is because the vast majority of people living in the Philippines can be argued to be living at subsistence level, which effectively drags the average downward.

[13] For the purposes of this study, formal market activities are defined as involving transactions with institutions rather than personal exchanges (banks as opposed to local patrons). This distinction is clarified in Chapter 4, "Informal Markets, Patronage Politics and the Survival of Small Business Owners."

the 9 bank branches with a life-changing loan, versus 367 individuals that went home empty-handed. The survey on political engagement was implemented three years after this event; sufficient time to adjust to new economic circumstances. The more important question, however, is exactly how treatment influenced the level of economic formality – the key determining factor of my study.

The movement towards economic development, either at a societal level or specifically for the individuals in this study, is not necessarily binary. Each person in the study, regardless of treatment assignment, had a financial portfolio comprised of varying informal financial arrangements. Prior to assignment, the average individual had seven informal financial agreements and zero formal agreements (the latter being the original selection criteria). At day one of the experiment, the average person in the treatment group has the exact same number of informal liabilities, with the key addition of one considerably larger formal bank loan.[14] From this point on, the treatment group shifts towards greater formality through two mechanisms. First, the assignment to treatment, by definition, means people have formal loans for the first time.[15] Second, the influx of cash enables the treatment group to pay down informal debts, thus reducing interaction with informal creditors.

The analysis presented in Table 1 indicates how experimental treatment resulted in a movement towards modern markets in each of the ways just described. The financial activities of both treatment and control groups were tabulated to determine whether assignment to treatment was associated with greater formal market exposure, as well as lower informal market exposure. The probit analysis depicted in Table 1 demonstrates the strong relationship between treatment and a shift towards formal transactions. "Formal Bank Loans" is a frequency index for the number of bank accounts that people have at the time of the follow-up survey (3 years after treatment assignment).[16] The index was compiled at the individual level; each formal account opened results in a one-point increase in that individual's formal market behavior index. As a counterpart, I also created individual indices to measure the frequency of loans obtained from informal sources. "Informal Group Loans" represents the summation of loan-based activities conducted with local lending networks, such as "local ngo," "credit cooperative" or "paluwagan."[17] The regression results displayed in Table 1 indicate that assignment to

[14] For example, prior to the study, Carmen Santos was a member of two local lending groups and had borrowed money from her neighbor, an employer and her barangay chairman. She was randomly selected into treatment and received a credit balance of 250 USD, using some of this money to immediately pay off her debts to those creditors. Now in good standing with the bank, she had her loan account extended, and also opened a savings account at another bank with the help of her newly established formal credit.

[15] The near-perfect compliance rate (percent) of the treatment group indicates that they took up formal loans.

[16] As mentioned, only the treatment group had access to formal loans at the beginning of the study. It must be noted that the number of transactions is not weighted by the size of the loan, but it can be assumed with much confidence that informal transactions are typically much smaller. Furthermore, the formal loan accounts tend to be uniform in size.

[17] Note that the diaries did not ask if the loan was mediated through the barangay directly. In interviews, individuals indicated that they would probably say that their barangay-mediated loan was through a paluwagon, NGO or cooperative. A paluwagon is a joint lending group that often meets in the barangay hall. The assignment to treatment is

treatment is strongly and positively predictive of formal market activity, and strongly but negatively predictive of informal lending practices mediated through informal and local financial networks.

Dependent Variable	Mean (Treatment)	Mean (Control)	Beta Coefficient	Diff Treatment vs. Control
Formal Bank Loans	1.107	0.402	0.658	(+) ***
Informal Group Loans	0.181	0.448	-0.221	(-) ***

***p<0.005, ** p<0.01, *p<0.05

Table 1: Analysis of Formal Market Exposure. The analysis shows the difference across financial portfolios for treatment and control participants two years after individuals received their respective experimental condition. Assignment to treatment corresponds significantly to greater active participation in formal loans and lower participation in informal group loans.

The follow-up survey commenced in 2007, approximately 3 years after treatment assignment, and included a broad range of economic indicators as well as my instrument for assessing political engagement. To determine the impact of increasing microcredit access to microenterprises, Karlan and Zinman examined differences in means across both treatment and control. For the purposes of this study, two findings are key. First, their empirical tests of the economic data indicate that people were more likely to use the seed capital to pay down informal debts, evidenced by the fact that the rate of indebtedness decreased even in the absence of marked differences in investments made on the business itself.[18] This comports with the analysis in Table 1 above. They also show that people offered formal accounts with the banks (treatment) were less likely to borrow from informal sources, although they were more inclined to say that in a hypothetical situation they would be able to receive loans from informal sources if needed.[19] I interpret the treatment group's improved confidence in attaining the hypothetical loan as reflecting their improved autonomy vis-à-vis the informal lending markets, since they are more likely to have paid off any preexisting informal loans

regressed upon the indices for formal and informal loan transactions, respectively, in the previous 12 months. The positive relationship between formal index measures and treatment, and the negative relationship between informal index measures and treatment, support the claim that treatment is associated with a higher level of financial formality. The people who were assigned to treatment were far less likely to take out informal loans, and far more likely to take out formal ones (not too surprising, since the take-up rate is 100 percent).

[18] I calculated these economic outcome statistics independently, in order to verify my research. However, these data are officially tested and represented in Karlan and Zinman's paper (2009). My analysis matches the findings in their paper's appendix that presents the empirical findings, shown in Tables 4 through 11. The difference in means tests supports the conclusion that improved access influenced how people financed their businesses. In Table 4, note that people assigned to treatment are far more likely than the control group to have formal outstanding loans from the original bank partners (FMB) or a similar, formal lender. Table 1 describes the significant finding that the treatment group borrowed less from the informal sector over the 12 months preceding the survey.

[19] (Table 9) of Karlan-Zinman paper

(particularly those that are most onerous and embedded in local money politics). The second, and more important, finding is actually an impressive null-finding. Karlan and Zinman do not find any empirical evidence of a wealth effect coming from the sizable formal financial loan. In other words, three years after the fact, people were more financially autonomous, less tied to informal lending networks, and more likely to be involved in other formal financial transactions; but crucially, they did not have higher income or assets.

The economics experiment, in short, provides a crucial picture of how formalizing markets influences poor voters in terms of their embedded relationships with political power brokers. Since the wealth effect of economic modernization is held constant, my research design allows us to focus entirely on the influence of the modernization process itself. This means that the findings on political behavior can be correctly attributed to the change in institutions, and not be confused with the wealth effect. Such a separation of the sociological and economic components of development, an unintended consequence of the original experiment, turns out to be highly beneficial in understanding the enduring poverty-clientelism relationship. Can greater institutional formality disrupt clientelistic networks? Will lessoning people's reliance upon informal lending services reduce patronage politics, even when incomes stay the same?

Survey and GIS Data

To test the impact of modernizing banking upon political institutions, I combine a survey data set (n= 1978) with spatially codified, demographic information that I gathered between 2007 and 2010. Combining survey and spatial data provides a more comprehensive account of how this process of formalization translates to a reduced presence of political clientelism. Survey measures on political engagement were selected to cover both behavioral and attitudinal aspects of civic interaction and commitment. These fourteen questions were adjusted from well-established and general survey banks such as the World Value Survey, and translated into Tagalog.[20]

[20] The surveys were conducted in either English or Tagalog, depending upon the recipient's preference.

Survey Measures of Political Engagement		
Attitudinal		
Interest in "politics"		
Trust in political institutions	Police Courts Nat'l government Political parties Charitable groups	
Political skepticism	Blind trust Complete pessimism Moderate skepticism	
Political efficacy	Internal – personal Internal – informational Internal – group based External – service delivery External – elections	
Behavioral		
Electoral behavior	Voting	Past Anticipated (future)
Informal political activities	Discussion groups Signing petitions Joining boycott Attending demonstration	Past Anticipated (future)

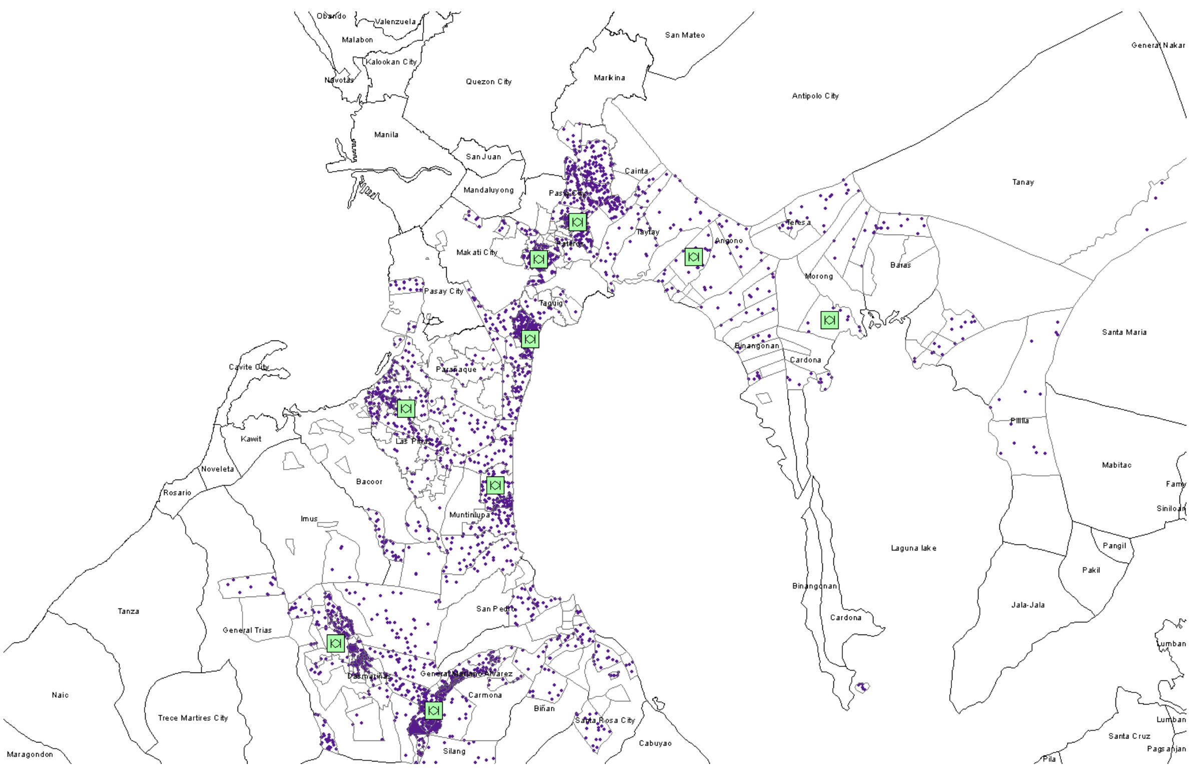
Table 2: Survey Constructs

The survey battery on political engagement includes 14 survey questions.[21] An obvious starting point for assessing a group's engagement in the political sphere is to

[21] The empirical survey was purposely designed with minimalist measures for political engagement for two reasons. First, the nature of large-N survey analysis is such that it relies upon consistently understood reference points and, accordingly, does not allow for subtle delineation of concepts and open-ended responses. The experimental treatment (formal financial inclusion) is binary, and the survey questions were similarly purposefully designed to be mathematically simplistic in order to help increase the reliability of responses across a diverse sample frame. This was done not because political engagement is easily understood, but rather to increase the empirical utility of the survey research. Most of the questions required simple "yes" or "no" answers, or asked respondents to rank general concepts on an implicitly nominal scale. The second motivation for measuring political engagement in a broad sense was for external comparison. What is lost in terms of nuance and depth in large-N survey work is made up in fecundity. It is, of course, very interesting to learn about political engagement as described by Filipinos themselves; information tallied from responses to such simple questions belies a much deeper story about the respondents' actual perceptions of the political sphere. This is exactly why ethnographic field interviews are also essential: the process of getting to know people and having them explain their stories and attitudes firsthand provides a much richer, yet complementary, analysis. Nevertheless the focus of this research was to uncover the globally relevant phenomenon of market formalization, and to test empirical hypotheses on clientelism that will resonate in societies at a similar stage of development. This is why I utilized broadly-

simply ask them how interested they actually are in politics. The survey battery on political engagement begins by asking the respondent directly about their prior and future participation in elections, as well as their interest in politics. These questions are then followed by questions about their attitudes towards political institutions, and their level of skepticism.

In addition to the survey panel of 1978 participants, I was able to verify the home address, location of business and bank branch for 1369 people in the survey panel. Figure 2, The Arc GIS Map of Study Coverage, shows the geographic location of each person geo-referenced in the study coverage area. Home addresses are plotted on the map according to the location of their barangay, as well as the 9 bank locations. There are over 30,000 barangays in the country, and the study area covers roughly 2000 of them. The people who participated in the downstream experiment were matched to 273 unique barangays, 27 municipalities and four provinces. This information was verified over the course of field interviews (over 260 open-ended interviews in the four provinces), and through the relentless dedication and non-stop assistance of my assistant, Yaying Yu. The final product of three years of labor is a geo-coded database that contains individual, temporal and locality-specific information.



derived survey instruments that had been previously tested in numerous contexts. Parsimony was thus paramount in the design of quantitative survey questions, both for external comparison and for empirical utility.

Figure 2: Map of experiment participants and participating nine bank branches. This figure is an ARC GIS Generated Dot plot of Codified Study Participants. The map represents the spatial and administrative clustering of individuals in the downstream experimental study. Each dot represents an individual whose barangay address has been verified and GIS coded for the spatial analysis of the study. The people in the study reside in four provinces: Metro Manila, Cavite, Laguna and Rizal. The number coded is (n= 1,576). Those coded in the map are from 273 unique barangays, 27 municipalities and 4 provinces.

These additional temporal, spatial and characteristic-based data are useful for balance and robustness checks, as well as exploring conditional hypotheses later on. Notice, for example, the tiny dots are clustered in the 27 municipalities depicted on the map. This, of course, sparks some curiosity about which of the 273 Barangays these survey participants inhabit, and how many other people in their immediate community share the experience of being part of the banking expansion project. This question is answered by measuring "cluster size" through multiple stages of work. First, I organized original bank applications according to "home addresses" into a database. Since these are people who live in predominately semi-formal or squatter communities, street addresses are mostly useless for organizational purposes. Instead, I codified the addresses that could be verified by barangay, the smallest administrative unit recognized by the state. Second, once the barangay was identified and verified as being in the appropriate municipality and province, the individual address was assigned a centroid designating its latitudinal and longitudinal coordinates. Additionally, I created centroids for the exact locations of each of the nine bank branches. The third step was to acquire digitized maps of the Philippines, its provinces, the municipalities, and barangays (called "shape files"), and layer these into one balanced mapping system. Fourth, the address and banking location centroids, now coded by latitudinal and longitudinal coordinates, were merged into the three-layer map system. Finally, the survey response database was appended to the address centroids using unique values for each participant. The result is a fully integrated spatial database, which allowed me to command ArcGIS to generate "cluster size" by performing an algorithm to count the number of individual centroids falling into each of the barangay shape files.

To ensure pre-treatment balance, and thus successful randomization, I include tests of treatment orthogonality upon key individual-level characteristics (see Table 2). The variables employed here were collected either directly from the survey, during fieldwork, or extrapolated with ArcGIS analysis. The essential point is that both leading up to and including the experimental sampling window, the two groups were roughly equivalent. The only thing that changed was the nature of their interactions with financial institutions. For example, "cluster size" is the measure of how many peers a particular survey participant has within his/her local community. We can see in the balance check that people assigned to treatment or control were equally likely to live in a barangay with at least one other person who was also in the study's sample frame.

Individual Covariates: Tests of Orthogonal Treatment

variable	coding	definition	Control (mean)	Treatment (mean)	ALL	diff test
female	(0- male, 1-female)	gender	0.801	0.823	0.819	0.023
married	(0- no, 1-yes)	marriage status	0.705	0.756	0.746	0.045*
age	years	age in years	41.536	41.207	41.268	-0.014
branch	(1-9)	the bank branch applicant visited	4.913	5.261	5.197	0.059*
cluster_size	(1-53)	number of other participants in barangay	9.429	9.933	9.840	0.004
no_travel_work	(0- no, 1-yes)	work is in the home	0.342	0.361	0.357	0.016
b_in_barangay	(0- no, 1-yes)	the business is in the barangay	0.880	0.855	0.859	-0.028
b_moved_once	(0- no, 1-yes)	the business moved once in term of study	0.071	0.069	0.069	-0.003
whole_life_one_pla ce	(0- no, 1-yes)	the person lived in same barangay for life	0.112	0.139	0.134	0.031
longtime_address	(0- no, 1-yes)	> 40% of life in current barangay	0.358	0.350	0.351	-0.007
address_tenure	(.016 - 1)	percentage of life at current address	0.361	0.375	0.372	0.016
short_b_tenure	(0: >3 yrs; 1:<3 yrs,)	business less than three years	0.254	0.215	0.222	-0.037
same_birth_prov	(0- no, 1-yes)	born in same province they currently reside	0.407	0.408	0.408	0.001
distance_geo	(0-29 miles)	the distance travelled to apply bank loan	2.868	3.236	3.167	0.006
distance_manila	(9-52 miles)	distance from Manila city center	23.879	26.573	26.063	0.116*
bad_floor	(0- no, 1-yes)	the home residence has unfinished/ dirt floor	0.969	0.960	0.962	-0.017
above_medi~p	(0- no, 1-yes)	above medium income at time of application	0.473	0.506	0.500	0.027

Table 2: Randomization Check. Orthogonality tests of individual covariates indicate that assignment to treatment does not correspond significantly in most cases. The exceptions are marriage status and distance to Manila.

Experimental Results: Intention-To-Treat Analysis

The impact of banking access is calculated by estimating the Intent-to-Treat Effect (ITE).[22] The ITE is an estimation of the causal influence that being assigned to treatment has had upon individual responses to survey questions.

---

[22] The ITE is an estimation of the causal influence that being assigned to treatment has had upon individual political attitude. Let $T \in \{0,1\}$ be a random variable, where 1 indicates that the subject is assigned to treatment. As mentioned earlier, the credit applicants in the treatment group are offered a loan of roughly 250 dollars; those in the control group do not receive money. Let Y_i refer to the outcome variable, the vector of responses to the survey questions, which are presented in the appendix. $Y \in (Y_{1i} \ldots, Y_{Ni})$, where i indexes individuals and $j = 1, \ldots, N$ are outcome measures. The aim of this calculation is to determine what effect treatment has on Y. If we define Y_{ij1} to be the random variable representing the outcome j for individual i if treated, and Y_{ij0} to be the random variable representing the outcome j for individual i if not treated, then we seek the average treatment effect, $\forall_j$: $E[Y_{ij1} - Y_{ij0}] = \delta_j$. Here, expectations are applied over individuals, and δ_j is the average marginal impact of being assigned to receive an FMB loan. Of course, we cannot compare the impact of treatment within individuals, but we can simplify this equation to allow us to determine the average impact of treatment. Due to the random assignment of individuals to

$$Y = \alpha+\beta_1 X_1 +\varepsilon$$

The dependent variable, Y, represents the survey questions on political responses to treatment. X_1 is the time variable indicating whether the bank applicant was assigned to treatment or control ($X_{1} = 1$ Treated; $X_{1} = 0$ Control), three years prior to follow-up survey. $\beta_{1,}$ our key coefficient, is the intent-to-treat effect, the effect that treatment assignment has upon political affect.

As a result of greater inclusion in formal market institutions, participants assigned to treatment shifted markedly away from politics. This is evident by comparing differences in average survey responses to questions relating to both attitudinal and behavioral political engagement. People who had been randomly given access to formal credit (treatment group) expressed, on average, less commitment to political life.

Political disconnection is evident in both informal and formal political activities. The results for voting behavior are presented in Figure 3. Here, we see that the treated group reported being less engaged in the electoral process. The difference between treatment and control in terms of whether they had voted in the last election is not significant. This is expected, since the prior national election was held *before* the experiment took place. What is noteworthy is that those in the formal finance treatment group responded that they were less willing to vote in upcoming elections. This finding holds true to a high degree of statistical significance ($p>.01$). For the control group who did not participate in the FMB bank loan program, nearly everyone (99.6 percent) indicated that they planned to vote in the following election, whereas nearly 3 percent of the treated group indicated that they did not.

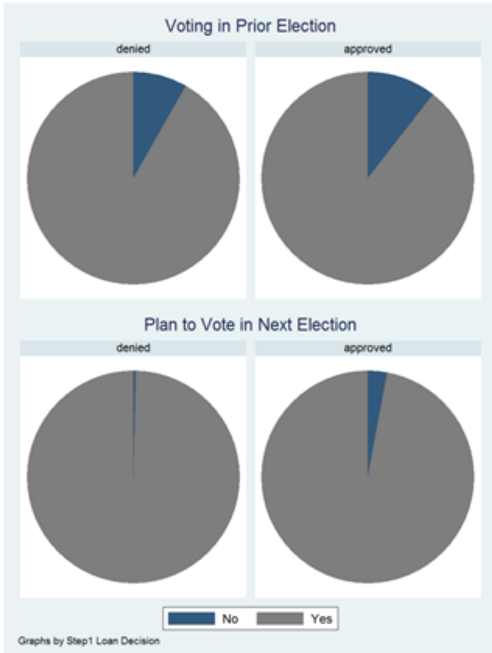
---

treatment and control, for all persons in groups, we can split δ_j into two terms. Thus, the average effect of treatment intention is:

$$\delta_j = E[Y_{ij}|\ T_{ij}= 1] - E[Y_{ij}|\ T_{ij}= 0] = Y_j|T_i =1 - Y_j|T_i = 0,$$

where δ_j represents the average effect of treatment upon each j outcome variable. This basic model estimates the impact on political preferences of receiving a loan from the banking institution, as revealed in the follow-up survey detailed above.

Figure 3: Experimental Individual-Level Treatment Results: Voting Behavior



Voted in Prior Election	Control	Treatment	Beta. Coeff.	Std. Err.
"Yes"	91.77%	89.46%	-0.0231	-0.0199
"No"	8.23%	10.54%		

Plan to Vote in Next Election	Control	Treatment	Beta. Coeff.	Std. Err.
"Yes"	99.59%	97.05%	-0.0254***	-0.00661
"No"	0.41%	2.95%		

Robust Standard Errors in Parentheses *** p<0.01, ** p<0.05, * p<0.1

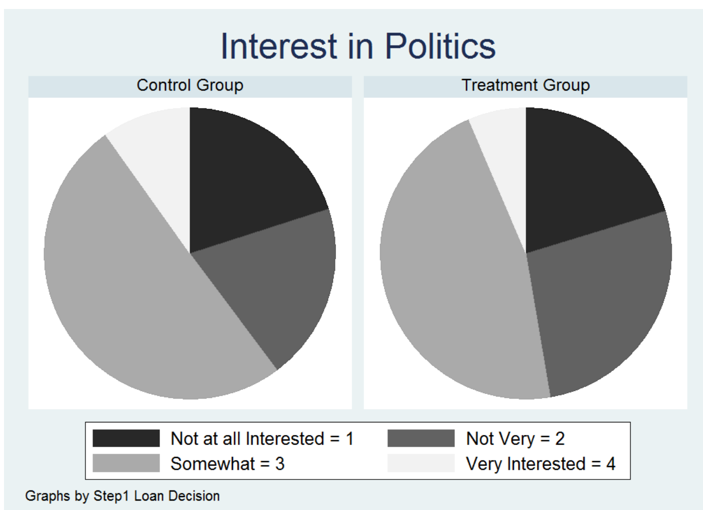
The empirical finding that access to formal finance led to lower electoral engagement is strongly complemented by conversations with the participants themselves. I do not interpret the decline in willingness to vote as an indication that people are actually less in favor of democratic processes. What these results show, instead, is a shift in thinking about one's obligations. Numerous accounts from people in both treatment and control conditions paint a very clear picture that democracy is not working for them. In interviews, it is actually quite rare that someone will express a conceptualization of politics beyond the immediate patronage system in their barangay. While this has happened on occasion, the vast majority of accounts follow two themes. The first involves spelling out the various ways in which they utilize "local elites to get things done" when necessary. The second relates to the ways in which they are socially and materially tied to the barangay, and therefore obligated sometimes to help "get things done" on behalf of elites to remain on good terms. Both groups tend to tend to express an overwhelming support for "democracy" in an abstract sense. Here, "politics" is experienced as a thorn that becomes more apparent to people who conduct their banking with the formal bank. The key difference for this latter group is that the treatment provides a material buffer from patronage politics. Therefore, these people are more apt to "check out" when democracy in practice is not working, and clearly a waste of their time.

Table 3: Experimental Individual-Level Treatment Results: Civic Engagement

Variable	Control	Treatment	Treatment Effect	Beta. Coeff	Std. Err
Meet with a group to discuss politics. (no=0, yes=1)	57%	54.38%		-0.0262	-0.0388
Sign a petition. (no=0, yes=1)	66.52%	59.40%	(-)	-0.0713**	-0.0345
Attend peaceful demonstrations	54.31%	43.37%	(-)	-0.109***	-0.0361

The three questions on informal political engagement are markers for the strength of civil society. If people are averse to signing a petition, discussing politics or attending peaceful demonstrations, they are also unlikely to be politically mobilized. The survey results indicate that assignment to treatment spurs lower engagement in informal political activities. This difference is consistent across all three forms of activities surveyed, and statistically significant in two. The treatment group expressed significantly less willingness to sign a hypothetical petition or attend a peaceful demonstration. This highlights the wide-reaching effect that formalizing finance has on political behavior: as a result of having had treatment, people are less likely to vote *and* less likely to engage in local activities.

Figure 4: Experimental Individual-Level Treatment Results: *Interest* in Politics

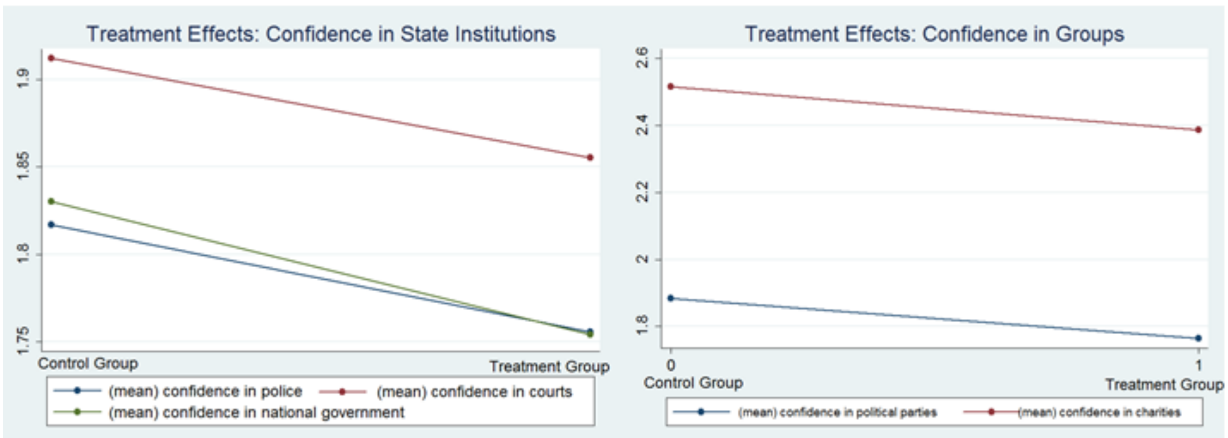


Variable	ALL	Control	Treatment	Treatment Effect	Beta. Coeff	Std. Err
Interest	2.408	2.500	2.388	(-)	-0.112*	(-0.0646)

Robust Standard Errors in Parentheses *** p<0.01, ** p<0.05, * p<0.1

The empirical finding that a movement towards economic formality leads to people's disconnecting from the political sphere is consistent across both behavioral and psychological indicators of political engagement. The variable *Interest*, which measured responses for the question, "How interested would you say you are in politics?" produced a clear outcome: the treatment group became less interested in politics (See Figure 4). This is robust statistical evidence that entrepreneurs express less interest in political participation once they gain access to modern finance, and the finding holds true at a significance level of (p>.10). Notice also that a clear majority of participants in the control group expressed that they were very interested or somewhat interested in politics, whereas considerably fewer in the treated group reported feeling as engaged.

Figure 5: Experimental Treatment Estimation: Trust in Political Institutions



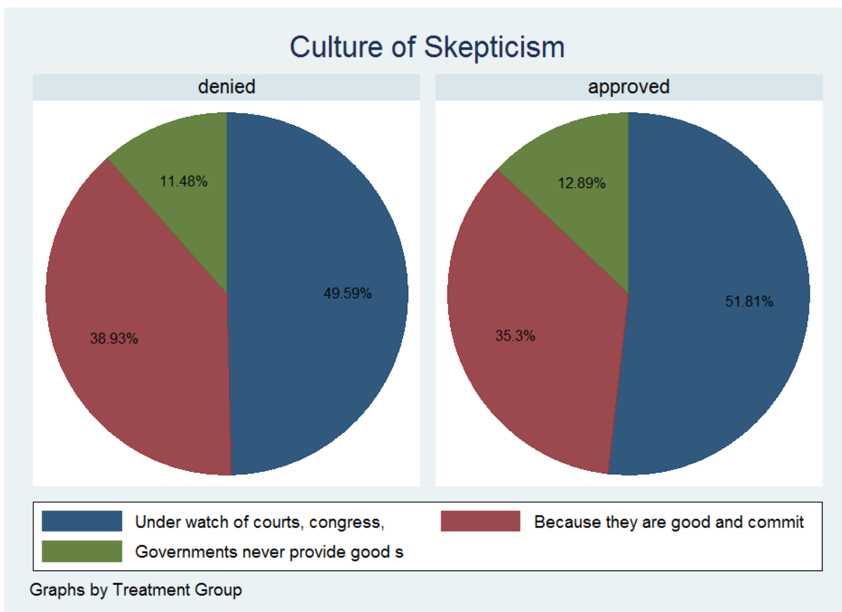
Variable	Control	Treatment	Difference	Beta. Coeff.	Std. Err.
Confidence in police	2.183	2.245	(-)	-0.0616*	-0.0323
Confidence in courts	2.088	2.145	(-)	-0.0569*	-0.0317
Confidence in national government	2.170	2.246	(-)	-0.0763**	-0.0352
Confidence in political parties	2.116	2.236	(-)	-0.119***	-0.035
Confidence in charities	1.485	1.614	(-)	-0.130***	-0.0449

Robust Standard Errors in Parentheses *** p<0.01, ** p<0.05, * p<0.1 [Note to self, **I need to change the averages that I reported, these are inverses.]**

The experiment also resulted in a marked decrease in trust among those who gained access to formal market institutions. The results in Figure 5 show that as a response to the experimental treatment, people are significantly less trusting of political institutions. This relationship holds for all survey questions on political confidence (S.22-26). People assigned to treatment are particularly less confident when it comes to political parties, the national government and charitable organizations, but confidence also drops significantly for police and courts.

Why would confidence in political institutions drop when someone engages more with formal market institutions? This is a fair question, since one would not expect confidence in government versus the market to be a zero-sum game. In fact, it isn't, exactly.[23] It is rather that the experience of banking outside of the informal economy liberates people from social binds, leading to more skeptical and autonomous thinking; people with a greater sense of autonomy are, in turn, simply more likely to express contrarian viewpoints. In other words, reducing economic insecurity makes people more comfortable, and thus more outspoken. The degree to which the courts, police, national government, etc. are actually failing people who receive treatment versus control is likely to be constant. What is different is people's thinking about those political institutions. Formalizing finance provides an avenue for securing livelihood that lies outside of *local money politics* – one less vital resource under the control of political patronage. This enables citizens to experience themselves as more autonomous, and take a more critical stance towards the political environment.

Figure 6: Experimental Individual-Level Treatment Results: Political *Skepticism*



Rationale for effective service delivery	Control	Treatment	Difference Across Groups
i.) Under Watch of Courts	49.59%	51.81%	(+)
ii. Good People	38.93%	35.30%	(-)
iii. Never Provide Good Services	11.48%	12.89%	(+)

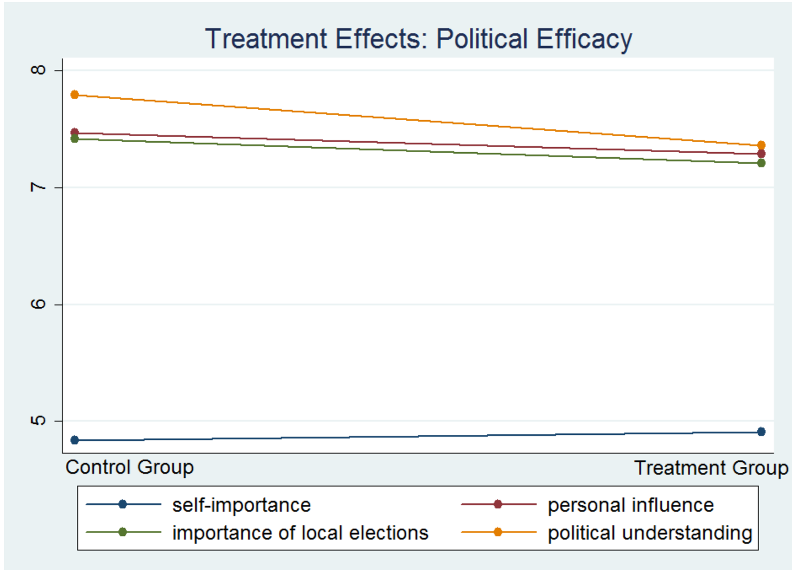
[23] could cite some other statistics from the economic impact evaluation that show that people are more confident in their ability to get loans (from banks or informal markets), but they aren't necessarily more confident in banks as an effective institution than the control. The latter survey result came from a survey question that I designed, but have since left for Karlan and Zinman to use in their paper.

Autonomous people do not blindly continue to engage in politics when the system fails them, but instead become more skeptical of the world around them and are more inclined to embrace "secular-rational values."[24] The question illustrated in Figure 6 asks respondents to choose from among three rationales explaining why "governments provide good services to the people." Although this question is impossible to delineate for difference-in-means testing, the construct designed by Stokes and Boix is an interesting one. What we see here is that people assigned to treatment are more inclined to say this happens when "they are under the watch of the courts, Congress, or the press" (Rational-Legal Value), or that "governments never provide good services" (Political Disillusionment). Both of these responses reflect a more skeptical viewpoint than the statement, "because they are good, committed people" (Blind Faith).

The final questions on the survey battery for political engagement focused on political efficacy. These included three questions gauging efficacy in an external sense, and one question addressing internal efficacy. The findings in Figure 7 show that on average, people in the treatment group expressed lower political efficacy for all four facets. They tended to respond less enthusiastically to the following statements: "There are plenty of ways for people like me to have a say in what the government does" and "I feel like I have a pretty good understanding of the political issues that confront our society." They also tended to agree more with the idea that "local elections are not important enough to bother with." These all point to lowered psychological engagement with politics. However, only the fourth question addressing internal political efficacy yields a significant difference in means across treatment and control groups (** $p<0.05$). Also, there is a very slight uptick in agreement with the statement, "politicians pay attention to people like me," but this difference is negligible in terms of statistical inference.

[24] Maybe I should clarify what I mean by citing the term from the Inglehardt Welzel "Modernization , Cultural Change and Democracy. The Human Development Sequence".

Figure 7: Experimental Individual-Level Treatment Results: Political *Efficacy*



Variable	Control	Treatment	Significant Difference	Beta. Coeff.	Std. Err.
Politicians pay attention	4.838	4.906		0.068	-0.204
Personal influence	7.470	7.288		-0.181	-0.199
Elections matter	7.421	7.208		-0.213	-0.21
Political Understanding	7.789	7.362	(-)	-0.428**	-0.209

Robust Standard Errors in Parentheses *** p<0.01, ** p<0.05, * p<0.1

It may be worth noting that the decline in internal political efficacy was more pronounced than that for external political efficacy. This suggests that the experimental treatment, in subsidizing formal financial access for a randomized group of entrepreneurs who were previously deemed "unbankable," affects people at an individual level. In other words, it is hitting the demand side of the political participation equation. What shows up in conversations with these individuals is that they are less interested in participating, and less willing to make an effort. So, the internal aspect of political efficacy – the belief that one understands politics – may shift even further than external measures. Of course, the two are closely related, since people who believe that political engagement does not make a tangible difference are also likely to be less interested and not seek out political information. Furthermore, external political efficacy is closely related to trust in government, as presented in Figure 5 where we see that people's confidence in the efficacy of political institutions declines dramatically. Although the supply side of the equation – accountability and quality of governance – is not directly manipulated by the experiment, it is clear that people's faith in government drops anyway. In conclusion, it may be a bit of a fool's errand to dissect the relative magnitude of changes reflected in individual survey questions. What is important to take away from all of this is that political efficacy, and thus motivation to engage in political life, has decreased as a result of the experimental treatment.

To summarize, the treatment assignment in this downstream experiment on expanding financial access corresponds to less enthusiastic responses on questions about both political attitudes and behaviors. People who participated in treatment were less interested in politics, and responded that they were less likely to participate in both electoral and non-electoral political activities. The results of the experiment also indicate that attitudes towards politics become more negative as people become more involved in formal markets. Finally, experiences with modern finance correspond to increased skepticism about state institutions. Interestingly, people who are more integrated into the formal economy express significantly less confidence in various government institutions.

Market Formality and the "Disengagement Effect"'

To evaluate the extent to which "local money politics" drives this disengagement effect, I provide two additional empirical tests. The mechanism is first tested by an analysis of spatial heterogeneity in treatment effects. The idea here is that if diminishing reliance on entrenched clientelistic finance is truly driving the effect, then the treatment should be most pronounced where such informal financial arrangements are most manifest. Additionally, I test for downstream, second-order effects by using assignment to treatment as an instrument for lending practices. Together, these additional analyses help to confirm the empirical results and their interpretation that the shift from politics reflects a shift away from clientelism.

Spatial heterogeneity

The overlap between political clientelism and informal finance varies over the 273 barangay communities studied. As described in the previous section, the barangays all share certain characteristics such as informal markets, low incomes, poor public infrastructure, and the same style of local government. However, for reasons outside the scope of this paper, the level of machine politics and the particular tactics used vary; not every form of informal finance was directly mediated by local politics. For example, in many communities all forms of informal banking are mediated through the local barangay. In others, the presence of autonomous loan sharks, known as "Bombay 5-6ers," are tolerated.[25]

[25] The barangay chairman (the most senior elected official) will often organize local business owners through local meetings and capital schemes. Frequently, he will visit households of local shopkeepers to invite them to participate in meetings, and discuss issues pertaining to local entrepreneurship. There, the chairman often endorses a private moneylender, or even provides loans to constituents directly.

During field interviews, I began to hypothesize that the manner in which people react to formal finance has a lot to do with the type of informal financial arrangements they were accustomed to prior to treatment. Upon discovering that "Bombay 5-6ers" were listed as a form of finance in the financial diaries examined at the outset of the experiment, it dawned upon me that this could be used as a means to tease out the "disengagement effect" mechanism. In other words, if my intuition about clientelism-mediated lending is correct, then the availability of Bombay loans relative to the Barangay-mediated loans could shed light on why some people are more sensitive to treatment than others. When only barangay-mediated loans are prevalent, one would expect a more pronounced political influence (i.e., disengagement effect) from treatment, since formal loans are specifically replacing the financial arrangements built into local politics; in effect, pulling people's material interest away from those politics.

To test for spatial heterogeneity treatment effects, I first organized the pre-treatment portfolios according to barangay. Recall, the variable "barangay cluster" from the earlier description. There were anywhere from 1 to 53 people from the study sample living in each of the communities. Recall also from the prior section that the average person who applied to the bank (either treatment or control) had seven informal banking arrangements, and zero formal bank arrangements (again, the latter being the intention of the study design). Using the codified banking information, I generated two count variables. "Local-Informal Loans" represents the summation of loan-based activities conducted with local lending networks, such as "local NGO "credit cooperative" or "Paluwagan," as well as informal loans from people living in the community, such as "friends" and "employers." All "Local-Informal Loans" share the characteristic that the arrangement might possibly be politically charged. The second count variable, "Bombay Loan," denotes the number of arrangements that the individual had with a Bombay 5-6er. Finally, I used these two measures to calculate a "Bombay Index," which is the loan ratio for each barangay cluster.

Although the mixing of local informal finance and politics is ubiquitous, the degree to which informal finance is embedded in local politics varies across barangays. In some barangays nearly every moneylender is tied to the local political elites, whereas in some neighborhoods loan sharks known as Bombay 5-6ers, who offer loans that do not entail politics, are common.

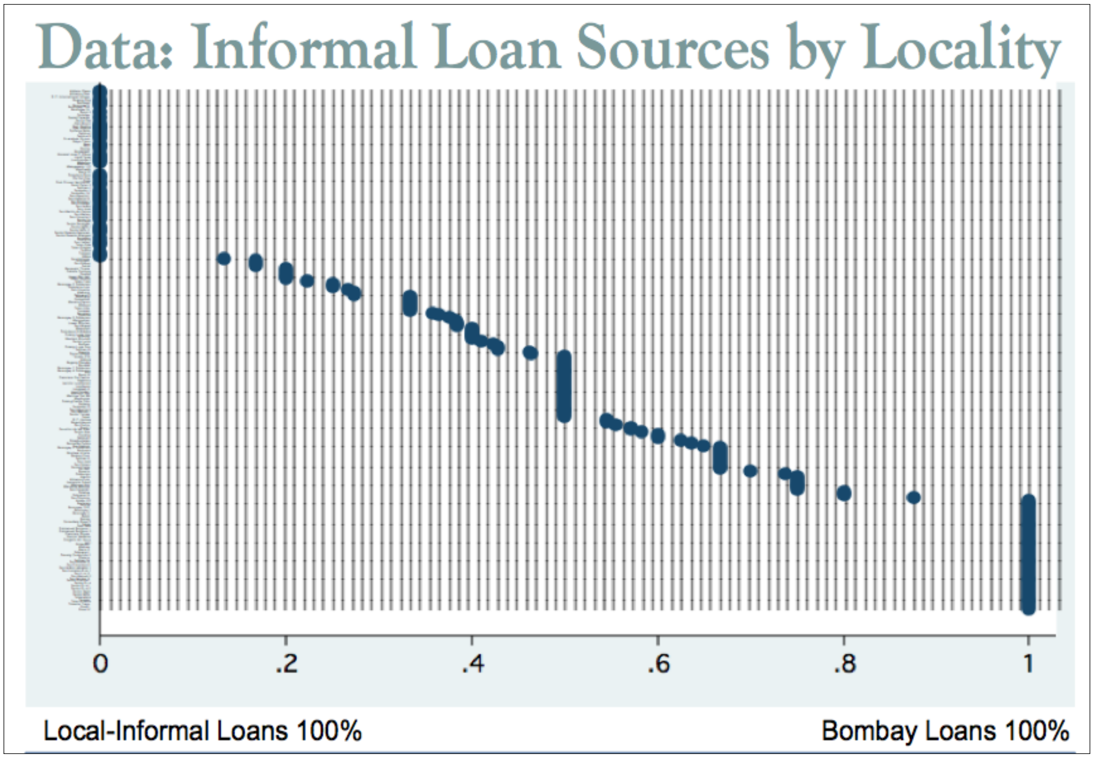


Figure 8: Bombay Index by Locality. Informal lending portfolios are indexed across the barangays showing highest to lowest to percentage of informal lending dedicated to Bombay lending sources.

Figure 8 above, the "Bombay Index," shows us where pre-treatment usage of Bombay 5-6er loans versus politically mediated forms of lending is most common. The 273 barangays are listed on the y-axis, in order of their average lending practices. The dots on the y-axis are barangays where absolutely no one had arrangements with a Bombay 5-6er. Those on the far right are the barangays where all informal arrangements were with a Bombay 5-6er. Because the cluster size of some of these groups is small, (for example, if only 2 people are tabulated in a given barangay as opposed to 50), it is not viable to test for spatial heterogeneity at the barangay level. However, there is a strong case to be made for doing so at the municipal level. To provide a conservative test of the Bombay effect, I compare only those living in the tail ends of the distribution. The barangays of Damarioas, Pasic, Tanay and Pateros have an extremely high prevalence of Bombay 5-6ers, while these lending practices are least common in the municipalities of Las Pinas, Makati, Teresa, Muntilupa. These 8 municipalities thus lie at the polar ends in regards to the acceptance and frequency of non-politically embedded lending practices. Indeed, the empirical index is further confirmed by anecdotal observation in the field.[26]

[26] I have about 40 pages of description on this in the book, but have taken great pains to condense this for the article. Conference readers- please give me feedback on whether you find this to be incomplete or if you have any suggestions on what information I should include, or what may be extraneous. ☺

Table 4: Split Analysis by Prevalence of "Bombay" Loans - Spatially Heterogenous Treatment Effects

Dependent Variable	**Full Sample**	**High Bombay**	**Low Bombay**
Interest in Politics	-0.112*	-0.0373	-0.243**
	0.0646	0.185	0.119
Confidence in	-0.512***	-0.742	-0.341
Political Institutions	0.122	0.496	0.271
Political Efficacy	-0.447**	0.235	-0.806**
	0.205	0.65	0.348
Political Behavior	-0.456***	0.173	-0.901***
	0.175	0.498	0.331
N	1354	192	288

Robust Standard Errors in Parentheses *** p<0.01, ** p<0.05, * p<0.1

Split Analysis by Prevalence of "Bombay" Loans - The original experimental test statistics are listed in the first column, The test statistics for only those individuals who live in "High Bombay" and "Low Bombay" areas are in the middle and far left columns, respectively. The results are in accordance with the hypothesis that the treatment effect would be more pronounced in the "Low Bombay" areas, and absent in the "High Bombay" areas.

The results in Table 4, above, indicate that the nature of lending practices utilized in local political economies is a determinant of the experimental treatment effect. Here, the sample is essentially "split" by observations in high- and low-Bombay municipalities. "High_Bombay" is a binary variable for whether an individual participant lives in a municipality where Bombay-type lending is most common. The other variable, "Low Bombay," indicates that the individual resides in a municipality where Bombay-style lending is absent. The original ITT findings are listed under "Full Sample." Here, we see by comparing across the sample subgroups ("High Bombay" v. "Low Bombay"), that the treatment effect is pronounced and significant only in the "Low Bombay" column. It appears that in the areas where people substitute out informal lending practices that are politically charged ("Low Bombay"), there are strong treatment effects. In contrast, in subsample "High Bombay," none of the treatment estimates are statistically significant at the 95% confidence level.

Downstream Analysis

The preceding analysis provides evidence of a link between local lending practices and the experimental outcome. Another way to investigate the relationship between informal financial behaviors and political clientelism is to test for the downstream impact of treatment assignment. Here, banking practices are treated as an endogenous variable that is instrumented by treatment assignment. Downstream estimation strategy involves first estimating the effect of treatment assignment upon an intended outcome (here, informal banking practices), and then, in the second stage, measuring the instrumented effect of this outcome upon political engagement. This differs from intent-to-treat analysis, since it essentially is not measuring the direct effect of treatment assignment.

The mechanism being explored is whether treatment influences people's lending practices, which in turn influences their political affect. There are three variables treated separately as endogenous: "Formal Bank Loans," "Informal Group Loans" and "Formal-Informal Loan Differential". Again, the first two were already explicated in the previous section. The "Formal Bank Loans" variable is the number of bank accounts that individuals have at the time of the follow-up survey. "Informal Group Loans" is a measure of informal loans. "Formal-Informal Loan Differential" is the measure of formal loans minus informal loans. The hypothesis for the first-order treatment effect is that people assigned to treatment will have fewer informal transactions, and more formal transactions. Indeed, this was already made evident in Table 1 above. The downstream hypothesis is that formal loans will have a negative impact on political engagement, and informal loans will have a positive impact.

Table 5: Instrumental Variables Analysis – On Lending Behavior

Dependent Variable	**ITT- Full**	**IV- Formal**	**IV- Informal**	**IV- Differential**
Interest in Politics	-0.112*	-0.395**	1.323**	-0.317***
	0.0646	0.158	0.579	0.116
Confidence in	-0.512***	-0.789**	2.629*	-0.595**
Political Institutions	0.122	0.34	1.396	0.257
Political Efficacy	-0.447**	-0.66	1.77	-0.393
	0.205	0.456	1.468	0.333
Political Behavior	-0.456***	-1.273***	3.800**	-0.891***
	0.175	0.44	1.617	0.309
N	1354	602	531	529

Robust Standard Errors in Parentheses *** p<0.01, ** p<0.05, * p<0.1

Instrumental Variables Analysis on Loan behavior - The original experimental test statistics are listed in the first column. IV-Formal are test statistics from TSLS, treating formal lending as endogenous and instrumenting with random treatment assignment. IV-Informal is the instrumental variables results for informal lending behavior and IV Differential refers to the difference between informal and formal take up as the first stage outcome variable.

The results from the downstream analysis, using two-stage least squares (TSLS), comport with the interpretation of the "disengagement effect". Table 5, above, the original ITT findings are compared to estimates for Formal Bank Loans," "Informal Group Loans" and "Formal-Informal Loan Differential." The estimates for political interest are significant, and the magnitude of the effect size is considerably larger. With the IV estimation for "Formal" and "Differential," the beta coefficient can be interpreted as indicating that when people take out more formal lending relative to informal as a result of treatment, they become less interested in politics. Note that the direction of the effect for "Informal" is positive. I interpret this to mean that informal lending, brought about by random assignment, corresponds to higher political engagement. The results for the other political responses follow the same pattern. Formal finance leads to less political engagement; informal finance leads to more. Notice, however that the Political Efficacy measure is not significant for any of the IV estimations. Furthermore, the standard errors are considerably larger due to small sample size. The data collection for the financial diaries is considerably less complete than the follow-up survey. At the time of the follow-up survey, the average number of non-missing responses for a given survey question on political engagement was 1414; people answered questions over 70% of the time. However, the financial diaries were only capturing completed responses regarding lending practices roughly 30% of the time. As a result, the TSLS analysis depicted above has considerably less power. Nevertheless, these findings still lend support, since they are remarkably strong given the small sample.

Conclusion

Financial modernization is often studied in development economics, but it is overlooked as a force in global socio-political change. In this article, I attempt to bridge the two complementary research agendas of the microeconomics of development and the study of political clientelism. Greater emphasis on the former enables us to dissect the poverty-clientelism connection in new and exciting ways. My thesis is that economic informality undergirds political clientelism. As local political economies modernize, people become less reliant upon informal financial and political networks and thus the cost-benefit calculus for political clientelism shifts.

This experimental case study, on expanding modern financial services to poor citizens in the peri-urban slums of Manila Philippines, highlights how greater economic formality, not necessarily income, can reduce people's engagement with local power brokers. I find that people opt out of political relationships when they have greater financial autonomy. Evidence from both oral survey research and statistical analysis contradicts the common assumption that improved economic status leads to greater political participation and inclusion. Instead, my multi-method research reveals that entrepreneurs who have traditionally made use of politically embedded financial agreements express less interest in political participation once modern finance is made available to them. This work challenges the hypothesis that economic integration strengthens democratic inclusion, at least in the short term.

This research further illuminates how and why economic and political development may occur *in tandem,* but not necessarily *in harmony*. As formally structured financial services move into poor communities and disrupt preexisting local and informal financial networks, one observes an initial disengagement from politics among many residents. I argue that this disengagement actually reflects political empowerment since only those who were participating in local politics for instrumental purposes become less active. The introduction of formal financial property rights reduces political and economic dependency at the local level. Therefore, a movement toward modern markets may prove to be an effective force in reducing political clientelism.

Citations

Armendáriz, Beatriz and Jonathan Morduch. 2010. The Economics of Microfinance. Cambridge: Massachusetts Institute of Technology Press.

Ayson, George and Reamur, David. 1998 The 1986 EDSA Revolution. edited by C. T. T. The 1986 EDSA Revolution Website: Ateneo de Manila University, Quezon City, Philippines barangay metro manila

Baldwin, Kate. “Why Vote with the Chief? Political Connections and Public Goods Provision in Zambia” *American Journal of Political Science* 57(4):794-809.

Candler, Gaylord G. 2014 The study of public administration in India, the Philippines, Canada and Australia: the universal struggle against epistemic colonization, and toward critical assimilation Rev. Adm. Pública — Rio de Janeiro 48(5):1073-1092, set./out. 2014

Celoza, Albert F. 1997. *Ferdinand Marcos and the Philippines: the Political Economy of Authoritarianism*. Westport, CT: Praeger Publishers.

Cleary, Matthew R., and Susan Stokes. 2006. Democracy and the Culture of Skepticism: Political Trust in Argentina and Mexico. New York: Russell Sage Foundation.

Collins, Daryl, et al. 2009. Portfolios of the Poor: How the World's Poor Live on Two Dollars a Day. Princeton: Princeton University Press.

Constantino, Renato. 1975. *The Philippines: A Past Revisited*. Quezon City: Renato Constantino.

Demirguc-Kunt, Asli and Leora Klapper. 2012. "Measuring Financial Inclusion: The Global Findex Database." World Bank Research Policy Working Paper 6025.

Gutierrez, Eric. 1998. "The public purse," in Sheila C. Coronel and Cecile C.A. Balgos, eds., *Pork and Other Perks: Corruption and Governance in the Philippines.* Quezon City: Philippine Center for Investigative Journalism,

Guzman, Emmanuel C de. 2003. The Local Government Code and the Reconstitution of Power in a Philippine Municipality. *Master's thesis Department of Sociology and Anthropology, School of Social Sciences, Ateneo De Manila University, on March 2001*:1-13.

Hodder, Rupert. 2000. "Business, politics and social relationships in the Philippines," South East Asia Research 8 (2): 93-145.

Hutchcroft, Paul D. 1991. "Oligarchs and Cronies in the Philippine State: The Politics of Patrimonial Plunder," *World Politics* 43 (3): 414-450.

Hutchcroft, Paul D. 1998. *Booty Capitalism: The Politics of Banking in the Philippines*. Ithaca: Cornell University Press.

Hutchcroft, Paul D. 2008. "The Arroyo Imbroglio in the Philippines," *Journal of Democracy* 19 (1): 141-155.

Hutchcroft, Paul D., and Joel Rocamora. 2003. "Strong Demands and Weak Institutions: The Origins and Evolution of the Democratic Deficit in the Philippines," *Journal of East Asian Studies* 3 (2): 259-292.

Hutchcroft, Paul D. 2000. "Colonial Masters, National Politicos, and Provincial Lords: Central Authority and Local Autonomy in the American Philippines, 1900-1913," *Journal of Asian Studies* 59 (2): 277-306.

Junker, Laura Lee. 1999. *Raiding, Trading, and Feasting: The Political Economy of Philippine Chiefdoms*. Honolulu: University of Hawai'i Press.

Kajisa, Kei. 2007. "Personal Networks and Nonagricultural Employment: The Case of a Farming Village in the Philippines," *Economic Development and Cultural Change* 55: 669-707.

Karlan, Dean, and Jonathan Zinman. 2009. "Expanding Microenterprise Credit Access: Using Randomized Supply Decisions to Estimate the Impacts in Manila*." Innovations in Poverty Action and Financial Access Initiative Working Paper.

Kasuya, Yuko. 2005. "Patronage of the past and future: Legislators' decision to impeach President Estrada of the Philippines," *The Pacific Review* 18 (4): 521-540.

Kawanaka, Takeshi. 2007. "The Robredo Style: Philippine Local Politics in Transition," *Kasarinlan: Philippine Journal of Third World Studies* 13 (3): 5-36.

Kawanaka, Takeshi. 2007. "Who Eats the Most?: Quantitative Analysis of Pork Barrel Distributions in the Philippines." Institute of Developing Economies Discussion Paper No. 126, October. http://ir.ide.go.jp/dspace/bitstream/2344/633/3/ARRIDE_Discussion_No.126_kawanaka.pdf.

Keefer, Philip. 2002. "Clientelism, Credibility and Democracy." The World Bank. November 6. http://web.international.ucla.edu/media/files/keefer.pdf.

Kerkvliet, Benedict J. Tria. 1995. "Toward a More Comprehensive Analysis of Philippine Politics: Beyond the Patron-Client, Factional Framework," *Journal of Southeast Asian Studies* 26.2 (September): 401-419.

Luyt, Brendan. 2007. "The hegemonic work of automated election technology in the Philippines," *Journal of Contemporary Asia* 37 (2): 139-165.

McCoy, Alfred W. 1993. "An Anarchy of Families: The Historiography of State and Family in the Philippines," in Alfred W. McCoy, ed., *An Anarchy of Families: State and Family in the Philippines*. Madison: Southeast Asian Studies Center, University of Wisconsin, 1-32.

Nowak, Thomas C., and Kay A. Snyder. 1974. "Clientelist Politics in the Philippines: Integration or Instability?," *The American Political Science Review* 68.3 (September): 1147-1170.

Parreño, Earl. 1998. "Pork," in Sheila C. Coronel and Cecile C.A. Balgos, eds., *Pork and Other Perks: Corruption and Governance in the Philippines.* Quezon City: Philippine Center for Investigative Journalism, 32-55.

Pinches, Michael. 1997. "Elite democracy, development and people power: Contending ideologies and changing practices in Philippine politics," *Asian Studies* 21 (2-3): 104-120.

Rogers, Marvin L. 1986. "Changing Patterns of Political Involvement among Malay Village Women," *Asian Survey* 26.3 (March): 322-344.

San Juan, Jr., E. 2007. *U.S. Imperialism and Revolution in the Philippines*. New York: Palgrave Macmillan.

Scott, James C. 1969. "Corruption, Machine Politics, and Political Change," *The American Political Science Review* 63 (4): 1142-1158.

Scott, James C. 1972a. "Patron-Client Politics and Political Change in Southeast Asia," *The American Political Science Review* 66 (1): 91-113.

Scott, James C. 1972b. "The Erosion of Patron-Client Bonds and Social Change in Rural Southeast Asia," *The Journal of Asian Studies* 32 (1): 5-37.

Sidel, John T. 1997. "Philippine Politics in Town, District, and Province: Bossism in Cavite and Cebu," *The Journal of Asian Studies* 56.4 (November): 947-966

Sidel, John T. 2000. "Forget it Jake, It's Chinatown," in Eva-Lotta E. Hedman and John T. Sidel, eds., *Philippine Politics and Society in the Twentieth Century*. London: Routledge, 65-87.

Sidel, John. 2004. "Bossism and democracy in the Philippines, Thailand, and Indonesia: towards an alternative framework for the study of 'local strongmen'," in John Harriss, Kristin Stokke, and Olle Tornquist, eds., *Politicising Democracy: the New Local Politics of Democratisation.* Basingstoke UK: Palgrave Macmillan, 51-74

Silliman, G. Sidney. 1985. "A Political Analysis of the Philippines' Katarungang Pambarangay System of Informal Justice through Mediation," Law & Society Review 19 (2): 279-302.

Simbulan, Dante C. 2005. *The Modern Principalia: The Historical Evolution of the Philippine Ruling Oligarchy*. Honolulu: University of Hawai'i Press.

Stokes, Susan C., Thad Dunning, Marcelo Nazareno, and Valeria Brusco. 2013. *Brokers, Voters, and Clientelism: The Puzzle of Distributive Politics*. Cambridge University Press.

Thachil, Tariq 2014 "Elite Parties and Poor Voters: Theory and Evidence from India" American Journal of Political Science 108:2

Trocki, Carl A., ed. 1998. *Gangsters, Democracy, and the State in Southeast Asia*. Ithaca, NY: Cornell Southeast Asia Program Publications.

Weitz-Shapiro, Rebecca 2012 "What Wins Votes: Why Some Politicians Opt Out of Clientelism," American Journal of Political Science 56:3,