Dynasties and Corruption:
How Dynasties Threaten Accountability for Corruption

Daniel Bruno Davis
Washington DC

Bachelor of Science, University of Wisconsin-Madison, 2007
Master of Arts, University of Denver, 2015

A Dissertation presented to the Graduate Faculty
of the University of Virginia in Candidacy for the Degree of
Doctor of Philosophy

Department of Politics

University of Virginia
May, 2022

Dynasties and Corruption:
How Dynasties Threaten Accountability for Corruption

How best to control corruption is one of the most important unanswered social science questions. This dissertation contributes to the literature on the control of corruption by looking at how dynasties limit both vertical and horizontal accountability for corruption. In the Philippines, do areas with a higher concentration of dynasties see fewer prosecutions for corruption? Will voters reject corrupt politicians even when they are from a large dynasty? Can either horizontal accountability (prosecutions) or vertical accountability (elections) control corruption in the face of dynastic power? This dissertation also examines if a lack of prosecutions and opportunities for corruption leads to more dynasties, or if the dynasties cause these conditions.

To shed new light on these issues, this dissertation compiles new data sets on historic land ownership, dynastic membership, prosecutions for corruption, and elections. For some of these problems, this is the first time large quantitative data has been used to examine the issues. For others, the unique availability of data on these topics in the Philippines means that old questions are answered with new rigor.

Using this data, this dissertations shows that areas of the Philippines which had more inequality in land ownership in the early 20th century have a higher concentration of dynasties today. In those areas with a higher concentration of dynasties, even as corruption worsens prosecutions for corruption remain rare. Voters in the Philippines will punish politicians indicted for corruption, but when those politicians come from large dynasties, they are likely to be elected anyway.

Table of Contents

Acknowledgments

Sitting down to write these acknowledgments is humbling because it shows just how many people gave their time and effort to help me complete this dissertation. It amazes me that so many people were willing to go out of their way to discuss this research and offer advice. If it takes a village to raise a child, then it takes a city to finish a dissertation. I hope that the work here is worthy of all the energy poured into it by a multitude of people. I am also paralyzed by the fear that I've forgotten to thank someone. So, to everyone who has helped me on this long journey, I can never repay the kindness, faith, support, encouragement, and charity you have shown me.

From the beginning, I have been indebted to Dan Gingerich for walking me through this project since before there even was a project. He helped shape the questions I address, and gave invaluable advice on how to approach addressing them. He showed an unfailing knack for improving the ideas I was working on. I have also benefited greatly from the advice and guidance of my entire dissertation committee. John Echeverri-Gent was an unfailing pillar of support. John pushed me to think about how my work connected with ideas that I hadn't considered, greatly improving the project. Brantly Womack was crucial in focusing the scope of my dissertation. At one stage, I planned to look at six or seven countries before Brantly helped me see how little depth that would leave. Allen Hicken's generosity with his time has been exceptional. I had only briefly met him when I asked him to be on my committee, but he has, again and again, spent hours offering me crucial advice. His vast knowledge of the Philippines has been vital to my project. Sylvia Tidey has been kind enough to offer me a perspective from a different discipline to the betterment of this work.

Beyond my committee, I have gotten advice and comments from a wide range of academics from all over the world. I think it shows the best side of academia that so many were willing to take time out of their very busy schedules to help a graduate student, who in most cases they didn't know. The advice, guidance, and support I received helped at every stage of working on my dissertation. I am

indebted to Emiliano Bolongaita, whose work was one of the initial inspirations for this dissertation. I want to thank Pablo Querubin who spoke with me and shared some of the initial data that got me off the ground. I also would like to thank Nico Ravanilla, Tom Pepinsky, Paul Hutchcroft, and John Sidel all of whom helped me think through the key ideas I was working on.

In the Philippines, I am deeply indebted to Dean Ronald Mendoza of the Ateneo School of Government who not only hosted me when I was in Manilla, but contributed some of the key data and most important ideas in this dissertation. Dean Ron offered me his insights into dynasties and politics in the Philippines. He connected me with numerous people working on dynasties and public procurement. He shared some of his crucial data and the insights necessary to build on that data. His expertise on dynasties is what made this dissertation possible. The rest of the Ateneo School of Government was very helpful as well, especially Jurel Yap who helped me navigate the data they have been collecting. I was also helped by other academics in the Philippines who took the time to offer me advice and connections. I truly appreciate the help of Joseph Capuno, Raul Fabella, and Matthew David Ordonez.

I also owe a great deal to all the people from civil society groups and NGOs who I spoke to in the Philippines. These people are working to make the Philippines a better place and shared their insights into how corruption in public procurement functions. Some are quoted in the dissertation, but all of them helped me a huge amount and were crucial in developing this work. Specifically, I want to thank Dondon Parafina, Rosa Clemente, Toix Cerna, Vivien Suerte-Cortez, and Jose Cortez. I wouldn't have nearly as good an understanding of public procurement without their help. They are remarkable people who work to make the world a better place. While I was in Manila, I was also helped by many people at the Asian Development Bank. They provided a great deal of technical know-how about how the government functions. They were unfailingly helpful and generous with their time and insights. I truly appreciate the help of Ruby Alvarez, Lila Mallory, Claudia Buentjen, Hanif Rahemtulla, and Vinod Thomas.

I want to give an especially big thanks to Luis Abad and Isaias Ubana for their help in understanding the politics of the Philippines. It was especially important to learn from people working in politics how politics in the Philippines functions. I am particularly grateful for how open they were when discussing all topics. There are several people in the Philippines I need to thank but who I can't name. A few people who work or worked in sensitive jobs agreed to speak with me anonymously. Their forthrightness and deep understanding of how the government works provided crucial insights for this dissertation. My dissertation wouldn't be the same without their help and while I can't name them here, I just want them to know how much I appreciate what they did.

I wouldn't have gotten the opportunity to go to the Philippines without generous funding from several sources. I want to thank the Bankard Fund for Political Economy for providing the bulk of the funding I needed to be able to spend time in the Philippines and collect so much useful information. I also want to acknowledge the generous funding I received by way of the Bynum Grant from the Quantitative Collaborative. Without this funding, I wouldn't have had the time to gather the data I needed to complete this research.

Finally, I want to thank my friends and family. Without their support, I would never have been able to finish this. It was a long road including a typhoon, flood, earthquake, volcano, and a global pandemic. I especially want to thank my parents who have been endlessly supportive through a long experience in grad school and my mom in particular who copy edited this entire dissertation (though I've edited it more since so all the mistakes are mine alone). Thank you so much to everyone. I feel very lucky to have received so much from so many. This work belongs to all of you.

Introduction: The Long Run Effect of Dynasties on Accountability

The Problem of Dynasties

Corruption is one of the most intransigent problems in governance because corruption is perpetrated by those with the most power. While corruption also involves low level offenses, such as a police officer asking for a bribe not to write a traffic ticket, huge sums of money change hands between top politicians and those seeking influence across the world. These politicians work to undermine systems of accountability and avoid punishment. This dissertation examines one important way politicians avoid punishment for corruption: They are part of political dynasties that help shield them from being prosecuted for corruption or being voted out for being corrupt. I look at how dynasties form, how they limit the ability of the government to prosecute members for corruption, and whether elections can be used to punish corruption. Unfortunately, my key finding is that once dynasties get established, they can become self perpetuating and very difficult to root out. I also show that dynasties can create an environment so hostile to those trying to examine their behavior that few prosecutions for corruption occur. However, this dissertation does offer some hope by showing that when presented with evidence of corruption, voters will reject corrupt politicians, though there are limits to how far this goes. Dynasties allow politicians to get away with shocking levels of corruption and are very difficult to root out.

Like corruption, political dynasties are a problem in many places. While nominally no different from families being prevalent in any other field, political dynasties become a significant issue when they start to keep qualified outsiders from joining the political process and protect incompetent, or criminal, insiders from the consequences of their actions. Dynasties may replace democratic institutions, such as political parties, as the main focus of political power building. Dynasties are a problem in countries at very different levels of economic development. In Japan, about 25% of legislators come from a political dynasty, in Pakistan about 44%, while in the Philippines more than half of legislators hail from dynasties. Dynasties are also deeply enmeshed in the political process. While virtually no politician would admit to

being corrupt, and as I show there is a political cost to being revealed as corrupt, dynasties can't hide. They succeed despite, or because of, their status. They can trade on the name of politicians already elected and the connections they bring. I will show that dynasties gain power when those already in a strong position are able to cement their control over the state. Because dynasties are built to keep themselves in power no matter what, corruption goes unreported and unpunished, and the normal processes of accountability are short circuited.

How do citizens hold corrupt politicians accountable? Accountability can be thought of in two broad categories, horizontal and vertical accountability. Horizontal accountability occurs when one part of the government holds another accountable. For corruption, this usually means one government agency prosecuting some official in the government for corruption. Both prosecutor and official are part of the government, hence the accountability flows from one part of the government to another, horizontally. Vertical accountability for corruption usually means elections. The people hold elected officials accountable for their actions. The accountability flows up from the people to the government. This dissertation raises questions about whether either form of accountability can work and how they interact with each other. Corrupt politicians, with the support of their dynasties, can stymie government agencies trying to prosecute corruption. Similarly, it is unclear whether voters will hold corrupt politicians accountable, especially if they are from large dynasties.

This dissertation will address these three central issues (corruption, dynasties, and accountability) in three papers. The first deals with the origins of political dynasties in the Philippines. This paper shows how dynasties grew out of land inequality and were able to take advantage of their incorporation into the political process to cement their hold on power. The second paper will show how dynasties stop horizontal accountability by limiting the ability of the central government to prosecute corruption. The third paper will show that voters do punish those who are indicted for corruption, but when candidates come from large political dynasties, their chance of election is still extremely high.

These papers address some of the key debates in the literature on corruption, dynasties, and accountability. This introduction gives a general overview of the key arguments in the papers. The next section looks at which literatures I examine and what big questions this dissertation strives to answer. A more complete, and specific, literature review is included in each of the three papers that comprise this dissertation.

Overview of the Literature

This dissertation addresses important questions in the literature on both how dynasties begin and what their effects are. It is generally believed that dynasties are tied to land inequality [see Main 1966, Rafi 2018, Kurniadi 2019, Wittman 2009, McCoy 1994, or Sidel 1999] but I use a novel analysis of land ownership and elections to provide solid evidence that land and dynasties are tied together. This isn't a new argument, but it is traditionally only made with qualitative evidence. This dissertation adds important quantitative work to support the connection. This dissertation also contributes to the work on the effects of dynasties. There is a good deal of work that connects dynasties to poor economic development [see Ali 2016, Garces et al. 2021, Mendoza et al. 2016, Geys and Smith 2017, George and Ponattu 2017]. This dissertation contributes to the work on the effect of dynasties by showing how they undermine governance and the political process. This also connects to dynastic survival by showing why dynasties are so effective in holding onto power.

I also address the work on vertical and horizontal accountability, as well as how they interact. There is a well-developed literature on the control of corruption by anti-corruption agencies [see Quah 2010, de Speville 2010, de Sousa 2009, Szeftel 2000, Heilbrunn 2004, Schutte 2012]. This isn't surprising, given both the huge success of the anti-corruption agencies in Hong Kong and Singapore and the difficulty other countries have had in following their model. This dissertation contributes to this debate

about the success of horizontal accountability (anti-corruption agencies) by both showing the significant failures of the Philippines anti-corruption agency (the Ombudsman) and exactly how the Ombudsman fails. I also look at the debate about corruption and vertical accountability. One of the most important outstanding questions in the study of corruption is if and when people vote for corrupt politicians [see Chong et al. 2015, Hooghe and Quintelier 2013, Winters and Weitz-Shapiro 2013, Klasnja et al. 2014, Ferraz and Finan 2007, de Vries and Solaz 2017]. This dissertation contributes to this literature on vertical accountability by showing that voters will punish corruption when presented with evidence of corruption, even in elections marred by clientelistic payouts. However, again dynasties act as a limitation on accountability. Larger dynasties can get their members elected at a very high rate even when they are known to be corrupt. Further, dynasties suppress investigations into corruption, so they limit horizontal accountability which in turn limits what people know about corruption and limits vertical accountability.

It's also important to define what I mean when I talk about corruption here. The definition of corruption as "the abuse of public office for private gain" has a long history but is often criticized as being too Western-centric and the ideas of "public" and "private" as being too modern to truly encompass the idea (Farrales 2005). Gingerich (2013, p8-11) points out that the idea of private gain is too narrow as well. People might engage in corruption for the benefit of a political party rather than themselves. However, Kurer (2005) argues that instead of thinking of this as public vs private we can see the issue as equality. Some people are being treated differently by the state because of their connections. As Kurer notes this idea isn't rooted in a modern concept and encompasses different ideas of what equality means in different times and places. This sidesteps the public vs private debate by suggesting corruption is when officeholders violate the norms of their society.

Even if we accept this idea of corruption, corruption encompasses a lot of behavior. However, this dissertation looks at a subset of corruption that is narrower and clearly violates the norms of any

society. I look at corruption specifically as it relates to public procurement. There are different ways to act corruptly in public procurement, but they all involve giving some benefit to specific people or companies bidding on a public procurement contract. This corruption might involve awarding a public procurement contract to a specific company in exchange for a bribe. It might involve creating a contract for a non-existing public procurement (like painting a building that doesn't exist) and then pocketing the money. In the end, all these involve taking money from the government in one way or another. That's why public procurement is such a big target for corruption, it's where the money is.

This dissertation contributes to the broader literature on corruption in terms of the work on corruption, elections, prosecutions, and dynasties mentioned above. This dissertation contributes in terms of adding to the literature on the measurement of corruption. There is an emerging literature that works to measure corruption by looking at the quality of public procurement contracts [see Coviello and Gagliarducci 2010, Auriol et al. 2016, Burgess et al. 2015, Olken 2005, di Tella and Schargrodsky 2003, Fazekas et al. 2016]. I both present a novel data set of public procurements in the Philippines and help validate this approach by showing the correlation between low quality public procurement contracts and prosecutions for corruption.

The Philippines

Before giving an outline of the three papers that make up this dissertation, I will discuss why I chose to focus on the Philippines, give some background on the history and government of the Philippines, and show how corruption has become such an ingrained problem. I will omit a detailed look at dynasties since the first paper is about how those came to be and why they continue to hold power. This section intends to give some background more generally.

The Philippines was a Spanish colony from 1565 to 1898, then a US colony from 1898 to 1946. The initial Spanish colonizers employed strategies in the Philippines not dissimilar from those seen in Spanish America. They set up encomiendas and used both force and religious conversion to bring the native people in line (Simbulan 2005, p.16-18). The Philippines, though, failed to provide an immediately extractable resource, like silver in the Americas. The distance from Spain and relative underpopulation also made large scale plantation farming, like in the Caribbean, difficult. Given these difficulties, there was never more than a small number of Spanish officials in the Philippines. Additionally, the distance between Spain and the Philippines is so large that trade ships were usually only sent biannually.

The distance necessitated a high reliance on local intermediaries, even compared to other Spanish colonies. By the time of the US takeover, then, the descendants of the local powerholders, much more than any Spanish peninsulares, ran things on the ground. This was somewhat true in most Spanish colonies but was true to a much larger degree in the far-flung Philippines. When the US took power, the government became a semi-democracy, but the franchise was initially only extended to an extremely small group of people. These voters were mostly the same elites from the Spanish period (Simbulan 2005, p.40-42). In 1901, for example, less than 2% of the population was eligible to vote. The franchise expanded with each election, but the elite had time to entrench themselves. The first paper will describe how these elites kept power in their families, and the later papers will describe the long-running effects of these dynasties.

The government in the Philippines, having been a US colony, is modeled off the US. The Philippines has a bicameral legislature, a division of power between three branches of government, and a popularly elected president. Even compared to the US's "Imperial" presidency, the president of the Philippines has vast powers. Hutchcroft and Rocamora (2003, p.295) note that the Philippines president has "control over the decisions on the suspension of the writ of habeas corpus, assumption of emergency powers, national finance, and budgetary appropriations; and the amendment of the

constitution," making the Philippines' presidency more "rooted in Latin American practices." The president's control over budgetary "pork" is especially important and helps explain why both Congress and local power holders tend to bend to the president's wishes. Elections in the Philippines are heavily clientelistic with officials being judged mostly on if they can deliver pork or bribes to voters. With the president controlling much of the money, politicians court his favor. The third paper includes a longer description of elections and clientelism in the Philippines.

While the Philippines is technically a unitary state, provinces and localities have seen their power increase since the end of the Marcos era. Provinces and municipalities have little power to tax directly in most cases, though property taxes are assessed locally. About 10% of the national budget is allotted to the provinces and municipalities to spend on their priorities. Congress doesn't directly have a role in local spending, but by controlling the budget of national institutions, like the Department of Public Works and Highways, they can get involved in how money is spent by those departments at a local level. Local leaders are beholden to national interests, especially the president, for additional money.

Political dynasties have been a problem in the Philippines since the first elections. The first paper will describe this problem in more detail but suffice it to say the Philippines has a government highly beholden to a relatively small number of elite dynastic families. The national government is used as a piggy bank to buy local support, and corruption is endemic. The Philippines suffers from both petty and grand corruption. In terms of petty corruption, according to the 2016 Asia Barometer Survey, about 30% of people in the Philippines personally experience corruption each year. For comparison, that makes the Philippines fourth worst out of the 12 countries where the Asia Barometer asked about corruption. Citizens are potentially exposed to corruption whenever they interact with the government. "The excessive red tape and inefficiency of the Philippine Civil Service provide ample opportunities for corruption" (Quah 2010, p. 12).

The Philippines also faces significant problems with widespread, institutionalized corruption. One telling fact is that despite looting the country during Ferdinand Marcos' time in power and being forced to flee the country when he fell, the Marcoses have returned to power. While Ferdinand Marcos died in '89, his family has returned to prominence in the Philippines. Marcos' son and one of his daughters have served as representatives, governors, and senators in the last 20 years. His son is currently the leading presidential candidate for the 2022 elections. His wife, while under indictment in the Philippines in numerous cases concerning the enormous graft of her and her late husband, served almost a decade in the Philippines' congress. Despite numerous cases against them, they have never had to return a substantial amount of the looted money. One decision led to an order to return about $300,000. This is a laughable sum compared with the billions they stole.

Public procurement, which I will focus on in this dissertation, is a major source of corruption. One of the most infamous modern scandals was the Priority Development Assistance Fund (PDAF) scandal. The Philippines gives individual congressmen an unusually large hand in controlling budgets in their respective districts. The most overt version of this was the PDAF. The PDAF was money for development directed by each congressman and senator. The amount of money varied over time but rose to about four million dollars a year under the control of each congressman. The idea was that the congressmen could identify projects and agencies in need of funds in their district.

Even in the best-case scenario, this was a project rife with clientelistic bargains. However, at least a dozen congressmen went far beyond just rewarding supporters with pork-barrel spending. A group led by businessman Janet Lim-Napoles created fake NGOs that congressmen would award contracts to. These non-existent NGOs would then pay huge kickbacks to the congressmen. When this scandal was uncovered, Lim-Napoles was arrested along with several congressmen. One of the most high-profile senators involved in the scandal (Bong Revilla) was found not guilty and has since run for, and won, his old Senate seat. He had the endorsement of President Duterte's daughter. The anti-

corruption court found him not guilty but still ordered him to pay back several million dollars in looted money.

Given this background, what makes the Philippines the right case to examine the role of dynasties, the effectiveness of different forms of accountability, or the measurement and control of corruption? There are two broad reasons why the Philippines is a good case for all these issues. First, the Philippines has significant problems with dynasties, lack of accountability in government, and corruption. But this doesn't mean that all the problems are inseparable. Instead, by looking at the development of dynasties, different forms of accountability, and the attempts to control corruption, we can tease out each of the problems individually as well as how they affect each other. Second, the Philippines offers a good case to test these issues because of unique opportunities to measure all the key concepts which are absent in other countries.

The interaction of dynasties, accountability, and corruption makes the Philippines a good test case because it shows us how these problems build on each other. The first paper traces dynasties back to their origins and their incorporation into the modern political system. From this, we will see that dynasties don't just take advantage of places with weak accountability or high corruption, but that they create and exacerbate these problems. Further, we will see in the Philippines how dynasties affect different forms of accountability. As noted before, there is a lot of work on attempts to control corruption through both horizontal and vertical accountability. In the Philippines, we can see how dynasties affect both these forms of accountability. The Philippines has a significant problem with dynasties but also has had democratic elections, with two interruptions, for more than a century. The Philippines isn't the only country with dynasties and corruption, but the long-running problems give us leverage to tease out how these issues work.

The Philippines also offers a unique opportunity to measure all this on a broad scale. Dynastic relationships can be hard to track broadly without coding every politician and their family individually. However, naming conventions in the Philippines (detailed in the papers) allow us to see who is related in large quantitative data sets. There is no other country where family data is so easy to measure on such a broad level. In addition, the Philippines offers a clear picture of the origins of dynasties as the US created crucial census data at the same time as the US was creating the critical juncture that allowed dynasties to flourish. So, we can not only see the extent of dynasties now but also see how they developed a hundred years ago.

The Philippines also has a single anti-corruption court, so there is data on all corruption cases in one place. In other countries, researchers might have to resort to newspaper records of prosecutions, which might miss smaller cases. There is also a large data set on all public procurements in the Philippines. These are a likely source of corruption, and as detailed in the second paper, we can use these to create a measure of corruption. It's unusual for a developing country to have such an extensive public procurement record going back more than 15 years. Finally, the Philippines has regular elections, and I was able to collect data on who ran and who won. This isn't unique, but when added to the rest of the data, the elements are in place to examine the issues. To summarize, the Philippines allows us to collect broad data on the membership of dynasties, their origins, corruption prosecutions, corruption in public procurement, and elections. The Philippines is a country that showcases the issues with dynasties, corruption, and accountability and offers the opportunity to measure each issue.

The Papers

This section will describe the arguments and findings of the three papers that make up this dissertation and how they relate to one another. The first paper looks at the origins of dynasties in the Philippines.

Having a class of powerful landholders isn't unusual (especially for a country that was in many ways pre-modern) but in the Philippines, choices made by the US helped the existing large landholders to build their power and then to incorporate that power into the new democratic system in such a way that their families, the emerging dynasties, were able to capture vast political power.

When the US took the Philippines from Spain, the US inherited a country with deep inequality in land, a key form of wealth in an overwhelming agrarian country. The policies adopted by the US ended up entrenching those who already had wealth. The US bought huge swaths of land in the Philippines from the Catholic Church and instituted a program of land titling to create clear records of ownership. Both these policies could have helped the poor and landless. Redistributing to those without land and giving them clear titles to prevent abuses could have been a huge boon. Instead, the US passed the cost of the new land on to the newly created colonial government. The government sold the land to those who had the money to buy it, those who were already better off. The land titling system required surveys and fees that placed it out of the reach of the poorest. Thus, those already in a strong economic position became even more economically powerful.

As the US was helping the landed elite increase their economic power, the US built a new democratic government in the Philippines in such a way that those with economic power, the landed elite, were able to take over the reins of government. The US wanted to create elections and an indigenous legislature in their new Philippines colony. While that is not a bad impulse, the way the US did so meant that power flowed to the landed elite. The US instituted elections very quickly and gave over the government, and the civil service, to the Filipinos. With no existing democratic institutions, the large landholders were able to get themselves elected to the vast majority of the seats. Once in power, the landholders found that not only could they gain political power from the new government, but they could also turn that political power into economic gains. By using the central government to deliver pork to themselves, they were able to cement power so that even as the Philippines economy became less

reliant on agriculture, they were able to hold onto power. This way, those families who were able to benefit from early land acquisition were able to cement themselves as political dynasties for a hundred years.

I show quantitative evidence of this connection by looking at US census data on land inequality. Those areas that had more land inequality in 1918, after the US had been selling off land to the elite, have a higher concentration of dynasties in the 21st century. In other words, where land was concentrated in a few hands after the US took over, dynasties took strongest root. Further, areas with a higher rate of land titles issued in those first years by the US also show a higher concentration of dynasties in the 21st century. Again, the choices made by the US helped those with means secure their power and gave rise to long lasting dynasties. Building off this work, the second paper looks at how dynasties in the Philippines today can avoid being prosecuted for corruption. 100 years later, dynasties are still using their political power to gain economic advantage.

The second paper examines times when prosecutions for corruption are stymied by dynasties. Corruption prosecutions are the purview of the Ombudsman, a national institution tasked with investigating and prosecuting corruption. While anti-corruption agencies have worked wonders in some countries, their record overall is mixed. In the Philippines, the Ombudsman is only weakly independent and has limited investigative powers. This doesn't mean the Ombudsman never makes cases, but it does mean that their work can be interfered with. Because the Ombudsman has limited investigative powers, they often rely on reports of corruption and those in the know testifying about corrupt practices. However, while the Ombudsman is a national agency, dynasties are powerful on the local and provincial level. That means that most dynasties have a hard time affecting a national agency like the Ombudsman, but also that the Ombudsman has a hard time investigating at the local level. Mayors and governors have a lot of power over the police and courts on the local level. Again, this doesn't always stop the Ombudsman, but it makes investigations more difficult.

Dynasties grew up using their political power to gain economic advantage. The ability to get money through corrupt means is one of the big advantages of holding key government offices. Therefore, corruption investigations can be a threat to all the dynasties in a province and their ability to turn their political power into economic power. While dynasties compete against each other, sometimes violently, they also often form alliances and work together. Not every province has the same concentration of dynasties. As noted in the first paper, in some places, dynasties were able to put down deeper roots than in other places. In areas where dynasties control a large number of the local and provincial offices, they can create a cone of silence, preventing the sort of reports and informants that the Ombudsman relies on to prosecute corruption. So, in provinces with a high concentration of dynasties, as corruption increases, prosecutions remain rare. However, in provinces with a low concentration of dynasties, as corruption increases, so too does the chance of a mayor or governor being prosecuted.

This paper uses three unique data sets: a measure of the concentration of dynasties in every province, something that isn't possible in most countries; a measure of all the prosecutions undertaken by the Ombudsman; and a measure of corruption based on the extensive public procurement data available in the Philippines. This data shows that overall prosecutions increase as corruption increases but that the effect is moderated by the concentration of dynasties. Much like the way dynasties from all over the country in the early 20th century came together in the new central government to hand out pork to themselves, today dynasties in the Philippines make sure that horizontal accountability fails to stop them from making money corruptly. The third paper takes this further by looking at vertical accountability. Do those who are indicted for corruption face consequences at the ballot box?

Horizontal accountability is not the only threat corrupt politicians face. Even if they can avoid being sent to jail for corruption, they may face the loss of their office through elections. After all, voters often say that corruption is one of the largest issues facing them. The Philippines, though, is a tough

case for vertical accountability. Elections in the Philippines are much more organized around clientelistic payoffs than policy differences. Parties are weak and transitory with politicians often winning election to the same office under many different party labels. Instead, voters want politicians to deliver at best pork and at worst direct payoffs. Will voters in such a system punish corrupt politicians or will they ignore corruption as long as they get their end? I find that across 10 elections, after the end of the Marcos dictatorship, voters do punish corrupt politicians at least somewhat.

The third paper looks at half a million candidates for office and finds that for mayors there is a statistically significantly lower chance of winning election if they have been indicted for corruption. Other offices show a lower chance of election if they have been indicted as well, but since the main target of anti-corruption prosecutions are mayors, the other results lack enough data to be statistically significant. This result is important because it shows that even in a clientelistic system, and even in a country with endemic corruption, voters are still not OK with corruption and will punish corrupt politicians. There are some limits to this, however. First, as shown in the second paper, where dynasties are concentrated, there are fewer prosecutions for corruption. This means that dynastic concentration undermines both horizontal accountability and vertical accountability because poor public procurement contracts on their own are not enough for voters to reject politicians. Second, the third paper shows that if a candidate is a part of a dynasty with three or more members already in office, their chance of winning election is so high that being indicted for corruption makes no difference. Voters do punish corruption, but dynasties can short-circuit both horizontal and vertical accountability.

Conclusion

The three papers that make up this dissertation show how dynasties originate, how they keep their power, how they allow members to get away with corruption, and how they pervert both horizontal and

vertical accountability. Looking at these issues in the Philippines gives us a unique opportunity to measure the key ideas. The measure of dynasties, especially, isn't available in other countries. We can see how the US exacerbated land inequality in the Philippines and then incorporated the large landholders into the government so that their families were able to keep power even as land became less important. We can see how those dynasties today work together to prevent prosecutions for corruption by dropping a cone of silence over areas where they are concentrated. We can see how while voters will punish politicians known to be corrupt, dynasties can suppress this information and still help their members get elected. These issues are important in many countries, but in the Philippines, we don't just have anecdotal evidence, but can see data to make the picture clear.

This dissertation continues with the papers outlined here, exploring dynastic origins, dynasties and corruption prosecutions, and prosecutions and elections. Finally, this dissertation ends with a brief concluding chapter that discusses what we have learned from these papers for both political science and for policy making and what work is still left to do.

Work Cited

Ali, A. (2016). Do political dynasties hinder development?. IGC working paper reference no. S-89207-PAK-1.

Auriol, Emmanuelle, Stephane Straub, and Thomas Flochel (2016). "Public Procurement and Rent-Seeking: The Case of Paraguay". In: World Development 77, pp. 395–407.

Burgess, R., Jedwab, R., Miguel, E., Morjaria, A., & i Miquel, G. (2015). The value of democracy: evidence from road building in Kenya. American Economic Review, 105(6), 1817–1851.

Chong, A., De La O, A. L., Karlan, D., & Wantchekon, L. (2015). Does Corruption Information Inspire the Fight or Quash the Hope? A Field Experiment in Mexico on Voter Turnout, Choice, and Party Identification. *The Journal of Politics*, *77*(1), 55–71. https://doi.org/10.1086/678766

Coviello, Decio and Stefano Gagliarducci (2010). "Building Political Collusion: Evidence from Procurement Auctions". In: IZA Discussion Paper 4939.

De Sousa, L. (2010). Anti-corruption agencies: between empowerment and irrelevance. Crime, law and social change, 53(1), 5-22.

De Speville, B. (2010). Anticorruption commissions: the "Hong Kong model" revisited. Asia-Pacific Review, 17(1), 47-71.

De Vries, C. E., & Solaz, H. (2017). The Electoral Consequences of Corruption. Annual Review of Political Science, 20(1), 391–408. https://doi.org/10.1146/annurev-polisci-052715-111917

Di Tella, R., & Schargrodsky, E. (2003). The role of wages and auditing during a crackdown on corruption in the city of Buenos Aires. The Journal of Law and Economics, 46(1), 269-292.

Fazekas, M., Tóth, I. J., & King, L. P. (2016). An objective corruption risk index using public procurement data. European Journal on Criminal Policy and Research, 22(3), 369-397.

Farrales, M. J. (2005). What is corruption?: A history of corruption studies and the great definitions debate. A History of Corruption Studies and the Great Definitions Debate (June 2005).

Ferraz, C., & Finan, F. (2008). Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes *. Quarterly Journal of Economics, 123(2), 703–745. https://doi.org/10.1162/qjec.2008.123.2.703

Garces, L., Jandoc, K., & Lu, M. G. (2021). Political Dynasties and Economic Development: Evidence using Nighttime Light in the Philippines. Philippine Political Science Journal, 41(3), 215-261.

George, S. E., & Ponattu, D. (2017). Understanding the economic impacts of political dynasties: evidence from India. Unpublished manuscript, 1-58.

Geys, B., & Smith, D. M. (2017). Political dynasties in democracies: Causes, consequences and remaining puzzles.

Gingerich, D. W. (2013). Political institutions and party-directed corruption in South America: Stealing for the team. Cambridge University Press.

Heilbrunn, J. R. (2004). Anti-corruption commissions: Panacea or real medicine to fight corruption. World Bank Institute, 2.

Hooghe, M., & Quintelier, E. (2014). Political participation in European countries: The effect of authoritarian rule, corruption, lack of good governance and economic downturn. Comparative European Politics, 12(2), 209–232. https://doi.org/10.1057/cep.2013.3

Klasnja, M., Tucker, J. A., & Deegan-Krause, K. (2014). Pocketbook vs. Sociotropic Corruption Voting. British Journal of Political Science, 46(1), 67–94. https://doi.org/10.1017/S0007123414000088

Kurer, O. (2005). Corruption: An alternative approach to its definition and measurement. Political Studies, 53(1), 222-239.

Kurniadi, B. D. (2019). Defending the Sultan's Land: Yogyakarta, Control over Land and Aristocratic Power in Post-Autocratic Indonesia. In *A Thesis]. Doctor of Philosophy of the Australian National University* (Issue September).

Main, J. T. (1966). Government by the People: The American Revolution and the Democratization of the Legislatures. *The William and Mary Quarterly*, *23*(3), 391. https://doi.org/10.2307/1919237

McCoy, A. W. (1994). An anarchy of families: The historiography of state and family in the Philippines. *An Anarchy of Families: State and Family in the Philippines*, 1–32.

Mendoza, R. U., Beja Jr, E. L., Venida, V. S., & Yap, D. B. (2016). Political dynasties and poverty: measurement and evidence of linkages in the Philippines. Oxford Development Studies, 44(2), 189-201.

Olken, B. A. (2005). Monitoring Corruption: Evidence from a Field Experiment. In in Indonesia." NBER Working Paper# 11753.

Quah, J. S. T. (2010). Defying institutional failure: learning from the experiences of anti-corruption agencies in four Asian countries. Crime, Law and Social Change, 53(1), 23–54.

Rafi, A. (2018). Social Reproduction of the Landed Political Elite in Pakistan (Doctoral dissertation, University of London).

Schütte, S. A. (2012). Against the odds: Anti-corruption reform in Indonesia. Public Administration and Development, 32(1), 38-48.

Sidel, J. T. (1999). *Capital, coercion, and crime: Bossism in the Philippines*. Stanford University Press.

Szeftel, Morris (2000). “Between Governance and Under- development: Accumulation and Africa’s ’Catastrophic Corruption’”. In: *Review of African Political Economy* 27.84, pp. 287–306.

Winters, M. S., & Weitz-Shapiro, R. (2013). Lacking Information or Condoning Corruption: When Do Voters Support Corrupt Lacking Information or Condoning Corruption When Do Voters Support Corrupt Politicians? Comparative Politics, 45(4), 418–436. https://doi.org/10.5129/001041513X13815259182857

Wittman, H. (2009). Reframing agrarian citizenship: Land, life and power in Brazil. *Journal of Rural Studies*, *25*(1), 120–130. https://doi.org/10.1016/j.jrurstud.2008.07.002

Entrenching Dynastic Power in the Philippines

"It may be the 21st Century, but in reality, this is still a very feudal society."

Marites Vitug

Introduction

Dynasties are incredibly central to Filipino politics. In 2016, 81% of governors, 78% of representatives, and 69% of mayors had a family member in office.[1] As Luis Abed (Interview 2019) said, "[political] parties are essentially an alliance of families." Dynasties don't just persist across positions but over time as well. The former president's (Benigno Aquino III) mother was president, his father would have been president if he wasn't assassinated, his grandfather was a long-time legislative leader, and his great-grandfather was a general who fought for independence against the Spanish and Americans. While the Aquinos are very famous, it's not at all unusual for mayors and governors to have parents and grandparents who were both in office. Dynasties have been a hindrance to the Philippines. They are associated with lower growth (Mendoza et al. 2016), worse health outcomes (Braganca et al. 2015), and protection of corrupt officials from prosecution (Davis forthcoming). But dynasties are not some immutable aspect of Filipino culture. Political dynasties developed first during the Spanish colonial period but were able to take deep root thanks to the choices made by the US after taking control of the Philippines.

This paper examines what allowed political dynasties to take such firm root in the Philippines, adding to the debate by bringing in new quantitative evidence. The US didn't necessarily create powerful families, but the US helped to strengthen and cement those families so that even a century later they endure. This paper also examines the connection between land and dynasties. While the power of the landed aristocracy was mostly eclipsed by the commercial and industrial bourgeoisie in the West, in the Philippines, the end of Spanish domination and the choices made by the US allowed large

[1] Ateneo School of Government

landholders to entrench themselves. The 18-year period between when the US took over and when the US handed legislative power to the Filipinos was key in establishing this system of dynastic power. In addition, the way the US built that new political system, and how that new political system allowed landholders to turn their economic power into political power, was key to establishing the long-term power of dynasties.

Censuses taken by the US in 1903, just after the US finished fighting anti-colonialist insurgents in most of the Philippine's islands, and in 1918, not long after the US handed over most power to the new indigenous legislature give a clear view of this critical juncture. These censuses include data on how many farms of different sizes there were in each province and how much farmland each tranche includes. With this data on farm distribution, I will show that areas of the Philippines that had more land inequality in 1918 had a higher concentration of dynasties in the 21st century. Areas where some families were able to capture a disproportionate share of the land in the early 20th century are areas where today there is a higher concentration of dynasties. I will also show how areas in the early 20th century where the US helped wealthy farmers get clear title on their land also saw more dynasties in the 21st century. While the connection between the landed elite and power is well established, this paper presents the first quantitative evidence of a connection between land inequality and land titling in the early US period and the salience of dynasties a century later.

This paper contributes to the literature on critical junctures and incorporation by showing how the early US colonial period was key in cementing the wealth of large landholders and turning that into political power. This paper also contributes to the literature on land and dynasties as well as inequality and dynasties. This is useful for both understanding the Philippines but also for understanding how power ossifies and how dynasties take hold generally. Finally, this paper will show that even where the US had good intentions, creating a land titling system, there is clear evidence that it contributed to the long-lasting power of political dynasties.

The next section begins by describing the key work on dynasties, land inequality, and critical junctures and how this relates to the evidence at hand. Next, I will outline the development of farming and land distribution in the Philippines, followed by a discussion of the emerging dynasties during the period of direct US rule. Then I will outline the data available in the four censuses examined. Finally, I will conclude by discussing how this data was used, what conclusions can be drawn, and what is left for future work.

Literature Review and Theory

For most of human history, landholding was the same as holding wealth and power. Not surprisingly, many of the early democratic systems were dominated by large landholders. In the UK, as the monarchy weakened, the parliament became increasingly dominated by a landed elite of "between six thousand and ten thousand families" (Jupp 1990, 54). In the UK, the power of these families waned over the 19th century as the franchise broadened and a capitalist economic elite, detached from the land, came to dominate. In 19th century Germany, some political parties were organized around protecting the economic and social power of the landed elite (Berdahl 1972). In the early US, especially in states that could support large farms, the landed elite dominated. Main (1966, p.396) describes the members of the Virginia House of Burgesses on the eve of the American Revolution, saying, "most of them were also large landholders and the legislature was firmly in control of the great planters." A decade after the revolution, "the great landowners still controlled the lower house, though their strength was reduced from 60 per cent to 50 per cent" (p. 402).

While in much of the developed world the increased quality of democracy and the shift in power to industrial developers weakened these old landholding families, there are many places where they persist. Nasr (1996) argues that the post-independence government of Pakistan turned to the colonial

era landed elite to help shore up the new state. As the landed elite were incorporated into the political system, they were able to use spoils from that system to maintain their power. Kurniadi (2019) looks at how in the ancient capital of Jogjakarta in Indonesia, after the autocratic period, it was the elites who had the most land that were able to reemerge as political bosses. In Brazil, historically, land was given out to key elites working for the crown. Today less than four percent of people own almost half the workable land (Wittman 2009). This paper contributes to this work not by being the first to suggest that the Philippines has problems with dynasties, or that these dynasties were originally based in the land, but by offering clear quantitative evidence that land inequality and land policies that favor the rich (Torrens titling) contributed to the rise of political dynasties in the Philippines.

The Philippines had a colonial system of land ownership under the Spanish, not so different from other Spanish colonies, but the enormous distance between the Philippines and Spain, and the relative paucity of resources in the Philippines, meant that Spanish control was always light and there were relatively few *peninsulares* even compared to other Spanish possessions. So, the *mestizos* and the descendants of the native power holders (all intermarried) dominated even more than other places. This power was reinforced by US policies that benefited those already in a strong position and then handed them political power.

As Pepinsky (2019) notes, we can learn a good deal from the careful analysis of single case studies, and while this study looks just at the Philippines, we can learn much from this case that applies broadly. The history of Filipino dynasties is a good example of the importance of critical junctures and path dependency. In a similar vein to how Acemoglu et al. (2000) looked at colonial institutions and their effect on the development of modern economies, this paper looks at land inequality in the 1910s and its effect, a century later, on dynastic stability. This isn't because things stayed the same for a hundred years, but because there was a critical juncture around the time of the US takeover of the Philippines. As Collier and Collier (1991) point out, a crisis usually forms the core of a critical juncture. And just as Collier

and Collier identified how labor was incorporated into developing Latin American states as a key critical juncture with long-running consequences, the way the US took over the Philippines and sought to incorporate the local elites (economic elites) into a national government was the critical juncture that led to the sustained power of political dynasties.

The US sought to create significant change in the Philippines, dismantling existing Catholic and Spanish power structures, sending in thousands of teachers, and opening huge swaths of the country to farming for the first time. The US sold off an enormous amount of land, but mostly those already in a strong position were able to benefit. The US turned over significant power to an elected Philippines legislature by 1916. This enabled those who benefited economically from the changes made by the US to build their political power. Between 1903 and 1918, we see large changes in the distribution of farmland and a huge increase in the total amount of farming. What we also see is a stronger correlation between land inequality and the later presence of a high concentration of dynasties. The US land reform policies benefited the well-off and the US land titling initiative helped those who were already well-off to secure their place. The US then incorporated those elites into the new political system in such a way that they could turn their economic power into political power and their political power back into economic power forming long lasting dynasties.

This paper also contributes to the examination of dynasties in the Philippines specifically. There is a significant amount of quantitative work on dynasties in the Philippines (Mendoza et al. 2016, Querubin 2013, Labonne et al. 2019, Dulay 2021 to name a few), but it almost entirely focuses on the effects and control of dynasties rather than their origins. Tadem and Tadem (2016) as well as McCoy (1994) and Sidel (1999) suggest that the US played a key role in allowing the creation of powerful dynasties, but their accounts are purely historical and descriptive. Maurer and Iyer (2008) look at land inequality in the early Philippines but don't connect it to later dynasties.

This paper addresses the origins of dynasties in the Philippines and provides specific evidence that supports the conclusion that the US played a large role in allowing the dynasties to develop. This analysis also gives us more leverage on some of the chicken and egg problems that plague research into dynasties. As Mendoza et al. (2015) note, it is an open-ended question if dynasties are a cause of or result of poor development. This is also a question more broadly in research on inequality and corruption (Jong-Sung and Khagram 2005). Williamson (2017) further notes that there is surprisingly little research into the whole history of inequality in the Philippines despite the existence of these censuses from the early 20th century. This paper helps to answer both questions. First, by looking at how existing land inequality is associated with more powerful dynasties a century later, this paper suggests that inequality can lead to dynasties rather than dynasties just leading to inequality. Second, since we also know that dynasties can reinforce economic inequality and poverty, this research helps show how land inequality in the early 20th century can lead to wealth inequality much later.

This paper also contributes to the literature on land inequality and land redistribution more generally. From the beginning of the US colonial period, there was a recognition that the Philippines suffered from significant land inequality issues and that something should be done. The first US governor-general, Willian Howard Taft [before he was president], made that a major US aim. However, subsequent governors-general didn't share his focus. Between the 1903 and 1918 censuses the US tried to enact land reform. It has largely been seen as a failure (You 2014), and by comparing land inequality to modern dynastic strength, we can see that failure.

One of the major questions in the study of land inequality is the significance of geography or factor endowments, as well as the importance of colonial institutions (Framkema 2009). Here we have a snapshot right at the end of the Spanish period (the census of 1903), right before the US transfers a lot of power (the census of 1918), and after two decades of mostly home rule but before the US left (1939 and 1948). Land inequality and distribution changed a lot over this period, and it shows the importance

of changes in institutions. The US ended up advocating different land redistribution policies in other Asian countries it had influence over. You (2014) explains that after World War II the US feared communist sympathies in Taiwan and South Korea and pushed both to enact broad land reform. In both countries, land inequality decreased substantially over the next ten years. In the Philippines there was an armed struggle for land reform, the Huk rebellion. The Huk rebellion started as a fight against Japanese occupation, but with the end of World War II became a broader peasant rebellion. However, with the defeat of the Huk the threat of violent land appropriation by the peasants ended, the landed elite retrenched, and land inequality remained high. Land reform could have been a huge boon. Race (1972, p17) notes that in South Vietnam land redistribution attempts that simply "created hatred and bitterness between landlord and tenant." Instead it was the Viet Cong who successfully redistributed land and won the support of a broad swath of peasants.

This paper also examines the relationship between land inequality and the prevalence of export crops. Von Braun et al. (1989) look at Guatemala and find that the presence of more export crops, as well as better prices for those crops, exacerbate land inequality. This makes intuitive sense, as large landholders don't need subsistence farming, so they should move toward whatever will make the most money. In addition, as they become more successful, they should be able to buy up more land to increase profits. However, when looking at the Philippines I don't find this same connection. I initially suspected that export crops were associated with more dynasties, but that isn't the case. This could be because of the relatively low level of exports in the Philippines overall.

Finally, this paper contributes to the literature on colonial institutions and corruption. Acemoglu et al. (2000) look at settler fatalities, but the crux of their story is the importance of the institutions developed by colonial powers. Extractive states (where few colonists could live) simply stole everything that wasn't nailed down and developed institutions to legitimize this theft. The example par excellence is Peru with its enormous silver mines and modern underdevelopment. In the literature, British, or

sometimes French, colonies are usually seen as having legacies that promote more useful institutional development (Bernhard et al. 2004). The British legal code is also seen as a benefit to its former colonies which has helped with development (Daniels et al. 2011). It was two former British colonies, Hong Kong and Singapore, that developed a lot of the modern tools for fighting corruption. Lange et al. (2006) argue that places colonized by Spain, specifically, end up worse off than other countries with colonial pasts.

The Philippines offers a unique opportunity to examine these colonial legacies. The Philippines was for some 330 years a Spanish colony. It exhibits many of the problems that might be associated with that colonial legacy. It is underdeveloped, has high corruption, and has weak rule of law. However, the Philippines was also a US colony for 48 years. The US specifically engaged in a process of trying to build a new political system modeled on its own, and therefore partially on the British, system. This paper looks at how the US inherited a legacy of land inequality, but instead of reducing the problem, pushed for new institutions which incorporated political dynasties in a way that has negatively shaped the Philippines since. It wasn't so much the Spanish institutions that led to the long-running problem, but that the US ones that entrenched the dynasties.

Farming in the Philippines

The economic value of the Philippines to both Spanish and American colonial rulers was mostly in agriculture. The Philippines has one of the largest gold reserves in the world, but even today little to none has been successfully extracted. Bauzon (1975, p.1) notes that while it's unclear whether private land ownership existed before the arrival of the Spanish, it was certainly part of Spanish large-scale farming and the introduction of cash crops. Sobritchea (1981, p.18) describes farming before the Spanish, noting that "land in precolonial times, especially areas used for wood and grazing, was

considered a communal resource." The pre-Spanish form of land ownership was largely collective and not subject to intensive farming. The Philippines was also considered underpopulated even as late as 1900 when the US took over and farmland was not in short supply.

The Spanish also instituted land tenure systems that hugely disadvantaged the natives. Several systems, all similar in effect to sharecropping, made many native Filipinos pay to use ancestral land or reduced even successful farmers to near destitution (Bauzon 1975, p.4-7). This also increasingly saw land consolidated into large holdings. Bauzon (p.9) explains, "the Spanish Government consciously encouraged growth and development of haciendas precisely because of its desire to promote and foster an export economy in the Philippines." This was a major source of resentment against the Spanish that led to uprisings before the US-Spanish War.

The US took note of this problem immediately. The former Spanish government, though, was not the only large landholder. Beyond rich *mestizos*, the Catholic Church (through local friars) held a great deal of land and acted as landlords. Roth (1977) notes that the friars took on the role of not only priest, but also of teacher, mayor, landlord, and judge. For many Filipinos, the friars were their only real experience of the Spanish government. The US did not want to share power with the friars but the treaty the US signed with Spain bound them to respect existing property rights in seized territory, specifically including those of the Church. The US negotiated with the Vatican to buy the friars' lands, paying as much for them as it had, adjusted for inflation, when buying Alaska from Russia. The initial plan was to redistribute the land to reduce rural unrest and lower land inequality. This was largely a failure. Bauzon (1975) explains that the plan failed because the US did not support the ability of poor Filipinos to successfully buy or work the land. Those already with money were able to purchase the land, often simply replacing friar landlords with Filipino ones.

The US took over a country with significant problems relating to landholdings and essentially made things worse. The end of Spanish colonialism could have been a huge boon for the poor. There was land available to the government, but the poor got very little. As we will see later in this paper there was a huge increase in the number of small farms in the early US period, but they worked an incredibly small amount of land. Instead, the US cemented the power of those already on top. Bauzon (p.15) adds, "A measure of how utterly the Americans failed in their handling of the agricultural question can be seen in the increased frequency of rural conflict in the 1920s and the 1930s, culminating in the outbreak of the Huk rebellion in the 1950s."

The friar lands didn't end up going to the poor for several reasons. First, it was too expensive. The purchase of the friar lands was backed by a loan from a New York bank that the new government of the islands was responsible for (Ventura 2016, p.466). This created an incentive to sell off lands to those who already had money. Second, the government wanted the land surveyed before selling it, a slow process (p.467). Even where land was offered theoretically for free as part of a homestead program, there were costs associated with surveying and applying that were unaffordable to the poor (p.469). Third, distrust of the government ran high. Farmers asked why they should apply for title to the land they had worked from time immemorial. Fourth, the program was not suited to local conditions. A disease had killed off many of the water buffalo in the Philippines at this time so some who may have been able to pay off loans for new land were unable to (p.470). Finally, the program was undermined by its supervisors. The US governor-general thought that largescale farming would be in the interest of the Philippines. Congress scolded the program administrators for not divvying up large tracts of land as the law ordered, but to little effect (p.472). The governor-general was thus quick to call the program a failure and place the blame on the Filipinos. By 1918 two-thirds of the friar lands had been sold off (Maurer and Iyer, 2008). The census results we will see in 1918, then, already contain the effects of this land going to the better off.

It wasn't only in the distribution of the friar lands that the early agricultural policies failed to help. The US also saw that most Filipinos didn't have clear title to the land they worked. Even in areas that had not been part of any *hacienda* system, historical systems of communal ownership left most smallholders with no clear title to their farms. To alleviate this problem, the US tried to create a land titling (or Torrens) system. This included the right of ownership conveyed on those without clear deed who worked the land, modeled in part on the US's history of homesteading. However, a land titling system that could have prevented the abuses of land grabbing that had plagued the Spanish era only benefited those with the money and connections to take advantage of the system. Like the distribution of the friar lands, getting a Torrens title took money, time, and often a more sophisticated used of the courts. This wasn't difficult for the wealthier and better educated, but for the poor, those most in need of clear title to prevent abuses, titles were hard to come by. Unlike the friar lands which had been sold off, Torrens titles were still rare by 1918. Only 4.5% of land parcels had Torrens titles by 1918 (Maurer and Iyer, 2008). Later in the paper, I will examine how areas that saw a higher rate of Torrens titles compare to other areas in terms of modern dynastic concentration.

Even with all these problems, the amount of farmland increased hugely in the early US years, from about 1.3 million hectares to about 2.4 million hectares farmed. The number of farms increased even more from about 800,000 to about 1.9 million. This is partially a result of the US loosening controls on public lands. As Iyer and Maurer (2008) note, the cost of not having a clear title in the early US period was not very high. There wasn't a great likelihood of being forced off the land in this period. The poor took some public land without title while the rich cemented their control by gaining clear legal title, the first step to building a long-lasting power base.

The US also tried to keep American land ownership limited. Anti-colonialist forces in the US Congress pressed for a restriction on the amount of land American corporations could own. Corporations were limited to 1024 hectares (Iyer and Maurer 2008). Homesteading in the Philippines

was also theoretically open to individual Americans, but very few took advantage (McDiarmid 1955, p.860). In the end, the Philippines kept laws restricting corporate ownership throughout and after the US colonial period. Despite some fears, there was not a run of "American absentee land ownership" (p. 886). It was the powerful families in the Philippines, not US corporations, that were the center of agricultural life in the Philippines.

The US opened free trade with the Philippines after taking colonial possession, opening a huge new market for agricultural exports. This was strongly in the interests of the Filipino elites. With the Spanish and the friars removed, the elite were those Filipinos who had owned significant land before. There was almost no mercantile elite at this point. Iglesias (2003) notes that the short-lived First Philippines Republic (1889-1901) restricted suffrage to the landed and proposed to give them the friar lands. Bauzon (1975, p.18) describes how the elite of the Philippines worked with and benefited from US colonial control:

> […] in 1900-1901, elite collaborators helped the Americans initiate a counter-revolution, thus doing a great disservice to the good and noble men who fought and died for Filipino liberty and again all forms of tyranny. In 1907, after American political changes enabled them to acquire positions of influence and authority in the colonial government, their very first act on the very first day of the session of the Philippines National Assembly was to pass a resolution increasing their personal allowances and remunerations. Throughout the existence of the National Assembly, their legislation record in social welfare was zero. In 1909-10, when free trade was being established between the Philippines and the United States, they publicly opposed free trade, but only for electoral popularity since in private they supported free trade for the simple reason that it meant an economic windfall for them as landlords and as producers-exporters of cash crops. Their economic prosperity due to free trade made them oppose Philippine independence in the 1920s and in the 1930s because it meant the termination of free trade, and thus an end to their enormous profits.

The elite of the Philippines benefited from the US takeover in many ways. First, the US opened up farming by selling off lands to the elite who could afford it. Second, the US interest in land titling only benefited those who were already in a good position. Finally, free trade with the US and the resultant boom in exports benefited those with large export-oriented plantations. In addition, the US, thanks to at least some republican impulses, quickly devolved power to Filipinos. But in doing this at the same time

as they were giving more and more economic advantages to that same group, the US ensured that the landed elite would politically dominate the country instead of just economically dominating it. The US inherited a system with huge issues of land inequality and despite some good intentions made things worse.

This is the first part of the reason why the early US period was a key critical juncture in the building of dynasties in the Philippines. The US adopted land policies that saw the rich gain land and, even more important, formal recognition of their land and economic power. This new elite was always going to be powerful, but the US incorporated them into a new political system that helped the landed elite turn economic power into political power. This political power then became part of a self-sustaining cycle where the elite could use political power to generate rents and rents to build political support.

Before moving on to discuss how the landlords were incorporated into the political system, I will discuss the issues and changes in farming in the Philippines. The Philippines is mostly tropical, but it stretches for more than 1,100 miles north to south. This means there are different climates on different islands. For example, tobacco (which was a key export crop in 1903 but fell off quickly later) is only grown in the very far north. Sugarcane, on the other hand, is grown in several places but is heavily concentrated in the middle islands. Abaca, or Manila Hemp, is grown mostly on the northern island of Luzon. Coconuts are grown mainly on the southern islands. The staple food crops of the Philippines are rice and corn, depending on the island. Some of this is due to climate and some due to tradition. Some areas consume both. Despite growing a significant amount of rice, the Philippines has always been a net rice importer.

Animals are also raised in the Philippines for food or as agricultural tools but not in significant numbers compared to farming. During several periods in the first half of the twentieth century, animal

diseases devastated populations. Right around the time when the US was taking over, a huge number of the water buffalo used in farming were dying. During this period the Philippines exported only agricultural products to any significant degree. Even in agriculture, only three or four crops were being exported: Abaca, sugar, coconuts, and tobacco. Abaca began as the largest export but fell off as sugar rose. Tobacco was the fourth and eventually declined to almost no exports. In the later 20th century, coconuts would become increasingly important and Abaca, used to make ropes, would decline.

Table 1

Year	Population	Total Ha Farmed	Number of Farms	Land Inequality Gini	Ha of Abaca	Ha of Sugar	Ha of Coconuts
1903	7,635,426	1,298,845	815,216	0.696	217,608	71,885	148,245
1918	10,314,310	2,415,778	1,954,513	0.680	392,995	147,016	399,859
1939	16,000,303	3,953,811	1,634,726	0.477	291,531	229,638	1,051,215
1948	19,234,182	3,711,903	1,638,624	0.451	102,170	89,229	754,979

Table 1 shows a quick comparison of farming over the four periods I examine. A few key changes jump out. From 1903 to 1939 there is huge growth in the amount of land farmed. The amount of land farmed more than triples. During this same period, there was significant population growth but less than the growth in the area farmed. The growth in farm area versus population is even more significant between 1903 and 1918. The farmed area nearly doubles while the population increases by about 30%. The number of farms more than doubles between 1903 and 1918 but after that decreases and remains flat. This could be the result of pent-up demand to have any farm for those left landless under the Spanish. The contraction after 1918, though, even as farm area grew, suggests that it was no longer as desirable to start a new farm.

The Gini coefficient for land inequality is similar in 1903 and 1918 and decreases significantly in 1939 and 1948. The decrease between 1918 and 1939 is driven by the fact that the number of farms

decreased slightly while the total area increased. Those gains went primarily to middle-sized farms. Direct size by size comparisons are difficult because what sizes the census takers decided to group farms into changed greatly between censuses. The 1939 census has very different size categories from the other three. Looking at the 1903 and 1918 censuses (with some combining[2]) a direct comparison is possible.

Charts 1 and 2 show the changes between 1903 and 1918. Chart 1 shows how significant the increase in small farms was. In 1903 there were 291,007 farms under .35 hectares. In 1918 there were 930,853. Those starting new farms were almost all in the smallest three tranches. Many people were starting new farms but the area they covered remained minuscule. Chart 2 shows that despite the changes in the number of farms and the amount of land farmed, the pattern of land ownership remained very similar. In terms of farmed area, most area was farmed in mid-sized farms, while the largest few had a very disproportionate share of land. In terms of the number of farms, the smallest farms made up a huge share. In 1918, 930,853 farms worked only 164,761 hectares while just 2,646 farms worked 284,440 hectares. The largest farms were well entrenched and while their overall dominance didn't change, they benefited from changes in land titling as well.

[2] For example, in 1903 there are categories for farm between 2 and 3 hectares and 3 and 5 hectares, while in 1918 it is just farms between 2 and 5 hectares.

Chart 1

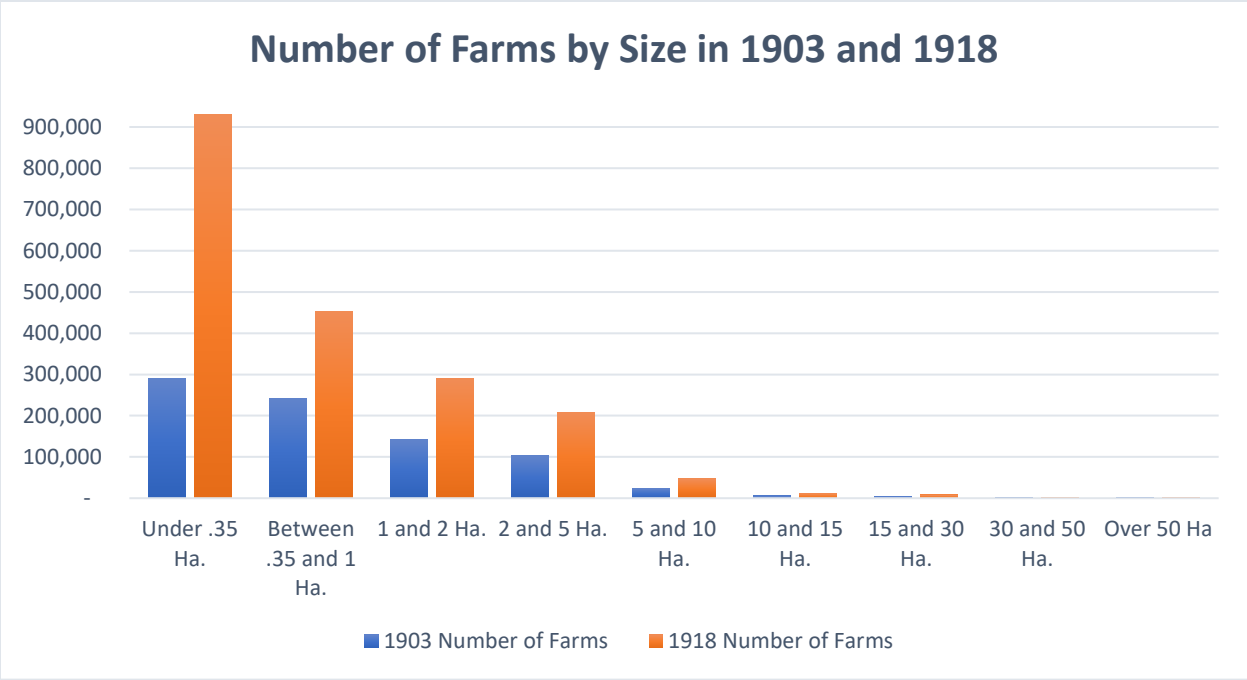
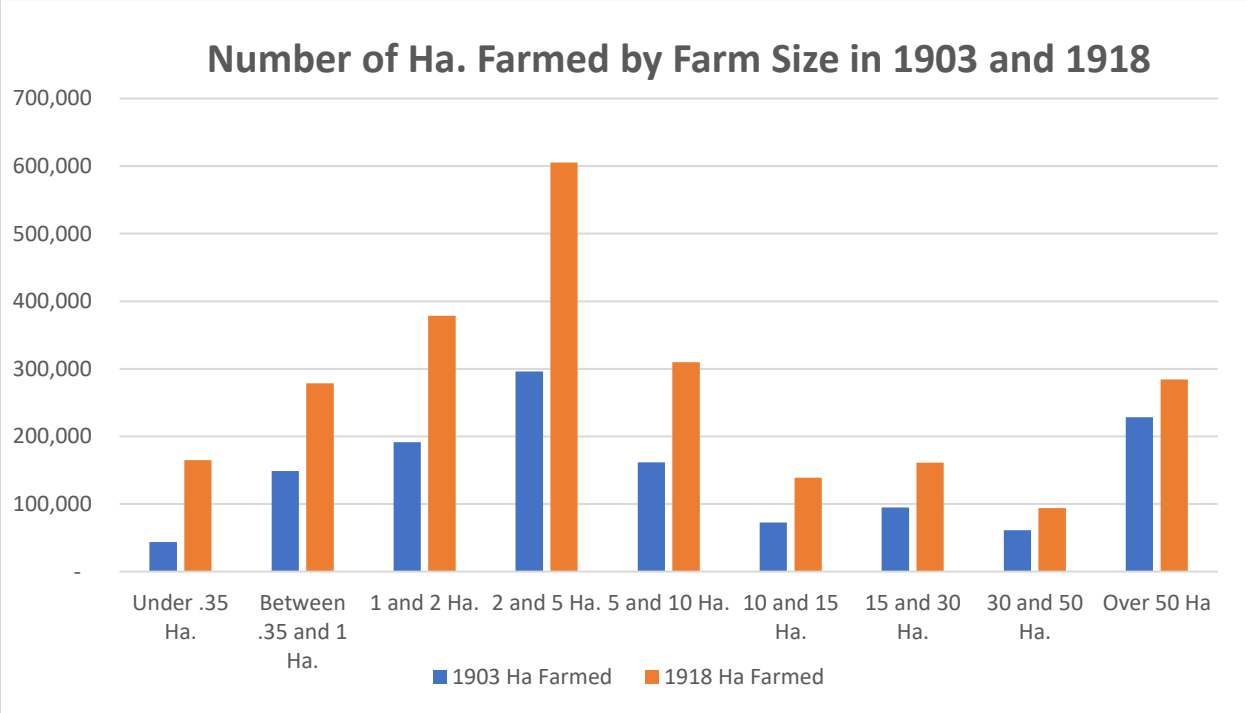


Chart 2



Political Incorporation: Emerging and Enduring Dynasties in the Philippines

While the landed elite had existed under the Spanish, they weren't the ones holding key political power. In much of what is now the Philippines, there was little central authority of any kind. The southern islands were always more independent and in many respects it wasn't until after the US takeover that the whole of the Philippines was administered from Manila. The landed elite, though, had economic power already under the Spanish. McCoy (1993, p. xii-xiv) writes, "Although Spanish colonials restricted Filipino participation in governance, their colonial regime presided over a period of marked growth in the mid-nineteenth century that, by default if nothing else, enriched Filipino landholders and urban merchants." As the previous section discussed, these landlords were further empowered by the changes to landholding that the US brought.

Economic power in land, though, was not a guaranty that landowners would emerge as dominant political actors. The emerging landed elite were able to use political changes brought by the US conquest to turn their increasing economic power into political power. Anderson (1988, p.11-12) walks through how the US interest in developing power quickly entrenched the new ruling class:

> But it was above all the political innovations of the Americans that created a solid, visible 'national oligarchy'. The key institutional change was the stage-by-stage creation of a Congress-style bicameral legislature, based, in the lower house at least, on single-district, winner-take-all elections. The new representational system proved perfectly adapted to the ambitions and social geography of the mestizo nouveaux riches. Their economic base lay in hacienda agriculture, not in the capital city. And their provincial fiefdoms were also protected by the country's immense linguistic diversity. They might all speak the elite, 'national' language (Spanish, later American), but they also spoke variously Tagalog, Ilocano, Pampango, Cebuano, Ilongo, and a dozen other tongues. In this way competition in any given electoral district was effectively limited, in a pre-television age, to a handful of rival local caciques. But Congress, which thus offered them guaranteed access to national-level political power, also brought them together in the capital on a regular basis. There, more than at any previous time, they got to know one another well in a civilized 'ring' sternly refereed by the Americans. They might dislike one another, but they went to the same receptions, attended the same churches, lived in the same residential areas, shopped in the same fashionable streets, had affairs with each other's wives, and arranged marriages between each other's children. They were for the first time forming a self-conscious ruling class.
>
> […]

> One final feature of the American political system is worth emphasizing: the huge proliferation of provincial and local elective offices—in the absence of an autocratic territorial bureaucracy. From very early on mestizo caciques understood that these offices, in the right hands, could consolidate their local political fiefdoms. Not unexpectedly, the right hands were those of family and friends. Brothers, uncles, and cousins for the senior posts, sons and nephews for the junior ones. Here is the origin of the 'political dynasties'—among them the Aquinos and Cojuangcos—which make Filipino politics so spectacularly different from those of any other country in Southeast Asia

The US effectively created a plethora of local offices that the large landholders, now more entrenched thanks to US land sales and Torrens titling, could dominate. The US started creating local administration, and holding local elections, as soon as they had pacified areas, even as the US fought to conquer other parts of the Philippines. The first elections were in Bulacan in 1899.

The US expanded local elections as more territory was conquered. The elections, though, had a very limited franchise. Voters had to own property or had to have been in the government under the Spanish. Teehankee (2002) also notes that elections were conducted only on the municipal level initially. Provincial governors and boards were elected indirectly by municipal councils. This meant that power was heavily in the hands of those local elites, who were at this same time benefiting from land sales and land titling. The first national elections were held in 1907. These were only for a lower house of the Philippines legislature with the upper house being the Philippines Commission, who were appointed by the US and under the supervision of the US governor-general. The lower house could pass laws, but they could and were vetoed by the Philippines Commission such as when the lower house tried to decriminalize calling for the Philippines' independence. The 1907 elections saw only 1.1% (Teehankee 2002) of the population registered to vote; that number expanded slowly with each subsequent election. In 1916, the US disbanded the Philippines Commission and allowed elections for both an upper and lower chamber of the Philippines legislature. The governor-general remained the executive until 1935 but the US took an increasingly hands-off approach.

So, elections started right after the US conquest and by 1916 the electoral system had most of the elements it has today. Elections started very locally and with a highly restricted franchise. This gave the elite the first advantage in getting into office. Jurado (1977) compiled data on early elections and the franchise. Unfortunately, data is not available for every election year. In 1909 5.2% of the population over 21 was registered to vote, and in 1912, 5.9%. Here the data skips to 1935, where the number has risen to 24.5%. After World War II and with independence, the number rises rapidly: 37% in 1946, 52.5% 1947, and 60% in 1949. What's clear from this is that the franchise was quite limited until late in the US period or early in the independence period.

The US not only started expanding the number of elected positions; in 1912, the new American governor-general pushed for as much power devolution as possible in the civil service. He limited executive power and even lowered civil service salaries to force out American bureaucrats so they could be replaced by native Filipinos (Abinales and Amoroso 2005, p.139). The new political power of the elected and appointed Filipinos, who came largely from the landholders, could be turned again into economic power. Abinales and Amoros (p.140) explain:

> There were two sources of largesse. First was the state itself. Through the "spoils" system, Filipino politicians distributed offices (and their corresponding budgetary allocations) to relatives and supporters. Political appointment of kin, allies, and cronies became standard practice, with entry into government assured by the backing of a powerful politician. In exchange, an appointee facilitated the business success of his patron and protected other members of his network within the bureaucracy.
>
> The other path to material enrichment was the extension of the spoils system into the economy. Here the vehicles were state corporations established to promote colonial economic development. The Philippines National Bank (PNB), for example, created by the Assembly to finance sugar production and exportation, was taken over by Serigo Osmena "in violation of every principle which prudence, intelligence and even honesty could dictate." Osmena used appointment to the PNB's offices to repay political debts, without regard for appointees' knowledge of the sugar industry or bank management.

Thus, the landholders had found political power and through political power more economic power. This closed out the critical juncture. The US had opened a period of sweeping political change and incorporated the Filipinos into the government in such a way that the landed elite, who the US had also

helped substantially, now controlled the government. Using this power, the elite could turn governmental power into rents such that they weren't as reliant on land anymore. The progression had been from land to wealth to local power to national power. But once the landlords ran the government, they only needed to turn power into rents and rents back into power to become self-sustaining. Land itself became less important. We see a reduction of land inequality in the late US period, but by this time the political elite, the early landholders, were well established and economically diversified. This process survived numerous changes in regime as the elite were able to protect their core interests.

This is not to say that it was just national power that mattered. Hutchcroft (2000) points out that national power, especially in this era, was always a lot weaker than local power. The national government provided an opportunity for local elites to create patronage opportunities that helped them secure their local power. As Hutchcroft notes (p. 279), "the quest for self-government [in the early American era] became nearly synonymous with the quest for local autonomy, national legislative authority, and patronage opportunities." The US initially hoped that increased education and civil society would undercut the power of these local elites and make the Philippines more democratic, but that never came to pass (Hutchcroft 2000, p. 295-296).

During World War 2, Japan conquered the Philippines, leading to a difficult occupation and eventual uprising among the peasantry (the Huk Rebellion) that lasted well after the Japanese left. Many powerful figures collaborated with the Japanese who, in exchange, did not upset the overall power of the elite (Anderson 1988). The US also didn't punish the elite who had worked with Japan. Anderson (p.14) notes that "One might have expected the returning Americans to punish the oligarchs for their collaboration with the enemy. Senior officials in Washington indeed made noises to this effect. But the on-the-spot Liberator was, of course, MacArthur, who had close personal and business ties with the prewar oligarchy."

After the war things fell even more into the hands of the oligarchy. They used the same tactics but with the addition of political violence (Anderson 1988 p.15). Anderson (p.16) shows how after the US left there was a change in the source of economic wealth, but it benefited those already in power:

> The period 1954–1972 can be regarded as the full heyday of cacique democracy in the Philippines. The oligarchy faced no serious domestic challenges. Access to the American market was declining as post-independence tariff barriers slowly rose, but this setback was compensated for by full access to the state's financial instrumentalities. Under the guise of promoting economic independence and import-substitution industrialization, exchange rates were manipulated, monopolistic licenses parceled out, huge, cheap, often unrepaid bank loans passed around, and the national budget frittered away in pork barrel legislation. Some of the more enterprising dynasties diversified into urban real estate, hotels, utilities, insurance, the mass media, and so forth.

The oligarchy sailed on now firmly in control of the state. The biggest challenge to their power didn't come from reform but from a new form of autocracy. The Marcoses were local landlords and powerholders back to the Spanish period but were a minor family before Ferdinand Marcos. Marcos attacked the oligarchy not because he was a reformer but because he wanted to centralize all power onto himself. No man, though, rules alone. Marcos didn't have the power to remove all the oligarchs, so he created a policy of working with some and attacking others. The result was some changeover in who the oligarchs were, but many families persisted, and the powerful dynastic system rolled on (Tadem and Tadem 2016).

Post Marcos, the new constitution contained a provision aimed at limiting the power of dynasties, which reads, "The State shall guarantee equal access to opportunities for public service, and prohibit political dynasties as may be defined by law." However, this has not been operationalized by the Congress (Mendoza et al. 2019). Today in the Philippines, the majority of congressmen, governors, and a high percent of mayors have a relative in office at the same time. The current constitution has not been successful at limiting the power of political dynasties.

Those who were in a strong position in the late Spanish era were able to grab up not only economic but also political power under the new American administration. As America pulled back,

those same people were able to cement their power over the government and use that to build even more economic power. They created a self-sustaining system where political power led to money, which led to more power. They held onto this power through the Japanese occupation, the end of American rule, the Marcos dictatorship, and still have it today. Most of these families no longer look to the land for their economic security, but this dynastic system had its roots in the ability of some families to consolidate their landholdings. The early US period was the critical juncture. The US, intentionally or not, secured the economic base of the landed elite and then handed them political power. If this argument is correct, we should be able to observe a correlation between the land distribution and land titling of the early 20th century and the concentration of dynasties today. The rest of this paper will show how census data supports the idea that it was where landed elites thrived and in areas where the US Torrens system helped them secure their power in the early 20th century that dynasties today are most concentrated.

Data

In this section I will explain how different censuses collected different information about farming in the Philippines. All four censuses collected information on the number of farms of different sizes and how much land all those farms, as a group, occupied. This is what is required to make a measure of land inequality. I will also detail how provinces themselves changed over this period and the difference between provinces today and in the early 20th century. Finally, I will detail how dynasty concentration in the 21st century is measured.

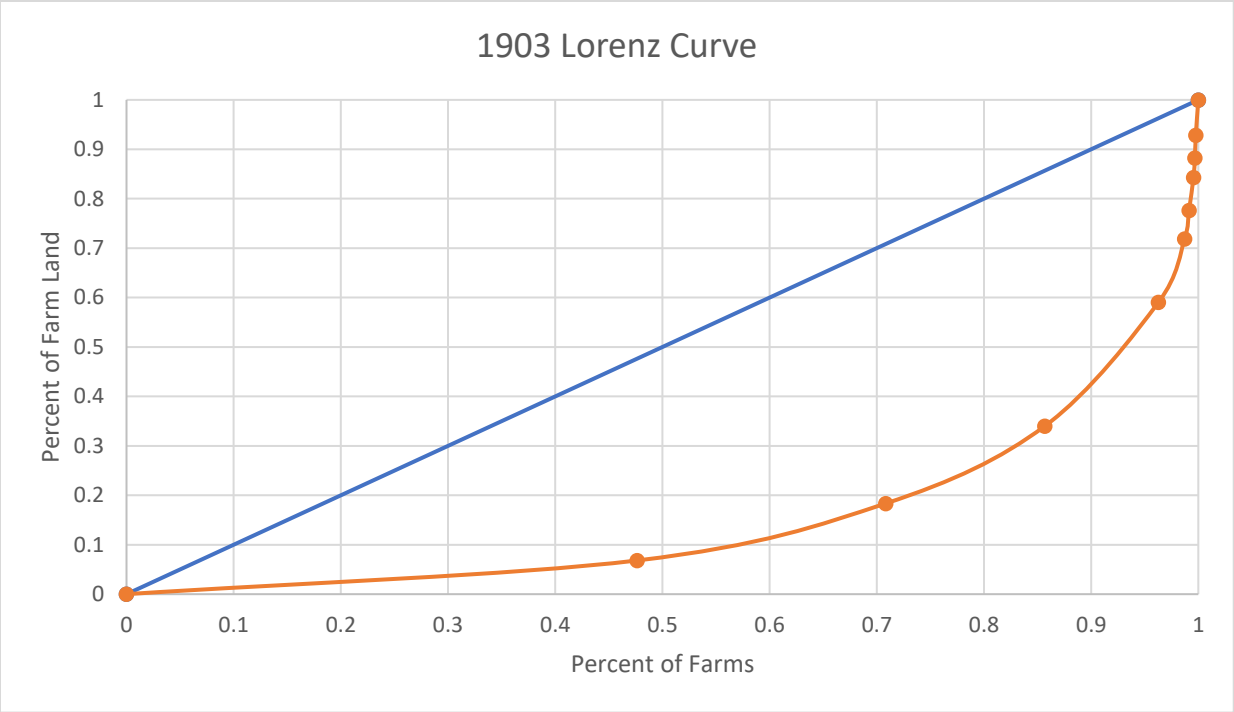
The 1903 census started just a few years after the US had taken the Philippines from Spain, and less than two years after the end of major fighting against guerrilla forces opposing colonization. The 1903 census was conducted in an environment in which the US had not yet secured control over all parts of the country. The Spanish never really had much control over the southern and southwest

islands of the Philippines, and the US fought against guerrilla forces there into the early 1910s. The 1903 census (vol 1, p.22) notes that in some areas it was necessary for armed guards to accompany census enumerators. The 1903 census also notes the difficulty in dealing with some tribes and with the "Moro" people of the southern islands (vol 1, p.23). The 1903 census says that their main strategy to get an accurate census was to include governors and local powerholders in the process. Under the Spanish, censuses had been used mostly for tax collection, so were opposed and undermined at every level. The US leaders spent a great deal of effort bringing the Filipino leaders onboard and issuing notices and proclamations about how this census would not be used for taxes or military conscription. The census describes the process as successful, and Ariffin (2019) notes that the US used the census to build stronger relations with the Filipino elite by employing them in data collection and organization.

The 1903 census explains that while they were able to get a direct headcount in most of the Christian part of the Philippines, which was not the region with the ongoing guerilla war, they had more issues in other places. The 1903 census notes that when they couldn't get a direct count, they would sometimes count houses, as some communities would take to the hills at their approach, and in some cases census takers would ask neighboring communities (vol 1, p.20-24). The census describes a few procedures used that give the impression they were trying whatever seemed to work. This raises questions about the veracity of the 1903 census for some areas. Unfortunately, there is no record of which areas exactly gave them the most trouble. A few areas are simply not included, but mostly for any area there is data in the 1903 census. By the time of the 1918 census, however, these problems had been overcome. There was no longer an active insurgency and the government had expanded and was more accepted in even the remote parts of the Philippines. The 1918 census was able to reach even remote areas that had been hard to contact in 1903 (1918 census vol 1, p.17). By the time of the 1939 and 1948 censuses, these issues weren't a problem at all.

The four censuses collected somewhat different supporting information. All four collected data on landholdings and crop types by province. The 1918 census collected data on land titling that was not collected in any other census. This reveals the effect of the Torrens titles, but can't be compared across time. Starting in 1939, the census includes information on the value of farm equipment in the same size categories as the data on land ownership. From this, for the 1939 and 1948 censuses, I can also construct a Gini measure of farm equipment inequality. As noted above, the four censuses use different intervals for reporting on the sizes of farms. For example, the 1903 census has a 2-to-3-hectare tranche and a 3-to-5-hectare tranche while the 1918 census has a 2-to-5-hectare tranche. The 1939 census is an outlier, eliminating the larger tranches to include many smaller ones. However, this isn't a problem in calculating the Gini coefficient because Gini is a measure of how concentrated wealth (or in this case land) is. Chart 3 below shows the Lorenz Curve for 1903. The orange line is the cumulative percentage of farms and the amount of land those farms occupy. From this, we can see that 10% of the farms account for more than 50% of the total farmland in 1903. The blue line would be a perfectly equal distribution of land. The space between the blue and orange line, compared to just the area under the blue line, is the Gini.

Chart 3



Early 20th century provinces aren't the same as the current provinces. Between 1903 and 2020, the Philippines doubled the number of provinces. Fortunately, the way new provinces were almost always created was by splitting large provinces into pieces. For example, the large southern island of Mindanao, pictured below, originally contained just five provinces. The Davao Region (in the bottom right of the picture) was, in 1903, one province called Davao. Davao, though, conformed to the combined borders of the five modern provinces that succeeded it. There are one or two exceptions, but for the most part, you can compare one province in the first half of the 20th century directly to its successor provinces.

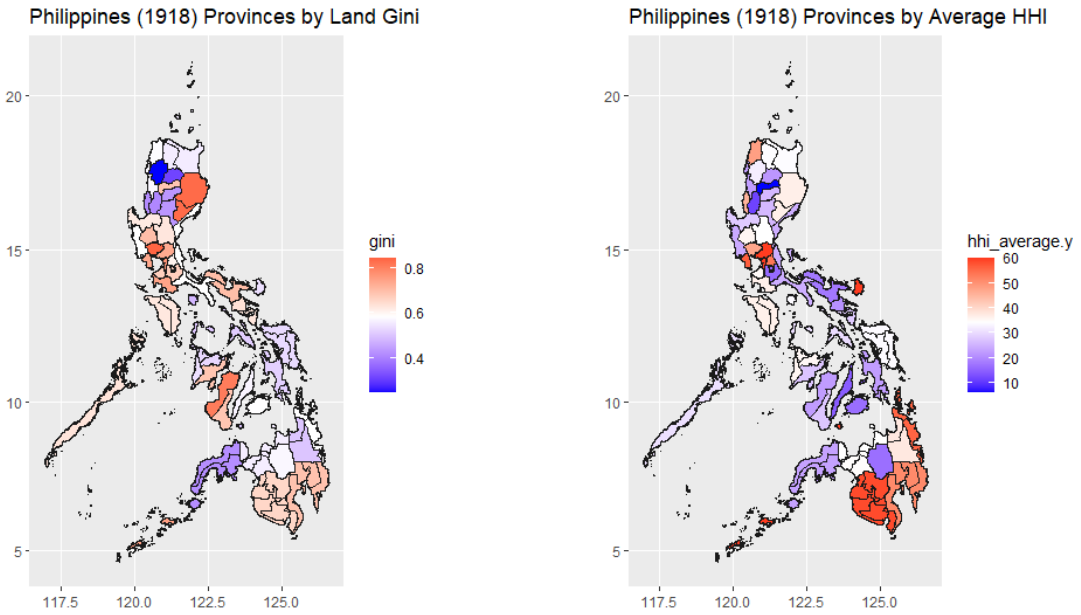
This means that I had to combine the dynasty concentration or divide the land inequality. For example, I could take all five provinces that make up the old province of Davao and average the dynasty concentration between them (weighted for population) and compare that to the land inequality in an earlier period. Alternatively, I could compare the dynasty concentration of each modern province to the land inequality of the whole old province. Each method has some drawbacks. I lose some nuance by averaging dynastic concentration. However, since the dynasty concentration is a measure of how many seats are held by families, there is no reason it can't be averaged over a larger region. Treating each modern province as separate but using one land inequality measure for a large area ignores the issue that I don't know how land inequality varied over each section of the old province. In the end, I tried both methods. Combining modern provinces produced the clearest results, but for 1918 both methods were statistically significant.

I measure dynasties based on the work of Mendoza et al. (2016) who code a dynasty as two or more family members in office in a province at the same time. Because of unique naming conventions introduced by the Spanish, two people from the same province with the same family name are very

likely to be related. In addition, dynasties in the Philippines, while powerful, almost always are centered on just one province. Therefore, the Philippines offers a unique case where dynasties can be measured directly from election records. If there are 10 people named Ampatuan elected in the province of Maguindanao we can say with a high degree of confidence that they have a ten-person dynasty. For dynastic concentration I also follow Mendoza et al. and use the econometric measure HHI (Herfindahl–Hirschman Index) created to measure market concentration. The HHI measure takes the share of seats held by each family, squares them, and adds them together. So, if there are three dynasties in a province holding 5% of the seats, each the HHI would be 75 (5^2 + 5^2 + 5^2).

So, what does this all look like? Below I have a map showing the 1918 land inequality by province and the modern dynasty concentration (HHI) averaged across those same provinces. The lines on the map are the modern provinces, but you can see the 1918 provinces by looking at areas that are the same color. The correlation here isn't visually apparent, partially because it is necessary to control for the widely different populations of the provinces, but some similarities can be seen. In the southeast of both maps, the old province of Davao can be seen to have above-average land inequality in 1918 and high dynasty concentration in the 21st century. Zamboanga, to the north-west of Davao on the same island, has lower than average land inequality in 1918 and lower than average dynasty concentration today. In the next section, I will detail how the more precise statistical comparisons were made.

Chart 4



Methods

As noted above, the biggest challenge when comparing land inequality in 1903-1948 and dynasty concentration today is the differences in the provinces. To deal with this I ran all the regressions by first comparing land inequality in early 20th century provinces to the average dynastic concentration of their modern successor provinces. Second, I ran the regressions by comparing the land dynastic concentration of each modern province with the land inequality of the larger province it was a part of in the early 20th century. The first method makes more sense since it isn't necessary to assume that all the modern successor provinces had the same land inequality as their early 20th century progenitors. To combine modern provinces into early 20th century provinces I took an average of each province's HHI weighted by the number of seats in a province, which is a function of population. I also ran regressions looking at the effect of Torrens titles on dynastic concentration and if they interacted with land inequality. The HHI measure is the dependent variable as the theory is that changes in land inequality and more Torrens

titles in the early 20th century would lead to change in dynastic concentration today. To avoid over-emphasizing the effects of any one election, I average HHI for the last 5 elections for each province.

I also used three controls for all the models. First, I controlled for the number of seats available for election in the modern province (or the total if combining provinces). This controlled for the different sizes of provinces today. Second, I controlled for the number of hectares farmed in the early 20th century province. This controlled for the size of provinces in the past. Finally, I added a control for land devoted to the key export crops (Abaca, sugar, coconuts, and in some periods tobacco). My concern was that areas which could grow more export crops might be more subject to elite capture since the farming was more profitable (though this does not turn out to be the case). I combined the amount of land farmed in all three or four crops (tobacco drops off as an export) to save some degrees of freedom. Due to the small number of provinces in the early 20th century, all the regressions are a bit underpowered. I never have more than 45-50 degrees of freedom. I have a few more rows than provinces because the 1903 and 1918 count "subprovinces," which were large areas nominally under the control of another province, as separate areas. All the subprovinces from 1903 and 1918 eventually became their own provinces.

For the 1939 and 1948 censuses, I also try a Gini coefficient for the inequality in farm equipment for each province. Starting in 1939 the censuses recorded the value of farm equipment owned by each of the tranches of farms. In the same way I created a land inequality Gini, I created one for the inequality in farm equipment. Finally, in the 1948 census, they only reported tranches of farms by total land area, not land area farmed. That means some farms were very big but farmed little land. I still calculate the Gini based on farmed land, not just owned land, but in the 1948 census these throw off the tranches a little. It shouldn't throw off the data too much since farms are still roughly organized into the same categories. Also given the similarities in the underlying data and results between 1939 and 1948, this doesn't seem to have done much harm.

Results and Discussion

I will begin by walking through the result for each of the four censuses. For each census, the models are divided between those comparing land inequality in early 20th century provinces to modern provinces by averaging across the old province and those models that split up the land inequality across the modern provinces. For example, I could compare land inequality in the early 20th century province of Davao to the average dynastic concentration of all Davao's modern successor provinces (I label this "Old Provinces" below). Alternatively, I could compare the land inequality of all the early 20th century province of Davao to the dynastic concentration of each modern successor province (I label this "Modern Provinces" below). The first way requires averaging modern dynastic concentration; the second assumes the land inequality was the same in all parts of the old provinces. The first way makes more sense because it doesn't involve assuming each part of the old provinces had the same inequality.

Table 3 reports the results for the 1903 census. Models 1 and 4 look at land inequality with no controls. The results are not statistically significant. Models 2 and 5 look at the correlation with the proper controls. Neither result is significant. Models 4 and 5 have the sign going in the wrong direction, i.e., more land inequality is associated with less dynastic concentration. These are the only regressions where this happens. I have no explanation for it except random variation. Model 3 is a unique one that I only try for the 1903 census where instead of using the Gini to measure land inequality, I use the number of large farms (greater than 50 hectares) in each province. This has the correct sign and a p-value of .1. This suggests that there is likely some connection between large farms and later dynasties, but a weak one. Given how things hadn't taken their modern form by 1903, since the US had just taken over and hadn't time to make fateful changes, I think these regressions show that the way things were in 1903 didn't set the course for today, but also weren't completely different.

Table 3 (1903 Census)

	Dependent variable:				
	Dynastic Concentration (Old Provinces)			Dynastic Concentration (Modern Provinces)	
	(1)	(2)	(3)	(4)	(5)
Land Inequality	8.675	28.315		-24.527	-10.327
	(40.799)	(42.690)		(44.452)	(46.114)
	p = 0.833	p = 0.511		p = 0.583	p = 0.824
# of Large Farms			0.194		
			(0.116)		
			p = 0.103		
Hectares Export		-0.00000	-0.00000		-0.00000
		(0.00000)	(0.00000)		(0.00000)
		p = 0.707	p = 0.161		p = 0.741
Hectares Farmed		-0.0003	-0.0004		0.00001
		(0.0002)	(0.0002)*		(0.0002)
		p = 0.224	p = 0.077		p = 0.975
Provincial Seats Sum		-0.004	0.004		
		(0.018)	(0.019)		
		p = 0.823	p = 0.845		
Provincial Seats					-0.102
					(0.038)***
					p = 0.009
Constant	33.147	31.503	47.431	58.806	72.367
	(25.833)	(27.493)	(9.206)***	(27.821)**	(28.657)**
	p = 0.207	p = 0.259	p = 0.00001	p = 0.038	p = 0.014
Observations	45	45	45	82	82
R^2	0.001	0.074	0.125	0.004	0.106
Note:					*p<.1**p<.05***p<0.01

Table 4 is one of the key tables for this paper. This shows the results from the regressions for the 1918 census. For both models 2 and 4, we have a statistically significant correlation. As the land inequality in 1918 provinces increases, the dynastic concentration in 21st century provinces increases. This is true whether the data is grouped by old or modern provinces. This is a remarkable result. The idea that land inequality in 1918 could affect life 100 years later shows how important this period was for the Philippines and how entrenched dynasties became. Provinces that had worse land inequality by 1918 show more powerful dynasties today. It's also worth noting that this result is much stronger than the correlation for 1903. This supports the argument that it was changes over those 15 years that

allowed those who benefited to seize power permanently. The economic elite who benefited from the US programs, seen in areas with more land inequality and more Torrens titles, were able to cement their power after 1918 by turning it into political power. Not every province changed in the same ways and those places where land inequality became a central problem were fertile ground for the building of political power in a way that secured it in the hands of a few families with all the problems that entails.

In Table 4, and in all the regression tables, the amount of export crops grown in a province does not end up being statistically significant. In some model specifications not reported here it comes close, but the sign is going the wrong way. I suspect this is because while there was an effort made to orient the Philippines economy toward exports, it was never that successful. Farming always stayed relatively small by international standards. Rice was the most commonly grown crop in the Philippines and yet the Philippines remained a net importer. In addition, different areas of the Philippines have different suitability for export crops, but dynasties are a phenomenon in all parts of the country. Some dynastic families may grow crops for export but it's clearly not a requirement. However, since export crops could be correlated with both inequality and dynasties, I keep it as a control. I also ran models 2 and 4 with the share of other specific crops (rice, corn, and the export crops), but none of the coefficients on those crops were statistically significant. I didn't add them to the models in Table 4 as they reduce the already limited number of observations.

There is also the possibility that the US did not want to compete with a major agricultural exporter with special trade status. Pepinsky (2015) looks at sugar exports and finds that while the US had several territories that exported sugar (Hawaii, Puerto Rico, and the Philippines) in Hawaii and Puerto Rico, the farms were owned by Americans. In the Philippines, as noted above, there was far less American ownership. Pepinsky argues that this led to a caucus for granting the Philippines independence to keep their exports further away. This logic may explain why export crops didn't become central to dynasties.

Table 4 (1918 Census)

	Dependent variable:			
	Dynastic Concentration (Old Provinces)		Dynastic Concentration (Modern Provinces)	
	(1)	(2)	(3)	(4)
Land Inequality	37.805	67.012	55.671	70.593
	(31.159)	(31.533)**	(33.917)	(32.911)**
	p = 0.231	p = 0.039	p = 0.105	p = 0.036
Hectares Export		-0.0001		-0.0003
		(0.0002)		(0.0002)
		p = 0.511		p = 0.262
Hectares Farmed		-0.0002		0.0001
		(0.0001)		(0.0002)
		p = 0.101		p = 0.519
Provincial Seats Sum		0.002		
		(0.021)		
		p = 0.933		
Provincial Seats				-0.125
				(0.040)***
				p = 0.003
Constant	16.700	12.237	10.581	29.297
	(18.902)	(18.800)	(20.541)	(20.302)
	p = 0.382	p = 0.519	p = 0.608	p = 0.154
Observations	52	52	82	82
R^2	0.029	0.173	0.033	0.169
Note:				*p<.1**p<.05***p<0.01

Table 5 shows the regressions for the 1939 census. The models with inequality alone were omitted for space, but the coefficients weren't statistically significant. Model 1 (which is the same as Model 2 from the last two tables) isn't statistically significant this time. The coefficient is very similar, but the standard error is higher. This is interesting for a few reasons. First, I would expect some correlation. Even if we accept that the time around 1918 was the key, those relationships should still partially be present here. I think that explains why we have a similar coefficient but a larger standard error. The land inequality has shifted, overall inequality went down between 1918 and 1939, but some of those previous relationships are there. Second, it suggests that it was the earlier period that was central to the establishment of dynasties. With inequality having decreased, this time period doesn't have as strong a link to dynasties in the present.

Models 2 and 5 use a Gini calculated by farm equipment, not landholding. On their own, these variables are not statistically significant in any model. However, Model 3 shows an interesting result. When the Gini for farm equipment is controlled for the Gini for landholding, it becomes close to statistically significant (p=.056). This could suggest that it was land more than wealth that is connected to dynastic concentration. It could also suggest that the changes since 1918 had made farming more detached from dynasties as mechanization was coming in more during this period. There isn't enough evidence to state this conclusively, though, since the 1918 census didn't have data on farm equipment.

Table 5 (1939 Census)

	Dependent variable:					
	Dynastic Concentration (Old Provinces)			Dynastic Concentration (Modern Provinces)		
	(1)	(2)	(3)	(4)	(5)	(6)
Land Inequality	69.879		158.993	37.497		79.700
	(61.710)		(80.990)*	(72.169)		(94.456)
	p = 0.264		p = 0.056	p = 0.605		p = 0.402
Farm Equipment Inequality		-11.901	-55.868		-5.630	-25.429
		(25.998)	(33.722)		(27.963)	(36.544)
		p = 0.650	p = 0.105		p = 0.841	p = 0.489
Hectares Export	-0.0001	-0.00001	-0.0002	-0.0001	-0.00001	-0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
	p = 0.458	p = 0.958	p = 0.275	p = 0.729	p = 0.962	p = 0.639
Hectares Farmed	-0.0002	-0.0002	-0.0002	0.00004	0.00002	0.0001
	(0.0001)	(0.0001)*	(0.0001)	(0.0001)	(0.0001)	(0.0001)
	p = 0.151	p = 0.096	p = 0.164	p = 0.756	p = 0.863	p = 0.685
Provincial Seats Sum	0.017	0.015	0.025			
	(0.026)	(0.026)	(0.026)			
	p = 0.506	p = 0.563	p = 0.338			
Provincial Seats				-0.111	-0.110	-0.117
				(0.040)***	(0.040)***	(0.041)***
				p = 0.007	p = 0.008	p = 0.006
Constant	20.364	52.379	-2.724	50.030	67.035	41.070
	(26.978)	(10.665)***	(29.914)	(30.788)	(13.134)***	(33.468)
	p = 0.455	p = 0.00002	p = 0.928	p = 0.109	p = 0.00001	p = 0.224
Observations	50	50	50	82	82	82
R^2	0.140	0.119	0.190	0.106	0.104	0.112
Note:						*p<.1**p<.05***p<0.01

The 1948 census regressions are very similar to the ones for 1939. Looking at the data this isn't surprising since the Gini, amount of land farmed, and the number of farms are quite similar between 1939 and 1948. This, in and of itself, is somewhat surprising because the Philippines has just gone through World War 2, but what this shows is a decade of stagnation in farming. Again, the coefficient for Model 1 is similar to the coefficient for the same model from 1918 but with a higher standard error.

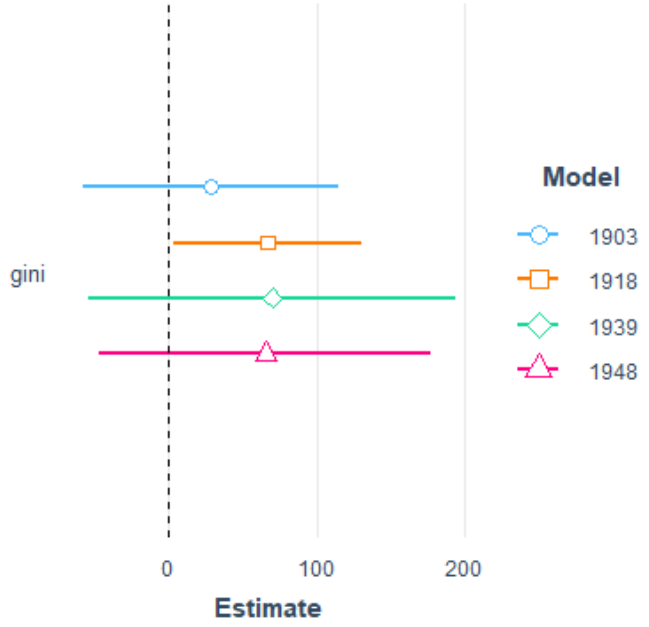
Table 6 (1948 Census)

	Dependent variable:					
	Dynastic Concentration (Old Provinces)			Dynastic Concentration (Modern Provinces)		
	(1)	(2)	(3)	(4)	(5)	(6)
Land Inequality	65.307		97.060	54.491		82.382
	(55.894)		(65.525)	(65.604)		(79.434)
	p = 0.249		p = 0.146	p = 0.409		p = 0.303
Farm Equipment Inequality		-5.049	-29.041		-1.708	-22.195
		(26.957)	(31.155)		(29.314)	(35.337)
		p = 0.853	p = 0.357		p = 0.954	p = 0.532
Hectares Export	-0.0002	-0.0001	-0.0003	-0.0001	-0.00001	-0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
	p = 0.437	p = 0.751	p = 0.304	p = 0.702	p = 0.957	p = 0.555
Hectares Farmed	-0.0003	-0.0003	-0.0002	0.00002	0.00001	0.0001
	(0.0001)**	(0.0001)**	(0.0001)*	(0.0001)	(0.0001)	(0.0001)
	p = 0.042	p = 0.047	p = 0.086	p = 0.838	p = 0.902	p = 0.601
Provincial Seats Sum	0.043	0.043	0.048			
	(0.031)	(0.032)	(0.032)			
	p = 0.183	p = 0.188	p = 0.142			
Provincial Seats				-0.109	-0.107	-0.113
				(0.038)***	(0.038)***	(0.038)***
				p = 0.005	p = 0.006	p = 0.005
Constant	21.651	47.336	13.736	44.708	65.897	38.556
	(22.732)	(8.818)***	(24.296)	(26.902)	(11.424)***	(28.729)
	p = 0.346	p = 0.00001	p = 0.575	p = 0.101	p = 0.00000	p = 0.184
Observations	51	51	51	82	82	82
R^2	0.165	0.141	0.181	0.111	0.103	0.116
Note:						*p<.1**p<.05***p<0.01

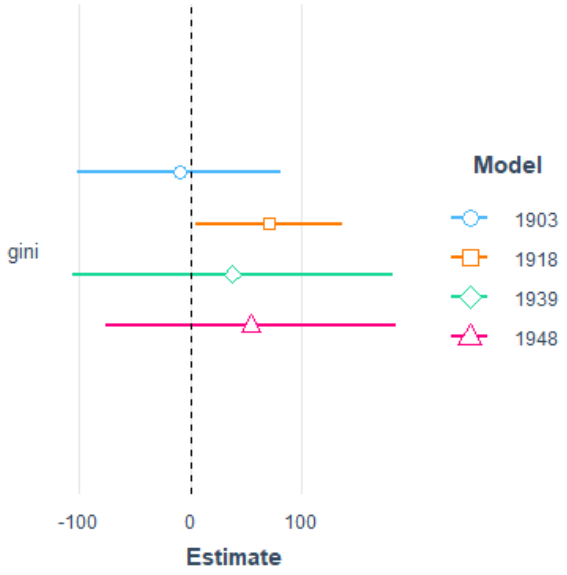
Charts 5 and 6 show the coefficient on land inequality in the main model with controls for each census. Chart 5 includes the models based on the old provinces, and Chart 6 shows the models based on the modern provinces. Looking at the charts shows that the coefficients are not much different between

each census, but the standard error changes a lot. I like to think of this in terms of a picture coming into focus. In 1903 the effect of dynasties wasn't quite in focus. It is in focus in 1918 and then drifts out of focus in 1939 and 1948. This is expected, as while 1918 is the critical period, there are roots before this and the effects linger after 1918.

Chart 5



Char 6



Charts 5 and 6 show the critical juncture at play. The connection between land inequality and dynasties in 1903 is weak as the US has just taken over and is about to unleash a period of substantial change. By 1918, the US has cemented the power of the large landholders and they are beginning to turn that economic power into political power. Those places where the land was concentrated, a high Gini, end up with more dynasties a century later. This doesn't completely change by 1939 or 1948 despite a decrease in overall land inequality, because even as the elite transition from wealth in land to wealth in government they still own much of the land at this point. The standard errors get higher because the relationship becomes weaker, not nonexistent. The early period was the critical juncture of land to power that is why we see the statistically significant effect for 1918.

Finally, Table 7 looks at the importance of not just land inequality but also how the US cemented that inequality. The 1918 census, and only the 1918 census, collected data on what sort of land title people had. As noted before, while the idea had some egalitarian merit in theory, it was those with money who benefited much more than those who were just generally in need of land. The 1918 census includes seven categories for land ownership. Having no title at all was most common and is the omitted reference category for Table 7. People might also have been issued a Torrens title under the new US system. They may hold their land by Spanish royal decree. They may hold their land informally as something they worked which the government was trying to recognize in a sort of homesteading fashion list as "possessory." They might get a judicial decree declaring title on the land. They might have a traditional private land deed, and they might be squatting on public land.

This forms an unordered categorical variable with "no title" left out as the reference category. In Models 2 and 5, from Table 7, it is clear that those provinces with a higher percentage of Torrens titles (compared to having "no title") were correlated with a higher dynastic concentration in the 21st century. Provinces with higher possessory titles are associated with lower dynastic concentration. This shows that in places where the rich were able to get a hold of Torrens titles, they were able to build the sort of

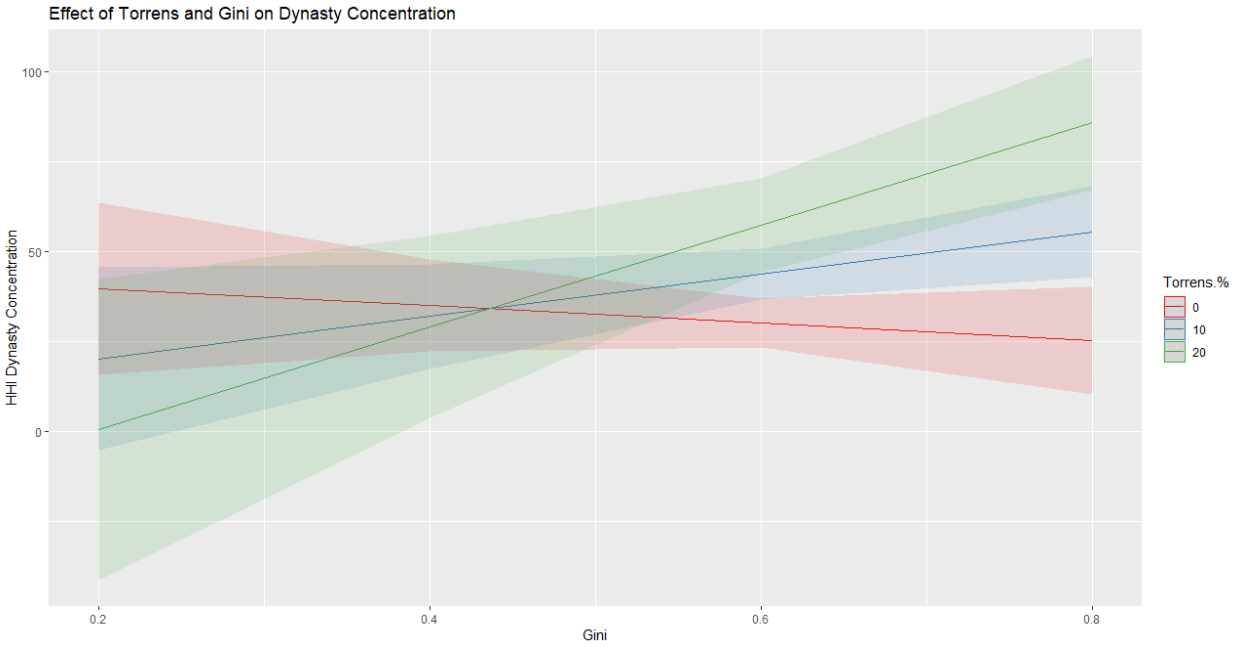
power that created lasting dynasties. In areas where the poor were simply able to keep using their traditional land or homestead its dynasties didn't develop as strongly. This again shows the importance of this critical juncture. The US only pursued this land titling system for a limited time before turning over the government. In 1918, only 4.5% of land had a Torrens title, yet we still see this correlation with dynasties suggesting that it is a good indicator for concentration of wealth. We see here how areas where the well-off were able to cement their power would go on to have lots of dynasties, whereas areas where the poor were able to hold onto more land see fewer dynasties.

In Models 2 and 5 the Gini coefficient is no longer statistically significant. I believe this is because the changes in land inequality between 1903 and 1918 were tied into changes in titling. Models 3 and 6 interact Gini and Torrens titling and in both cases the interaction is statistically significant. Chart 7 below shows a graph of the interaction in Model 3. For provinces with a low percentage of Torrens titles, increases in Gini is not associated with an increase in dynastic concentration. For provinces with a high level of Torrens titles, increases in Gini is associated with an increase in Torrens titles. This is all a bit underpowered, though, as there are only 52 observations in Model 3.

Table 7

	Dependent variable:					
	Dynastic Concentration (Old Provinces)			Dynastic Concentration (Modern Provinces)		
	(1)	(2)	(3)	(4)	(5)	(6)
Land Inequality	67.012	21.463	-24.022	70.593	51.917	12.501
	(31.533)**	(30.612)	(30.829)	(32.911)**	(37.342)	(40.527)
	p = 0.039	p = 0.488	p = 0.441	p = 0.036	p = 0.169	p = 0.759
Land Inequality * Torrens %			8.301			7.196
			(2.535)***			(3.265)**
			p = 0.003			p = 0.031
Torrens %		1.626	-3.620		1.279	-2.971
		(0.422)***	(1.647)**		(0.514)**	(1.992)
		p = 0.0005	p = 0.034		p = 0.016	p = 0.141
Royal %		1.810	1.185		0.710	-0.110
		(1.212)	(1.106)		(1.467)	(1.476)
		p = 0.143	p = 0.291		p = 0.630	p = 0.941
Possessory %		-1.883	-1.127		-1.480	-0.616
		(0.677)***	(0.651)*		(0.690)**	(0.778)
		p = 0.009	p = 0.092		p = 0.036	p = 0.432
Judicial Decree %		-2.742	-4.676		-3.307	-4.996
		(2.372)	(2.213)**		(2.725)	(2.763)*
		p = 0.255	p = 0.041		p = 0.229	p = 0.075
Private Deed %		0.293	0.460		-0.043	0.099
		(0.382)	(0.347)		(0.437)	(0.431)
		p = 0.447	p = 0.193		p = 0.922	p = 0.820
Public Land %		-0.495	-0.260		-0.407	-0.244
		(0.294)	(0.274)		(0.277)	(0.280)
		p = 0.101	p = 0.349		p = 0.146	p = 0.386
Hectares Export	-0.0001	0.00003	-0.00000	-0.0003	-0.0001	-0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
	p = 0.511	p = 0.861	p = 0.995	p = 0.262	p = 0.746	p = 0.658
Hectares Farmed	-0.0002	-0.0003	-0.0003	0.0001	0.0001	0.0001
	(0.0001)	(0.0001)**	(0.0001)***	(0.0002)	(0.0002)	(0.0002)
	p = 0.101	p = 0.011	p = 0.008	p = 0.519	p = 0.722	p = 0.613
Provincial Seats Sum	0.002	0.025	0.031			
	(0.021)	(0.021)	(0.019)			
	p = 0.933	p = 0.246	p = 0.108			
Provincial Seats				-0.125	-0.125	-0.139
				(0.040)***	(0.040)***	(0.039)***
				p = 0.003	p = 0.003	p = 0.001
Constant	12.237	34.790	53.853	29.297	49.975	70.103
	(18.800)	(16.997)**	(16.352)***	(20.302)	(22.023)**	(23.311)***
	p = 0.519	p = 0.048	p = 0.003	p = 0.154	p = 0.027	p = 0.004
Observations	52	52	52	82	82	82
R^2	0.173	0.492	0.599	0.169	0.285	0.332
Note:						*p**p***p<0.01

Chart 7



Taken together this shows that dynasties were empowered by choices the US made in the early 20th century. Changes in land ownership laws allowed the already wealthy to increase their control over the land in some provinces. These provinces would go on to experience a history of stronger dynasties as those dynasties cemented their power so that even as land became less important, they were able to hold onto their political and economic power. Chart 7 shows that it was both the effect of the US giving titles to those with money and areas where those people held a higher percentage of the land.

Conclusion

Looking beyond the Philippines, we sometimes treat the old power of landholders as a relic of the past with little impact on the modern world. This paper shows that those old powers can have a way of worming themselves into the system so that even as land becomes less important, those who had power before can keep it. This paper also shows statistical evidence that it was landholding that created

the power base for dynasties. This is often suggested in the literature but here we have strong evidence to support this claim.

How would things have been different if the US had engaged in real agricultural reform or not helped the landed elite gain so much political power? I believe the land question is the real starting point. If economic life is going to be controlled by a small clique, it would always be hard to keep them out of political power. There was land to go around in the Philippines, but the US was only passingly interested in seeing it go to small farmers. With a stronger economic base, small farmers might have been better able to advocate for themselves and keep the large landholders from dominating so fully. The US also mixed good instincts, turning over power to the Filipinos, with bad, only trusting the elite. The Philippines would have been better off if either the US ensured a more equitable early distribution of power, or if the US had tried to incorporate the poor earlier instead of after the powerful had grabbed control.

For the Philippines, it was the choices the US made during the critical juncture right after it took over that opened the door for dynastic power. It was also the handover of power to those emerging dynasties, and other leaders who worked with them, that let those dynasties keep their power into the modern world. Through the US period, the Japanese invasion, the early Republic, the Marcos dictatorship, and today's post-Marcos constitution, dynasties have endured in the Philippines. It is remarkable, though, that we can so clearly see the roots of these dynasties in the problems of landholding in the first few decades of the 20th century.

Work Cited

Abinales, P., & Amoroso, D. (2005). *State and Society in the Philippines (Pasig City*. Anvil Publishing.

Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, *91*(5), 1369–1401.

Ariffin, D. (2019). The censuses of the Philippine islands: From ethnological inquiry to the formalization of racial categories in the American-occupied Philippines from 1903 to 1939. Social Science Diliman, 15(1).

Anderson, B. (1988). Cacique democracy and the Philippines: Origins and dreams. *New Left Review*, *169*, 3.

Bauzon, L. E. (1975). *Philippine agrarian reform 1880-1965*. ISEAS Publishing.

Berdahl, R. M. (1972). Conservative Politics and Aristocratic Landholders in Bismarckian Germany. *The Journal of Modern History*, *44*(1), 2–20. https://doi.org/10.1086/240704

Bernhard, M., Reenock, C., & Nordstrom, T. (2004). The legacy of Western overseas colonialism on democratic survival. *International Studies Quarterly*, *48*(1), 225–250.

Bragança, A., Ferraz, C., & Rios, J. (2015). Political dynasties and the quality of government. *Unpublished Manuscript*.

Collier, R. B., & Collier, D. (1991). *Shaping the Political Arena: Critical Junctures, the Labor Movement, and Regime Dynamics in Latin America*. Princeton University Press. https://books.google.com/books?id=gIO9QgAACAAJ

Daniels, R. J., Trebilcock, M. J., & Carson, L. D. (2011). The Legacy of Empire: The common law inheritance and commitments to legality in former British colonies. *The American Journal of Comparative Law*, *59*(1), 111–178.

Frankema, E. (2010). The colonial roots of land inequality: Geography, factor endowments, or institutions? *Economic History Review*, *63*(2), 418–451. https://doi.org/10.1111/j.1468-0289.2009.00479.x

Hutchcroft, P. D. (2000). Colonial masters, national politicos, and provincial lords: central authority and local autonomy in the American Philippines, 1900–1913. The Journal of Asian Studies, 59(2), 277-306.

Iglesias, S. (2003). Colonial and indigenous influences on local power structure in the Philippines. Asia Europe Journal, 1(4), 541-549.

Jong-Sung, Y., & Khagram, S. (2005). A comparative study of inequality and corruption. *American Sociological Review*, *70*(1), 136–157.

Jupp, P. J. (1990). The Landed Elite And Political Authority In Britain, Ca. 1760-1850. *The Journal of British Studies*, *29*(1), 53–79. https://doi.org/10.1086/385949

Jurado, E. P. (1977). Political Indicators: An Attempt at the Quantification of Political Information. Philippine Political Science Journal, 4(5-6), 30-51.

Kenawas, Y. C. (2015). The Rise of Political Dynasties in a Democratic Society. *EDGS Working Paper - Arryman Fellow*, *22*, 1–58. https://www.edgs.northwestern.edu/documents/working-papers/the-rise-of-political-dynasties-in-a-democratic-society.pdf

Kurniadi, B. D. (2019). Defending the Sultan's Land: Yogyakarta, Control over Land and Aristocratic Power in Post-Autocratic Indonesia. In *A Thesis]. Doctor of Philosophy of the Australian National University* (Issue September).

Lange, M., Mahoney, J., & Vom Hau, M. (2006). Colonialism and development: A comparative analysis of Spanish and British colonies. *American Journal of Sociology*, *111*(5), 1412–1462.

Main, J. T. (1966). Government by the People: The American Revolution and the Democratization of the Legislatures. *The William and Mary Quarterly*, *23*(3), 391. https://doi.org/10.2307/1919237

Maurer, N., & Iyer, L. (2008). *The cost of property rights: Establishing Institutions on the Philippine Frontier under American Rule, 1898-1918*.

McCoy, A. W. (1994). An anarchy of families: The historiography of state and family in the Philippines. *An Anarchy of Families: State and Family in the Philippines*, 1–32.

McDiarmid, A. M. (1953). Agricultural public land policy in the Philippines during the American period. *Phil. LJ*, *28*, 851.

Mendoza, R. U., Beja Jr, E. L., Venida, V. S., & Yap, D. B. (2016). Political dynasties and poverty: measurement and evidence of linkages in the Philippines. *Oxford Development Studies*, *44*(2), 189–201.

Mendoza, R. U., Beja Jr, E. L., Venida, V. S., & Yap, D. B. (2019). Political dynasties in the Philippine congress. In *Building Inclusive Democracies in ASEAN* (pp. 7–38). World Scientific.

Nasr, S. V. R. (1996). Pakistan: State, agrarian reform and Islamization. International Journal of Politics, Culture, and Society, 249-272.

Pepinsky, T. B. (2015). Trade Competition and American Decolonization. World Politics, 67(3), 387-422.

Pepinsky, T. B. (2019). The return of the single-country study. Annual Review of Political Science, 22, 187-203.

Race, J. (1973). War Comes to Long An: Revolutionary Conflict in a Vietnamese Province. United Kingdom: University of California Press.

Roth, D. M., & others. (1977). *friar estates of the Philippines*. University of New Mexico Press.

Sidel, J. T. (1999). *Capital, coercion, and crime: Bossism in the Philippines*. Stanford University Press.

Smith, D. M. (2012). Succeeding in Politics: Dynasties in Democracies. *Dissertation for the Degree of Doctor of Philosophy*, 1–242. https://escholarship.org/uc/item/0xp4r2hb

Sobritchea, C. I. (1981). The Philippine peasantry of the early colonial period. *Philippine Sociological Review*, 17–23.

Tadem, T. S. E., & Tadem, E. C. (2016). Political dynasties in the Philippines: Persistent patterns, perennial problems. *South East Asia Research*, *24*(3), 328–340.

Teehankee, J. (2002). Electoral politics in the Philippines. Electoral Politics in Southeast and East Asia, 149-202.

Ventura, T. (2016). From small farms to Progressive plantations: The trajectory of land reform in the American Colonial Philippines, 1900--1916. *Agricultural History*, *90*(4), 459–483.

Von Braun, J., Hotchkiss, D., & Immink, M. D. C. (1989). *Nontraditional export crops in Guatemala: Effects on production, income, and nutrition* (Vol. 73). Intl Food Policy Res Inst.

Williamson, J. (2017). Philippine Inequality across the Twentieth Century: Slim Evidence but Fat Questions. *Philippine Review of Economics*, *54*(2), 37–60.

Wittman, H. (2009). Reframing agrarian citizenship: Land, life and power in Brazil. *Journal of Rural Studies*, *25*(1), 120–130. https://doi.org/10.1016/j.jrurstud.2008.07.002

You, J. (2014). *Land Reform, Inequality, and Corruption: A Comparative Historical Study of Korea, Taiwan, and the Philippines*.

The Effect of Dynasties on Corruption Prosecutions in the Philippines

Introduction

On the small island province of Biliran, millions of pesos meant for hospitals have gone missing. Local advocacy groups have been working to get the Ombudsman, who is in charge of all corruption prosecutions, to charge members of the Espina family. (Castillo 2010, p.210). The Espina, however, dominate local politics. Two of the last three governors of Biliran have been Espinas. Their family and allies control almost all mayoral and legislative positions. No one has been charged concerning the missing hospital funds. Moreover, when the "former" bodyguard of one Espina murdered a political rival in broad daylight, no Espina was charged. By contract, in Camarine Norte on the Island of Luzon, former governor Casimiro Padilla Jr. was charged by the Ombudsman with corruption for not returning a pistol that had been issued to him when he was in office. The Ombudsman's office agrees that Padilla did, in fact, return a pistol, they simply claim it was a cheaper one than he had been issued. The pistol in question was worth about $150. After a case spanning nearly 20 years, Padilla served three years in prison.

Is the Ombudsman able to prevent widespread corruption or hold anyone with power accountable? Horizontal accountability, especially when taking place between different levels of the government, is supposed to be a key tool for fighting corruption. But what affects the ability of institutions such as the Ombudsman to hold politicians accountable? This paper focuses on the influence of political dynasties and asks whether dynasties are insulated from any accountability in the Philippines. In analyzing corruption, prosecutions, and dynasties in the Philippines, I find that not all members of dynasties are protected. Instead, when a province becomes inundated with many dynasties holding, as a group, a large number of seats, prosecutions for corruption become much less frequent. In the Philippines, dynasties, which are most powerful at the local level, are able to keep the national anti-corruption agency from holding them accountable, at least in places where there is a high concentration of dynasties.

The weakness of the Ombudsman allows dynasties to keep prosecutors at bay. The Ombudsman is a national organization with a single leader appointed by the president. However, the Ombudsman has a relatively small staff and relies on reports of corruption for most investigations. In provinces where dynasties are concentrated, these reports are less common. The Ombudsman doesn't have the power to wiretap or to examine bank records. When the Ombudsman does make cases, the cases tend to be based on witnesses or audits. Dynasties can intimidate the public into silence in provinces where dynastic power is at its strongest. Critics, the media, and local police are silenced, keeping the Ombudsman, and all accountability to national institutions, at a minimum.

The limits of horizontal accountability and the pernicious effect of dynasties are problems in many countries, but the Philippines offers an excellent opportunity to study accountability and dynasties because of unique opportunities to measure the key concepts. First, the Philippines has a special court for corruption (the Sandiganbayan), from which I obtained records of all the cases. So, unlike in many countries, we can see every person who was indicted for corruption at any level. Second, while the Philippines is not unique as a home to powerful dynasties, thanks to unique naming conventions it is much easier than in other countries to trace these dynasties even at the local level. Third, the Philippines has had an online public procurement system for almost 20 years, a rarity for a developing country. From this, I was able to create a measure of the quality of the public procurement contracts in different provinces and localities, a strong instrument for corruption. Finally, dynasties in the Philippines are not uniformly distributed. Some provinces have a much higher concentration than others. This means that in some places it is much easier to get away with being corrupt. The data shows that prosecutions for corruption increase as corruption worsens, but that it is highly conditional on the power of dynasties.

I begin with a brief discussion of the literature on corruption, accountability, and dynasties and this paper's contribution to the literature. Then I will explain how prosecutions work in the Philippines,

and why we can measure dynasties and corruption with more accuracy than in other countries. After, I will show how each of the key variables is measured including the models used to measure corruption. Next, there is a review the results of the models used to test the data and the implications of these findings. Finally, I end with a discussion what more work can be done to better understand the power of dynasties and accountability.

Literature Review and Theory

The negative effects of corruption are well known and varied. Mauro's (1995) early cross-national work suggests that corruption lowers growth. Azfar and Gurgur (2006) and Di Tella and Schargrodsky (2003) suggest that corruption worsens public health outcomes. Anderson and Tverdova (2003) show how corruption lowers regime support. There is a long-running debate, though, about how to control corruption. Hong Kong and Singapore had significant success in controlling corruption by creating powerful anti-corruption agencies. Quah (2010) and de Speville (2010) suggest that these agencies are the key to holding back corruption. Others have not been so sure. De Sousa (2009) pointed out that while some agencies had successes, others were so constrained that they had little effect. Szeftel (2000) argues that while Africa tried to follow the Asian model for anti-corruption agencies these agencies were so undermined by the very leaders who created them that they failed almost immediately. Heilbrunn (2004) argues that anti-corruption agencies will not succeed unless backed by strong government support, which is a rare condition.

This paper contributes to this literature by looking at when and if the anti-corruption agency in the Philippines can prosecute elected officials for corruption. It's not enough to just say that anti-corruption agencies may fail, or that more powerful agencies are more successful. The Ombudsman (the Philippines anti-corruption agency) does prosecute some people, but corruption is still a rampant

problem in the Philippines. This paper explores when these prosecutions go ahead and when they are stymied. As will be described in the next section, the Ombudsman is vulnerable to political interference, and in the Philippines, it is dynasties and not political parties that are central to the political process. As one member of an important dynasty told me, “Parties are essentially an alliance of families” (Luis Abad, personal communication, October 19, 2019).

The next paper has a more detailed breakdown of party weakness, but it’s important to understand that parties are extremely weakly institutionalized in the Philippines. It’s not unusual for candidates to run under different party labels in every election. Timberman (2016) describes the situation saying, “dynasties both reflect and contribute to the almost farcical weakness of political parties […] Duterte’s presidential campaign was loosely affiliated with the Filipino Democratic Party (PDP)–Laban, a small regional party, and within days of his victory, more than 60 of 115 LP congressmen switched to PDP-Laban.”

The research on dynasties in political science and economics has focused on two major areas: why do dynasties form and persist, and what are the consequences of dynasties. This paper contributes to each question. Dynasties persist by helping to keep their members out of jail. Political solutions aren’t usually enough to stop dynasties. Mendoza et al. (2020) and Querubin (2011) show that term limits in the Philippines either didn’t stop dynastic formation and may even have helped dynasties grow. On the other hand, it wasn’t elections or new rules that broke the power of the Ampatuans, one of the largest and most powerful dynasties in the Philippines. The prosecution and eventual conviction of its most important members severely limited their power. This paper also contributes to understanding the effects of dynastic power in democracies. Research has shown that dynasties are linked to increased poverty even when accounting for dynasties being more likely in poorer areas (Mendoza et al. 2013). Amundsen (2016) shows that in Bangladesh, like in the Philippines, dynastic power makes parties weaker and less democratic. Folke, Persson, and Rickne (2017) show that even in more established

democracies, relatives of those in power make more money, similar to what Chen and Kung (2019) found for connected firms in China. Fiva and Smith (2018) show that even in Norway's closed list proportional representation system (where name recognition of candidates is less of a factor) dynasties help members get elected by boosting party connections. Davis et al. (forthcoming) show a correlation between increased dynastic concentration and increased corruption. This paper builds on that to show that dynasties are not just linked to more corruption but keep prosecutions at bay so that corruption can spread.

This paper also contributes to the work on corruption by constructing a novel measure of corruption in the Philippines, using public procurement data. As shown in Coviello and Gagliarducci (2010), Auriol, Straub, and Flochel (2016), Burgess et al. (2015), or Olken (2005), corruption can be seen in the poor quality of public procurement contracts in some places as opposed to others. For example, Di Tella & Schargrodsky (2003) showed that the number of hospital procurement contracts in Argentina that only had a single firm bidding for the contract dropped hugely when the government announced new audits. Ravanilla et al. (2019) specifically show that in the Philippines, mayors from minor political parties receive fewer public works projects, which are rife with corruption, than more connected mayors. This paper contributes to the growing literature using public procurement contracts to create more objective and broad measures of corruption [see also Fazekas et al. (2016) work on public procurement contracts and corruption in Europe].

This paper will show that dynasties are the key factor limiting who is prosecuted for corruption in the Philippines. As dynasties hold more and more of the elected offices in a province or municipality, corruption prosecutions become infrequent even as the level of corruption (the level of suspect public procurement contracts) increases. Dynasties can exploit the weakness of the Ombudsman to keep prosecutions at bay. In places where dynasties are very strong, they alter the entire climate of the province so that the Ombudsman can't make cases. Interestingly, members of larger dynasties from

regions that have few dynasties overall aren't as successful in preventing prosecution. It takes the overall concentration of dynasties to keep the prosecutors out.

To summarize, this paper contributes to the literature on accountability by showing where anti-corruption agencies fail. It also contributes to the literature on dynasties by showing how they cement their power by creating a cone of silence that hinders prosecutions. Finally, this paper contributes to the literature on corruption by creating a new public procurement measure of corruption. Next, this paper will give an overview of how prosecutions, dynasties, and corruption work in the Philippines, and what data is available.

Prosecutions for Corruption

Corruption prosecutions in the Philippines are handled by the office of the Ombudsman. The office of the Ombudsman goes back to the pre-Marcos period, but it took its modern form as a dedicated anti-corruption agency during the reforms that followed Marcos' fall. Bolongaita (2010) notes that for the most part, the Ombudsman was not based on any preexisting agency and not created in concert with civil society groups. The Ombudsman predates the successful models of Hong Kong and Singapore. The Ombudsman is empowered to prosecute cases involving corruption of almost all politicians. Only very low-level elected officials, municipal counselors, and barangay leaders have corruption cases not automatically handled by the Ombudsman, and those are remitted to the Ombudsman if they involve a serious amount of money.

The Ombudsman does not have full investigatory powers. They often rely on the police, or other investigative bodies like the Commission on Audit, to do the front-line investigating. The Office of the Ombudsman does have investigators, but they just don't have that many and the office doesn't have as much power as other anti-corruption agencies. The Ombudsman can't wiretap; in fact, all wiretaps, save

for national security, are illegal in the Philippines, and they usually can't subpoena bank records. That's not to say they don't make cases, but they have a lot of limits on what they can accomplish.

The Ombudsman's office is also vulnerable to political interference. The appointment of the Ombudsman, and other important judicial bodies, is supposed to be safeguarded from presidential interference, but those protections are themselves very weak. Presidents can only choose an Ombudsman from a shortlist created by the Judicial and Bar Council. However, the president also appoints members of the Judicial and Bar Council. There are rules about who must serve on the councils (two people from Congress, a retired Supreme Court Justice, a professor, a retired lawyer), but the president can still choose from amongst these. In practice, the shortlist is already a list the president will approve of. The Ombudsman, once appointed, serves a single seven-year term and can only be removed by impeachment. This theoretically grants them a great deal of independence but in practice they are often very subservient to the president that appointed them. The term of an Ombudsman doesn't match the six-year presidential term. Presidents may have to spend several years with an Ombudsman appointed by their predecessor. This has resulted in Ombudsman being at odds with and investigating people close to a president. For example, when Duterte took office, he ordered the Ombudsman, who was appointed by his predecessor and political rival Aquino, to fire a deputy Ombudsman who had investigated Duterte. The Ombudsman, though, refused. However, when the Ombudsman's term expired, Duterte appointed an ally as the new Ombudsman and the deputy was fired and lost his pension.

The law makes the Ombudsman an independent agency, but in practice it is susceptible to presidential power. I interviewed a lawyer who had worked at the Office of the Special Prosecutor, the prosecutorial arm of the Ombudsman. The prosecutor (Prosecutor Interview 2019) I spoke to, despite working for the Ombudsman's office, thought that if a president called up an Ombudsman, the president could get the Ombudsman to back off an investigation. The prosecutor didn't admit to

knowing of that happening, but he agreed that that was the way things worked. I spoke with another senior official who had worked for the Ombudsman (Official Interview 2019) ,who spent a lot of time telling me that he personally never engaged in corruption. The official said that he wasn't offered bribes because he never took meetings with those involved in cases. He suggested that even those who turned down bribes were putting themselves in a bad situation. Implicit in this, though, was the fact that bribes relating to the Ombudsman were not unheard of. He had to take special care to not be influenced.

Cases can originate from complaints sent to the Ombudsman. They can also come from issues referred by other agencies or by the Ombudsman's investigative division. However, there is no requirement that they proceed with any particular investigation, or once started that they keep going. Most of the staff of the Office of the Ombudsman are hired through normal civil service procedures. However, since each case had to be, eventually, reviewed by the Ombudsman, or the deputies who are also appointees, the career officers can't escape politics.

All cases brought by the Ombudsman are tried before a special anticorruption court, the Sandiganbayan. The Sandiganbayan consists of 21 justices appointed by the president in the same manner as the Ombudsman. The Sandiganbayan is both a trial and appeals court and decisions made there can only be overruled by the Supreme Court. Cases are heard by panels of three justices. Virtually all cases are held in Manila, where the Ombudsman and Sandiganbayan are also located. The Ombudsman is the only agency that can bring cases before the Sandiganbayan. The trial and appeals process is famously slow. Cases drag on for years or, not uncommonly, decades when appeals are included. This makes it somewhat hard to say which Ombudsman was responsible for a case since virtually every important case takes longer than the tenure of any Ombudsman or president.

Cases against powerful individuals are relatively rare despite the high level of corruption in the Philippines. In addition, even when powerful people are brought to trial and convicted, the conviction

rarely stands up to years of appeals. In one case after a successful conviction and a denied appeal it still took about five years for the Ombudsman to get the Sandiganbayan to actually order the convicted man to serve his sentence. That is not to say the Ombudsman doesn't win convictions and sometimes send people to jail, however. The most powerful and connected are a small group. Most dynasties aren't anywhere near as powerful as the Marcos dynasty. Most governors and congressmen are from a dynasty and some 30% of local office holders as well. The Ombudsman has a hard time making cases, but it still does make cases. As we will see later, in provinces with a low concentration of dynasties, areas with more corruption see more prosecutions. The data on prosecutions is noisy but extensive. What hinders the prosecutors more than their lack of investigatory power is the power of dynasties.

Dynasties in the Philippines

Dynasties in the Philippines emerged out of the Spanish colonial period. Due to the huge distance between the Philippines and Spain, the Spanish ruled by coopting and empowering local leaders. Some dynasties can trace their roots back even further to pre-Spanish royalty. The problem is so entrenched that the post-Marcos constitution includes an anti-dynasty provision, but one that has never been put into law. Even the most powerful national dynasties grow from provincial roots. The Marcoses were not one of the leading national families before Ferdinand, but they were a powerful family in their home province of Ilocos Norte. They have roots going back to the Spanish colonial period. Today the Marcoses are again one of the most powerful families. Ferdinand's daughter Imee was governor until recently, when she was replaced by her son. Ferdinand Marcos' son, Ferdinand "Bongbong" Marcos Jr., is a leading candidate in the 2022 presidential election. However, the Marcoses are not the only family in Ilocos Norte. The Fariñas family has included mayors and provincial as well as national legislators in Ilocos Norte, to name one example. While a few extremely powerful dynasties get most of the press,

politics in the Philippines is made up of many small dynastic families. It's not unusual for the mayor and vice-mayor of a town to be father and son, or brothers, often switching jobs when one is term limited. Even these smaller dynasties enjoy huge advantages over politicians without family in office. Access to money, to patronage networks, and even to the tools of violence all work along dynastic lines.[3]

Since every province has multiple dynasties, these families form shifting alliances. I spoke to a long-time mayor from Quezon about how dynasties affected politics (Ubana Interview). He said the relationships between dynasties were "quite transactional" and that dynasties had "no permanent friends, only permanent interests," to paraphrase Lord Palmerston. He said that when faced with a corruption investigation, local officials might want to influence the decision but that it was only when they could reach up to the national level that this was possible. While mayor, he wasn't a member of a dynasty (now as a state legislator his wife has replaced him as mayor), but he would work with dynasties, trading his ability to deliver votes in his city for favors. He explained that dynasties were driven by one overriding idea, "the protection and continuation of the dynasty."

Dynasties have a lot of power at the local, or provincial level. For example, Sidel (1999) notes that mayors can appoint, promote, and remove local police chiefs. Yilmaz and Venugopal (2013) explain that under post-Marcos decentralization, local governments are also responsible for the budgets of local courts. With so much local power and so much favor trading between dynasties, dynasties are in position to prevent a national organization like the Ombudsman from effectively investigating, particularly in areas where dynasties control a high concentration of the local seats. We might also expect to find that dynasties that are the most connected to national politics, such as having a congressman as a member of the dynasty, would be protected as well. However, as we will see, this isn't born out in the data.

[3] For more on dynasty origins see the paper on land and dynasty origins.

Theory

Based on this background on prosecutions and dynasties, I argue that dynasties are colluding with one another to prevent prosecutions by the Ombudsman. Dynasties intimidate the public into silence allowing corruption to go unpunished. Dynasties are not evenly distributed across the Philippines. As examined in the previous paper, some places had histories that led to much greater dynasty formation. When groups of dynasties control many of the elected offices in a province, they create a culture where even while in some competition for seats, the dynasties are jointly ruling the province and keeping the national government at bay. In places where dynasties don't have this strength, I expect to find that more corruption leads to more prosecutions. However, in areas where dynasties are the most pervasive, I expect to find that the Ombudsman can't make cases even when corruption becomes rampant.

Dynasties are able to prevent the Ombudsman from making cases because the Ombudsman's weakness means they need outside help (reports, audits, complaints, informants) to make cases. The Ombudsman doesn't have the resources to investigate broadly and uncover otherwise unknown cases of corruption. This is similar to what McCubbins and Schwartz (1984) call "fire-alarm oversight." Like responding to a real fire alarm, the Ombudsman waits for someone to sound an alarm before taking action. McCubbins and Schwartz distinguish this from "police-patrol oversight" where the oversight is active and looking for violations. Fire-alarm oversight requires less resources and initiative, but is also less broad. More effective anti-corruption agencies take many actions that could be described as like police-patrols. The Hong Kong anti-corruption agency developed a high school curriculum that was deployed to attempt to change the culture around corruption at the grass roots level. The Ombudsman is much more limited, and thus vulnerable to dynastic interference.

Many dynasties in the Philippines use violence and intimidation as a key way to hold onto power. Winters (2011) writes, “At no point from the Spanish period in the nineteenth century, through the American period in the twentieth, to the contemporary period in the twenty-first century have oligarchs in the Philippines ever been fully disarmed. A significant segment has retained formidable coercive capacities – ranging from standing private militias in the countryside, to bands of soldiers that can be hired as needed from the Philippine armed forces, to motley goon squads that can be raised and unleashed in the provinces and sometimes in Manila.” Violence today isn’t what it was in the early republican period, but dynasties are often willing to not only use their power over the government but force to get their way. This shouldn’t be taken to mean that anyone who criticizes those with power will automatically be gunned down, but it’s far from unheard of. Jopson (2013) describes the situation with the media saying, “a culture of silence by apathy, if not intimidation or ignorance, is fostered.”

Given that dynasties are willing to use force and that there are certainly instances of dynasties using violence against one another, why do I believe that dynasties are cooperating to keep the Ombudsman out rather than trying to use the Ombudsman against one another? Dynasties will compete for elections, sometimes violently, but they don’t want anything that threatens the overall status quo. Overall, the ruling group of the Philippines isn’t any one leader but the dynasties ruling as an oligarchic whole. Quimpo (2015) writes, “In the contemporary ruling oligarchy, as in the pre-dictatorship one, oligarchs rule collectively through institutions and norms, albeit relatively weak, and maintain a direct hand in coercive power through their own armed groups. Their paramount objective is to secure and maintain their wealth and power against all threats. Politicians who are part of or aligned with the oligarchy resort to patronage and also to campaign overspending, bribery, fraud, coercion or violence to gain or retain public office.” Quimpo goes on to note that all the dynasties work together to defeat public calls for things like land reform.

Dynasties form shifting alliances to increase their power. Mendoza et al. (2020) explain that in Western Samar, two of the larger dynasties-- the Tans (12 elected members) and the Uys (13 elected members) -- were joined when Stephen James Tan married Stephany Uy. The alliance involved accepting that the families worked together in some areas and competed in others. Mendoza et al. argue that this alliance persisted even after Reynaldo Uy was murdered, possibly at the behest of Milagrosa Tan. Aspinall et al. (2016) look at how alliance networks form and shift quickly saying, "local factions will often jump ship to align with a winning presidential candidate or member of Congress who can help direct projects towards the municipality. Some candidates we interviewed struggled to recall what party they had been aligned with even one election ago." In many ways the dynasties in the Philippines act similarly to dynasties in medieval Europe. They fight with one another, but don't continence threats to the overall system. They might fight, but they also intimidate everyone else into silence, making the Ombudsman's job nearly impossible in some places.

Data

This section will describe the availability and assembly of the data used to test if dynasties can prevent corruption investigations. In order to test this argument, I need to have data on prosecutions, dynasties, and corruption. I examine corruption, dynasties, and prosecutions at both a provincial and local level. The Philippines currently has 81 provinces with the number varying only slightly over the last 20 years. Each province is led by a directly elected governor. Metro Manila doesn't have a governor but is administered by a department of the central government and thus is excluded from this study. Underneath the provinces are 146 cities and 1488 municipalities. Cities and municipalities are on the same level. Each city or municipality is led by an elected mayor who, like the governors, serves a three-year term with a maximum of two consecutive reelections. A mayor or governor who has been out of

office for one term can be elected to additional terms. Underneath cities and municipalities are barangays, which can be villages or sections of a city. There are just over 42,000 barangays in the Philippines. Barangay elections are theoretically every three years, but recently the government has postponed them as a money saving measure. Barangay elections are also officially non-partisan. Unlike governors or mayors who act as patrons distributing money for votes, barangay leaders are more like brokers. They don't have the sort of power that makes the positions interesting for the well-connected dynasties. There is also a paucity of data on exactly who is running in or winning the elections when they take place. Therefore, I focus on governors and mayors.

Prosecutions for corruption do not necessarily take place when a governor or mayor is in office. This means that the data cannot be organized as mayor-term, or governor-term, since a mayor might be prosecuted for something he did only after his term is over. This is especially true as prosecutions in the Philippines are notoriously slow. Instead, the data is organized by governor or mayor. A row in the data set is one mayor or governor, however many terms he served. In the regression, I control for the number of terms an official served as well as how much data on public procurement there is. Finally, governors and mayors are considered separately. There is too much overlap and too many issues with different levels for both to be in the same regression. For governors I end up with 209 observations, while for mayors I have 2812 observations. Each observation being a single governor or mayor. For governors I lost some observations due to name mismatches, but I have the vast majority. With about 80 provinces and five terms, the theoretical maximum number of governors is only 400 and since the median governor served two terms, and many served three or four, I have almost all of them. Governors who are missing should be missing at random due to issues like names from one government agency being entered in different ways to other agencies. For governors I tried to correct all of these I could find, but some still likely were lost. For mayors, most of the missing data is from 2004 and 2007 where there are few entries for public procurement data. For smaller municipalities, data is missing from 2010

as well. In addition, I am missing some of the mayoral data from 2016 due to missing dynasty data. I control for this by adding a variable for the number of terms for which someone was a mayor but for which I am missing data.

Prosecution Data

I was able to get data on every case tried in the Sandiganbayan until the end of 2019. The data is somewhat right censored. Just because someone hasn't been charged with corruption doesn't mean they won't be. Cases can take decades from start to finish. People who have entered public life more recently are less likely to have had charges filed against them even if they are corrupt. However, as I will show in the results sections, controlling for time in office, and using a survival model (which better handles right censored data) produce similar results.

The data being right censored should make the relationship I'm looking for harder to find. Prosecutions for corrupt acts in 2019 probably won't come for years. The fact that I still find a relationship between corruption and prosecutions suggests that the relationship is probably larger than it appears in my data. There isn't a clear relationship between the type of case and how long it takes. The Ombudsman and the Sandiganbayan are both notoriously slow on any number of cases. Appeals are sometimes not made or heard for years after the initial case. Even with right censored data, the data shouldn't be biased.

A threat to the accuracy of the data is how names are handled. To match governors and mayors with prosecution records, I needed to make sure the names were the same. However, since families often serve in the same position, just matching on family names isn't enough. I matched governors and mayors on their first names, last names, and suffix. Issues with the quality of government records mean that I probably have some false negatives. There is no one standard across agencies, or even within an

agency, for how names are recorded. In some parts of the Philippines, people may have many given names. Which one goes first can vary. Girls named Maria will often shorten it to “Ma.” followed by their next given name. So, Maria Josefina Cruz may be Maria Cruz in one place Ma. Josefina Cruz in another, and even possibly Josefina Cruz in a third. This isn’t a problem for every name. Maria is a particularly problematic first name, as is Mohammed in different regions. Most names, though, are more consistent. I tried to make sure as many of the conventions were the same across data sources as possible, for example all “Ma.” became “Maria,” but there are almost certainly some errors. However, these should be random errors as I was able to account for family differences by looking at suffixes. This should make the data somewhat noisier, but not biased.

Dynasty Data

The Philippines has some of the strongest dynasties in the world but also presents an excellent case for measuring the impact of dynasties. In the US we have political dynasties as well, but they can be harder to measure. Not everyone named Bush from Texas is related to the former presidents. Quite a few people related to the Kennedys are not named Kennedy. Names in the Philippines, though, have stronger local connections. A Spanish governor in the 1840’s took a literal book of Spanish surnames, the Catalogo de Apellidos, and tore out pages, assigning people in different provinces different surnames. Cruz, Labonne, and Querubin (2020) explain, “Municipal officials throughout the country then assigned a different name to each family. Since then, names have been transmitted through generations according to well-established and enforced naming conventions. Consequently, very common family names are not as prevalent in the Philippines as in other countries, and thus, sharing a family name is very strongly correlated with an actual family tie.” If your surname is Ampatuan and you live in Maguindanao it’s highly likely you are directly related to anyone else named Ampatuan, at least in that

province. This is less true in Manila where people have come from all over the country, but not having a governor, Manila doesn't appear in the data set. This naming convention creates a unique opportunity to measure the extent of dynasties. In addition, dynasties are mostly focused on one province. Very few families have any power outside their traditional homes. This further means that to see the extent of a dynasty we only need to look at the offices in any given province. The governor of Leyte is not likely to be related to the governor of Maguindanao.

The naming convention doesn't work perfectly. Naming conventions for women can be a challenge. About 20% of elected politicians in the Philippines are women. Like in the US, women almost always take their husband's surname. This can sometimes obscure political connections. Early in her career Imee Marcos, daughter of the dictator Ferdinand Marcos, was married to a former athlete named Tommy Manotoc. So, while most people knew her as Imee Marcos, in congress she was Mrs. Manotoc. Tommy Manotoc's first wife, though, was also running for office. The Philippines is the only country, besides the Vatican, that doesn't recognize divorce. Tommy Manotoc's first wife, then, was also running as Mrs. Manotoc. However, cases like this are relatively rare. Not only do women make up a minority of politicians, but they are also more likely to be associated with their husband's families. Some professional women will also hyphenate their names after marriage. In that case, I used the final part of the hyphenated name, which is the husband's. The result is that I likely miss a few political connections, but it shouldn't be too many.

The dynasty measure I used is based on the work of Mendoza et al. (2016). They measure "fat" dynasties by how many people from the same dynasty are in office in the same province at the same time. They look at a province's governor, vice-governor, and the provincial legislature. They also look at the mayor, vice-mayor, and the municipal legislature for every municipality and city in a province. Finally, they also include the members of the House of Representatives of the Philippines who are mostly elected from single member districts. The Senate is elected with a single national district and a

small percent of the House is elected by proportional party list voting. These legislators aren't included since they aren't tied to any specific geographic area. The exact number of people considered varies from province to province, as the number of municipalities varies.

I try several different measures of the size and power of dynasties. I tried the number of seats, either in a province or a municipality, held by a dynasty. I also try that number divided by the number of available seats. I looked at a measure of whether a dynasty included a congressman, or for mayors a governor. It would be interesting to see how being linked to the president affected the chance of prosecution, but it wasn't possible to measure that. Because of party switching, virtually every member of congress joins the president's coalition. The most important measure I use, though, is a measure of dynastic concentration. This also follows the work of Mendoza et al. (2016). Specifically, they use an economic measure of market concentration, the Herfindahl-Hirschman Index (HHI). HHI is calculated by taking the percent of seats controlled by each dynasty, squaring it, and adding the results together. For example, if there are three dynasties in a province, one controlling 4% of seats, one controlling 1% of seats, and one controlling 3% of seats the HHI would be 4^2 + 1^2 + 3^2 = 26. A high HHI means that many of the seats in a province are held by dynasties. It doesn't necessarily mean that this is the result of one big dynasty, however.

Corruption in Public Procurement Data

As noted before, there is an emerging literature focused on measuring corruption by looking at public procurement contracts. This is an indirect measure of corruption, but one that looks at objective data, not simply beliefs about the extent of corruption. Underlying this is the idea that we can spot corruption by looking at areas where public procurement contracts are worse than in other parts of the Philippines. This may lack some accuracy because every questionable contract isn't the result of corruption. Higher

rates of poor contracts, though, are more likely in more corrupt areas. However, this measure does have precision since the measures being used are the same everywhere. Public procurement rules are uniform across the Philippines and the last major reform to the public procurement system was in 2003. The Philippines is unusual for a developing country in terms of how advanced its electronic public procurement system is. Since 2000, even before the law was officially passed, the Philippines has moved toward an online system for public procurement. PhilGEPS (Philippines Government Electronic Procurement System) is now supposed to include all public procurements in the Philippines. While it does not include all procurements (many of the small barangays lack the technical or language skills to use PhilGEPS), it does include the vast majority of procurements.

The public procurement system was created, in part, to reduce corruption but still allows a lot of corruption to slip through. Rosa Clemente, the deputy director of PhilGEPS, said that PhilGEPS "can't eradicate but minimizes corruption" (Interview Clemente). I expect to find evidence of corruption in procurement data from PhilGEPS because there is no real punishment for having contracts in the system that fail to live up to the standards. Many contracts entered into PhilGEPS show that contracts weren't posted correctly, or don't list who won the bidding. According to the law, this could result in some punishment for the bureaucrats who oversee the system, but I was told that in practice this doesn't happen (Interview PhilGEPS Staff). The national auditing agency, the Commission on Audit, does sometimes produce audits of procurements that result in legal action, but they often rely on reports of possible corruption (Interview COA). There are too many technical violations in PhilGEPS for a relatively small organization like the COA to investigate. So, while PhilGEPS data is public those engaging in corruption don't need to worry much about the trail they may be leaving.

I look at data from 2004 to 2019, which includes 9.1 million public procurements. These include federal agencies, provincial spending, city and municipal spending, school and hospital spending, and even procurements on the barangay level. For my work, I am looking specifically at the procurements in a

province or at the city/municipal level. The number of provinces and municipalities in the data set increases over time. In 2004 only about 60 of the provincial governments were adding all contracts to PhilGEPS but by 2007 it was more than 70. The exact numbers are a hard to pin down since PhilGEPS doesn't have a clear standard for when a province was added. Each province has some contracts back to 2004, but they become more complete moving forward. Similarly, in 2004 only about 500 municipalities and cities were in PhilGEPS, but by 2010 it was virtually all of them.

What this means is that for provinces there is data back to 2004, but the number of procurements in the system increases greatly over time. In 2004, there were only about 40,000 procurements in the system per year. By 2010, it was more than 250,000. Today, it is about 800,000 a year. So, if I compare someone who was governor only from 2004-2007 with someone who was governor from 2016-2019, then the second person would have many more public procurement contracts in his term. I use controls for how many terms someone was governor and how many contracts they had across all their terms. For municipalities, many have no data from 2004 or 2007. Any mayor who simply has no public procurement data is dropped from the data set. For those with some years for which there is data and some with no data, a control is used for the number of missing terms and the number of contracts.

The public procurement data itself is organized by each procurement opened. That includes public bidding, where anyone can bid, negotiated procurement, where the contract is awarded directly, and even shopping for small items. Very small regular items (paper and pens for example) can be bought directly from another arm of the Department of Budget and Management and don't show up in the data set. Some of the data is too specific to be useful. The name of the specific item acquired is entered by hand so even for similar items there is no uniformity. After conducting interviews and reviewing the data with one of the directors of PhilGEPS, I identified eight factors that could be used to compare procurements. *Procurement Mode*: if a contract was open to public bidding. *Approved Budget of the*

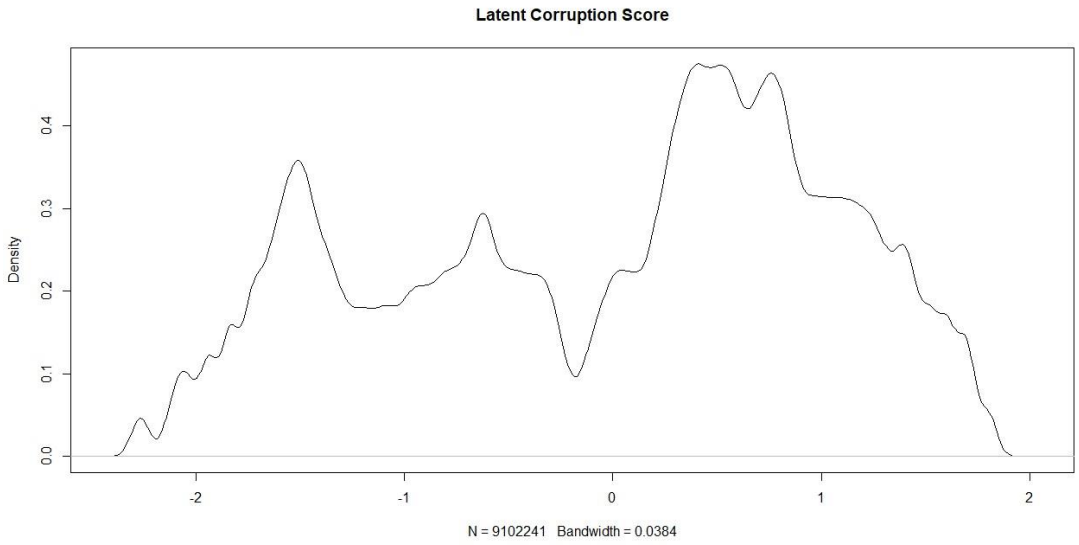
Contract: the amount of money allocated for the contract. *Time to Close*: how long the contract was open for bidding. *Classification*: whether the contract was for a good or service. *Notice Status*: was the result of the bidding entered into PhilGEPS. *Contract Duration*: how long the contract was for. *Award Date to Publish*: how long after the contract was awarded was the notice published. *Effective Date to End Date*: how long the contract actually took to finish. These eight factors, which are measured for each contract, are detailed in Appendix A.

For each contract, I created a latent variable measure using an IRT model. Not all the factors load heavily onto the latent variable. The IRT model uses all eight factors, but two factors, Procurement Mode and Time to Close, do most of the work in determining the latent corruption score for each contract. Procurement Mode is a measure of if the contract was open to public bidding or if it was directly awarded to a company. As noted above, the importance of competitive bidding to the cleanliness of contracts is well established in the literature. Time to Close is a measure of how long companies had to bid on each contract. They are supposed to have at least two weeks, but contracts are often open for less time. This violates the procurement law and provides an opportunity for corruption as only connected companies may know of an opportunity to bid on a procurement contract. Appendix B has more details on exactly how the latent score is measured. In the end, each contract gets a latent variable score for how likely it is to be corrupt. These scores are relative to the other contracts. A score of 0 means that the contract has an average likelihood of being corrupt. A score of 1 means it has 1 standard deviation more than average chance of being corrupt. A score of -1 means 1 standard deviation less likely to be corrupt.

The graph below is a density plot of all 9.1 million latent corruption scores, one for each contract. As the graph shows, it goes from about -2 to about 2, with several peaks. Each procurement contract is used to create the measure and each contract gets a corruption score. These scores are then averaged to create scores for each province (or municipality) and year. For each governor and mayor, I

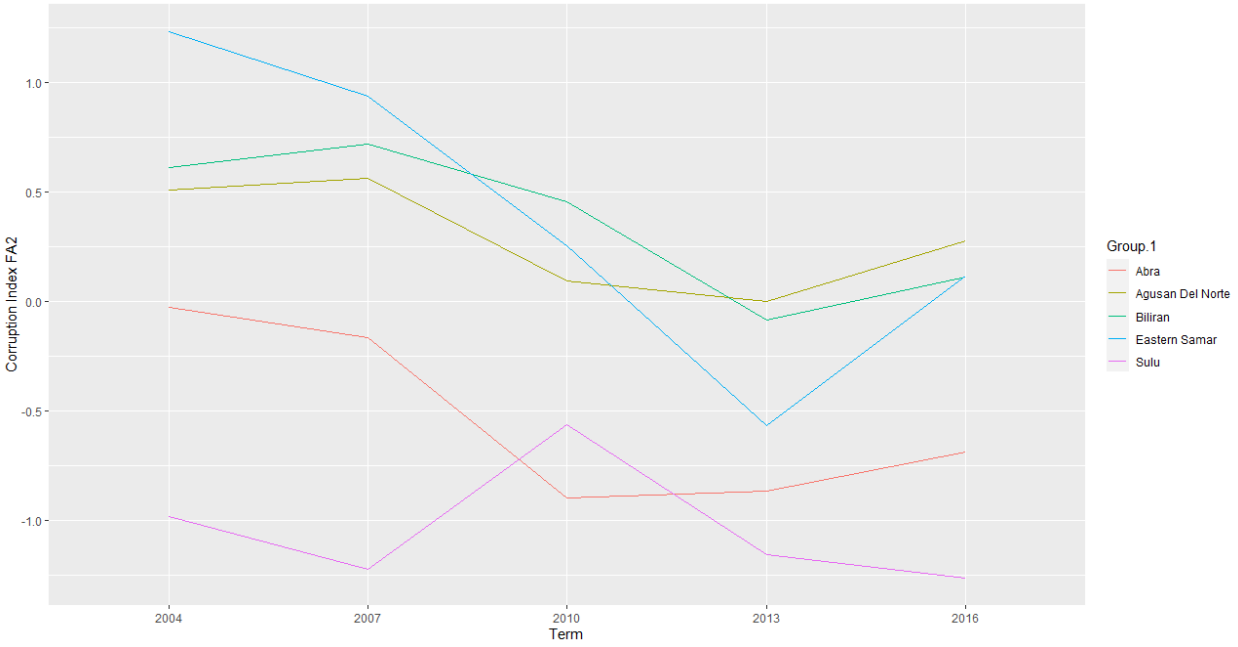
also average across term. From Figure 2, below, Sulu has an average latent corruption score of about -1 during the 2004-2007 term. That means that, on average, all the contracts in Sulu from 2004-2007 were one standard deviation less likely to be corrupt than the overall average. This is all weighted by the number of contracts in each year.

Figure 1: Latent Corruption Score Density Plot



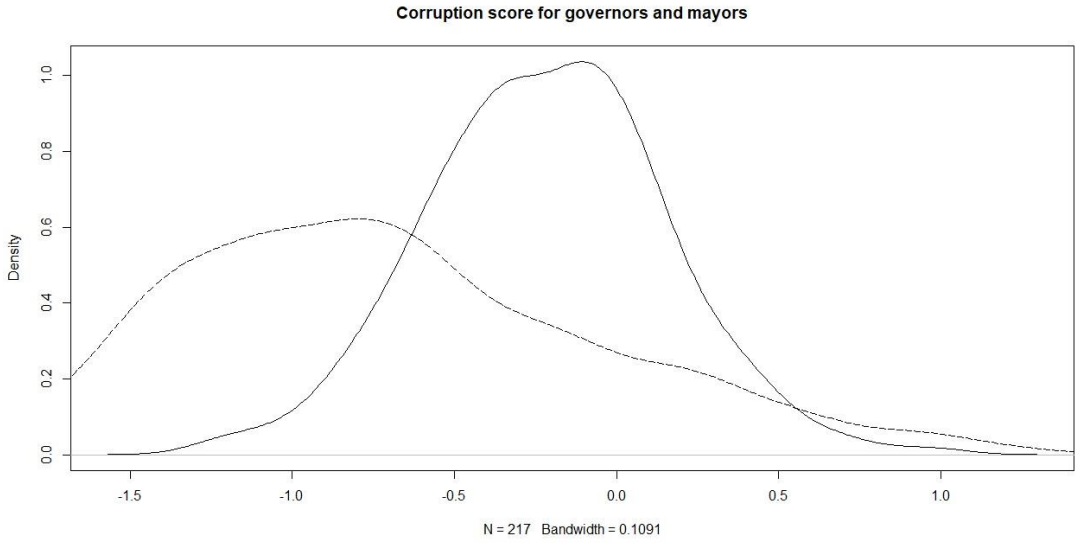
So, what does the result of all this modeling look like on the provincial level? Since I am looking at corruption for a governor or mayor, I averaged the corruption score for each contract by province or municipality and term. The average scores for provinces varied quite a bit between provinces and in some cases quite a bit over time as well. The graph below is five provinces with one score for each term from 2004 to 2019. So, for Abra in 2004 to 2007, all the contracts are added and averaged. This gives a rating for the province for the 2004 term of .03, meaning the corruption was very close to average. However, by 2010 the rating was -.9 almost a full standard deviation less corrupt than average. The overall range was from about 1.5 to -1.5 so a score of -.9 is good. We see Agusan Del Norte scoring above average throughout the whole period. Eastern Samar starts with a very high corruption score, above 1, but moves closer to average over time. I averaged for municipalities in the same way.

Figure 2: Corruption in Five Provinces



Finally, this is all combined into one score for each governor and mayor. So, if someone is governor of Sulu in 2004 and then again in 2010 they get a score of around -1 for 2004 and about -.5 for 2010. That governor's overall corruption score would be -0.75. Figure 3, below, is a density graph of the latent score for all the governors and mayors. Governors is the solid line and mayors the dashed line. As seen from the graph, most governors are a bit below average on their province's corruption score, while mayors are well below average on corruption. This may reflect the fact that it is a relative minority of governors and mayors who are doing most of the dirt. In other words, the mode is lower than the mean. The mode for mayors can be much lower than zero, even as zero is by definition the average contract, because more of the corrupt contracts are not on the municipal level.

Figure 3: Latent Corruption Score Mayors and Governors



Methods

This section describes the methods used to examine the data, and the controls used. From the previous section, we can see that there is data on every governor or mayor who was prosecuted for corruption. There is data on the size of each dynasty an elected official is part of and the overall concentration of dynasties in their province or municipality. Finally, there is data on corruption from the quality of public procurement contracts for each governor or mayor for their time in office compared to the national average.

Since the dependent variable, prosecution, is a binary variable I need to use a logistic regression. The linear predictor is straightforward: where "prosecution" is if a mayor of governor was prosecuted, "corruption" is the quality of public procurement contract when they were in office, and "dynasty" is the HHI for the province while they were in office.

$$\text{Prosecution} = B_1*\text{Corruption} + B_2*\text{Dynasty} + B_3*\text{Corruption}*\text{Dynasty} + \text{Controls}$$

I expect B_1 to be positive as more corruption should lead to a higher chance of prosecution. B_2 should be negative as stronger dynastic concentration should lower the chance of prosecution. Most importantly, B_3 should be negative as the effect of corruption on the chance of prosecution should go down as dynasties become more powerful. That's the key relationship. As dynasties become more ingrained, even higher levels of corruption shouldn't lead to a much greater chance of being prosecuted. The regression in its basic form is the same for governors and mayors. The relationship between mayors or governors and corruption should be the same overall. As noted before, in addition to the dynastic concentration measure (HHI), I also examine if the same effect can be seen with the ratio of seats a dynasty controls in a province or municipality.

It is important to note that because the models include an interaction and because it is a logistic regression, we can't be certain from the sign and significance of a regression table if things are as they appear. As Ai and Norton (2003) show us, in a logistic regression the link function acts to weakly interact all the variables, so even the sign and significance can't be taken at face value. I present a few predicted probability plots that show the key relationship. While Ai and Norton are correct that we can't assume the sign and significance are correct for logistic regression, in almost all cases something like a predicted probability plot will bear out what is shown in a regression table.

I also show the results from a survival model. The data for both governors and mayors is right-censored. Just because someone hasn't been arrested for corruption doesn't mean he won't be. Survival models deal with right censored data because they estimate a hazard ratio. A hazard ratio is a combination of an unconditional failure function -- how likely mayors or governors are to be prosecuted at a point in time -- and a survival function -- how likely mayors or governors are to not be prosecuted at a point in time. Right censored data, that is mayors or governors who haven't been prosecuted so far, give information about the survival but not the failure. While this is a theoretically sounder way to deal

with right censored data, it does effectively reduce the degrees of freedom by discarding a lot of information.

Finally, I will briefly cover the measurement of the controls I used in the key regressions. First, I included a control for the total number of contracts included in the corruption measure for every governor and mayor. My concern was that places that had more contracts entered into PhilGEPS might simply be places that were more scrutinized in general and thus more likely to see prosecutions. Governors oversaw orders of magnitude more contracts than mayors. The mean for governors was 15,000 contracts while for mayors it was only about 200 contracts. The provincial contracts include the public procurement contracts for the municipalities that make up the province.

Second, I included a control for the number of terms served for a mayor or a governor. Since each row is a single leader, some served for three or four terms while others only served for a single term. This was somewhat covered by the number of contracts but not completely. In addition, those who served for more terms might be more likely to have been prosecuted simply because they were more in the public eye. This control should deal with this being an unbalanced panel. Governors and mayors are prohibited from serving more than three consecutive terms but may return to office after skipping an election. There are ways around this, though. Mayors, especially, have served more than three terms by legal maneuvering. One mayor in the data set served in all five terms under consideration.

I include three controls that are alternative ways of measuring dynasties: the number of relatives in office in the province or municipality; if the governor is related to a mayor or congressman, or for mayors if they are related to the governor or a congressman; and the percent of seats in a province or municipality held by a dynasty. This shows that dynastic concentration is associated with lower prosecutions even when considering other ways of measuring dynasties. I also included two

controls for both the governor and mayor data that only are measured on the provincial level. These measures simply don't exist on the local level for all of the Philippines. First is the state population. While population data is available for many municipalities, it isn't available for all of them and isn't updated regularly. Population ranges from 15,000 for the smallest province to above 4 million. The second is poverty. Poverty is measured as the percent of families in a province falling below that province's poverty threshold. In the poorest provinces this can be well over 50%. All these controls would be useful to have on the local level as well, but the data simply doesn't exist to make such a thing viable.

There is also a control for the average size of the public procurement contracts, to control for bigger contracts having a different relationship with corruption. Finally, there are controls for whether a governor was a former mayor and whether a governor or mayor had a family member indicted for corruption. The idea behind this control is that once someone in your family was indicted it might be more likely you are indicted as well. Table 1, below, shows the summary statistics for the control variables.

Table 1: Controls

	Min.	1st Q	Median	Mean	3rd Q	Max
Contracts (governors)	53	3421	14991	28526	36101	220970
Contracts (mayors)	1	52	202	629	592	30976
Terms (governors)	1	1	2	1.834	3	4
Terms (mayors)	1	1	2	1.852	3	5
Dynasty Size (governors)	0	0	1	1.663	2.333	12.5
Dynasty Size (mayors)	0	0	0.33	0.89	1	27
Link to Mayor or Congress (governors)	0	0	0	0.1539	0	1
Link to Governor or Congress (mayors)	0	0	0	0.0134	0	1
Provincial Seats	56	132	194.7	213.8	271	566
Municipal Seats	6	10	10	10.19	10	26
Dynasty Seats % (governors)	0	0	0.62%	0.90%	1.30%	6.78%
Dynasty Seats % (mayors)	0	6.66%	10.00%	10.71%	13.33%	80%
Poverty	2.69%	22.55%	33.80%	32.96%	43.59%	71.94%
Population (in thousands)	15	410	706	975	1260	4320
Provincial Procurement Budget Average (in thousands)	5	1139	1961	2902	2947	50679
Municipal Procurement Budget Average (in thousands)	14	1158	1835	2339	2840	27693
Governor Former Mayor?	0	0	0	0.051	0	1
Family Member Indicted (governors)	0	1	1	0.756	1	1
Family Member Indicted (mayors)	0	0	1	0.6475	1	1

Results and Discussion

Table 2 shows the results from the key regressions for governors. Model 1 includes all the controls but not the interaction. The signs are all as expected, but the dynastic HHI isn't statistically significant. Increased corruption, though, is still statistically significantly associated with prosecution risk. In all the models being linked to a mayor or congressman was associated with a lower chance of prosecution; however, there is no interactive effect with corruption. Model 2 is the most important. This includes the

key variables as well as controls for the total number of contracts, the number of terms served by each governor, the number of relatives they have in the province (another measure of dynasty), if they have a link to a mayor or congressman (another measure of dynasty), the number of available seats in the province, the percent of seats the governor's dynasty controls (another measure of dynasty), the level of poverty in the province, and the population in the province, the average size of public procurement contracts, if the governor was a former mayor, and if a relative of the governor was indicted.

In Model 2, the interaction between dynasty concentration and corruption is significant at the .10 level. Corruption is also statistically significantly correlated with a higher chance of prosecution. The concentration of dynasties is correlated with a lower chance of prosecution. The interaction shows us that in provinces with concentrated dynasties, higher corruption doesn't lead to a higher chance of prosecution but in provinces with less concentrated dynasties higher corruption does lead to a higher chance of prosecution. This is what I expected to find. However, because of the nature of a logistic regression we need to see a predicted probability plot to be sure these relationships exist.

Figure 4, below, is a predicted probability plot for corruption from Model 2, controlling for the other variables. As corruption increases the chance of prosecution increases quite dramatically from around 0% to around 40%. This also suggests that the measurement model is capturing an important aspect of the public procurement contracts. Otherwise, it wouldn't likely be correlated with prosecutions. It also shows that the Ombudsman is getting at least some of the corrupt politicians. Holding dynasties constant, having more suspicious public procurement contracts in a province is associated with a much higher chance of prosecution.

Table 2: Governor Results

	(1)	(2)	(3)	(4)
Corruption	0.987*	2.787**	0.985*	1.658*
	(0.509)	(1.112)	(0.510)	(0.899)
Dynasty HHI	-0.011	-0.024*	-0.015	-0.008
	(0.012)	(0.014)	(0.014)	(0.012)
Corruption * Dynasty HHI		-0.043*		-0.027
		(0.023)		(0.020)
Corruption * Dynasty Ratio			0.339	
			(0.673)	
Total Contracts	-0.00003***	-0.00003***	-0.00003***	-0.00001*
	(0.00001)	(0.00001)	(0.00001)	(0.00001)
Terms	0.697***	0.725***	0.697***	0.323
	(0.242)	(0.246)	(0.241)	(0.210)
Number of Relatives	-0.022	0.008	0.004	0.155
	(0.183)	(0.183)	(0.188)	(0.155)
Link to Mayor or Congress	-1.243*	-1.340*	-1.183	-1.487**
	(0.743)	(0.747)	(0.762)	(0.684)
Number of Seats	0.004	0.003	0.003	0.002
	(0.003)	(0.003)	(0.003)	(0.002)
Dynasty Ratio	28.310	31.531	2.987	9.321
	(40.035)	(40.188)	(63.869)	(36.373)
Poverty	-0.114	-0.014	-0.203	-0.843
	(1.431)	(1.442)	(1.442)	(1.239)
Population	-0.00000	-0.00000	-0.00000	-0.00000
	(0.00000)	(0.00000)	(0.00000)	(0.00000)
PP Budget Average	-0.00000	-0.00000*	-0.00000	-0.00000*
	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Former Mayor	0.190	0.088	0.180	-0.153
	(0.752)	(0.756)	(0.752)	(0.605)
Family Indicted	0.100	0.076	0.140	0.015
	(0.429)	(0.433)	(0.437)	(0.357)
Constant	-1.540	-1.051	-1.330	
	(0.968)	(1.011)	(1.047)	
Observations	209	209	209	209
Log Likelihood	-104.143	-102.426	-104.013	-232.901
Akaike Inf. Crit.	236.287	234.851	238.026	
Note:				*p<0.1; **p<0.05; ***p<0.01

Figure 4: Governor Prosecution Change by Corruption

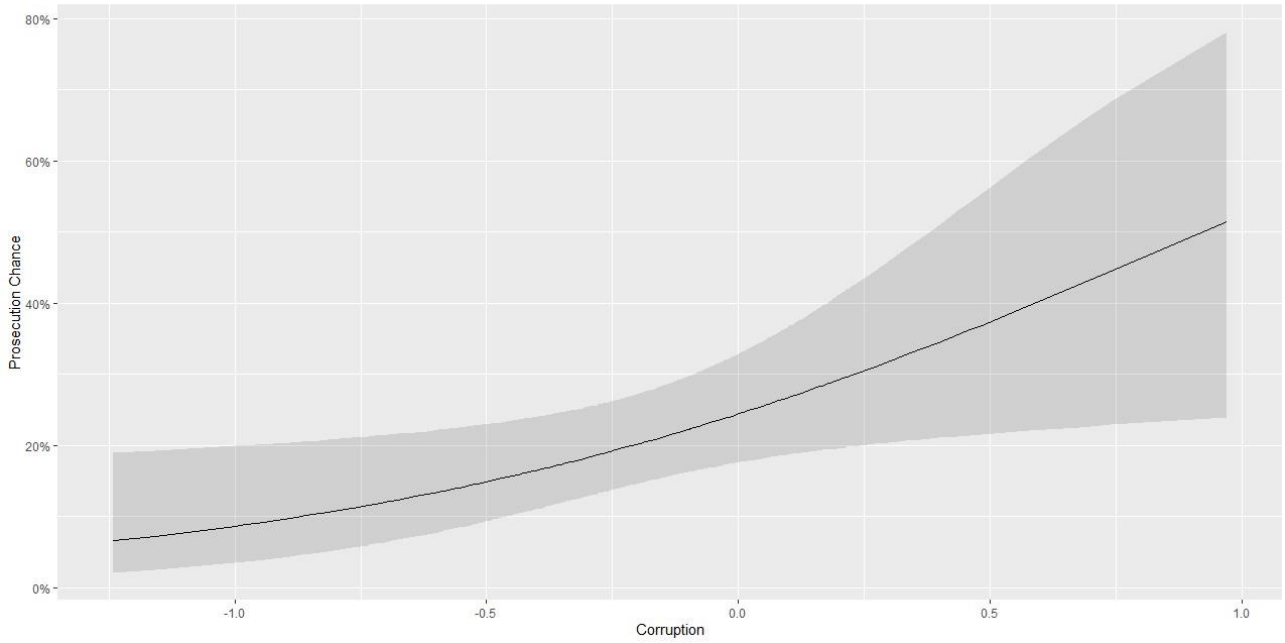
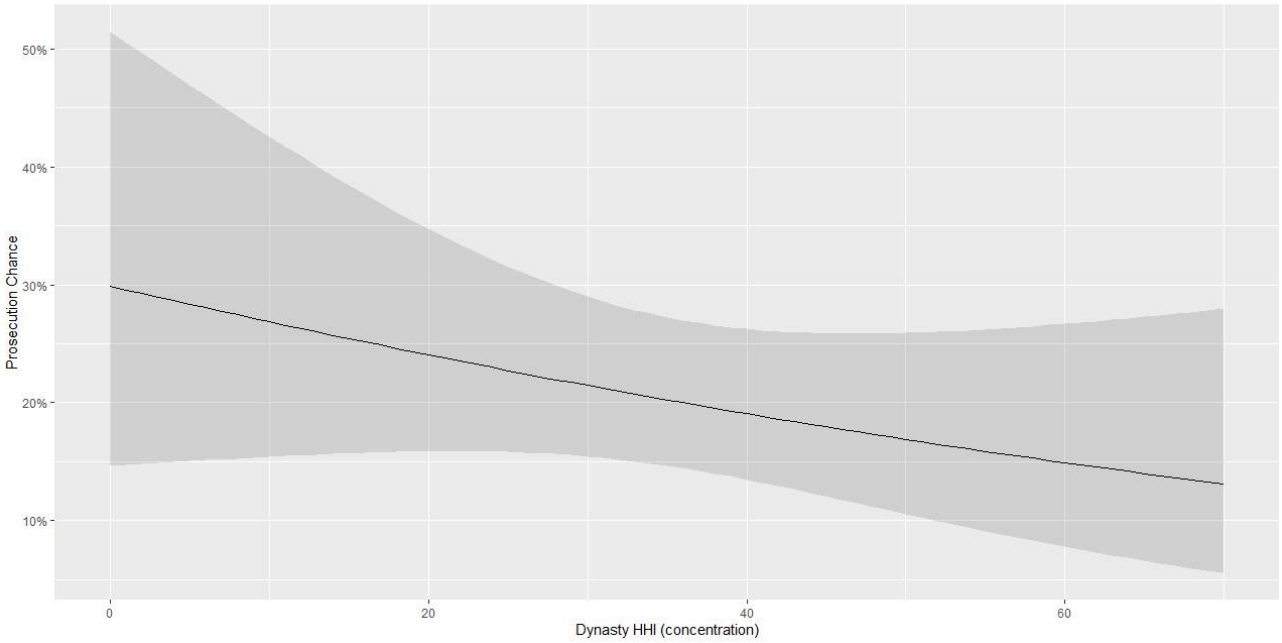


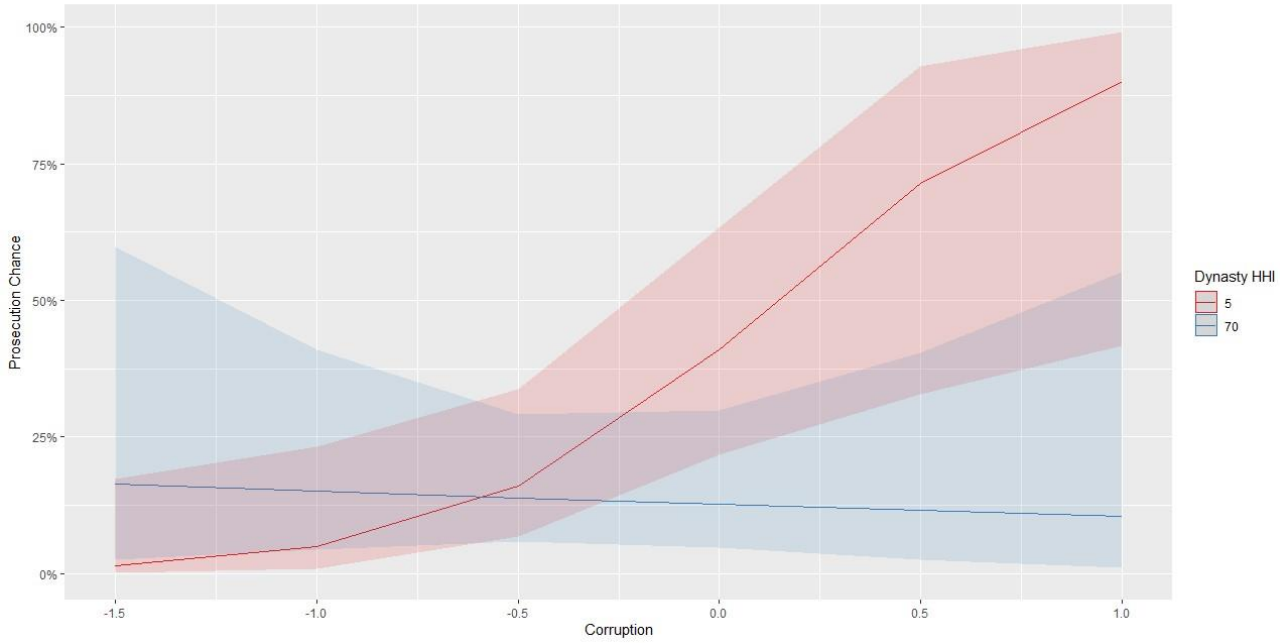
Figure 5 is a predicted probability plot of the effect of dynastic concentration on prosecution chance from Model 2. As HHI goes up, and dynasties become more concentrated in a province, the chance of prosecution drops substantially. The number of relatives a governor has in a province, however, does not have a statistically significant relationship with prosecution chance. The link to a mayor or congressman does have a significant relationship, but a predicted probability graph shows that the size of the effect is small. In addition, while not shown for space, an interaction between corruption and the link to a mayor or governor is not statistically significant.

Figure 5: Governor Prosecution Chance by HHI



Finally, Figure 6 is a margins plot which shows an example of the interaction. The red line is a province with a low HHI, i.e., not concentrated dynasties. For such a province, as corruption increases, the chance of prosecution increases from about 0% to around 75%. On the other hand, for a province with a high HHI, strongly concentrated dynasties, as corruption increases the chance of prosecution remains flat. The power of dynasties in a province determines if governors can get away with corruption. This relationship is only significant at the .10 level but given how few observations there are the results are still interesting.

Figure 6: Interaction Between Corruption and HHI



Model 3, from Table 2, interacts corruption with the percent of seats in a province a dynasty controls. The interaction for percent of seats is not statistically significant. The same is true if the size of the dynasty, as opposed to the percent, is used instead of the concentration of dynasties. This is an interesting result because it shows that the size of a particular dynasty doesn't matter, while the concentration of dynasties overall does. Finally, Model 4 uses the same variables as Model 2 but instead of a logistic regression, it is a Cox proportional hazards model. This survival model allows for the fact that the data is right censored. Unfortunately, given that I have only 209 observations and a survival model essentially discounts some of the information, the key interaction is not significant. However, the signs are still as expected.

Table 3, below, shows the key regression for the mayors data set. The number of observations is more than ten times higher than in the governors data set. Model 1 again doesn't include the

interaction. In the mayor data set the corruption measure is not statistically significant by itself, though it is going in the expected direction for four out of five models. I believe this is because the interaction is larger here and corruption behaves differently at different levels of dynasty HHI. Model 2 includes all the previous controls as well as a measure of how many terms there are for which the public procurement data is missing. 2004 and 2007 are missing much of the public procurement data on a municipal level. It also includes a control for the number of available seats in a province and municipality, though the percent of seats controlled by a dynasty is only based on the municipality.

As with the governor data, it is important to look at predicted probability graphs for the key model. Figure 7, below, shows that like what we see with governors, for mayors, as dynastic HHI rises in a province, their chance of prosecution goes down. The chance of prosecution, though, is lower overall. This makes sense as there are many mayors, some of which are likely to be beneath the notice of the Ombudsman with its limited resources. Figure 8 shows the interaction. Like for governors, in a province with a low HHI, mayors who have high levels of corruption in their municipality are more likely to be prosecuted. Mayors in provinces with a high HHI are not more likely to be prosecuted as corruption increases.

Returning to Table 3, Model 3 is the same as Model 2 but with two provincial controls removed. The interaction in Model 3 is significant at a .05 level. The provincial controls may be adding noise as they are the same for many municipalities. In the end, the relationship is the same, but the confidence intervals are a bit smaller. Model 4 uses the percent of seats held by a dynasty in a municipality. Here the interaction is not significant. This is the same result as seen for governors. Finally, Model 5 is a survival model. Unlike for governors, the interaction is statistically significant here, probably due to a much larger number of observations. This suggests the right bias in the data isn't so much biasing results as producing more noise.

Table 3: Mayor Results

	(1)	(2)	(3)	(4)	(5)
Corruption	-0.121	0.251	0.330	0.124	0.279
	(0.115)	(0.226)	(0.224)	(0.229)	(0.200)
Dynasty HHI	-0.009*	-0.024**	-0.027***	-0.010*	-0.021**
	(0.005)	(0.010)	(0.009)	(0.005)	(0.009)
Corruption * Dynasty HHI		-0.014*	-0.016**		-0.015**
		(0.007)	(0.007)		(0.006)
Corruption * Dynasty Ratio				-2.147	
				(1.758)	
Total Contracts	-0.0001	-0.0001	-0.0001	-0.0001	-0.00003
	(0.0001)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Terms	0.498***	0.499***	0.482***	0.500***	0.150*
	(0.094)	(0.094)	(0.092)	(0.094)	(0.089)
Missing Terms	0.101	0.097	0.121	0.100	-0.101
	(0.121)	(0.121)	(0.119)	(0.121)	(0.113)
Number of Relatives	-0.084	-0.086	-0.033	-0.087	-0.016
	(0.070)	(0.070)	(0.062)	(0.069)	(0.061)
Link to Governor or Congress	0.213	0.233	-0.061	0.242	0.301
	(0.736)	(0.735)	(0.725)	(0.734)	(0.696)
Municipality Seats	0.232***	0.232***	0.244***	0.232***	0.158***
	(0.063)	(0.063)	(0.062)	(0.063)	(0.047)
Province Seats	-0.0002	-0.0003		-0.0002	-0.0003
	(0.001)	(0.001)		(0.001)	(0.001)
Dynasty Ratio	-0.013	-0.155	-0.515	-1.894	-2.373*
	(1.324)	(1.331)	(1.305)	(2.063)	(1.380)
Poverty	1.981***	1.816***		1.950***	1.262**
	(0.589)	(0.594)		(0.589)	(0.582)
Population	0.00000***	0.00000***		0.00000***	0.00000**
	(0.00000)	(0.00000)		(0.00000)	(0.00000)
PP Budget Average	0.00000	0.00000	0.00000	0.00000	0.00000**
	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Becomes Governor	0.950	0.992	0.894	0.932	0.470
	(0.868)	(0.875)	(0.881)	(0.874)	(0.720)
Family Indicted	0.322**	0.335**	0.354**	0.326**	0.287**
	(0.151)	(0.151)	(0.150)	(0.151)	(0.143)
Constant	-6.833***	-6.340***	-5.345***	-6.601***	
	(0.791)	(0.831)	(0.729)	(0.813)	
Observations	2,812	2,812	2,834	2,812	2,812
Log Likelihood	-798.664	-796.922	-811.128	-797.917	-1,825.956
Akaike Inf. Crit.	1,629.327	1,627.843	1,650.255	1,629.834	
Note:					*p<0.1; **p<0.05; ***p<0.01

Figure 7: Mayor Prosecution Chance by HHI

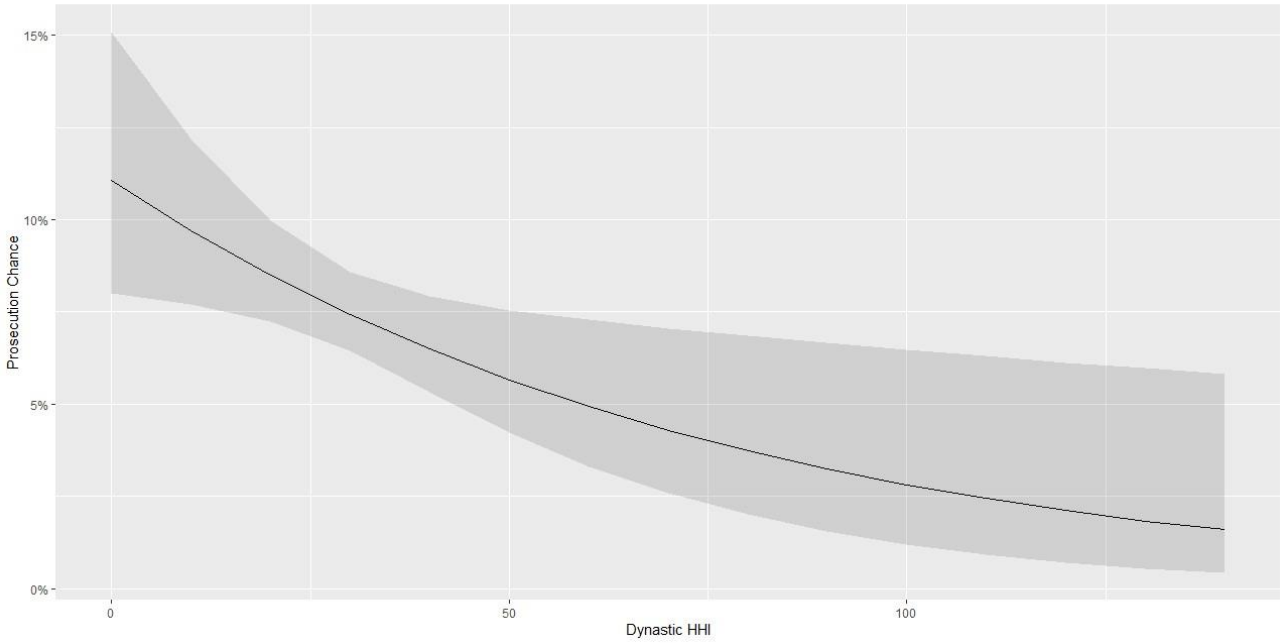
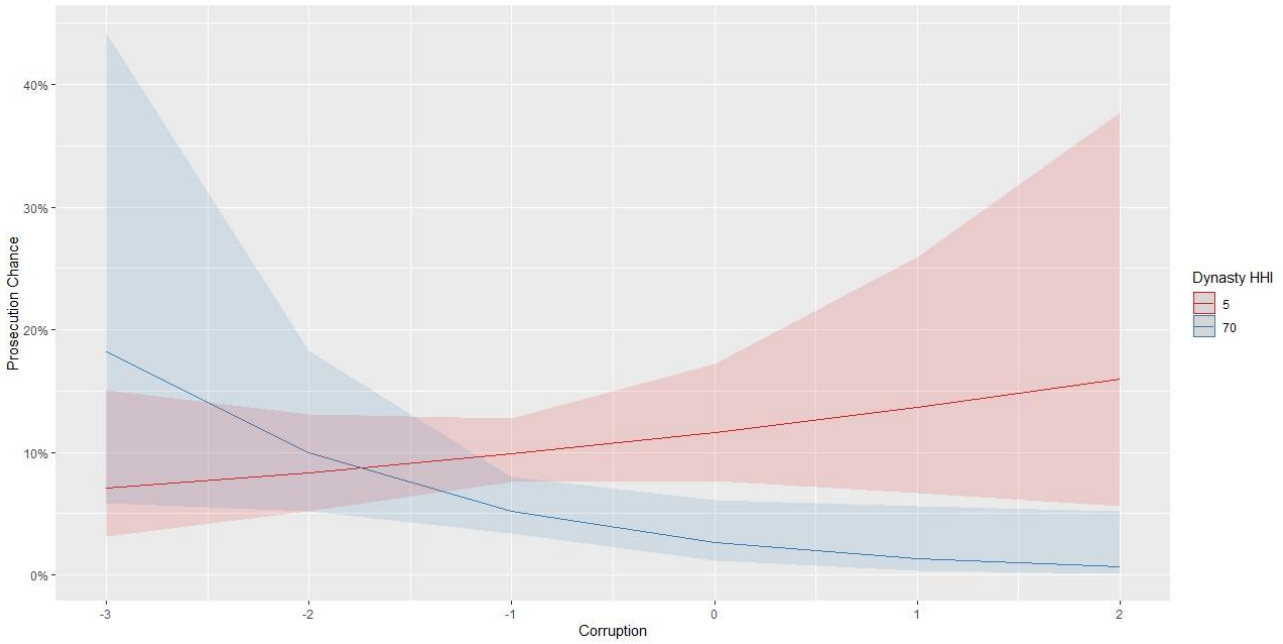


Figure 8: Interaction Between Corruption and HHI for Mayors



These regression models demonstrate a few things. First, the measure of corruption is working. Provinces and municipalities with weak dynasties and high corruption see more prosecutions than those with low corruption. If the quality of contracts were divorced from the actions of mayors and governors, I wouldn't expect to see any relationship, but a relationship does exist. Second, the overall concentration of dynasties is what matters to prosecution. While having more dynastic members might signal power or be an electoral advantage, it doesn't affect the chance of being prosecuted. For mayors, having a link to a congressman or the governor is also not associated with a lower prosecution chance. This is also true if you interact these measures with corruption. This is a surprising result. It shows that it is the overall situation created by dynasties that hinders prosecution, not their specific disposition. It is undeniable that some politicians can influence the Ombudsman, but this evidence suggests that those instances are rarer one-offs while dynasties as a group change how crime is investigated in a province such that the Ombudsman can't make cases. How corruption affects prosecutions is dependent on the concentration of dynasties. It's not just that in provinces with powerful dynasties we see fewer prosecutions; it's that we see no change in prosecution chances as corruption goes up. These dynasties can act to allow mayors and governors to get away with significant corruption. In provinces with small and weak dynasties, low corruption leads to a small risk of prosecution while high corruption leads to a high risk of prosecution.

Finally, the same principle holds true for mayors as well as governors. Governors are more likely to be prosecuted overall, but mayors whose municipalities show corrupt contracts and who don't live in a province with large dynasties risk prosecution. Mayors, on the other hand, who live in a province with powerful dynasties don't see their risk of prosecution increase even as corruption worsens. For the corrupt, it's better to be a small fish in a very dynastically controlled province than a big fish in a province with few dynasties.

Conclusion

To understand the relationship between corruption, prosecution, and dynasties, I examined three key factors. Who was prosecuted for corruption in the dedicated anti-corruption court? How much corruption there was in different municipalities and provinces based on the quality of their public procurement contracts? How much power do dynasties have in different provinces? Using these measures, I showed that in places where dynasties hold many of the key offices, corruption does not lead to more prosecutions. In places where dynasties hold few of the elected offices, corruption does lead to more prosecutions. This works the same way for governors and mayors. The size or connections of one dynasty are not important when controlling for the overall power and scope of dynasties in a province. A mayor who comes from a large dynasty is not better protected than one from a small dynasty. What matters is the overall power of dynasties in a province. Corruption can be assessed by looking at public procurement contracts in cities and provinces. As was suggested in interviews, the most important factor is if a contract is open to public bidding or if it is awarded directly to one company.

More work is needed to provide evidence for exactly how dynasties are changing the Ombudsman's work, in particular provinces. There is also some level of political protection that exists for powerful families. The fact that it wasn't detected here suggests that it isn't available widely, but it's possible with a more sensitive measure of the most powerful dynasties, we would be able to see when they are protected. The next section of this dissertation will show how for those indicted for corruption, there is also an electoral price to pay.

Work Cited

Ai, Chunrong and Edward C. Norton (2003). "Interaction terms in logit and probit models". In: *Economics Letters* 80.1, pp. 123–129. issn: 01651765. doi: 10.1016/S0165-1765(03)00032-6.

Amundsen, Inge (2016). "Democratic dynasties? Internal party democracy in Bangladesh". In: *Party Politics* 22.1, pp. 49–58. issn: 14603683. doi: 10.1177/1354068813511378.

Anderson, C. J., & Tverdova, Y. V. (2003). Corruption, political allegiances, and attitudes toward government in contemporary democracies. American journal of political science, 47(1), 91-109.

Ansari, Asim, Kamel Jedidi, and Laurette Dube (2002). "Heterogeneous factor analysis models: A Bayesian approach". In: *Psychometrika* 67.1, pp. 49–77. issn: 00333123. doi: 10.1007/BF02294709.

Aspinall, E., Davidson, M. W., Hicken, A., & Weiss, M. L. (2016). Local machines and vote brokerage in the Philippines. Contemporary Southeast Asia, 38(2), 191-196.

Auriol, Emmanuelle, Stephane Straub, and Thomas Flochel (2016). "Public Procurement and Rent-Seeking: The Case of Paraguay". In: *World Development* 77, pp. 395–407.

Azfar, O., & Gurgur, T. (2006). Local-level corruption hits health service delivery in the Philippines. Transparency International, Global Corruption Report, 37-39.

Burgess, Robin et al. (2015). "The value of democracy: evidence from road building in Kenya". In: *American Economic Review* 105.6, pp. 1817–1851.

Castillo, Nadja A. (2010). *BILIRAN PROVINCE: PROBING INTO A POSSIBLE AUTOMATED CHEATING*. Tech. rep. EU-CenPEG Project 3030, p. 26.

Chen, Ting and KAI-SING JAMES Kung (2019). "BUSTING THE PRINCELINGS THE CAMPAIGN AGAINST CORRUPTION IN CHINA'S PRIMARY LAND MARKET". In: *Quarterly Journal of Economics*, pp. 185–226. doi: 10.1093/qje/qjy027.Advance.

Coviello, Decio and Stefano Gagliarducci (2010). "Building Political Collusion: Evidence from Procurement Auctions". In: *IZA Discussion Paper* 4939.

Cruz, Cesi, Julien Labonne, and Pablo Querubin (2020). "Social Network Structures and the Politics of Public Goods Provision: Evidence from the Philippines". In: *American Political Science Review* 114.2, pp. 486–501. issn: 15375943. doi: 10.1017/S0003055419000789.

Desierto, Desiree A (2020). "Grand Corruption by Theft and Bribery"

De Sousa, L. (2010). Anti-corruption agencies: between empowerment and irrelevance. Crime, law and social change, 53(1), 5-22.

De Speville, B. (2010). Anticorruption commissions: the "Hong Kong model" revisited. Asia-Pacific Review, 17(1), 47-71.

Di Tella, R., & Schargrodsky, E. (2003). The role of wages and auditing during a crackdown on corruption in the city of Buenos Aires. The Journal of Law and Economics, 46(1), 269-292.

Fazekas, M., Tóth, I. J., & King, L. P. (2016). An objective corruption risk index using public procurement data. European Journal on Criminal Policy and Research, 22(3), 369-397.

Fiva, J. H., & Smith, D. M. (2018). Political dynasties and the incumbency advantage in party-centered environments. American Political Science Review, 112(3), 706-712.

Folke, Olle, Torsten Persson, and Johanna Rickne (2017). “Dynastic Political Rents? Economic Benefits to Relatives of Top Politicians”. In: *Economic Journal* 127.605, F495–F517. issn: 14680297. doi: 10.1111/ecoj.

Heilbrunn, J. R. (2004). Anti-corruption commissions: Panacea or real medicine to fight corruption. World Bank Institute, 2.

Jopson, T. L. A. (2013). Silent Assault: Multilevel Censorship as Media Repression in the Philippines. Philippine Social Sciences Review, 65(2).

Mauro, P. (1995). Corruption and growth. The quarterly journal of economics, 110(3), 681-712.

McCubbins, M. D., & Schwartz, T. (1984). Congressional oversight overlooked: Police patrols versus fire alarms. American journal of political science, 165-179.

Mendoza, Ronald U. et al. (2013). “Political Dynasties and Poverty : Evidence From the Philippines”. In: *12th National Convention on Statistics* 44.2, pp. 189–201.

Mendoza, Ronald U. et al. (2020). “Term limits and political dynasties in the Philippines: Unpacking the links”. In: *Asia-Pacific Social Science Review* 20.4, pp. 88–99. issn: 01198386.

Mendoza, R. U., Hiwatig, J., & Banaag, M. (2020). Dynastic Political Networks: Insights from the Case of Western Samar, Philippines.

Olken, B. A. (2007). Monitoring corruption: evidence from a field experiment in Indonesia. Journal of political Economy, 115(2), 200-249.

Paoli, Letizia (2007). “Mafia and organized crime in Italy: The unacknowledged successes of law enforcement”. In: *West European Politics* 30.4, pp. 854–880. issn: 01402382.

Quah, Jon ST. "Defying institutional failure: learning from the experiences of anti-corruption agencies in four Asian countries." Crime, Law and Social Change 53, no. 1 (2010): 23-54.

Querubin, Pablo (2011). “Political reform and elite persistence: Term limits and political dynasties in the Philippines”. In: *Mimeo*. url: http://pclt.cis.yale.edu/leitner/resources/papers/Querubin_Term_Limits.pdf.

– (2016). “Family and politics: Dynastic persistence in the philippines”. In: *Quarterly Journal of Political Science* 11.2, pp. 151–181. issn: 15540634. doi: 10.1561/100.00014182.

Quimpo, Nathan Gilbert. "Can the Philippines’ wild oligarchy be tamed?." In Routledge handbook of Southeast Asian democratization, pp. 347-362. Routledge, 2014.

Ravanilla, Nico, Renard Sexton, and Dotan Haim (2019). “Outsiders vs . Insiders : How Local Politics Drives Duterte ’ s War on Drugs in the Philippines”. In.

Rotberg, R I (2019). *The Corruption Cure: How Citizens and Leaders Can Combat Graft*. Princeton University Press. isbn: 9780691191577. url: https://books.google.com/books?id=d8iXDwAAQBAJ.

Szeftel, Morris (2000). “Between Governance and Under- development: Accumulation and Africa’s ’Catastrophic Corruption’”. In: *Review of African Political Economy* 27.84, pp. 287–306.

Teehankee, Julio C (2012). “Clientelism and party politics in the Philippines”. In: *Party Politics in Southeast Asia*. Chap. 10, pp. 186–214.

Timberman, D. G. (2016). The Vote in the Philippines: Elite Democracy Disrupted?. Journal of Democracy, 27(4), 135-144.

Winters, Jeffrey (2011) Oligarchy, Cambridge: Cambridge University Press

Yilmaz, S., & Venugopal, V. (2013). Local government discretion and accountability in Philippines. Journal of International Development, 25(2), 227-250.

Appendix A: Factors Measured for Public Procurement Contracts

Procurement Mode: Procurement mode is the first and most important factor I examine. This is if a procurement is made through public bidding where anyone can submit a bid, or some form of negotiated procurement where the winner is selected directly. There are quite a few different categories of negotiated procurements. For example, there are negotiated procurements listed under "Two Failed Biddings" where according to the law, the agency can skip public bidding if, for whatever reason, that process has failed twice already. Alternatively, there is "Small Value Procurement" where the procurement is under a certain threshold. The threshold ranges from 500,000 pesos (about $10,000) for a city or province to about 50,000 pesos ($1,000) for the smallest municipalities.

I was advised by those who work directly on procurement reform in the Philippines (Commission on Audit, personal communication, October 22 2019) that it was best to simply consider public procurement as public bidding or negotiated procurement since any category of negotiated procurement meant slipping around some oversight. Most of the contracts entered into PhilGEPS are negotiated procurements. In 2019 out of just under 800,000 procurements only about 280,000 were open to public bidding. On the other hand, out of just under one trillion pesos in total contracts offered, public bidding made up about 850 billion, or about 85% in terms of value.

Procurement mode is the most important factor because much of the outstanding research shows us that when people are trying to hide corruption, they do so by awarding contracts directly. It's harder to hide corruption when there might be a low-cost bidder who doesn't pay a bribe. Auriol, Straub, and Flochel (2016) showed that in Paraguay when the government announced it would audit hospital procurements much more closely the number of single bidder contracts fell off precipitously. This also matches what I was told to watch for by the Commission on Audit.

Approved Budget of the Contract: This is the amount of Philippine's pesos (php) that was allocated for the contract. For some contracts, the approved budget of a single procurement may appear more than once since contracts with multiple parts are usually listed with a single budget for all the parts. While this does mean that some contracts appear more than once in the data set, this tends to mostly be the case for smaller procurements. This shouldn't bias the data as the type of contract, and the size of the contract are also used to create the measure of corruption.

As noted above, contracts open for public bidding tend to be larger than the negotiated ones, but there is still variation within both groups. There are more than 1.6 million contracts worth above one million pesos. Of those about 1.5 million are public bidding while 100,000 are negotiated procurements. In reverse, of the approximately 450,000 contracts worth less than 7,000 pesos about 400,000 are negotiated while 50,000 were open to public bidding.

It makes sense that large contracts are less associated with corruption. Desierto (2020) models corruption in the Philippines and suggests that smaller spending is more associated with bribery and kickbacks, which is what is likely to produce the faulty procurements I am measuring here. Larger contracts are more subject to scrutiny. In the end the IRT model looks for levels that vary together and are suggestive of an underlying latent variable. The fact that some budgets are more associated with public bidding is not a problem. In fact, it makes the outliers stand out even more. If most large value contracts are open to public bidding, and one is not, it will create a score much higher on the corruption scale. On the other hand, if most small contracts are negotiated procurements, this would produce a score closer to average.

IRT models don't allow for continuous variables, so I needed to transform the budget into an ordinal measure. To do that I created 20 cut points with an approximately even number of contracts in each tranche. The smallest tranche is from zero pesos to about 6,800. The 10th tranche goes from about

136,000 php to 168,000 php. The largest tranche is anything above 9.8 million. Creating 20 levels instead of a continuous measure inherently loses some data, but a latent variable measure can't contain both continuous and binary data. You either must treat continuous data as ordinal, or nominal data as ordinal or continuous. Treating continuous data as ordinal loses some precision but treating nominal as ordinal creates information where none really exists.

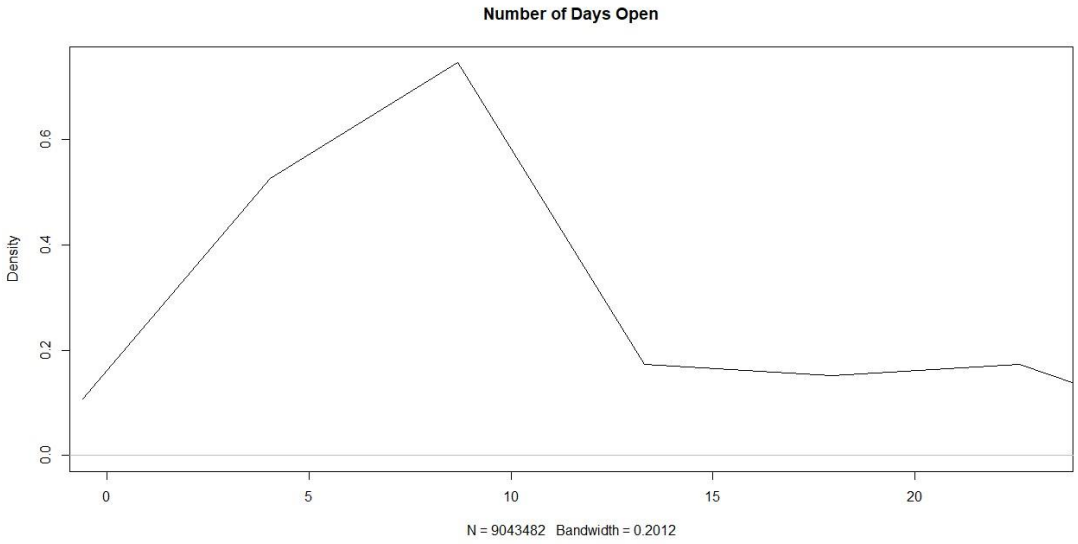
Time to Close: Under the Philippines procurement law all procurement is supposed to be listed for 14 days before the period for bidding is closed. Of the 9.1 million contracts in the data set only about 2.1 million were open for the correct 14 days. The density plot below shows the distribution of the number of days contracts were open. As is clear, the modal number is much less than 14. This was noted (Commission on Audit, personal communication, October 22 2019) as something I should specifically look out for, as while 14 days is required by law, most contracts posted in PhilGEPS don't follow these rules.

Again, since IRTs don't work with continuous data I had to transform the time into an ordinal measure. I decided on levels with fairly even numbers of entries. Here I used four levels, 0-6 days, 6-8 days, 8-14 days, and more than 14 days. Since only the last group is following the law, I could have just simplified it to a binary measure, but I didn't see the need to do so, since nothing is biased with more levels.

When localities don't enter contracts correctly there are supposed to be penalties. I was told (PhilGEPS, personal communication, October 27 2019) that according to the law civil servants would be denied bonuses for problems like this, or not entering contract winners, but that in practice their supervisors could simply allow them to have the bonuses anyway, so there is no strong incentive to make sure the law is being followed. I believe that this helps my research. If the system were more secure, there would be more pressure on those wishing to engage in corruption to falsify records. As it stands, no one in

power is checking up on how many negotiated procurements there are or when winners aren't entered in the system. When you see someone punished for a public procurement-related crime, the evidence doesn't come through PhilGEPS, but usually from some sort of informant.

Number of Days Open



Classification: PhilGEPS also includes information on how each procurement is classified. PhilGEPS includes four classifications: Goods, Good – General Support Services, Civil Works, Consulting Services. Of these, only 60,000 out of 9.1 million are listed as consulting services. 900,000 are civil works, and the remaining 8 million are goods. My measure was simply, goods or not goods. I was concerned that procurements of goods would be easier to fabricate than ones for services or projects, since overbuying and underdelivering are key ways corruption is accomplished. One common scam described to me is an agency placing a procurement for something like 200 chairs when they only need 100. The directed winner only delivers 100 chairs and the payment for the other 100 is split between the official and the company delivering the chairs.

Notice Status: While there are 9.1 million procurements between 2004 and 2019, in PhilGEPS only about 2 million of those include details on who won the procurement. There are several possible reasons for this. It could be that the procurement offered failed and no winner was selected. It could be that they cancelled the procurement before it got to that stage. It could be a lack of capacity on behalf of the locality trying to enter the data. However, an official working for PhilGEPS speculated that it was in part to dodge taxes. If you aren't shown in the database being awarded a contract it's harder to tax you. This means that there are many procurements entered into the system without information on the winner being added. In some of these cases there may not be a winner, but in an interview with the director of PhilGEPS I was told that it was more likely that the information on the winner simply hadn't been entered.

This is, obviously, suspicious. Not entering the correct information can easily be another way to avoid leaving evidence of corruption. Even though awards are more commonly entered for public bids than for negotiated procurements, the IRT model didn't group notice status into the same latent measure as procurement mode. It's possible that while not entering awards is suspicious, it just isn't how corruption is being hidden. The existing literature and my interviews only point to procurement mode and time to close as key factors to look for, both of which were grouped into the same latent variable.

Contract Duration: Contract duration is a measure for how long the contract is supposed to last. Unlike "Effective Date to End Date," listed below, this is the length the contract was listed as before it was awarded. It can be zero for immediate purchases or hundreds of days for ongoing consultations. I included this measure under the possibility that contracts that deviated from the norms might be more likely to be corrupt. In the end this factor didn't have much effect on the corruption measure or on the other latent variable measure. As with previous factors I had to transform it from a continuous measure to an ordinal one.

Award Date to Publish: I also included two measures that only applied to some of the procurements. The time from a contract being awarded to the award being announced, and the time from when the work could start to when it was finished, both rely on data that was only entered for procurements whose award was entered. The 2 million out of 9 whose award notice was correctly entered. This isn't a problem for an IRT model, as a null reading on any part of the measure simply aren't included for that item. What it does mean, though, is that measures with an award drew on somewhat more data. This shouldn't bias the results, since the IRT model includes the fact some procurements had no awards, but it does mean some parts are more precisely measured than others.

For those 2 million procurements, the date of the award and the date when the award is notified to the public are both recorded. I heard stories about companies not knowing that they had won a contract until they were supposed to start working on it. In addition, there are several contracts entered where the publish date is listed as before the award date. This is more likely to be a measure of incompetence than corruption, but it was worth including to see if it varied with the corruption measure.

Effective Date to End Date: Finally, I included a measure of the time from when work was supposed to start to when it was completed. While this is mostly directly a measure of efficiency or competence, it could theoretically also be a measure of corruption, as a company might keep a project going far longer than necessary as part of a scheme to run up the final bill. This was transformed into an ordinal measure and didn't load heavily onto the final corruption measure.

Appendix B

The eight factor measures don't directly measure corruption. As we have seen in other work, though, corruption can be inferred from some aspects of public procurement contracts the way Auriol, Straub, and Flochel (2016) do in Paraguay. What's needed is to combine them into a latent variable measure. There are a few possible ways to measure latent variables. Factor analysis is probably the best known but doesn't work with binary measures. Instead, I use an IRT measure to look at how these different measures load onto a latent variable.

Item Response Theory was developed to examine questions in standardized tests. We can imagine each question on the test having two parameters: difficulty and discrimination. Difficulty is how hard a question is. Discrimination is how well a question separates one student from another. So, if there is a question about Greek grammar on a math test, it will likely have a high difficulty, but not really help us separate one student from another. Questions don't need to be difficult to be good. An easy question that still separates low skill from very low skill is a useful question.

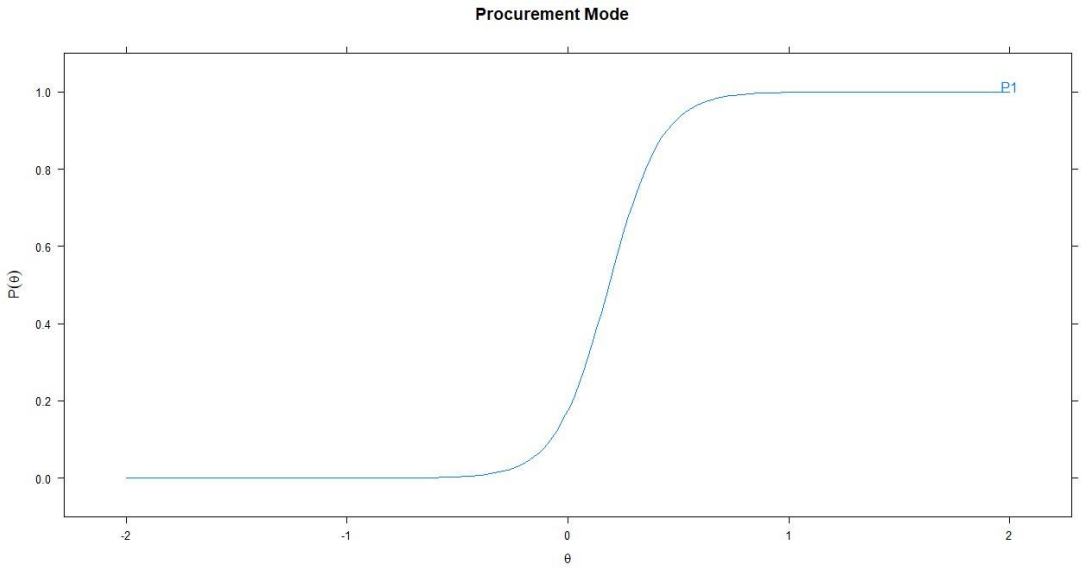
An IRT model will use the difficulty and discrimination of each question to also determine the skill of the respondent. In a test that's how well they score. This is how SAT scores are determined. Applied to measuring corruption, we can think of each question as one of the eight measures of public procurement contracts listed above. Difficulty is how much a level of a measure suggests a high corruption score. Discrimination is how much it separates one contract from another. In the end I get a score for each procurement in terms of the underlying latent value, corruption.

Below is an item response curve for procurement mode. The x-axis is possible scores for a procurement on the latent trait theta which is corruption. The y-axis is the probability of procurement being open to public bidding. So, if a procurement has a corruption score of one, the probability of that

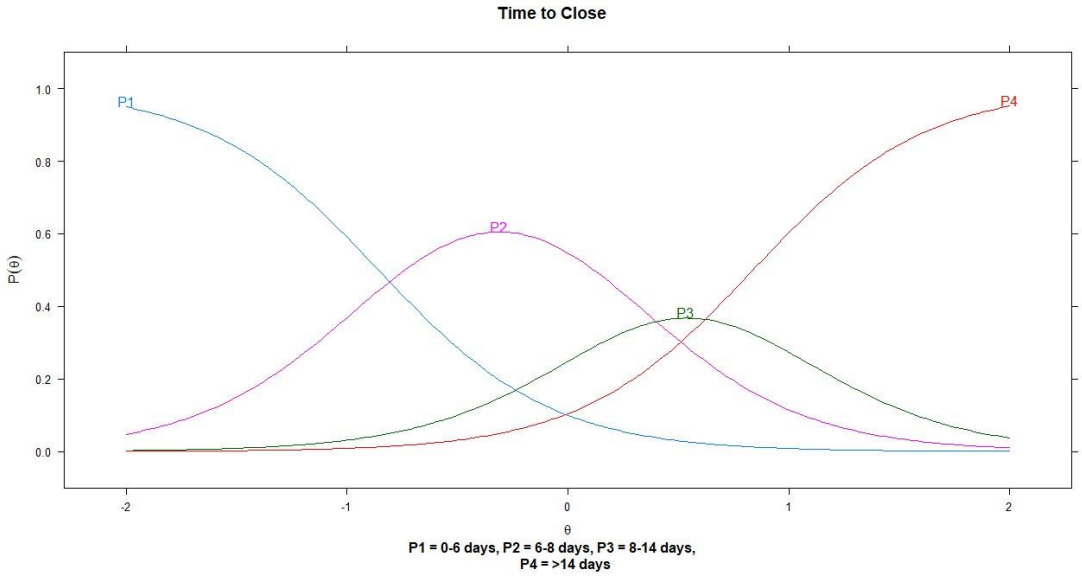
procurement involving public bidding is close to 100%. This is a very useful measure for the latent variable as it has a high discrimination. It clearly separates some procurements from others.

Next is an item curve for time to close. Here there are four curves since the variable is ordinal with four levels. The separation isn't quite as clear. A contract with a latent variable score of one has about a 75% chance of being in the fourth category. To create a single measure of the latent score for each contract, the model takes the curve for whatever category the contract is in for each measure and combines them, in effect creating a weighted average. However, the weighting is decided by the data itself. This ends up with something like a factor analysis, but the weighting can vary greatly. A measure that has little effect will have a very flat curve and not impact the overall latent score much at all. Each contract gets a score where zero is the average and one is one standard deviation higher on the latent ability (corruption). Each score isn't directly interpretable, but it tells us if the contract is more or less corrupt than most.

IRT Graph 1



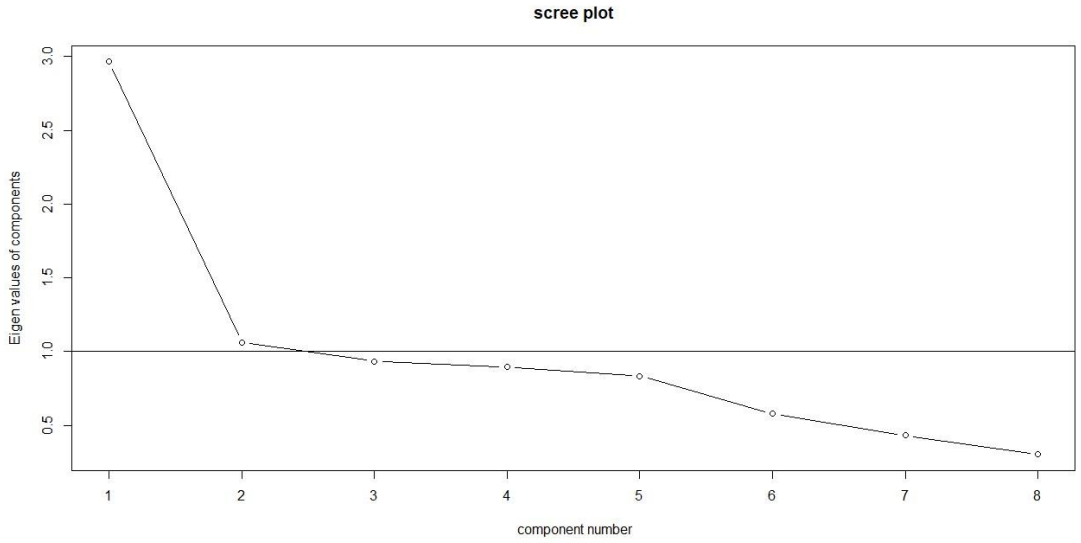
IRT Graph 2



Number of Latent Variables

From all eight item curves, the model calculates a latent ability score, here corruption, for each contract. However, the model I use calculates two latent scores for each contract based on a scree plot and a factor analysis. While a traditional factor analysis doesn't work with binary data Ansari, Jedidi, and Dube (2002) tell us that a heterogeneous correlation matrix will be able to approximate the correlation matrix necessary for a factor analysis. From this I can derive the scree plot below.

Scree Plot



From this scree plot we can see that two factors are the most appropriate number of latent variables to pull from this data. The result is confirmed by looking at factor loadings. The table below shows the factor loadings. This is how much each measure affects each latent variable. I've highlighted in yellow the factors that most heavily affect the latent variable, corruption. Procurement mode, time to close, and budget, have the largest effect. This is what I would expect. Based on interviews and the existing literature, these should be the factors affecting corruption.

I would label factor one as the competence or efficiency with which contracts are worked. It draws most heavily on how long the contract takes to complete but also is affected by if the contract is correctly entered into the system and how large the budget it. Every factor, though, has some effect on both latent variables. The model determines exactly how much affect and for what level. The two latent variables are somewhat correlated with a Pearson's of .65. That isn't surprising ,since they draw on the same underlying factors and both utilize the budget of the contract.

IRT Factor Table

	Factor 1	Factor 2	h2
Procurement Mode	-0.1309	-0.8747	0.9313
Time to Close	0.0839	-0.9421	0.7917
Notice Status	-0.4158	0.125	0.1209
Category	-0.6747	-0.1132	0.5675
Contract Duration	-0.3195	-0.1038	0.156
Approved Budget of the Contract	-0.4648	-0.3399	0.5373
Award Date to Publish	-0.2949	0.0381	0.0738
Effective Date to End Date	-0.8505	0.0448	0.6757
Rotated SS loadings:	1.781	1.811	

Accountability for Corruption Through Elections in the Philippines

Introduction

When surveyed, the vast majority of Filipinos say that corruption is one of the biggest threats facing the country. Yet in election after election, corrupt politicians win high and low offices. If corruption matters to voters, why don't they reject corrupt politicians? Worldwide, there is a gap between how people describe their hatred for corruption and corrupt politicians winning elections. It's possible people don't care as much about corruption as they claim to, but that seems unlikely, given we see whole revolutions, recently Tunisia, kicked off by issues of corruption. It also isn't plausible that people simply have no choice but to vote for corrupt politicians. In the upcoming presidential election in the Philippines Ferdinand "Bongbong" Marcos Jr., son of the late dictator, is leading the field, including some reform minded candidates, by a large margin. The Marcos family, who stole billions and have not had to return most of their looted wealth, are some of the most corrupt leaders to ever live.

This paper examines what obstacles there are to vertical accountability. Vertical accountability is when voters hold elected officials accountable, as opposed to horizontal accountability where one part of the government holds another part of the government accountable. I find that when voters have evidence that a politician is corrupt, they are less likely to support that politician. The problem is that dynasties can suppress that evidence. This paper builds off the last chapter to examine under what circumstances those who are indicted for corruption are punished by voters. As shown in the last paper, in provinces with a high concentration of dynasties, as corruption increases, prosecutions stay flat and low. This means that in those provinces where dynasties are the most concentrated, voters don't get information about corruption. So, voters will reject corrupt politicians, but only under circumstances.

I analyzed ten elections from 1992 to 2019 and found that for mayors there is a small but noticeable (about 5-7%) decrease in their chance of winning an election if they have been indicted for corruption. So, there is vertical accountability, but not a huge amount. People care, but other factors

have a much stronger correlation with a candidate's chance of winning. For example, if a candidate has more than two relatives already holding office when they run, i.e., if they're from at least a moderately sized dynasty, that candidate's chance of winning is close to 100% whether or not they have been indicted for corruption. Incumbency also provides, on average, a 40% greater chance at winning reelection, an advantage that dwarfs any problem being indicted for corruption might cause.

For other offices, those who were indicted for corruption saw a decreased chance to win election, but the results were not statistically significant. The corruption prosecutor, the Ombudsman, targets mayors much more than other positions. Since the Ombudsman's inception, there were 1,444 mayors indicted compared to only 177 vice-mayors and 115 city councilors. Only 117 governors were prosecuted, but there are many more mayors than governors, so governors were prosecuted at a higher rate. Still, compared to other local officials, mayors were a major target. That's not surprising. The structure of local governments gives the mayors disproportionate power over the local budgets and local governance generally.

This paper begins with an explanation of what has been written about corruption, accountability, elections, and the Philippines and how this work fits in and expands on that. Next, this paper includes a description of how prosecutions for corruption and elections work in the Philippines, with a focus on how they are being undermined. Then, this paper will include details of how the data was collected and what the limitation of this data is. Afterward, this paper has a description of the models used and the results of those models. Finally, this paper ends with an analysis of what the data shows and how this connects to other parts of this manuscript.

Literature and Theory

Why does vertical accountability fail? Why people vote for corrupt politicians while professing to hate corruption is one of the most important questions facing corruption scholars. One idea is that voters may lack information on who is corrupt. Winters and Weitz-Shapiro (2013) find that voters don't believe they've voted for corrupt politicians but when presented with evidence of corruption, they were less likely to vote for those politicians. Klasnja, Tucker, and Deegan-Krause (2014) distinguish between voting because of a general belief in a high level of corruption and voting because of specific knowledge of corruption. Looking at Slovakia, they also find that when there is specific evidence of corruption, or a personal experience with corruption, voters are more likely to reject politicians. Similarly, Pavão (2018) argues that when corruption is pervasive, voters will believe all politicians are corrupt and vote on other issues, but when corruption is low, voters will punish corrupt politicians. Agerberg (2020) finds that voters will reject corrupt politicians as long as there is a clean alternative.

There is a disagreement in the literature, though, on how increased information affects voting behavior. Chong et al. (2015) find that knowing more about corruption is linked to lower voter turnout in Mexican elections. Voters may be turned off by the political process by hearing about corruption. Banerjee et al. (2011) show that in India, increased voter information only helps challengers, not incumbents. That may be because voters already have a clear picture of incumbents that is hard to change. Welch and Hibbing (1997) find the opposite. Looking at US House races, they find incumbents charged with corruption have a lower chance of reelection. Humphreys and Weinstein (2012) examine how in Uganda, voters indicated in surveys they were very interested in information on elected officials' performance, but they found that officials didn't change their behavior in response and didn't suffer electoral consequences. Boas et al. (2019) find in Brazil, that in surveys experiments with theoretical, corrupt mayors voters indicate they will reject them, but when asked about their actual voting behavior, voters still vote for corrupt politicians. This could explain the difference in voting behavior suggested by

the different studies. Voters may say they oppose corruption, but not actually vote out corrupt politicians in the end. Boas et al. also find that other sources of information like party of dynasties have a larger effect on voter behavior. If they are right, we would expect evidence of corruption in the Philippines to have no effect.

However, Ferraz and Finan (2007) take advantage of a natural experiment in Brazil where the results of corruption audits were released in some places, and randomly not in others, before an election. They find that when voters have evidence of a single instance of corruption before an election, they are 4.6% less likely to reelect the politician. They also find that corruption is only one factor that voters look at. For otherwise very popular politicians, a 4.6% decrease is not insurmountable, though they find the effect is larger when multiple instances of corruption are reported. That is in line with the 5-7% reduction I found for politicians who had been indicted for corruption. Boas et al. also suggest that the difference between their findings and those of Ferraz and Finan is that Ferraz and Finan were dealing with a clearer source of information on corruption given to voters. In Boas et al.'s study information on corruption came mostly from other political parties. This might also explain why I find a reduction as the Ombudsman is a more trustworthy source than political ads. Finally, De Vries & Solaz (2017) reviewed the literature on corruption and elections and found that the key to voters punishing corrupt politicians was having specific information about their corruption.

There is also a debate about the relative role of horizontal and vertical accountability. Hong Kong and Singapore's amazing success in combating corruption through strong anti-corruption agencies led to this horizontal model being suggested as the key to fighting corruption worldwide. Other agencies that had less success were criticized for not following the Hong Kong or Singapore model closely enough (Quah 2010, or de Speville 2010). Other authors have suggested that this model will fail in all but a few circumstances (Heilbrunn 2004). Finally, some argue that this sort of horizontal accountability can work

to some degree (Schutte 2012). For those who believe elections (vertical accountability) to be a weak or nonexistent control for corruption, horizontal accountability offers some hope.

This paper examines how the vertical accountability of voters punishing elected officials for corruption relies on a system of horizontal accountability (in the Philippines the office of the Ombudsman). Even if the Ombudsman fails to win convictions, it may still have some power if voters are less likely to vote for candidates who have been exposed as corrupt. This relationship is similar to what Ferraz and Finan found. In that case, audits were conducted by the government, a system of horizontal accountability, but the punishment came from announcing the result. However, this further highlights the problem of dynasties. Since the last paper showed us that the Ombudsman isn't working correctly in areas with a high concentration of dynasties, politicians in those areas are escaping both horizontal and vertical accountability. The failure of horizontal accountability leads to a failure in vertical accountability if the literature is correct and people wait for a clear sign that a politician is personally corrupt before taking action. This paper, then, suggests both another path for horizontal accountability to work through, informing the people, and how even that might fail when the horizontal institution is weak. Horizontal and vertical accountability can work together but are subject to failures on both parts.

When thinking about how evidence of corruption affects elections ,it's also important to think about how this works in a heavily clientelistic system. Hicken (2011) notes clientelism may cause, or exacerbate, corruption by creating a system where it's hard to hold politicians accountable. If people vote not based on the ability or policy of politicians but on what the politician can deliver for them personally and immediately, then they have little reason to care if politicians are corrupt. In fact, as Stokes (2005) points out, in heavily clientilistic systems it's not that voters holding politicians accountable (what we've been discussing here as vertical accountability), it's that politicians pay off voters and then try to hold the voters accountable (what Stokes calls perverse accountability). The Brazilian governor Adhemar de Barros was famously described as someone who stole but also got things

done ("*rouba mas faz*"). However, this doesn't seem to be the case in practice. De Barros was defeated in several elections, and as noted above, even with all its problems with corruption, voters in Brazil vote against corrupt politicians when they have evidence of corruption.

Dynasties, on the other hand, have a huge effect on elections in the Philippines both directly and indirectly. While parties in the Philippines are weak and transitory, families are a long-term source of power. A significant majority of all congressmen, senators, and governors in the Philippines have at least one relative in office and in some cases, it can be dozens. This phenomenon is not unique to the Philippines. Amundsen (2013) argues that powerful dynasties make political parties in Bangladesh weaker as well. In the Philippines, attempts to slow or stop the power of dynasties have largely failed. Querubin (2011) shows that term limits don't stop dynasties in the Philippines; they just switch jobs or hand off jobs between family members. Mendoza et al. (2020) find that term limits lead to bigger dynasties as it forces families to pull in more members as some are term-limited out. Querubin (2016) also shows that politics in the Philippines tends towards dynasties, as when a person not from a dynasty gets into office, a family member is much more likely to be elected soon after. Mendoza et al. (2019) also show that the problem of dynasties is getting worse in recent years. They find that dynasties now account for 29% of all local positions (increasing by about 1% a year) in the Philippines, and a much higher rate for national positions.

Dynasties aren't a problem limited to the Philippines. Feinstein (2010) shows that in the US congressional candidates from dynasties have a significantly higher chance of winning elections regardless of their level of political experience. This is especially true when parties are weak. Thananithichot and Satidporn (2016) show an electoral advantage for dynastic candidates in Thai House races but one that is not nearly as strong as the role of party affiliation. Daniele and Geys (2014) show in Italy, dynastic politicians enjoy such a substantial advantage that they tend to win even over much more qualified non-dynastic candidates. Even in a more developed state with stronger parties, dynasties give

members a big advantage. Smith (2012) shows that in Japan, members of dynasties "inherit" the electoral reputation and party connections of previously elected members of the dynasty. In effect, dynasties are reducing the quality of politicians by getting ones elected who would not have been able to win on their own limited merits.

I will show that having family members holding office is very strongly correlated with a higher chance of winning an election in the Philippines, both for those indicted for corruption and those not indicted. For mayors, if they have more than two family members in office in the previous term, their chances of winning end up close to 100%. For those with two or fewer family members in office, there is still a reduction in the chance of winning for those indicted for corruption, but this gets overwritten with 3 or more family members as winning is close to guaranteed. This is not the only way dynasties can affect elections, though. As the previous paper showed, in areas with a higher concentration of dynasties, the chance of being indicted for corruption remains low even as corruption increases. So, politicians who come from areas with a high concentration of dynasties have less chance be being indicted and are thus less likely suffer any political consequences. This paper adds to the work on dynasties by showing how strongly political dynasties help members win election. This paper also shows that while there may be some punishment for corruption, it isn't enough to overcome the huge benefit of being in a dynasty.

Instead of voting for corrupt politicians only so long as they are in a dynasty, it is possible that voters may not be motivated to reject corruption at all. Klasnja and Tucker (2013) looked at responses to corruption in Sweden, a low corruption country, and Moldova, a high corruption country. In Sweden, they found people very willing to punish corruption while in Moldova it was only when corruption was linked to poor economic performance that people said they would punish corruption. Bauhr and Charon (2017) find the same thing looking across 21 European countries. They suggest that in high corruption countries, corruption connects some voters to corrupt politicians while demobilizing those who oppose

corruption. Hooghe and Quintelier (2013) find corruption linked to lower voter turnout in post-Soviet states. If corruption can reduce voter turnout, and as Bauhr and Charon suggest, turn off the voter opposed to corruption most of all, then corruption may not only have the obvious financial benefits for corrupt politicians but may be a viable elections strategy as well. In this case, we would expect to find that in areas with higher corruption, and with politicians known to be corrupt, corruption would be associated with a higher chance of election.

In the Philippines specifically, corruption has been linked to poverty (Mendoza et al. 2016), as well as worse health outcomes, poorer education, and a general decline in public services (Azfar and Gurgur 2008). Given these problems, it would make sense for voters to reject corrupt politicians, but there seems to be no end to them. A scandal over the abuse of funds for local projects, the PDAF scam, where money was directed by members of congress to nonexistent charities, has resulted in almost no convictions or money recovered. Many involved have continued to win election after election, often while on trial. Given these specific circumstances, the Philippines is a difficult case for voters punishing corruption. This paper contributes to the literature on corruption and elections by examining whether even in a very high corruption country like the Philippines, voters will still punish corruption if they have specific evidence of corruption.

To summarize, this paper contributes to the literatures on: the importance of information to vertical accountability; how horizontal accountability feeds vertical accountability; how clientelism limits vertical accountability; how dynasties weaken accountability; and whether voters will really reject corrupt politicians. The central argument of this paper is that when presented with evidence of corruption in the form of an indictment in the Sandiganbayan, voters in the Philippines are less likely to vote for a politician despite the clientelistic nature of elections. However, voters are much more likely to vote for politicians who have had a family member in office in the previous term. Politicians with several family members in office are so likely to win an election that any indictment for corruption becomes

unimportant. Finally, since corruption prosecutions themselves are lower in areas with high dynastic concentration, dynasties can avoid political accountability as well as legal accountability.

Before diving into the data, I will review how prosecutions work in the Philippines as well as how elections function to give context for how these two things may interact. Prosecutions for corruption involve different levels of government and make accountability complicated.

Prosecutions in the Philippines

As explained in the previous paper, the Ombudsman is tasked with investigating corruption for almost all elected officials. Very low-level offenses can be prosecuted at the local level, but the Ombudsman has exclusive jurisdiction to prosecute corruption-related offenses for everyone examined in this paper except municipal councilors. Even for municipal councilors, if the amount of money involved is significant, the Ombudsman has jurisdiction. The biggest target of the Ombudsman is mayors. There are 1,488 municipalities and 146 cities in the Philippines. These 1,634 mayors have a great deal of power. They have more power over local spending than their city or municipal councils and usually more local control than a far-off governor. However, they are not usually part of some big national family. They may be part of a large local dynasty but a Marcos (or someone like that) wants to be governor or senator, not the mayor of a village.

Mayors are both shielded and potentially exposed by the national nature of the Ombudsman. A mayor's power is tied to the city or municipality he runs. There is no inherent reason for national politicians to care much about local officials. Some may have powerful national connections, but not many. Since the Ombudsman is a national institution based in Manila and with its leaders appointed by the president, most mayors will have little chance of influencing its decisions. If, as I was told, a president could get most Ombudsmen to back off a case, the question is when a president is likely to do

that. A senator or governor might have more luck in appealing to a president, but most mayors can't reach that high.

On the other hand, the gap between local and national power works to keep the Ombudsman far removed from most municipalities. The Ombudsman doesn't have a large staff and has weak investigative powers. They often rely on things like informants to prove their case. Here mayors are at an advantage since they are much closer to those who might accuse them than a prosecutor in faraway Manila. The previous paper shows that in provinces with a high concentration of dynasties, as corruption increases, the chances of a mayor or governor being prosecuted for corruption remains low. In provinces with a low concentration of dynasties, as corruption increases, the chance of a mayor being prosecuted for corruption increases. Dynasties can make it hard for the national Ombudsman to penetrate local issues. In the end, it is mayors from provinces with a low concentration of dynasties who preside over cities with a high level of corruption who are most likely to be indicted. And, as the rest of this paper will show, these mayors then have a lower chance of winning elections.

Elections in the Philippines

Elections in the Philippines involve serious issues of clientelism, corruption, and weak parties. As noted before, this might lead people to believe that even knowing a politician was corrupt would not be enough to convince people to change their votes. However, even given the issues with clientelism and weak parties, voters in the Philippines do not simply vote for whoever pays them. Policies and the ability to govern do matter. This section of the paper will briefly explain why clientelism is such a problem in the Philippines, how this came to be, and why it doesn't mean that there is no hope for controlling corruption.

Elections are held on a three-year cycle with local (mayor, vice-mayor, municipal or city councilor), state (governor, vice-governor, state legislator), and House members elected to three-year terms with a maximum of two consecutive reelections. They can be reelected after three terms if they take a term off. In some cases, changes in the makeup of a locality have been used to let local officials run for even more consecutive terms. Presidents are elected to a single six-year term and senators to six-year terms with one consecutive reelection. Both presidents and senators are elected by the whole country.

Parties, even longstanding ones, are incredibly weak. During the US colonial period in the early 20th century, the US sought to quickly build up democratic institutions but paid little attention to what the practical outcome of a quick changeover was. Powerful local elites, often large landowners, were able to capture the huge number of newly created political offices and found common ground with the other elites they met in Manila (Anderson 1988). The new national bureaucracy was also the source of considerable rents that the new political elites could get their hands on (Abinales and Amoroso 2005). Teehankee (2012) adds that one reason parties failed to coalesce was that politicians feared being shut out of all the spoils. This is still the structure today and explains why the Liberals can win 115 seats in the House but then see 97 of those winners desert the party when they failed to win the presidency. In 2016, when Rodrigo Duterte won the presidency, his PDP-Laban party captured only three seats in the House while the Liberal party, whose candidate came in second in the presidential election, captured 115 out of 297 seats, by far the most. However, with huge immediate defections, by the end of the 17th Congress' term, PDP-Laban held 94 seats while the Liberals only held onto 18. The Liberals easily won the congressional election. Nevertheless, because they failed to win the presidency, their party was decimated. Hicken and Stoll (2013) point out that when presidential elections occur simultaneously with legislative elections, as is the case in the Philippines, legislators will "wait until after the election when the outcome is certain and then align with the winner" (p.4).

The local-national divide that helps explain the issues the Ombudsman has with prosecuting is also important when thinking about elections. Teehankee (p.191) explains the relationship between national money and local votes: “Historically, a powerful chief executive has exercised vast control over fiscal powers and patronage resources. Given the absence of a programmatic party system, the president is dependent on local political bosses and clans to mobilize electoral support and implement central government policy.” This would all seem to indicate that voting in the Philippines is little more than a system of cash for votes, but the reality on the ground is more nuanced.

Voters might not punish corrupt politicians if those politicians are enmeshed in long standing clientelistic networks. If voters get payouts regularly from one politician or dynasty, then they might be likely to support them even in the face of an indictment. However, there is good evidence that vote-buying doesn’t necessarily mean that people will vote for whoever pays them. Sometimes the Philippines is described as an especially vulnerable case for clientelistic payouts because of the cultural norm of “utang na loob” or debt of gratitude. The idea is that Filipinos will be more likely than other people to give their vote after receiving a payout as opposed to just taking the money and voting for who they please. However, this doesn’t stand up to scrutiny. Ravanilla et al. (2020) do find that there are cases where voters are highly likely to follow through with their promise to vote after receiving a payout, but that this depends on how likely a voter thinks his choice will be known and that he will be sanctioned for not following through on the agreement as opposed to simply voting his cultural values.

Canare et al. (2018) find that what politicians are offering has a large effect on how likely voters are to deliver their votes. Interestingly, cash was less likely to induce voters to vote for their patron than things like “shirts, umbrellas, mugs” (p.79). Groceries were also less likely to win votes than these material goods. They suggest this is because even in a place with a high degree of vote-buying, cash is still seen as inappropriate and voters are more comfortable with things that are less directly a form of vote-buying. They find that only about 17% of voters who take gifts change their vote. They report that

policies and an assessment of the candidates is much more important than gifts in deciding who to vote for. Canare et al. suggest that the role of vote-buying might be more to build a brand or stave off defections than to persuade voters. Poor voters, they argue, may expect some form of gifts so a candidate giving them doesn't necessarily win votes, but a candidate who fails to provide gifts may lose votes.

This makes the Philippines a harder case for vertical accountability for corruption than other countries since politicians gain favor by buying votes, but not an impossible one. Even voters who receive gifts indicate that they examine the fitness and policies of candidates. In addition, many voters indicate they are willing to take gifts and vote as they please as long as they are confident that they won't be found out. Just as vice-president Robredo suggested, voters can "accept the money, but vote according to your conscience."

Measurement

To review, my goal is to test under what circumstances voters will reject corrupt politicians. I believe that even though elections in the Philippines are highly clientilistic, voters will still reject corrupt politicians if they have clear evidence of corruption. However, I believe this effect will be lessened by the power of dynasties to get their members elected. To this end, I need data on who is being prosecuted, who is winning elections, who is in a dynasty, and what the level of underlying corruption is like in different municipalities. Given that the questions all revolve around winning or losing election, the data is organized as candidate-year. This section will describe how the data was collected, how accurate it is, and what the limitations of the data are.

Prosecutions

Because all corruption cases must be filed in the Sandiganbayan I was able to get a complete list of corruption cases up to the end of 2019. Any case against any of the people included in the elections data must be filed in the Sandiganbayan except for municipal councilors. Cases against private individuals can be filed in the Sandiganbayan if it also involves elected officials. The only issue with the prosecutions data is matching it to the other data. Naming conventions vary across the Philippines and across state agencies. In addition, in some parts of the Philippines having several middle names is common. “Hadji” a title given to a Muslim who has made a pilgrimage to Mecca is sometimes treated as a first name on some government documents. Because some, but not all, data sets include middle names I had to match names based on first names, last names, and suffixes (Jr., Sr., II, III, etc.). This created a situation where sometimes a name on one list might match more than one name on another. For example, there might be a corruption case filed against Maria Reyes and there might be two different people named Maria Reyes who ran for office at different times and places.

When combining the prosecutions and elections data if I only matched on names about 10% of matches had a duplicate, i.e. one name on the prosecutions list would match two names on the elections list. If I also matched by office and province, then the number of duplicates fell to about 0. Because I relied on matching office as well as name, someone who was indicted for corruption before they held public office would not appear as having been indicted in that measure. I include both measures of being indicted for corruption in the regressions below and the results are robust to either measure.

Elections

There is no publicly accessible data set of elections in the Philippines, so I had to bring together several data sets to get a complete picture of elections. I have data on all local and provincial elections from 1992 to 2019 except 2010 for which I only have data on mayoral elections. Small, random errors may

have been introduced by the need to use an optical character reader to get the data from thousands of pages of pdfs into a usable form, but when spot-checking I found minimal errors and what errors there are should be random instances where a character was blurry. For 2016, the data I had didn't include who had won the election; only how many votes each candidate had. For mayors or governors, this wasn't a problem, but city councilors are elected by being one of the top number of vote-getters. The number in question varies by the size of the city. I tried to account for this, but there may be a few cases of a winner not being counted. However, this paper doesn't focus on city councilors, and there are only 146 cities. Finally, I can't verify the underlying Commission on Elections data. In some cases, there are strange results reported, such as no votes reported, or surprisingly few candidates, but these seem uncommon.

Dynasties

Based on the work done by Mendoza et al. (2016), I define dynasties as having multiple family members in office at the same time. Mendoza et al. also has shown that it is these "fat dynasties" that pose the most problems. The Philippines also offers a unique opportunity to measure dynastic connections broadly. Due to a quirk of how the Spanish assigned family names during their colonial period, two people from the same province sharing the same family name are very likely to be related (Cruz, Labonne, and Querubin 2020). This means that I can look at how many family members were in office before a candidate ran for office, and how many ran with him. This doesn't capture connections between families, but it is highly correlated with the chance a candidate will win an election.

In addition, Davis (forthcoming) shows that in areas with a high concentration of dynasties, i.e. many families holding many offices, as corruption increases, the chance of being prosecuted for corruption remains flat. So, dynasties are influencing who is being indicted for corruption, and thus on their chances of being elected.

Corruption

While being indicted for corruption is the key independent variable in this paper, I also have a measure for corruption itself. I collected data on some 9 million public procurement contracts from 2003 to 2019 and created a measure for how clean they seem. There are several studies (Coviello and Gagliarducci 2010, Auriol, Straub, and Flochel 2016, Burgess et al. 2015, or Olken 2005) that have shown that things like only having a single bidder for a public procurement contract is strongly associated with corruption. I created a measure for each contract and then for each municipality and province for how clean the public procurement contracts appeared. As Davis (forthcoming) shows, in areas with low dynastic concentration, as the quality of the public procurement contracts goes down, the chance that a mayor or governor will be indicted for corruption increases. However, as shown below, as the quality of these public procurement contracts goes down, the chance of winning an election remains flat. However, because I only have public procurement data for the most recent years, I don't consider corruption directly in all models.

Methods

In this section I will detail the models I will examine and why they make sense given the data including what controls I use. The underlying model is straightforward, so much of what I examine is based on alternative measurements of the data, to show that the results are robust, or alternative controls, again to show that changes in model specification don't disrupt the underlying relationship. I will also detail models I looked at to answer related questions such as whether the effect of an indictment on elections vary over time.

The central model is:

$$WinElection = B\_1 * IndictedBeforeElection + \boldsymbol{Z} + e$$

Wherein the key controls are for having won an election previously. This is the key control because otherwise there is a significant issue of reverse causality. Being indicted for corruption is correlated with a higher chance of winning an election because to be indicted for corruption by the Ombudsman you usually need to be an elected official. And having previously won office is correlated with a much higher chance of winning office in the future. So, if the previous office isn't controlled for, the correlation goes in the wrong direction. I try a series of different control for previous times in office: having held the same office before, having held any office before, the number of times a candidate has held office, and the number of times they've run unsuccessfully. As will be shown below, the results are robust to any or all of these controls. One problem, though, is that since my elections data starts in 1992, anyone who held office before that isn't credited. Most of the period before this was during martial law, but even then there were some elections, of varying quality, and many appointments. This means that there are some people winning office who already held office being treated in the regression as first-time candidates. However, that should mean that the actual correlation between being indicted, and the chance of winning is larger than what I find since these missing offices will drive the relationship in the opposite direction. It's also not surprising, given this, that the correlation is much weaker in 1995 and 1998 (1992 falls out since there is no period before).

Since the elections data is panel data, I can also use either time or place fixed effects. The results are robust to either one-way fixed effects, two-way fixed effects, or no fixed effects at all. Since the data includes both provincial and municipal elections the fixed effects are also nested in one another suggesting the possibility of a multilevel model. Unfortunately, since there are 500,000 individual candidates with 84 provinces (more than currently exist because some come and go over time) and

about 1600 cities and municipalities running a multilevel model or running fixed effects for municipalities results in a matrix that is just too large to run. However, when an interaction for the position is included [*WinElection = B_1*IndictedBeforeElection + B_2*Position + B_3*IndictedBeforeElection*Position +* ***Z*** *+ e*] I find that the correlation is only statistically significant for mayors. Afterward, I use a subset of the data which only includes mayors and a model with fixed effects for time, province, and municipality. This model produces the same results.

I also run models to test if there is an interaction between being in a dynasty and being indicted. I run this test for mayors with the model :

*WinElection = B_1*IndictedBeforeElection + B_2*Dynasty + B_3*IndictedBeforeElection*Dynasty +* ***Z*** *+ e*

I try this model with both the number of members in a candidates dynasty and the dynastic concentration in a province. As I will discuss below, having more than a few members of a candidate's dynasty in office means that candidate's chance is very high even if indicted for corruption. I also run several models to examine specific parts of this question. I look at an interaction between being indicted and year. The effect does vary somewhat over time as for early years there are likely more mayors who I don't have information on their time in office before 1992. There isn't a strong effect. All the models run below are logistic regressions since the dependent variable is elected or not elected.

Results and Discussion

This section will examine the result of all the models and discuss the key takeaways from the group of regressions. Table 1 below examines all half million candidates for office between 1992 and 2019. Table 1 shows the success in using any one of three variables to control for the reverse causality caused by

someone who has been in office being both much more likely to win office in the future and more likely to be indicted for corruption (because they had the opportunity).

Table 1

	(1)	(2)	(3)	(4)	(5)
Indicted	0.536***	−0.214***	−0.074**	−0.357***	−0.229***
	(0.026)	(0.028)	(0.029)	(0.030)	(0.030)
Past Win		1.544***			
		(0.007)			
Past Win Same Office			1.690***		1.431***
			(0.008)		(0.010)
Number Past Wins				0.557***	0.165***
				(0.003)	(0.004)
Constant	−0.783***	−1.188***	−1.120***	−0.988***	−1.149***
	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
Observations	498,387	408,173	408,173	408,173	408,173
Log Likelihood	−310,429.300	−239,052.100	−237,542.300	−247,080.900	−236,776.100
Akaike Inf. Crit.	620,862.700	478,110.300	475,090.600	494,167.900	473,564.200
Note:					*p<0.1; **p<0.05; ***p<0.01

Model 1.1 [I refer to models by table and model number so this is Table 1, Model 1] shows the most basic form of the regression, only considering If someone has been indicted for corruption and if they won the election. In Model 1.1 being indicted for corruption is strongly positively associated with winning an election. This is because of the endogeneity problem noted above. Model 1.2 includes a control for a past win. In Model 1.2 that is any past electoral win. Having a past win is strongly correlated with a higher chance at election, but once that is controlled for the effect of being indicted on being elected is negative.

To show that this is not just the result of the model specification, Model 1.3 controls for having won the same office a candidate is running for, not just any office. Again, having won is positive and

statistically significant and being indicted is negative and statistically significant. Model 1.4 looks at the number of past wins and gets the same result. Model 1.5 uses controls for both having won the same office and the number of past wins. I control for both because both being very successful and having held the office a candidate is running for could independently affect their chances. Both are positive and statistically significant, while being indicted is negative and statistically significant. The number of observations drops in Models 1.2 to 1.5, because 1992 is excluded since there are no past elections to consider. 1992 also had more candidates than subsequent years. While not reported here, the relationship holds when adding controls for duplicate names and for past losses. This shows that the key to dealing with endogeneity, in this case, is controlling for having held office in the past. The model is also robust to several different specifications and combinations of controls.

Model 2.1 in Table 2 includes several new controls such as if the candidate has lost previous elections or lost an election for the same office. Not surprisingly these are statistically significant and negatively correlated with winning an election. I also include a control for the number of family members in office in the previous term. We'll take more of a look at this later, but for now it's positively correlated with winning an election. Model 2.2 is the same, but it includes fixed effects for years. For the models based only on mayors, I will look at the interaction between year and being indicted.

Table 2

	(1)	(2)	(3)	(4)	(5)
Indicted	−0.126***	−0.130***	−0.128***	−0.132***	−0.190
	(0.031)	(0.031)	(0.031)	(0.031)	(0.148)
Past Win Same Office	1.536***	1.543***	1.530***	1.538***	1.555***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Past Loss Same Office	−0.240***	−0.235***	−0.240***	−0.234***	−0.218***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.014)
Number Past Wins	0.157***	0.158***	0.146***	0.147***	0.138***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Number Past Losses	−0.276***	−0.277***	−0.274***	−0.276***	−0.284***
	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)
Family in Office	0.149***	0.159***	0.162***	0.173***	0.173***
	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)
Constant	−1.342***	−1.309***	−1.227***	−1.191***	−1.333***
	(0.008)	(0.011)	(0.030)	(0.031)	(0.046)
Year Fixed effects	No	Yes	No	Yes	Yes
Province Fixed effects	No	No	Yes	Yes	Yes
Office and Interaction	No	No	No	No	Yes
Observations	403,990	403,990	402,870	402,870	402,870
Log Likelihood	−229,856.300	−229,430.800	−227,641.900	−227,193.900	−227,101.900
Akaike Inf. Crit.	459,732.600	458,893.600	455,465.700	454,581.900	454,421.900
Note:					*p<0.1; **p<0.05; ***p<0.01

Model 2.3 has provincial fixed effects. This could theoretically be run with municipal fixed effects but with 1600 municipalities and more than 400,000 observations, the matrix becomes too large to practically compute. Model 2.4 uses two-way fixed effects. The key idea with models 2.2, 2.3, and 2.4 is that with either unit, time, or two-way fixed effects, the relationship between being indicted for corruption and election remains negative and statistically significant. We can see with these various specifications of controls and fixed effects that the result is quite robust. Finally, model 2.5 includes a control for what office the candidate is running for and an interaction between that and being indicted

for corruption. This isn't included in the table because they are very hard to interpret directly and because office is an unordered categorical variable, so the significance is relative to what it is being compared against. Instead, a predicted probability graph is needed to see how candidates for different offices fair when being indicted for corruption.

Figure 1 below shows the probability of winning an election for each office when controlling for all the variables included in Model 2.5, most importantly past office. We can see that for almost every office being indicted for corruption (the blue bars) results in a lower chance of winning an election. However, it is only for mayors that the results are statistically significant. Looking at the figure the reason is clear; there is just too much noise for the results to be clear for most positions. Mayors, who as noted above make up by far the largest group of elected officials indicted for corruption, is the only place where the results are statistically significant. Based on this, the rest of the models only examine the effect of being indicted on mayors. Besides focusing the discussion, this has the advantage of making the data set smaller so things like municipal fixed effects and a multilevel model can be tried.

Figure 1

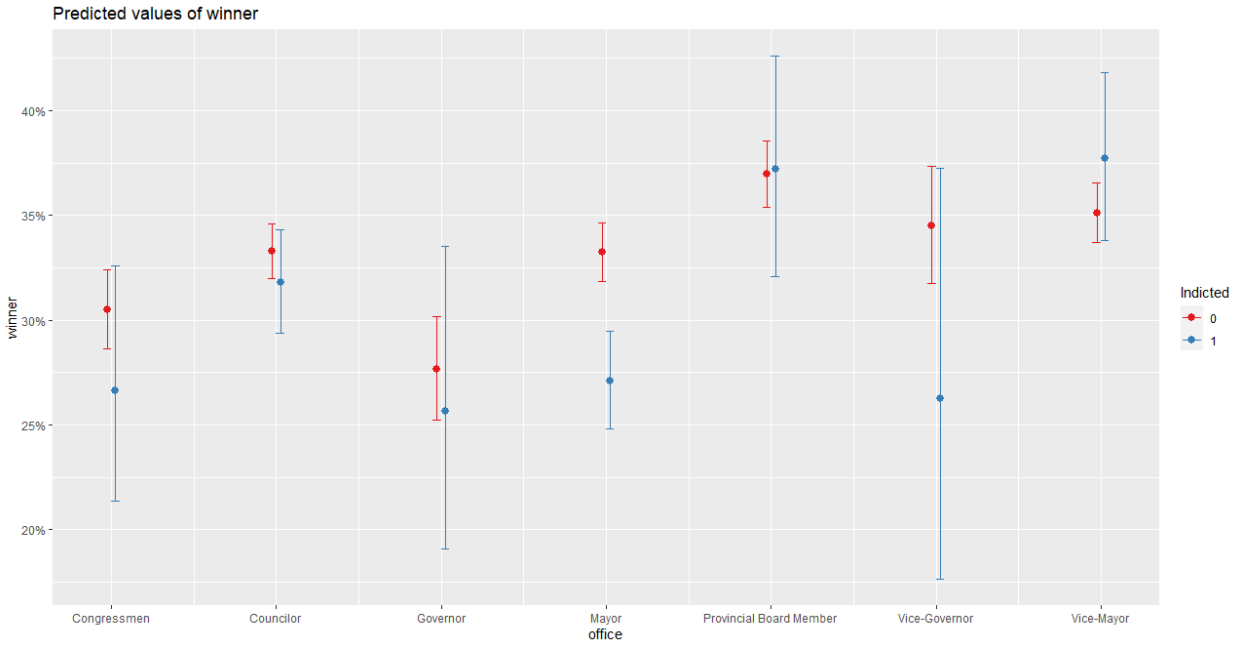


Table 3, below, looks at the same general models but for mayors. Model 3.1 is the same specification as model 2.4 except limited to just mayors. As expected, being indicted for corruption is statistically significant and negatively correlated with winning an election. The size of the effect is larger because all the other offices, which from Figure 1 we can see didn't have a statistically significant effect, have been eliminated. Again, having won in the past is strongly positively associated with winning, as is having family members in office. Models 3.2, 3.3, and 3.4 all try different fixed effects with municipalities instead of just provinces. This model specification isn't as good overall because we end up with only two or three candidates per municipality per year, but it's worth looking at these models briefly as a robustness check. Model 3.2 only has municipal fixed effects. Model 3.3 has municipal and year fixed effects and Model 3.4 has municipal, year, and provincial fixed effects. In all cases, the coefficient on being indicted is very similar to Model 3.1.

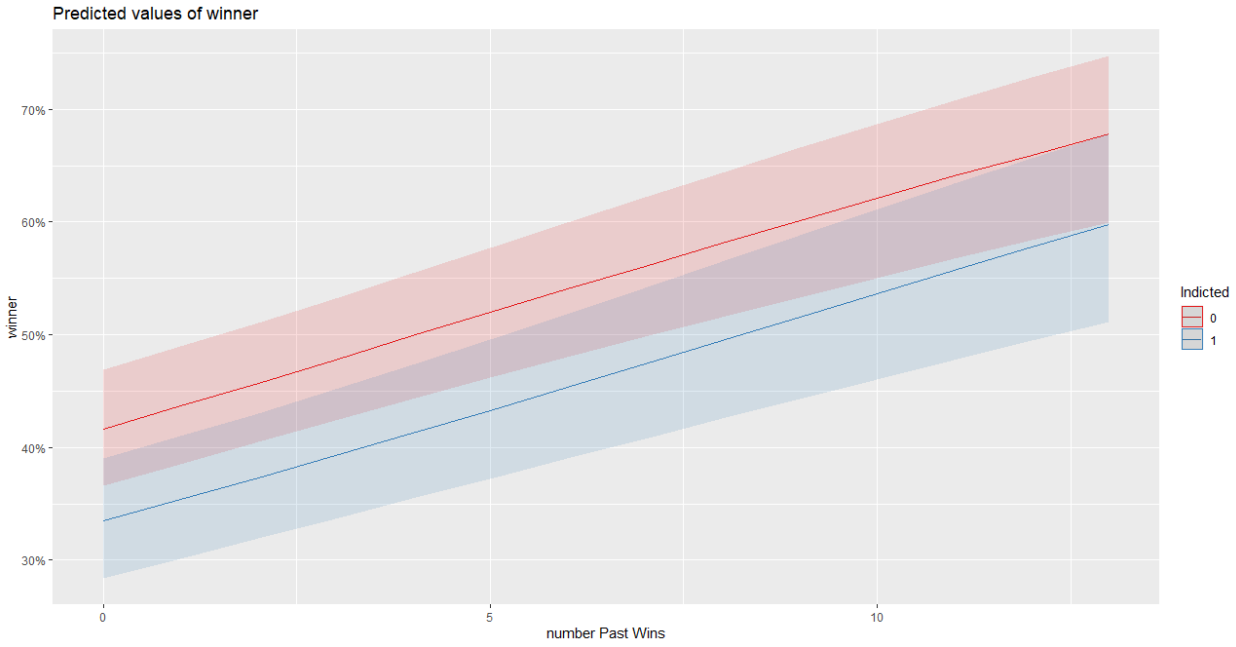
Model 3.5 is a multilevel model organized around provinces. Again, the results are very similar to the other models. Using municipalities here isn't possible because there are only a few candidates per municipality. What Table 3 shows is that for mayors we can choose a wide range of model specifications and still get the same relationship (so long as endogeneity is controlled for). This gives us confidence that the relationship is not being driven by any specific aspect of the model but by a real underlying causal relationship.

Table 3

	(1)	(2)	(3)	(4)	(5)
Indicted	−0.348***	−0.384***	−0.373***	−0.373***	−0.403***
	(0.058)	(0.062)	(0.062)	(0.062)	(0.072)
Past Win Same Office	1.897***	1.951***	1.950***	1.951***	1.897***
	(0.034)	(0.035)	(0.035)	(0.035)	(0.034)
Past Loss Same Office	0.158***	0.217***	0.217***	0.227***	0.154***
	(0.046)	(0.048)	(0.048)	(0.048)	(0.046)
Number Past Wins	0.083***	0.078***	0.083***	0.085***	0.086***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Number Past Losses	−0.522***	−0.557***	−0.553***	−0.555***	−0.525***
	(0.025)	(0.026)	(0.026)	(0.026)	(0.025)
Family in Office	0.196***	0.219***	0.226***	0.226***	0.193***
	(0.010)	(0.011)	(0.011)	(0.011)	(0.010)
Constant	−0.788***	−1.331**	−1.268**	−0.450	−1.087***
	(0.114)	(0.466)	(0.446)	(0.604)	(0.048)
Year Fixed effects	Yes	No	Yes	Yes	Yes
Province Fixed effects	Yes	No	No	Yes	Yes
Municipal Fixed effects	No	Yes	Yes	Yes	No
Observations	33,926	33,926	33,926	33,926	33,926
Log Likelihood	−18,610.170	−18,610.170	−18,610.170	−18,610.170	−18,690.140
Akaike Inf. Crit.	37,414.340	37,414.340	37,414.340	37,414.340	37,418.270
Bayesian Inf. Crit.					37,578.480
Note:					*p<0.1; **p<0.05; ***p<0.01

Figure 2 shows the difference between being indicted and not indicted based on Model 3.1. As we can see while the number of past wins increases the chance of a candidate winning there is about a 7% difference between being indicted and not being indicted.

Figure 2



The next figures are all based on Table 4, which takes model 3.1 and adds a series of interactions to see how that affects the relationship between being indicted for corruption and winning an election. Figure 3, based on model 4.1, shows the interaction between being indicted for corruption and having family members already in office when a candidate runs for office. There is an interaction, as can be seen also in Table 4, but really what Figure 3 shows is that being indicted matters if there are 3 or fewer family members in office, but once you start looking at larger dynasties, the effect of being indicted becomes small and not statistically significant. In addition, dynasty size is a strong predictor of a candidate's chance to win election. It's also worth noting that there are very few candidates with more than 5 family members in office.

Figure 3 is important because it shows that corruption is never thought of as a positive, or even neutral thing. It could have been the case that corrupt politicians from large dynasties were thought of as being more effective. Wade (1985) argued that poor voters in India preferred criminal politicians because they could better look out for their interests. Figure 3 shoes that this is not the case. Voters do prefer candidates from large dynasties, but they also prefer that they not be corrupt. It's just the case that if they come from a large dynasty, that helps more than corruption hurts. Figure 3 may also show how clientilistic bargains are built into the system. Voters don't approve of corruption, but they will vote for dynasties that they know well. This may reflect that those dynasties are a good source of payouts over time.

Figure 3

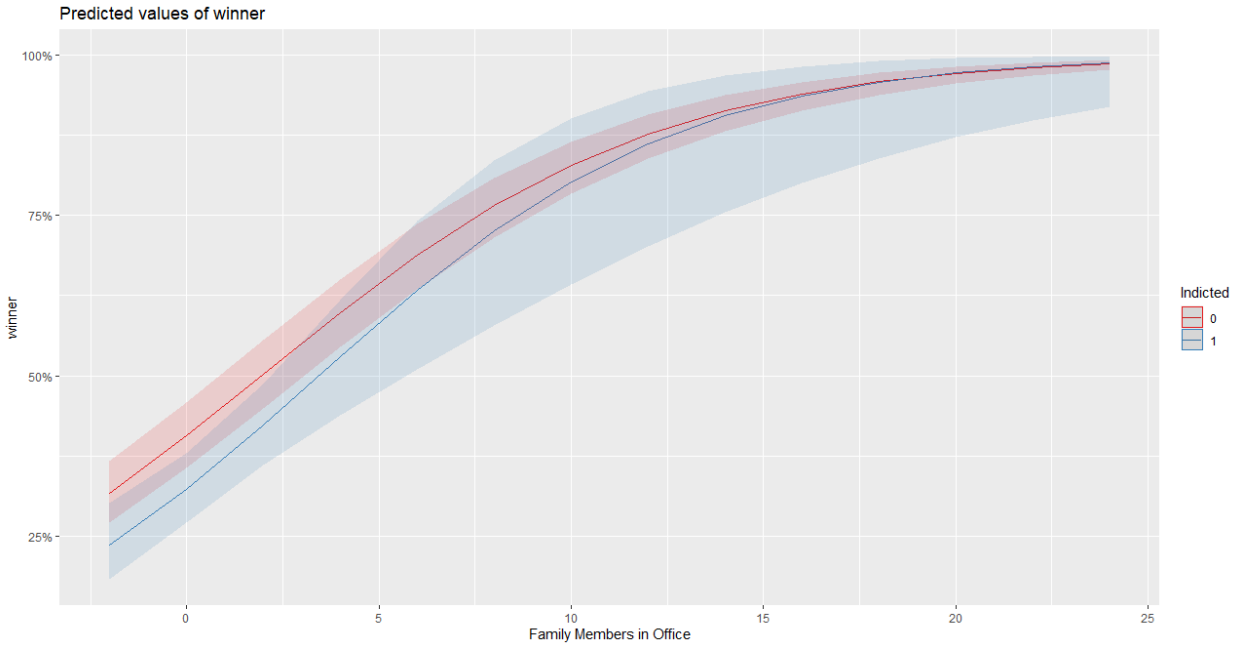


Figure 4, based on model 4.2, shows the interaction between year and being indicted for corruption. 1995 and 1998 have the relationship going in the wrong direction, but as noted before I

suspect this is because there are more candidates who previously held office who have yet to be indicted. For most of the rest of the years there is variation, but the overall relationship is similar. Most interesting is how weak the relationship is by 2019. This might reflect the changeover in the Ombudsman and a less active pursuing of cases. However, the 2019 result could also just be noise. The absence of evidence isn't evidence of absence after all. If the relationship continues to get weaker, that suggests a change in the work of the Ombudsman. It's possible given that the new Ombudsman got his job for being a Duterte ally, not a corruption fighter. What's key is that we can see that the relationship between corruption indictment and chance of winning election is not being driven by one year in particular.

Figure 4

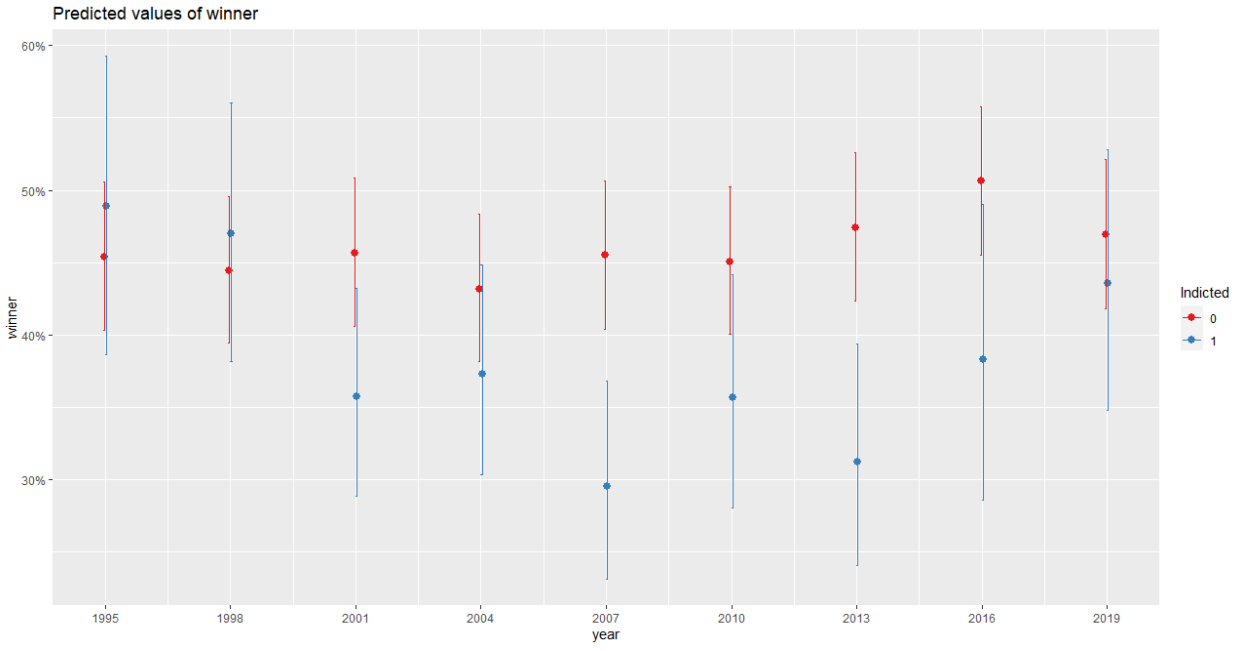


Figure 5, based on model 4.3, shows the interaction, or lack thereof, between being indicted and the level of corruption in a municipality. The effect looks slightly larger in very high corruption municipalities, but the results aren't close to being statistically significant. Part of the problem is a lack of data. Because the corruption data draws on the online public procurement system there are only four

election periods when I include this data. It is possible the relationship would be stronger with more data, but I can only go back so far.

Figure 5

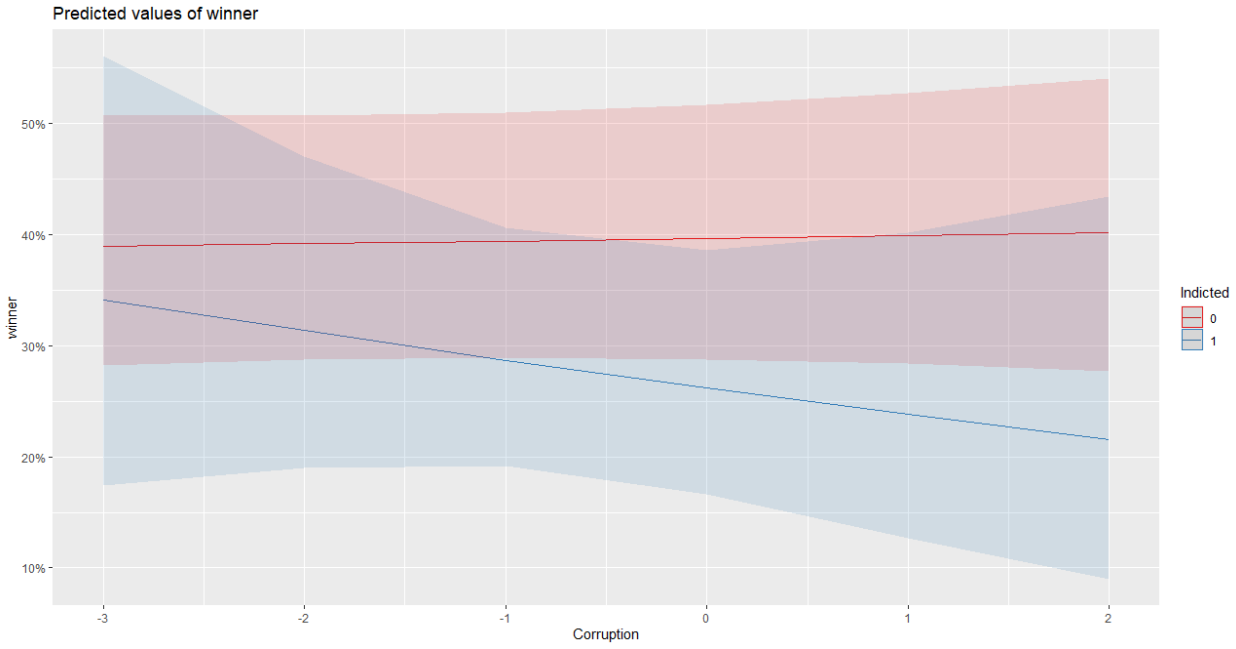


Figure 6 (based on Model 4.4) shows the interaction between being indicted for corruption and the concentration of dynasties in a province. At low levels of dynastic concentration, we see being indicted having a negative effect on a candidate's chance of being elected. However as dynastic concentration increases, the difference is no longer statistically significant. However, I'm not sure how much we can take from this result. The previous paper showed that as dynastic concentration increases, corruption increasing no longer results in a higher chance of prosecution. Therefore, in areas with a high concentration of dynasties, corruption prosecutions are quite rare. That's why the standard errors become so large in Figure 6 as dynastic concentration increases. It may be that dynastic concentration also works to weaken vertical accountability directly, but it's not clear from the data.

Figure 7 looks at dynastic concentration from another perspective. Figure 7 doesn't look at corruption indictment, but just the interaction between dynasty size and being indicted for corruption. From Figure 7 we can see that in provinces with a low dynastic concentration being from a larger dynasty is associated with a larger chance at election. However, in provinces with a high dynastic concentration the effect of the size of the dynasty disappears. I believe the lines crossing is just an artifact of the expanding standard errors as there are few provinces with an HHI above 150. Similar to how the effect of being indicted for corruption seems to go down as dynastic concentration increases, so too does the effect of a particular dynasty. I don't think there is enough evidence here to give a clear answer to why this is, but it could be similar to the research suggesting that people care more about corruption when corruption is low. Maybe when dynasties become very common the effect of being from one no longer gives a clear signal.

Table 4 includes the models that the above figures were drawn from. Each model has an interaction that is examined in one of the figures.

Figure 6

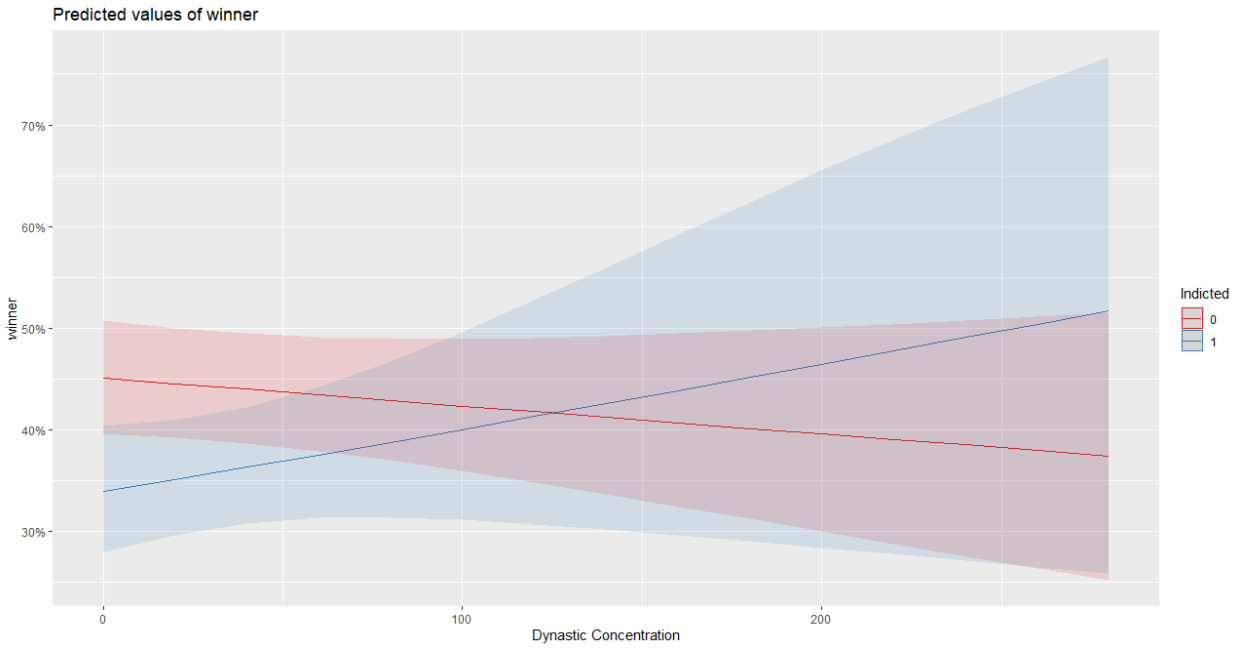
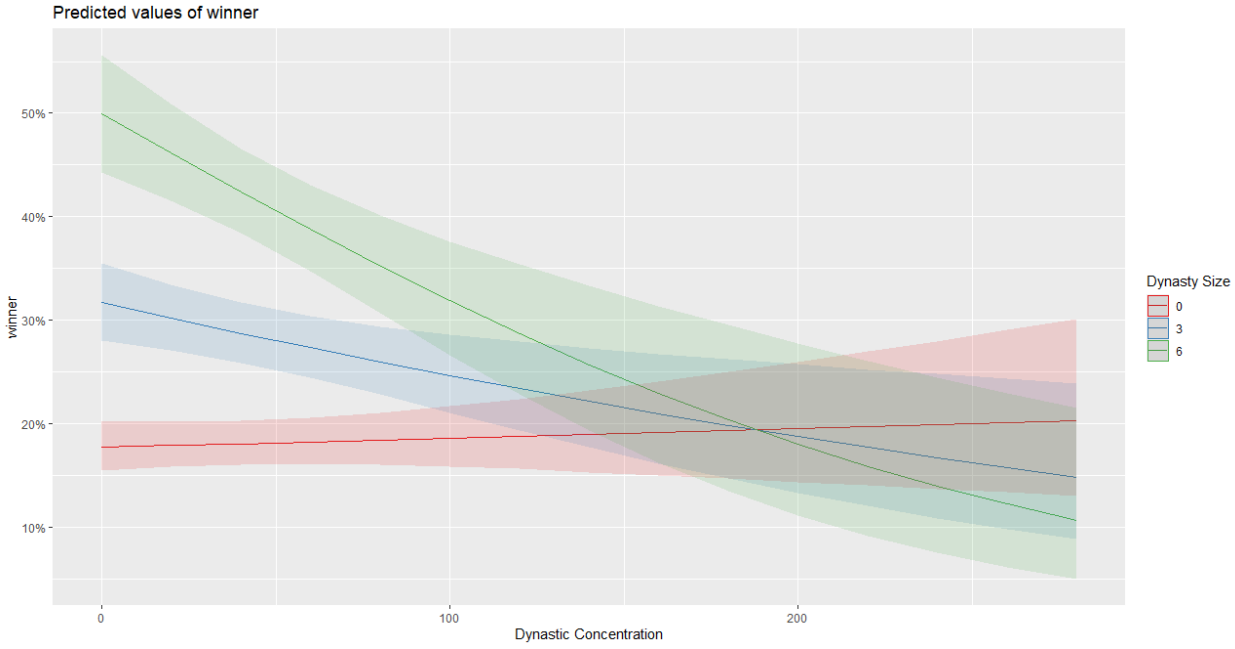


Figure 7



From all the models and figures above, we can learn five things. First, there is a relationship between being indicted for corruption and winning office. Being indicted for corruption reduced a candidate's chance of winning office by about 7% (depending on which model). Second, this relationship is robust to a wide variety of model specifications so long as those models control for endogeneity. Third, the relationship varies somewhat over time, but that is likely due to issues with the ability to control for endogeneity in the earlier years. Fourth, having several family members in office offers a huge increase in a candidate's chance to win an election that might swamp any problem created by being indicted. Fifth, corruption and dynastic concentration, while they influence who is indicted (Davis forthcoming) do not directly affect a candidate's chance of election beyond that.

Table 4

	(1)	(2)	(3)	(4)
Indicted	−0.361***	0.141	−0.617***	−0.471***
	(0.064)	(0.193)	(0.167)	(0.087)
Past Win Same Office	1.897***	1.870***	1.857***	1.898***
	(0.034)	(0.032)	(0.072)	(0.034)
Past Loss Same Office	0.159***	0.142***	0.191**	0.160***
	(0.046)	(0.043)	(0.091)	(0.046)
Number Past Wins	0.083***	0.078***	0.029	0.083***
	(0.011)	(0.010)	(0.019)	(0.011)
Number Past Losses	−0.523***	−0.512***	−0.567***	−0.523***
	(0.025)	(0.023)	(0.045)	(0.025)
Family in Office	0.195***		0.217***	0.196***
	(0.011)		(0.024)	(0.010)
Dynastic Concentration				−0.001
				(0.001)
Corruption			0.010	
			(0.045)	
Indicted*Family in Office	0.019			
	(0.044)			
Indicted*Corruption			−0.137	
			(0.169)	
Indicted*Dynastic Concentration				0.004*
				(0.002)
Constant	−0.788***	−0.608***	−0.942***	−0.764***
	(0.114)	(0.106)	(0.249)	(0.115)
Year Fixed effects	Yes	Yes	Yes	Yes
Province Fixed effects	Yes	Yes	Yes	Yes
Observations	33,926	38,127	8,015	33,926
Log Likelihood	−18,610.070	−21,192.250	−4,600.834	−18,607.890
Akaike Inf. Crit.	37,416.150	42,594.500	9,389.668	37,413.790

Note: *p<0.1; **p<0.05; ***p<0.01

Conclusion

Being indicted for corruption decreases a candidate's chance to win an election. This is somewhat surprising because the high levels of corruption and clientelistic nature of elections in the Philippines might have meant that people were either numb to news of corruption or that they didn't care as long as they got paid. However, while other factors had a greater impact, such as having held office previously or having family members in office, there was still a negative effect for being indicted. The weakness in this mix of horizontal and vertical accountability is that it relies on the Ombudsman to indict candidates. In cases where the Ombudsman fails, there doesn't seem to be a direct connection between the amount of corruption in an area and the chance of a candidate being elected. However, even if the Ombudsman fails to win a conviction, there is still a price to be paid for a candidate who is indicted for corruption. The other limitation is that having family members in office is so strongly associated with winning an election that candidates with more than about three family members in office are almost certain to win elections indictment or no indictment.

This paper contributes to the work being done on how voters punish corruption by showing that even in a difficult case they do, in fact, punish corrupt politicians. This paper also contributes to the literature on clientelism by showing the limits of these bargains. This paper also shows how anti-corruption agencies (horizontal accountability), and elections (vertical accountability) can work together instead of being two different options, but also what the limits of this logic are.

There is more that can be done to extend this analysis. The Philippines offers an easier ability to test the effect of corruption prosecutions, since they are all handled by one agency, but the same thing could be done in other countries with central anti-corruption agencies. We don't need to limit the examination of anti-corruption agencies to their ability to convict but can also consider how they inform the public. In addition, with the rise of computerized public procurement data around the world, there is

an increasing number of countries where the quality of public procurement contracts can be assessed to see how corruption is punished in elections as well as how that interacts with corruption prosecutions. There is also more work to be done looking at how dynasties face challenges. The Philippines is far from the only country with powerful political dynasties and looking at how they affect both elections and prosecutions is work that can be done in several countries.

Work Cited

Abinales, P., & Amoroso, D. (2005). *State and Society in the Philippines (Pasig City*. Anvil Publishing.

Agerberg, M. (2020). The lesser evil? Corruption voting and the importance of clean alternatives. Comparative Political Studies, 53(2), 253-287.

Amundsen, I. (2013). Democratic dynasties? Internal party democracy in Bangladesh. *Party Politics*, *22*(1), 49–58. https://doi.org/10.1177/1354068813511378

Anderson, B. (1988). Cacique democracy and the Philippines: Origins and dreams. *New Left Review*, *169*, 3.

Auriol, E., Straub, S., & Flochel, T. (2016). Public Procurement and Rent-Seeking: The Case of Paraguay. *World Development*, *77*, 395–407.

Azfar, O., & Gurgur, T. (2008). Very Preliminary, not for circulation Decentralization and Corruption in the Philippines. *Economics of Governance Volume*, *9*, 197–244.

Banerjee, A., Kumar, S., Pande, R., & Su, F. (2011). Do informed voters make better choices? Experimental evidence from urban India. Unpublished manuscript.

Bauhr, M., & Charron, N. (2017). Insider or Outsider? Grand Corruption and Electoral Accountability. *Comparative Political Studies*, 0010414017710258.

Boas, T. C., Hidalgo, F. D., & Melo, M. A. (2019). Norms versus action: Why voters fail to sanction malfeasance in Brazil. American Journal of Political Science, 63(2), 385-400.

Bolongaita, E. P. (2010). *An exception to the rule? Why Indonesia's Anti-Corruption Commission succeeds where others don't - a comparion with the Philippines' Ombudsman*.

Burgess, R., Jedwab, R., Miguel, E., Morjaria, A., & i Miquel, G. (2015). The value of democracy: evidence from road building in Kenya. *American Economic Review*, *105*(6), 1817–1851.

Canare, T. A., Mendoza, R. U., & Lopez, M. A. (2018). An empirical analysis of vote buying among the poor: Evidence from elections in the Philippines. *South East Asia Research*, *26*(1), 58–84.

Chong, A., De La O, A. L., Karlan, D., & Wantchekon, L. (2015). Does Corruption Information Inspire the Fight or Quash the Hope? A Field Experiment in Mexico on Voter Turnout, Choice, and Party Identification. *The Journal of Politics*, *77*(1), 55–71. https://doi.org/10.1086/678766

Coviello, D., & Gagliarducci, S. (2010). Building Political Collusion: Evidence from Procurement Auctions. *IZA Discussion Paper*, *4939*.

Cruz, C., Labonne, J., & Querubín, P. (2020). Social Network Structures and the Politics of Public Goods Provision: Evidence from the Philippines. *American Political Science Review*, *114*(2), 486–501. https://doi.org/10.1017/S0003055419000789

Daniele, G., & Geys, B. (2014). *Born in the Purple, Polticial Dynasties and Politicians' Human Capital*. 1–36. https://www.semanticscholar.org/paper/Born-in-the-Purple:-Political-Dynasties-and-Human-*-Daniele-Geys/17368c1dfb4aa8c719aa72b04aa32036b78ee903

De Speville, B. (2010). Anticorruption commissions: the "Hong Kong model" revisited. *Asia-Pacific Review*, *17*(1), 47–71.

De Vries, C. E., & Solaz, H. (2017). The Electoral Consequences of Corruption. *Annual Review of Political Science*, *20*(1), 391–408. https://doi.org/10.1146/annurev-polisci-052715-111917

Feinstein, B. D. (2010). The dynasty advantage: Family ties in congressional elections. *Legislative Studies Quarterly*, *35*(4), 571–598. https://doi.org/10.3162/036298010793322366

Ferraz, C., & Finan, F. (2008). Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes *. *Quarterly Journal of Economics*, *123*(2), 703–745. https://doi.org/10.1162/qjec.2008.123.2.703

Heilbrunn, J. R. (2004). Anti-corruption commissions: Panacea or real medicine to fight corruption. *World Bank Institute*, *2*.

Hicken, A. (2011). Clientelism. *Annual Review of Political Science*, *14*(1), 289–310. https://doi.org/10.1146/annurev.polisci.031908.220508

Hicken, A., & Stoll, H. (2013). Are all presidents created equal? Presidential powers and the shadow of presidential elections. *Comparative Political Studies*, *46*(3), 291–319.

Hooghe, M., & Quintelier, E. (2014). Political participation in European countries: The effect of authoritarian rule, corruption, lack of good governance and economic downturn. *Comparative European Politics*, *12*(2), 209–232. https://doi.org/10.1057/cep.2013.3

Humphreys, M., & Weinstein, J. (2012). Policing politicians: citizen empowerment and political accountability in Uganda preliminary analysis. Columbia Universities. Unpublished manuscript.

Klašnja, M., & Tucker, J. A. (2013). The economy, corruption, and the vote: Evidence from experiments in Sweden and Moldova. *Electoral Studies*, *32*(3), 536–543. https://doi.org/10.1016/j.electstud.2013.05.007

Klasnja, M., Tucker, J. A., & Deegan-Krause, K. (2014). Pocketbook vs. Sociotropic Corruption Voting. *British Journal of Political Science*, *46*(1), 67–94. https://doi.org/10.1017/S0007123414000088

Mendoza, R. U., Banaag, M. S., Hiwatig, J. D., Yusingco, M. H. L., & Yap, J. K. (2020). Term limits and political dynasties in the Philippines: Unpacking the links. *Asia-Pacific Social Science Review*, *20*(4), 88–99.

Mendoza, R. U., Beja Jr, E. L., Venida, V. S., & Yap, D. B. (2016). Political dynasties and poverty: measurement and evidence of linkages in the Philippines. *Oxford Development Studies*, *44*(2), 189–201.

Mendoza, R. U., Jaminola, L. M., & Yap, J. (2019). From fat to obese: Political dynasties after the 2019 midterm elections. *ATENEO SCHOOL OF GOVERNMENT WORKING PAPER SERIES, September*, 13–19.

Olken, B. A. (2005). Monitoring Corruption: Evidence from a Field Experiment. In in Indonesia." NBER Working Paper# 11753.

Pavão, N. (2018). Corruption as the only option: The limits to electoral accountability. The Journal of Politics, 80(3), 996-1010.

Quah, J. S. T. (2010). Defying institutional failure: learning from the experiences of anti-corruption agencies in four Asian countries. *Crime, Law and Social Change*, *53*(1), 23–54.

Querubin, P. (2011). Political reform and elite persistence: Term limits and political dynasties in the Philippines. *Mimeo*. http://pclt.cis.yale.edu/leitner/resources/papers/Querubin_Term_Limits.pdf

Querubin, P. (2016). Family and politics: Dynastic persistence in the philippines. *Quarterly Journal of Political Science*, *11*(2), 151–181. https://doi.org/10.1561/100.00014182

Ravanilla, N., Davidson, M., & Hicken, A. (2020). Voting in Clientelistic Social Networks: Evidence from the Philippines. *Working Paper*.

Schütte, S. A. (2012). Against the odds: Anti-corruption reform in Indonesia. *Public Administration and Development*, *32*(1), 38–48.

Smith, D. M. (2012). Succeeding in politics: dynasties in democracies. University of California, San Diego.

Stokes, S. C. (2005). Perverse accountability: A formal model of machine politics with evidence from Argentina. American political science review, 99(3), 315-325.

Teehankee, J. C. (2012). Clientelism and party politics in the Philippines. In *Party Politics in Southeast Asia* (pp. 186–214).

Thananithichot, S., & Satidporn, W. (2016). Political Dynasties in Thailand: The Recent Picture after the 2011 General Election. *Asian Studies Review*, *40*(3), 340–359. https://doi.org/10.1080/10357823.2016.1193473

Wade, R. (1985). Market for public office: Why the Indian state is not better at development. World Development, 13, 467–497.

Welch, S., & Hibbing, J. R. (1997). The effects of charges of corruption on voting behavior in congressional elections, 1982-1990. The Journal of Politics, 59(1), 226-239.

Winters, M. S., & Weitz-Shapiro, R. (2013). Lacking Information or Condoning Corruption: When Do Voters Support Corrupt Lacking Information or Condoning Corruption When Do Voters Support Corrupt Politicians? *Comparative Politics*, *45*(4), 418–436. https://doi.org/10.5129/001041513X13815259182857

Conclusion: What We Can Learn From the Findings

Summary of Key Findings

In the last three papers, I have shown how dynasties rose in the Philippines, how they stymie prosecutions for corruption, and how prosecutions for corruption affect a candidate's chance at election. I will begin with a brief summary of the key findings of all three papers and an explanation of how these findings go together. Next, I will explain the implications of my findings for other political scientists. While I explain in each paper how the question examined in that paper fits into the existing literature, I will now briefly explain what the papers suggest for political science research overall. What should someone reading this dissertation from an academic perspective take away from it? Then, I will discuss the implications of this dissertation from a policy making perspective. It's not enough to just argue back and forth with other social scientists; we must also keep one eye on what these findings mean to the larger world. What can those who want to effect change take from this? Finally, I will examine what more work could be done both in terms of the specific issues I looked at and in terms of what other research can be done to expand this work.

The first paper shows how dynasties in the Philippines grew out of land inequality, but that it was the choices made by the US in creating a new government that both exacerbated land inequality and allowed those who had the most land to take the reigns of the government. These large landholders were able to use their political power to increase their economic power. They were able to extract so much money from their positions in control of the government that even as land faded as the most important resource, they were able to hold onto power. These emerging political dynasties predate many of the later problems of weak institutionalization. Dynasties were there at the beginning, keeping the government subservient to their interests. It wasn't that the Philippines' problems with corruption and poor development allowed dynasties to grow, it was that dynasties and their self-centered nature kept the Philippines poor and corrupt. The later papers build on this idea by showing how dynasties today allow corruption to flourish.

The second paper examines when dynasties can stop prosecutions for corruption. The key is that it's not that large dynasties can protect their members from prosecutions; it's that when dynasties become very concentrated in one province, all prosecutions for corruption become rare. Dynasties intimidate people into silence, which keeps the Ombudsman, a national institution without a strong ability to get into local issues, out of their dealings. One large dynasty may be a problem for other reasons, but it's not enough to shut out national oversight. In places where dynasties have saturated political life, the accountability that should come from the national anti-corruption agency is missing. We can see echoes of how the differences in land inequality and land titling between provinces in the past led to differences in the concentration of dynasties today. The political culture of different provinces ends up being quite different such that in some places there are relatively few dynasties while in others they control a huge percent of the seats and allow corruption to go unpunished.

The third paper looks at whether those indicted for corruption are less likely to win election. I find that mayors who have been indicted for corruption are, in fact, less likely to win election. However, when those mayors come from even a mid-sized dynasty, three or more members, then being indicted has a much smaller impact on their chances of winning, which are very high. This shows that voters do punish corruption but that dynasties have a greater weight on the electoral process than corruption indictments do. Here it's not the concentration of dynasties that's key but the ability of dynasties to perpetuate themselves even in the face of being indicted for corruption. Further, this paper must be understood in relation to the second paper which shows that provinces with a high concentration of dynasties see fewer corruption prosecutions. This means that in provinces with a high concentration of dynasties, officials aren't indicted and won't face electoral consequences. In provinces with a low concentration, mayors might get indicted but if they are from a mid-sized dynasty, they are still likely to win election.

Implications for Political Science Research

One of the key takeaways from this dissertation is that the causes of corruption are deeply rooted. There are arguments about the deep roots of institutions, most famously Acemoglu and Robinson, but that logic can be expanded to look at issues like corruption. It's too easy to see corruption as a discrete problem. Individual instances of corruption are often treated as their own particular problem. But this is like treating each cough as a separate malady instead of looking at what sickness is producing the coughs. Instances of corruption are part of a greater system. We don't want to miss the forest for the trees. If we think of corruption as part of a long running issue, we can also see why corruption is so hard to fix. Corruption is so deeply enmeshed in the politics and economy of some countries that reducing corruption leaves gaps. This doesn't mean it isn't worth reducing corruption, but it does mean we have to think through what reducing corruption implies and how to compensate for changes. In the Philippines, corruption is not just a weight on people's lives; it's also a system of election financing. This means that those who rely on corruption, like politicians, will defend the institutions that allow corruption to flourish.

Dynasties also need to be understood not just as parasites but as part of the political system. Dynasties keep politicians safe from corruption prosecutions, but dynasties trace their roots back more than a hundred years. We don't have specific evidence of them keeping themselves safe from corruption prosecution in the 1940s but it's not hard to imagine the same system at work. Dynasties don't just promote or protect crime, though; dynasties are part of political life. In the Philippines, parties are virtually meaningless. In other countries, parties play a crucial role in informing voters about the positions of candidates. In the US you may not know exactly what positions a Democrat or a Republican will hold, but you have a good general idea. Without a clear party label each candidate becomes a total unknown. It's often not worthwhile for voters to deeply investigate every candidate. Dynasties fill in some of that gap by providing an alternative label. A voter in the Philippines might not be able to guess

from a party what a candidate is for, but he can guess by what the candidate's family name is. If a voter is happy with the work of a candidate's family, that tells the voter a lot about the candidate.

This isn't a defense of dynasties, but it does showcase how big a part of the political system they have become. If we see dynasties as part of a greater system, why they are so difficult to reduce becomes clear. People know politicians they like who are part of dynasties. We know that the social world is highly contingent, but more than many problems dynasties (and corruption) need to be seen as part of the political system, not just a problem with it. Only by seeing these connections can we think about how to deal with them. For example, if dynasties are helping people get elected by providing clear labels, then strengthening parties could help reduce dynasties by getting good politicians elected with a different label.

Another important implication of this research is that problems with accountability can be more intermingled than they might appear. We often talk about accountability as vertical or horizontal, but in this research, we see vertical accountability relying on horizontal accountability such that failures in horizontal accountability also undermine vertical accountability. This isn't a unique case. Criminal acts (corruption here) are by their very nature secret. It's difficult for the public to know about them without an investigation. This can sometimes be done by the press, but that's not always going to be possible. For people to punish politicians, they may need to hear about issues with corruption from the government. As the literature has shown, people are reticent to punish politicians just on a general belief that there is corruption; they want some evidence.

The connection between vertical and horizontal accountability flows the other way as well. The government may not want to investigate people in power. Pressure from citizens is important to keep systems of horizontal accountability moving forward. The government rarely wants to confront corruption; it's only when leaders think there will be a political price that anti-corruption moves to the

fore. In Indonesia, the anti-corruption agency regularly tries to build public support, knowing it will allow them more latitude to investigate those with power. So, I think it's important that accountability be examined both horizontally and vertically simultaneously. Even what sounds like a purely vertical accountability question such as, "when do voters vote for corrupt politicians," needs to be seen in the context of, "when does the government investigate corrupt politicians?" If we don't have both parts, we can miss key ideas.

This dissertation also takes another step forward in the social science research on the measurement of corruption. One of the central problems with research into corruption is how difficult it is to measure corruption, since corruption by its very nature is secret and illicit. There is an emerging body of work that looks at public procurement contracts to measure corruption, since they are both a major area of corruption (since it's where the government is giving out money) and something that must be at least partially public (you can't have bids for contracts without announcing them). There has been success in measuring corruption this way, but it's still a developing method. This dissertation adds more weight to the idea that even under less than perfect conditions you can successfully measure corruption with public procurement data.

The measure I used shows a correlation between corruption and corruption prosecutions which goes a long way to show that the measure is working. This measure works even without some of the more nuanced data on exactly what is being procured or which companies are bidding that could have made the data even better. If we can assess corruption from only a few pieces of public procurement information there is a hope for better research into the effects of corruption, with more exact data on where corruption is more of a problem and more cross-national research. Even though a public procurement measure is going to be different in different countries, we can use the same principle to look both at relative changes over time and the relative effects of policies. Right now, a lot of cross-national corruption research relies on self reporting or perceptions of corruption. With more public

procurement data, we can look at how different policies affect corruption in different countries. We might not be able to use this measure for an absolute level of corruption, but relative changes can tell us a lot.

Implication for Policy Making

When thinking about what lessons can be drawn from this dissertation for policymaking, it's important to think about what can be achieved short of huge reforms. Those would be good, but systemic overhauls are vanishingly rare. Instead, I'll begin with what lessons can be drawn for smaller, more immediate policies. The strength, tenacity, and perniciousness of dynasties are some of the major themes of this research. The Philippines has an anti-dynasty provision in the post-Marcos constitution, but it has never been actualized by any law. Dynasties are a problem, but we can't just say that the Philippines would be better off without them, because they are so entrenched. What can help limit the power and the durability of dynasties, without needing to take them on directly, is strengthening other institutions around representation. One of the key problems with dynasties is that they lower the quality of the people getting elected. In the Philippines, candidates run much more on family and clientelistic appeals than on party labels. It's not unusual for mayors to run under different party labels in every election. It's common for members of congress to switch parties depending on who wins the presidency. Since party labels give so little information dynasties fill in the gap.

Strengthening parties, and making parties a larger focus of elections, would help reduce some of the power of dynasties without needing to confront dynasties directly. There are a few ways to increase the power of parties: more party-list representation, giving election funding through parties based on past performance so that parties have an interest in stating constant, making some of the clientelistic payoffs to voters legal but only through parties. These wouldn't eliminate dynasties, but if party labels

were stronger, dynasties would have less ability to get their members elected. It might also cause dynasties in parties that didn't do well in elections to fade rather than party hop.

I also looked at the weakness of the Ombudsman and how dynasties were able to prevent them from bringing cases. The key lesson here is that anti-corruption agencies can work, but that they are only as good as their specific implementation. The Ombudsman does make cases. In the second paper, we saw that they prosecute more mayors and governors in areas with more corruption unless there is a high concentration of dynasties. The Ombudsman has little power to investigate, prosecutes cases in an incredibly slow-moving court, and is subject to the whims of its single leader. But the Ombudsman still makes some cases, and it could do better with more powers.

Obviously, the mass of corrupt politicians doesn't want the Ombudsman to be any stronger, but one advantage of institutional design is that the design can outlast the people who designed it. Countries go through periods of high popular demand for reform. Reforming the Ombudsman, when there is public pressure to do so, is a good option. With more investigative power, with a larger staff, with a more responsive court, the Ombudsman could make more cases and might be able to function in the face of powerful dynasties. Even if later governments wanted to weaken the Ombudsman, it's harder to walk back reforms once implemented.

There is also the possibility of redesigning the Ombudsman to have a more limited preview and then giving it more power. One reason politicians fear giving anti-corruption agencies power is they don't want to be prosecuted themselves. This was partially baked into the Ombudsman, who has no power to investigate the military. This isn't because there is little corruption in the military, it is because when empowering the Ombudsman after Marcos, they didn't want to cause a military coup. The Ombudsman could have its focus narrowed so that it was less a threat to the politically powerful. This would let some corruption go unpunished, but corruption among the most powerful is already going

unpunished. It's possible that if the Ombudsman had a smaller scope, it might be able to get the support it needed to be more effective in that scope.

Empowering the Ombudsman, though, will never fully tackle corruption. The sort of power and size the Ombudsman would need to try and stop the pervasive corruption in the Philippines is so much greater than what it has now, it's hard to imagine it without a full-scale revolution, and even then, only a part of a broader push. To tackle corruption in the Philippines what is needed is support from the bottom up. This dissertation shows that voters will punish corruption when they know of it. Corruption is not an inherent part of Filipino culture. Corruption is something voters hate even if it is a part of doing business to politicians.

Real reduction in corruption can only come from popular pressure. There are several ways the government can work to limit corruption (I suggest two above) but without a push, the government won't move to limit corruption. Corruption is baked into the system, part of political life. It's only with people getting fed up and making politicians change that things will change. Horizontal accountability is possible, but only when the push comes vertically. If voters make it clear that they will vote for politicians who reduce corruption, then there can be real reduction in corruption. People need to elect reforming politicians and support them through civil society organizations to see real change. Reformers come in all stripes. Benigno Aquino III was the sire of one of the Philippines' most prominent dynasties and turned out to be the sincerest reformer in recent history. But wherever they come from, the problems facing the Philippines are large enough that changes around the edges will only do so much. For significant improvement, the Philippines needs significant reform.

It is somewhat disheartening to argue that smaller, more measured changes just aren't enough. Real thoroughgoing reform is rare. Corruption and dynasties feed each other. Institutions are weak because they have been designed to be weak. Without a broad-based movement for reform, only very

incremental progress can be achieved. For other countries, though, this research can serve as a warning about how some of these problems can spiral out of control. Dynasties don't arise overnight. Taking steps to limit their power early before they start to dominate is important. Dynasties are organized first and foremost around replicating their power. When they amass a lot of power, they are very hard to stop.

Better institutions can limit how bad things get as well. As noted before, a more powerful anti-corruption agency can stop corruption from becoming endemic. Once it becomes a pillar of the political system, it is very hard to stop corruption. It's much easier to design good institutions before problems arise. Similarly, a more robust public procurement system would help. It's probably impossible to totally eliminate corruption in public procurement, but it doesn't need to be so easy. Even in the Philippines PhilGEPS was a step forward as the previous system was almost totally opaque with only non-electronic records and virtually no oversite.

Dynasties, corruption, lack of accountability, and weak institutions are all related. That is a huge problem when they are all an issue. They feed one another. People who benefit from one of these issues may defend all of them. But it also means that progress in one can help another. Limiting dynasties would take pressure off institutions and allow for more accountability and lower corruption. More accountability through elections could result in better institutions. Reducing corruption could bring more people into the political process and improve accountability. Policymakers in any country need to watch that the problems don't build on each other until they become as intractable as in the Philippines.

Work to be Done

There is more research that can be done both on the specific areas of this dissertation and the more general questions raised here. In this section, I will briefly describe what I think are some of the

important next steps. Thinking about the Philippines specifically, there is still a lot more work to be done with dynasties. I look at dynasties across provinces, but more could be done looking at dynasties over time. There is already some debate in the literature about whether long running dynasties are better or worse for development, but we could also test if long running dynasties are more likely to hinder prosecution. There is also the question of when dynasties rise and fall. Can the brand of a dynasty degrade over time if they produce poor results for the areas they represent? A more difficult topic that would be helpful is how dynastic alliances work. The problem is that these can't easily be seen in naming conventions. There might be something in electoral materials or campaigning involving people from multiple dynasties, but it would require a lot of data collection.

There is also more that can be done to examine some of the mechanisms suggested by this dissertation. I suggest the existence and conditions for dynastic cooperation, but more concrete evidence for this would be useful. This would likely have to be local and qualitative. In a similar vein, something like a survey would be helpful to think about how voters see dynasties and corruption. There are problems with reported behavior vis-a-vis corruption but getting some data directly on attitudes would be helpful with the larger quantitative data in this dissertation. For thinking about the origins of dynasties tracing land sales and titling in one province over its history could be helpful, though it would probably depend on a province having those historical records in their archives.

Thinking about issues raised by this dissertation more generally, as noted before, I believe there is a lot more room for using public procurement data to measure corruption. For this idea to gain wider acceptance work could be done specifically to validate it rather than examine a causal relationship. Thinking about dynasties, there isn't much work that looks at dynasties cross nationally. This is because political dynasties are going to be unique to each country and in most places, they are hard to measure. However, there are a lot of countries with long histories of families in power. Moreover, I believe there we should look at how those in power have changed in countries that have been democratic for a long

time. How many elected officials in the UK have aristocratic ancestors? How many American politicians had ancestors who were major colonial landowners? I think it's possible we see more families in power over time than we realize.

Finally, there is more to be done looking at when anti-corruption institutions work and when they fail. There is too much that treats this as an all or nothing question. Very few countries are Hong Kong or Singapore, but even weak anti-corruption agencies make some cases. The question, then, is under what circumstances do they work and how can these circumstances be expanded? Anti-corruption agencies have an important part to play in reducing corruption, but we need a clearer idea of what works and what doesn't.

Conclusion

In this dissertation, I've looked at how dynasties originated in the Philippines, how they limit prosecutions for corruption, and when those who are indicted for corruption are elected. From this, we can see how dynasties interact with and exacerbate problems of governance. I examined these problems in the Philippines, but the same issues exist, in part, in many countries. These problems aren't immutable, but they are very difficult because of how ingrained they are in the political system. With broad based reform even in the Philippines, these problems can be lessened. Not every part of the Philippines sees the same level of dynasties or the same problems. Hopefully, this dissertation shed some light on the extent of the issues, how they interacted, and suggested some possible ways to help.