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Family and Politics: Dynastic Persistence in the Philippines

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ABSTRACT

In many democracies a small subset of individuals enjoys a *de facto* electoral advantage. The existence of political dynasties, where individuals from a narrow set of families obtain larger vote shares and are more likely to access office, illustrates this phenomenon. In this paper, I study political dynasties in the Philippines and provide evidence of dynastic persistence. More precisely, I provide evidence that incumbency has a *causal* effect on the probability of having future relatives in office. Using a regression discontinuity design based on close elections, I find that candidates who barely win their first election by a small margin are around 5 times more likely to have a relative in office in the future than individuals who barely lose their first election and never serve. I discuss alternative channels that may explain dynastic persistence in the Philippines. I argue that access to office and public resources — important in clientelistic democracies like the Philippines — allows incumbents to give relatives an electoral advantage if they first run while they are still in office. Occupational choice, while plausibly important, is less likely to be the main driver of dynastic persistence.

Keywords: Political dynasties; elections; elite persistence

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Political power in most contemporary democracies is not equally distributed. Existing evidence suggests that some individuals enjoy a greater *de facto* electoral advantage than other candidates, which gives them greater access to elected office. Examples include the electoral advantage enjoyed by incumbents or candidates from incumbent parties (see, for example, Lee, 2008). The electoral advantage of some groups raises concerns about the extent to which it can create barriers to entry into the political system, leading to the under-representation of some groups in society and political capture by a narrow set of interests.

The existence of political dynasties is one particular example of this phenomenon. Many contemporary democracies, such as India, Japan, the Philippines, and the United States have political dynasties. Candidates from a narrow set of families enjoy an electoral advantage over other candidates, which allows members of these families to hold elected office for many generations. Notable examples include the Kennedy family in the United States, the Gandhi family in India, and the Aquino family in the Philippines.

But where does the electoral advantage of these families come from? It is possible that their success is rooted in sources completely outside the political system, such as the ownership of land, wealth, social networks, etc. It is also possible that their power, to some extent, flows from access to the political system by previous members of the family. Once in power, an incumbent can use the instruments of office to increase the political power of his relatives, for example by using public resources for personal enrichment or to fund patronage and clientelistic practices that are an important driver of electoral success in many developing countries. It would be conceptually desirable to disentangle the role of incumbency by previous relatives from other observable and unobservable characteristics of the family that are correlated with political power. This conceptual challenge is similar to that underlying the electoral advantage of candidates from an incumbent party. Candidates from the party in power may enjoy an electoral advantage due to characteristics of the party that make it popular in a given locality (and thus more likely to access office) rather than the party's incumbency status. Understanding the extent to which

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political dynasties persist due to access to office and incumbency is important in order to assess the extent to which they may create implicit barriers to entry into the political system.

In this paper, I study political dynasties in the Philippines and provide evidence that incumbency has a *causal* effect on the probability of having relatives in office in the future. The Philippines is an interesting setting in which to address these questions, as political dynasties are prevalent in many elected offices. For example, in the 2010 election, roughly 50% of the elected congressmen and governors were dynastic (had a relative serve previously in office).[1] Moreover, in 35 of the 80 Philippine provinces, the governor and congressman are related.

A simple comparison of incumbents and losing candidates on their likelihood of having future relatives in office confounds the effect of access to office with other characteristics of the family. I follow Dal Bo *et al.* (2009) and use a regression discontinuity design based on close elections to estimate the *causal* effect of holding office on the probability of having a relative in power in the future. The main result of the paper is illustrated in Figure 1. Candidates who barely win their first race (positive win margin) are roughly 12 percentage points more likely to have a relative serve in office in the future than runners-up (negative win margin). These results are robust to the inclusion of province and year fixed effects; to controlling for candidate characteristics such as party, gender and previous political experience; and to alternative bandwidths, polynomials in the forcing variable and subsamples.

A closer look at the political careers of members of political dynasties illustrates some important differences in the process of dynastic persistence in the Philippines relative to the U.S. case studied by Dal Bo *et al.* (2009). First, among incumbents who have a relative in office in the future, 72% have their relatives first enter office while they are themselves still in office. Also, in roughly half of the cases the incumbent remains in office (either the same office or a different office) after the relative has entered politics. In contrast, most dynastic transitions in the United States happen after the retirement of the first incumbent from the family (dynasty founder). This finding for the Philippines is consistent with evidence that suggests that incumbents use office to engage in clientelistic practices such as vote buying and patronage in order to give an electoral advantage to other relatives running for office. In line with this, I show that dynastic candidates (those with a previous relative in office) enjoy an electoral advantage relative to nondynastic candidates, but that this advantage is twice as large for candidates with a relative sitting in office while they are running. Thus, dynastic persistence in the Philippines

[1]By comparison, only 7% of current U.S. congressmen had a relative in Congress. See Dal Bo *et al.* (2009).

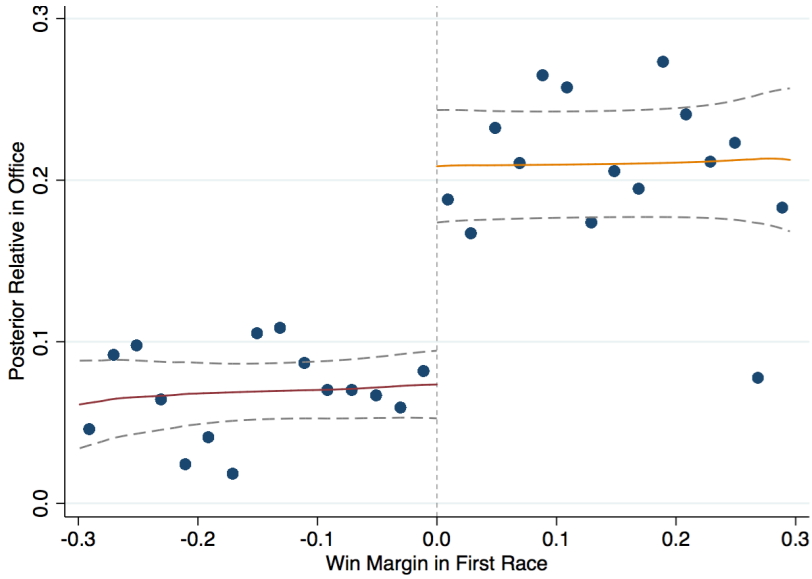

Figure 1: Future relatives in office and win margin in first election.
Horizontal axis shows the winning margin of nondynastic candidates (winners and runners-up) in their first race. Candidates with a positive winning margin win the election, while those with negative winning margins are runners-up. The figure focuses on candidates who won or lost the election by a margin of 30% or less. The dots show the fraction of candidates with future relatives in office, averaged in 2% bins of the winning margin. Local polynomial smoothing regressions using the raw (unbinned) data are shown (solid lines), together with 95% confidence intervals (dotted lines), at both sides of the threshold.

may partly be explained by an incumbent's electoral advantage spilling over to other family members.

I also show that occupational choice, while important, is less likely to be the main driver of dynastic persistence in the Philippines. Almost half of dynastic successions occur between relatives of the same generation (i.e., siblings, cousins, and spouses). Thus whenever an incumbent first enters office, many of his or her relatives have already chosen an occupation other than politics. This is consistent with journalistic evidence and interviews I conducted with congressmen in the Philippines, which shows that dynastic politicians come from diverse occupational backgrounds (often business) and run for office as a means of consolidating their economic standing and the political power of the dynasty (see Coronel *et al.*, 2007; Fafchamps and Labonne, 2015). In the United States, by contrast, evidence by Dal Bo *et al.* (2009) shows that the percentage of same-generation successions is less than 30% and thus occupational choice may play a more important role.

Establishing the existence and magnitude of dynastic persistence contributes to our understanding of the sources of power and the determinants of electoral performance in democracies. The importance of access to office suggests that the prevalence of dynastic politicians in the Philippines does not simply reflect the existence of a fixed group of powerful elites. *De jure* political power (holding elected office) is an important determinant of the electoral success of other members of the family, and it allows new incumbents to consolidate the dynasty's political power.

This paper is related to various strands of literature. Previous papers have studied political dynasties in different contexts. Rossi (2011, 2014) studies the origins and persistence of dynasties in Argentina. Other papers have documented the electoral advantage of dynastic candidates. See, for example, Bjolken and Chandra (2012) for India, Smith and Martin (2015) for Ireland, and Asako *et al.* (2012) for Japan. For the Philippines, work by Anderson (1988), Coronel *et al.* (2007), De Dios (2007), De Dios and Hutchcroft (2003), Lande (1965), McCoy (1994), Sidel (1999), and Simbulan (2005), among others, provides an interesting assessment of the historical origins of political dynasties and their effects on the political system. To my knowledge, this is the first paper to estimate the *causal* effect of incumbency on the electoral success of family members.

This paper is also related to the academic literature on estimating the incumbency advantage for individual incumbents or candidates from the incumbent party (see Ansolabehere and Snyder Jr., 2004; Erikson, 1971; Gelman and King, 1990; Lee, 2008; Levitt and Wolfram, 1997). However, rather than estimating the effect of incumbency on the incumbent herself or on other party members, I estimate its effect on other members of the family.

1 Historical and Political Background

During almost 400 years of Spanish control, economic and political power in the Philippines was restricted to a small *mestizo* elite known as the *principalia*. The arrival of the United States in 1899 further consolidated the power of these families. In order to gain their support and loyalty (necessary to pacify the islands), Americans introduced local elections in 1901, elections for a national legislature from single-member districts in 1907, and elections for the Senate in 1916.

The introduction of positions of power initially at the *local* level gave *principalia* families substantial economic and political power. The subsequent introduction of elections at higher levels of government (provincial and congressional district levels) increased these families' sphere of influence. National politics and the central state became subordinated to the local dynamics of power. This power structure prevented the emergence of strong political

parties with national platforms. The weakness of parties is often cited as an explanation of the importance of the family as a unit of political organization in the Philippines: parties did not emerge due to the local concentration of power, and party weakness further consolidated the power of elite families (Anderson, 1988; Sidel, 1999). Thus a common argument is that access to public office was an important source of power for these families, an argument closely related to what I explore in this paper.

In 1946, following a brief period of Japanese invasion during WWII, the Philippines became independent from the United States. There were no major changes to the electoral system: 24 senators were elected every 6 years from the country as a whole, and elections were held every 4 years for provincial governors and congressmen. The House of Representatives was composed of members from single-member congressional districts. Seven congressional and gubernatorial elections took place between 1946 and 1972, when Ferdinand Marcos declared martial law and closed Congress.[2]

In 1987, following the return to democracy, a new constitution introduced some changes to the political system. Congressional districts were reapportioned, and the term length was reduced from 4 to 3 years for members of congress, governors, and other provincial and local offices. Similarly, the 1987 constitution introduced term limits for all elected offices: two consecutive 6-year terms for senators, and three consecutive 3-year terms for congressmen and all other local officials. This reform, partly intended to promote the alternation in office of different families, was not successful in limiting the political power of dynasties. Elected officials are often replaced by their relatives after reaching the term limit or switch to other elected offices. For more on dynasties' adaptive strategies to term limits, see Querubin (2012).

Finally, parties have historically played a relatively minor role in Philippine politics. They are often personality based, and only play a relevant role during elections in order to establish electoral alliances with provincial and local politicians. There are no major programmatic differences. Party switching (locally known as turncoatism) is a common phenomenon, and opportunistic (often personality-based) coalitions are made in every legislature in order to secure support from the executive (see Hutchcroft and Rocamora, 2003).

Politics in the Philippines are characterized by strong clientelistic practices. As a result, electoral strategies tend to focus on contingent political exchange, such as patronage (Lande, 1996) and vote buying (Cruz, 2013; Khemani, 2011). Access to public office is important in order to use public jobs as a source of patronage, and to use public funds and government programs to gain the

[2]The only gubernatorial elections during the period of martial law took place in 1980. Similarly, elections for a new unicameral parliament, the Batasang Pambansa, took place in 1978 and 1984. However, there is broad evidence that elections under martial law took place in the midst of widespread intimidation and persecution of political opponents. As a result, most races were dominated by Marcos allies from the Kilusang Bagong Lipunan party.

support of other local officials such as municipal mayors and *barangay* (village) captains, who serve as political brokers and mobilize voters on election day.

2 Data and Descriptive Statistics

2.1 Data Sources

In this paper I focus on two elected offices: provincial governors and members of the House of Representatives. These are the most influential offices at the provincial level of government.[3]

The Philippines is currently divided into 80 provinces, each of which is headed by a provincial governor. Provinces and cities are divided into multiple congressional districts, each electing a member of Congress to the House of Representatives (lower chamber).[4] There are currently 229 congressional districts in the Philippines, each composed of approximately 250,000 inhabitants.[5]

I collected the names of incumbents going back to 1901 from various archival sources.[6] I also constructed a dataset with the name and number of votes received by all congressional and gubernatorial candidates for the period 1946–2010.[7] To my knowledge, this is the first paper to bring together these electoral data and analyze them in a systematic way.

The dataset on incumbents includes 2,863 individuals who served as governors during the period 1901–2010 or as congressmen during the period

[3]The main subnational level of government with elected officials in the Philippines is the province, which is the equivalent of a U.S. state. The top executive position in the province is the governor, followed by a vice governor and a provincial board (equivalent of a U.S. state legislature). The next subnational level is the city/municipality (equivalent to a U.S. city/town) headed by an elected mayor, vice mayor, and body of councilors.

[4]Nonetheless, currently 28 provinces have lone congressional districts and elect only one congressman from the province as a whole. Cities are entitled to elect at least one congressman to the House of Representatives.

[5]The number of provinces and congressional districts has been increasing since 1907 due to reapportionment and the creation of new cities and provinces. There were originally 33 provinces and 80 congressional districts in the first legislative elections in 1907. At the time of independence in 1946 the number of provinces had increased to 50 and the number of congressional districts to 133.

[6]The names of provincial governors for the period 1901–1935 come from the Roster of Public Officials available in the National Archives in Manila. Names of congressmen for the period 1907–1972 come from the Congressional Directories available in the House of Representatives in Quezon City. Data for the period 1987–2010 come from the Commission of Elections and Coronel *et al.* (2007).

[7]Electoral data for the period 1946–1972 were collected by hand from the original Canvas of Votes of the Commission of Elections, which is available in microfilm at the Center for Research Libraries. Data for the 1987 congressional and 1988 gubernatorial elections are available in Gutierrez *et al.* (1992). Electoral data for the period 1992–2010 were provided by the Commission on Elections and complemented with data from the Institute for Popular Democracy.

1907–2010. The dataset on candidates covers 15 congressional and gubernatorial elections during the period 1946–2010, which corresponds to 3,376 different races and 7,386 candidates.

2.2 Dynastic Measures

As a first step I establish the number of previous and posterior relatives in office for all candidates in the data set. This is done by matching the candidate's family names with the family names of earlier and subsequent incumbent governors and congressmen within the same province.[8] However, bilateral descent in the Philippines implies a particular structure of family names that must be taken into account. The name of a Filipino male or single female takes the form:

First name, Middle name, Last name

where Middle name corresponds to the mother's family name and Last name to the father's family name. In the case of married women, names take the following form:

First name, Middle name, Last name–Husband's Last name

where again Middle name corresponds to the mother's family name, and Last name to the father's family name.

Thus, relatives are identified by finding a match of the middle name, last name, or husband's last name within the same province.[9] Relatives traced only by last name would fail to identify wives and some grandchildren. However, the results presented in this paper are similar if relatives are traced using only last name.

A natural concern with this matching procedure is that individuals from the same province who share a middle name or last name may not necessarily be related to each other.[10] While this is certainly a possibility, it is less of a concern in the Philippines than in other countries due to the unique way in which family names are distributed across the different provinces. In 1849, concerned with the arbitrary way in which Filipinos chose their surnames,

[8]In the case of provinces that split into multiple provinces, posterior relatives of candidates in the original province are traced in all the different provinces into which the original province split.

[9]Several biographical sources were used to find the middle names of as many incumbents as possible. For most of the post-1946 congressmen, middle names were found in the Congressional Directories available at the House of Representatives in Quezon City. In the case of new provinces, relatives are traced back to incumbents in the original province.

[10]This matching procedure will identify almost all existing relatives in the dataset, with the exception of sons-in-law. The main concern is the existence of *false positives*, or matches that do not correspond to actual relatives.

Governor Narciso Claveria y Zaldua created a catalog with a list of 61,000 different surnames.[11] A different set of surnames (often starting with the same letter) was assigned to each town, and local officials had to assign a different surname to the different family heads. As a consequence, common last names (such as Smith in the United Kingdom and United States or Gonzalez in Latin America) are not as prevalent in the Philippines.[12]

I also attempted to verify the exact family link among a subsample of candidates. In particular, for those candidates used in the baseline regressions who won or lost their first race by a margin of less than 30% and for whom the name-matching procedure identified a future relative in office, I looked for detailed biographies to assess the specific link to all matched relatives.[13] The share of different family links for relatives of election winners and losers is reported in Table 1. Naturally, for some candidates I was unable to find biographical information to assess the existence and exact type of family link. This happened for only 5% of election winners and for 25% of election losers (naturally, there are fewer biographical sources for election losers who never end up serving in an elected position). The fact that I could not find biographical information for some candidates and their presumed relatives does not imply that the relatives identified by my name-matching procedure are false positives. Thus, these figures correspond to upper bounds on the rate of false positives. The very low percentage of presumed relatives of election winners for which an exact link could not be assessed suggests that the frequency of false-positives

[11] Claveria complained that the natives "arbitrarily adopt the names of saints and this practice has resulted in the existence of thousands of individuals having the same surname." He added: "I saw the resultant confusion with regard to the administration of justice, government, finance, and public order, and the far-reaching moral, civil and religious consequences to which this might lead, because the family names are not transmitted from the parents to their children, so that it is sometimes impossible to prove the degrees of consanguinity for purpose of marriage, rendering useless the parochial books which in Catholic countries are used for all kinds of transactions." See National Archives of the Philippines (1973).

[12] Fafchamps and Labonne (2015) compute a Herfindhal Index of name heterogeneity for a large sample of municipalities in the Philippines. A value of 0 indicates that there is only one family name in the province, while a value very close to 1 suggests a very low concentration of family names. The overall Herfindhal Index for the municipalities in their sample is greater than 0.999. The most common surname in their data, De La Cruz, is used by only 0.32% of individuals. By contrast, they show that the prevalence of common names is much higher in other countries in the region. The percentage of individuals that uses the most common surname is 7.25% in China, 5.5% in India, 11% in Taiwan and 38% in Vietnam.

[13] I use different sources. In particular, Coronel *et al.* (2007) provide a list of current and previous relatives in office for congressmen elected in 1992, 1998, 2001, and 2004 and governors elected in 2001 and 2004. This information was self-reported by the politicians in their Sworn Statement of Assets and Liabilities, and was verified by the Philippine Center for Investigative Journalism. For other candidates, a research assistant in the Philippines attempted to find biographical information using internet sources, congressional records, historical books, and phone calls to the municipal or provincial mayor or governor's office.

Table 1: Percentage distribution of family links to posterior relatives.

	Outcome of first race	
	Winner	Loser
Brother	20.00	20.37
Brother-in-law	1.11	0.00
Cousin	3.33	14.81
Daughter	7.22	0.00
Daughter-in-law	1.11	1.85
Father	0.00	1.85
Grandson	0.56	0.00
Husband	0.56	3.70
Nephew	5.56	14.81
Niece	0.00	1.85
Second cousin	1.11	0.00
Sister	1.67	1.85
Sister-in-law	1.11	0.00
Son	32.78	9.26
Wife	18.89	3.70
No biographies found	5.00	25.93
Total	100	100

Family links for sample of nondynastic candidates who won or lost their first race by a margin of 30 percentage points or less and had a future relative in office according to our name-matching criteria.

from the name-matching procedure is very low. If anything, the possibility that false positives are higher among election losers than among election winners biases the estimates on the causal effect of incumbency downwards.

Finally, I also assess the robustness of all my estimates to dropping from my sample all candidates with family names among the top two most common names in their province (and for whom the probability of false positives may be higher). On average, the two most common family names are used by only 1.6% of the population. Effectively, this leads to dropping less than 1% of the candidates from the sample and thus has a negligible impact on the estimated coefficients.[14]

[14]I thank Julien Labonne for providing the information on the two most common family names in each province, based on the National Household Tracking Survey. This information is not available for the provinces of Albay, Aurora, Bataan, Batangas, Benguet, Cagayan, Camiguin, Capiz, Catanduanes, Cavite, Guimaras, Laguna, Marinduque, Pampanga, Quirino, Rizal, Siquijor, Tarlac, Zambales, and Zamboanga Sibugay. See Fafchamps and Labonne (2015) for more details on this data source.

I then construct several measures for each congressional and gubernatorial candidate in the dataset. First, I construct a Post_Relative_Ever dummy that takes a value of 1 if the candidate has any relatives who first enter the House of Representatives or serve as governors any time after the election, and 0 otherwise. In order to minimize the likelihood that matches do not correspond to relatives, I also create the dummy Post_Relative_Recent that takes a value of 1 if the candidate has any relatives who first enter the House of Representatives or serve as governors in the 20-year window following the election. I use this latter dummy as the dependent variable in most of the regressions, but show the robustness of the results to using Post_Relative_Ever as the dependent variable as well.

In addition, I generate a Dynastic_Recent dummy that takes a value of 1 if the candidate had a relative who served as a governor or congressman in the 20 years prior to the election year and an Incumbent_Relative dummy that takes a value of 1 if the candidate is related to an incumbent at the time of the election. I will use these variables in Section 4, when I explore some of the mechanisms behind dynastic persistence. Naturally:

$$\text{Incumbent\_Relative} \subseteq \text{Dynastic\_Recent}$$

For conciseness, throughout the analysis I pool congressional and gubernatorial elections. However, the results look very similar if I examine each office separately.

3 Results

3.1 Regression Discontinuity: Estimating the Causal Effect of Incumbency

In order to estimate the causal effect of incumbency on the electoral success of a politician's relatives, I compare the probability of having future relatives in office for incumbents and candidates who run but lose (and thus do not serve). However, a naive comparison of the electoral success of relatives of election winners and losers may lead to a misleading inference of the effect of incumbency. In practice, winning and losing candidates are different along various characteristics. Thus, this naive comparison will confound the effect of incumbency with other characteristics of winning candidates. In order to estimate the *causal* effect of incumbency on the electoral success of a politician's relatives, it would be ideal to compare two individuals who are identical in every respect (wealth, charisma, connections, interest in politics, etc.) but due to random reasons, only one of them is elected. A regression discontinuity design based on close elections provides an empirical counterpart to this ideal counterfactual. The underlying identification assumption is that

the outcome of close races is as good as random and therefore, that the only difference between winners and losers of close elections is incumbency status.

The regression discontinuity design I use in this paper follows Lee (2008) and Imbens and Lemieux (2008) and is based on estimating a regression of the following form:

$$\text{Post\_Relative}_{ijt} = \alpha + \beta\,\text{Winner}_{ijt} + f(x_{ijt}) + \epsilon_{ijt}$$
$$\forall i \text{ s.t.} x_{ijt} \in (-h, h), \tag{1}$$

where $\text{Post\_Relative}_{ijt}$ is a dummy variable that takes a value of 1 if candidate i in province j has any relatives in office in the 20 years following the election at time t, and Winner_{ijt} is a dummy variable that takes a value of 1 if candidate i wins the election. The control function $f(x_{ijt})$ corresponds to an nth order polynomial of the forcing variable x_{ijt}, which in the context of this paper corresponds to the winning margin between the winner and runner-up of the election. The winning margin takes values between -1 and 1 and is positive for election winners and negative for runners-up.[15] The coefficient of interest is β.

Most approaches to estimating regression 1 rely on different configurations of the control function $f(x_{ijt})$ and different choices of the bandwidth h that determines the estimation sample. With smaller values of h, the sample is restricted to individuals who win or lose the election by a very narrow margin. This more closely resembles the empirical counterfactual, but comes at the expense of efficiency due to small samples. In the benchmark specifications, I follow Imbens and Lemieux (2008) who propose the estimation of linear regressions. For the choice of h, I follow the optimal bandwidth choice rule proposed by Imbens and Kalyanaraman (2012). I also show the robustness of the results to alternative choices of bandwidth and of the control function $f(x_{ijt})$. Ideally, estimates of β should not rely heavily on either the choice of bandwidth or the specification of the control function.

Throughout the analysis I focus only on the first election of non-dynastic candidates (winners and runners-up), i.e., those for whom Dynastic_Recent = 0. The focus on the first election is important for the identification assumption. The outcome of a close election involving an incumbent running for reelection or a seasoned candidate with previous electoral experience is less likely to be as good as random.[16] The focus on nondynastic candidates is important in order to avoid confounding the effect of incumbency of a candidate's previously elected relatives with a candidate's own incumbency effect on future relatives.

[15] For example, for a race in which the winner receives 40% of the votes and the runner-up receives 37% of the votes, the winning margin is 0.03 for the winner and -0.03 for the runner-up.

[16] I drop candidates whose first election was in 2010 (last election in my sample) as they cannot have any relatives entering politics after them.

For simplicity, throughout the analysis I only report estimates of a linear probability model (see Angrist and Pischke, 2009). However, all the results are qualitatively similar with probit regressions.

Finally, I defer a detailed assessment of the validity of the assumptions for the regression discontinuity design to Section 4.2, after presenting the main results of the paper.

3.1.1 Reduced Form Estimates

Figure 1 illustrates the main result of the paper. The dots show the fraction of candidates with future relatives in office, averaged in 2% bins of the winning margin in the first election. Local polynomial smoothing regressions using the raw (unbinned) data are shown, together with 95% confidence intervals. The figure reveals a discontinuous jump at the threshold in the fraction of future relatives in office. The magnitude of the discontinuity suggests that candidates who win their first election by a small margin are roughly 12 percentage points more likely to have future relatives in office than candidates who barely lose.

Table 2 reports estimates of β based on Equation 1. For reference, in Columns 1 and 2 I report standard ordinary least squares (OLS) estimates on the full sample of the naive comparison between winning and losing candidates. Standard errors are clustered at the candidate level. The specification in Column 2 includes province and year fixed effects. The OLS estimates suggest that winning candidates are 24 percentage points more likely to have future relatives in office than losing candidates. However, as discussed earlier, these cannot be interpreted as causal estimates of the effect of incumbency on the electoral success of future relatives.

In Columns 3 and 4, I report the benchmark regression discontinuity estimates based on local linear regressions using the Imbens and Kalyanaraman (2012) optimal bandwidth (in this case $h = 0.11$). Standard errors are clustered at the province level. The estimates provide evidence that incumbency has a causal effect on the probability of having future relatives in office. Candidates who win their first race by a small margin are 12 percentage points more likely to have future relatives in office. The estimates are statistically significant at conventional levels and remain essentially unchanged with the inclusion of province and year fixed effects in Column 4.

In Table 3, I show the robustness of these estimates to alternative bandwidth choices and control functions. All standard errors are clustered at the province level, and regressions in Columns 2, 4, and 6 include province and year fixed effects. In Columns 1–4, I follow Angrist and Lavy (1999) and focus on a small "discontinuity sample" and drop the control function. Columns 1 and 2 report estimates for a 5% bandwidth and Columns 3 and 4 for a 2.5% bandwidth. The estimates remain essentially unchanged and statistically significant in

Table 2: OLS reduced-form regressions.

Benchmark local linear regressions				
Dependent variable is posterior relatives dummy				
	(1)	(2)	(3)	(4)
Winner	0.244	0.238	0.107	0.124
	(0.013)	(0.013)	(0.047)	(0.050)
Bandwidth (h)	1	1	0.11	0.11
Control function f(Win Margin)	None	None	Linear	Linear
Province fixed effects	NO	YES	NO	YES
Year fixed effects	NO	YES	NO	YES
Observations	11,499	11,499	808	808
R-squared	0.096	0.148	0.042	0.17

Robust standard errors in parentheses. Standard errors in Columns 1 and 2 clustered at the candidate level. Standard errors in Columns 3 and 4 clustered at the province level. Sample in Columns 1 and 2 includes all congressional and gubernatorial candidates for the period 1946–2007. Sample in Columns 3 and 4 includes only the first race of all nondynastic congressional and gubernatorial candidates (winners and runners-up) for the period 1946–2007. Dependent variable is a dummy that takes a value of 1 if the candidate has any relatives entering Congress or the provincial governorship in the 20 years following the election. Winner is a dummy that takes a value of 1 if the candidate wins the election.

spite of a sizable reduction in sample size. In Columns 5 and 6, I follow Lee (2008) and consider the full sample of candidates but include higher-order polynomials in the winning margin in the first race (allowing for a different polynomial at either side of the threshold). Following Gelman and Imbens (2014), I only consider polynomials of order 2 (Columns 5 and 6) or order 3 (Columns 7 and 8). Again, the estimates remain essentially unchanged and statistically significant.

For completeness, in Panel A of Figure 2 I report the estimates of β for all possible values of the bandwidth h between 0.02 and 0.5, based on the linear specification. I report in different colors the estimate based on the optimal bandwidth proposed by Imbens and Kalyanaraman (2012) (IK, $h = 0.11$) as well as the optimal bandwidth proposed by Calonico *et al.* (2014) (CCT, $h = 0.12$). As expected, the estimates based on smaller bandwidths tend to be noisier. Reassuringly, however, the point estimates remain relatively stable for different values of the bandwidth.

3.1.2 2SLS Estimates

The results reported in Tables 2 and 3 correspond to reduced-form estimates of winning or losing the first election by a small margin. Nonetheless, some

Table 3: OLS reduced-form regressions.

Alternative bandwidth and control functions Dependent variable is posterior relatives dummy								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Winner	0.114	0.120	0.115	0.152	0.124	0.131	0.126	0.136
	(0.033)	(0.038)	(0.052)	(0.070)	(0.027)	(0.027)	(0.033)	(0.034)
Bandwidth (h)	0.05	0.05	0.025	0.025	1	1	1	1
Control function f(Win Margin)	None	None	None	None	Order=2	Order=2	Order=3	Order=3
Province fixed effects	NO	YES	NO	YES	NO	YES	NO	YES
Year fixed effects	NO	YES	NO	YES	NO	YES	NO	YES
Observations	403	403	203	203	1,919	1,919	1,919	1,919
R-squared	0.030	0.266	0.030	0.437	0.061	0.124	0.061	0.124

Robust standard errors in parentheses. Standard errors clustered at the province level. Sample includes the first race of all nondynastic congressional and gubernatorial candidates (winners and runners-up) for the period 1946–2007. Dependent variable is a dummy that takes a value of 1 if the candidate has any relatives entering Congress or the provincial governorship in the 20 years following the election. Winner is a dummy that takes a value of 1 if the candidate wins the election.

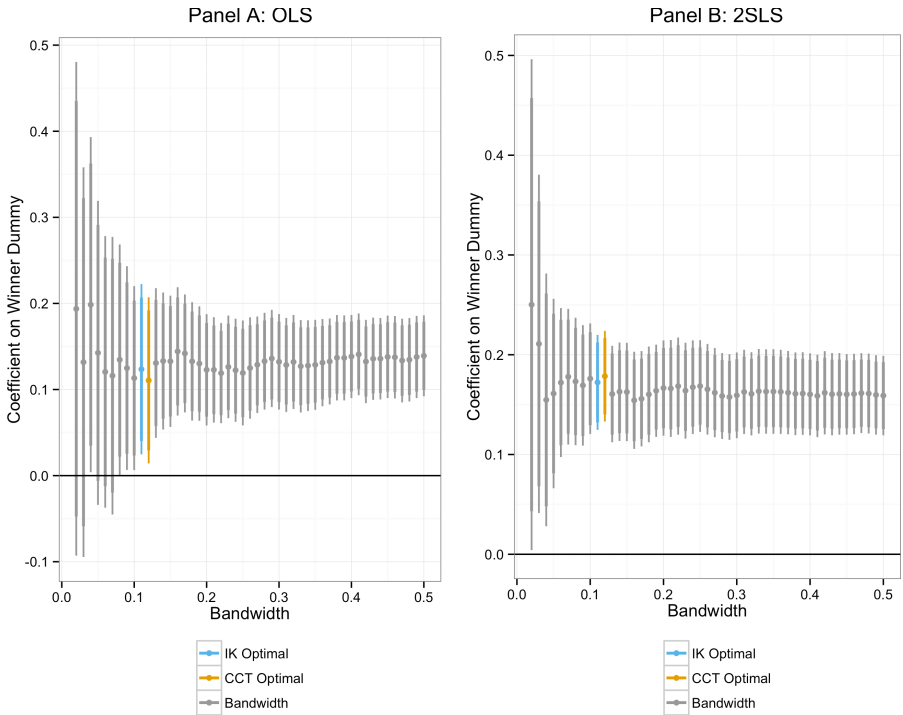

Figure 2: Robustness to alternative bandwidths.
Each sub-figure plots the point estimates for different bandwidth values between 0.02 and 0.5 in 0.01 increments. In Panel A the coefficients are OLS estimates based on Equation 1 using a linear polynomial. In Panel B, the coefficients are 2SLS estimates based on Equation 3 also using a linear polynomial. Thin lines stemming from the point estimates show 95% confidence intervals while the slightly thicker lines show 90% confidence intervals. Estimates shown in blue are for the optimal bandwidth proposed by Imbens and Kalyanaraman (2012) ($h = 0.11$) while the estimates shown in orange are for the optimal bandwidth proposed by Calonico *et al.* (2014) ($h = 0.12$).

candidates who lose their first election may run again and eventually win. In this case, the reduced-form regressions underestimate the causal effect of incumbency since I am classifying losing candidates who eventually serve as non-incumbent. To address this issue, I use a *fuzzy* regression discontinuity design (see Imbens and Lemieux, 2008). Essentially, this consists of using the outcome of the first close election as an instrument for whether the candidate serves in elected office. The first-stage regression corresponds to:

$$\begin{aligned} \text{Served}_{ijt} &= \mu + \tau \,\text{Winner}_{ijt} + f(x_{ijt}) + u_{ijt} \\ &\forall i \,\text{s.t.} x_{ijt} \in (-h, h), \end{aligned} \tag{2}$$

where Served_{ijt} is a dummy that takes a value of 1 if candidate i eventually serves in Congress or as provincial governor, and Winner_{ijt}, as before, is a dummy variable for whether candidate i wins his/her first election. The second-stage regression is given by:

$$\text{Post\_Relative}_{ijt} = \varphi + \gamma \widehat{\text{Served}}_{ijt} + v_{ijt}, \tag{3}$$

where $\widehat{\text{Served}}_{ijt}$ is the predicted value from Equation 2.

Given that most candidates who lose their first election never run again, the first-stage estimates are very strong (not reported). The estimate of τ on the Winner dummy ranges between 0.7 and 0.75 and is always statistically significant at the 1% level.

The two-stage-least-square (2SLS) estimates of γ are reported in Table 4 for the benchmark linear regression specification reported in Table 2 and for the alternative bandwidth and control functions reported in Table 3. Regressions in even-numbered columns include province and year fixed effects, and standard errors are clustered at the province level. As predicted, the point estimates are higher than the reduced-form estimates. The estimate in Column 1 suggests that candidates who serve in Congress or as provincial governors are 17 percentage points more likely to have their relatives become congressmen or governors in the future than candidates who run for these positions but do not serve. The estimated effect is remarkably large. Given the average value of Post_Relatives_Recent for losing candidates who never serve (roughly 4%), the estimates imply that incumbency makes a candidate 5 times more likely to have a relative serve in office in the future.

In Panel B of Figure 2, I also report the 2SLS estimates of γ for all possible bandwidth values between 0.02 and 0.5. Reassuringly, the point estimates are robust to bandwidth choice and are always statistically significant.

3.1.3 Intensive Margin Estimates

In their seminal paper, Dal Bo *et al.* (2009) focus on the sample of incumbent congressmen and compare those who barely win their first reelection attempt and serve for more than one term to those who barely lose their first reelection attempt and serve for only one term. In this respect they can only test the causal effect of incumbency on having future relatives in office on the *intensive* margin (those who serve longer relative to those who serve for a shorter period). In this paper, being able to trace relatives of winning and losing candidates allows me to focus on the effect of incumbency on the *extensive* margin and compare incumbents to those who never served in office. For the purposes of comparing my estimates with those of Dal Bo *et al.* (2009), I also estimate the causal effect of incumbency on the intensive margin by focusing on incumbents whose first reelection attempt was decided by a close margin. The estimates

Table 4: 2SLS regressions.

	Dependent variable is posterior relatives dummy									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Served	0.174	0.172	0.156	0.163	0.163	0.218	0.181	0.169	0.180	0.169
	(0.024)	(0.024)	(0.045)	(0.050)	(0.074)	(0.101)	(0.017)	(0.019)	(0.017)	(0.019)
Bandwidth (h)	0.11	0.11	0.05	0.05	0.025	0.025	1	1	1	1
Control function f(Win Margin)	Linear	Linear	None	None	None	None	Order=2	Order=2	Order=3	Order=3
Province fixed effects	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
Year fixed effects	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
Observations	808	808	403	403	203	203	1,919	1,919	1,919	1,919
R-squared	0.038	0.171	0.048	0.294	0.032	0.444	0.055	0.122	0.055	0.122

Robust standard errors in parentheses. Standard errors clustered at the province level. Sample includes the first race of all nondynastic congressional and gubernatorial candidates (winners and runners-up) for the period 1946–2007. Dependent variable is a dummy that takes a value of 1 if the candidate has any relatives entering Congress or the provincial governorship in the 20 years following the election. Served is a dummy that takes a value of 1 if the candidate ever serves in Congress or as provincial governor.

are reported in Appendix Table A1.[17] In the 2SLS regressions in Columns 4 and 5 the variable *Longterm* is a dummy that takes a value of 1 if the incumbent serves for two or more terms. Interestingly, and in contrast to Dal Bo *et al.* (2009), the estimates on the intensive margin are small and are never statistically significant. This suggests that the effect of incumbency on the extensive and intensive margins can be quite different. In the case of the Philippines, it seems that it is access to office, rather than tenure length, which affects dynastic persistence. I return to this issue in Section 5.2. However, the estimates in Appendix Table A1 should be interpreted cautiously. Incumbents in the Philippines tend to win reelection with very large margins of victory (this explains why sample sizes are noticeably smaller in these regressions). Thus, the sample of incumbents whose first reelection attempt is decided by a narrow margin may not be representative of the broader sample of incumbents.

3.2 Robustness and Validity Checks

The regression discontinuity estimates presented in Tables 2–4 are only valid to the extent that some basic identification assumptions are satisfied. The underlying assumption is that the outcome of close elections is as good as random and does not depend on any other underlying characteristics of the candidates. In this section I present some basic validity checks of this assumption.

One useful exercise, proposed by McCrary (2008), consists of testing for discontinuity in the density of observations around the threshold. For example, to the extent that close elections are manipulated and candidates in the sample lose more than 50% of the close races, one should observe a larger fraction of observations concentrated to the left of the threshold. In Figure 3, I plot the density of observations, averaged over equally sized bins. There is no evidence of sorting around the threshold. This is confirmed by a formal test reported at the bottom of the figure, which estimates the magnitude of the discontinuity. The estimate is very close to zero and is not statistically significant.

Another important validity check is to test for the balance of candidate characteristics across the threshold. Unfortunately, very little information is available on candidate characteristics. Nonetheless, for every election for the period 1995–2007 I have information on the party of every single candidate. This allows me to test whether candidates from certain parties are more or less likely to win close races. I also compute a *coalition* dummy that takes a value of 1 if the candidate's party belongs to the president's coalition at the

[17]For the regressions in Columns 1 and 4 I use the Imbens and Kalyanaraman (2012) optimal bandwidth, which for this sample is slightly larger ($h = 0.16$) than for the sample of winning and losing candidates used in Tables 2–4.

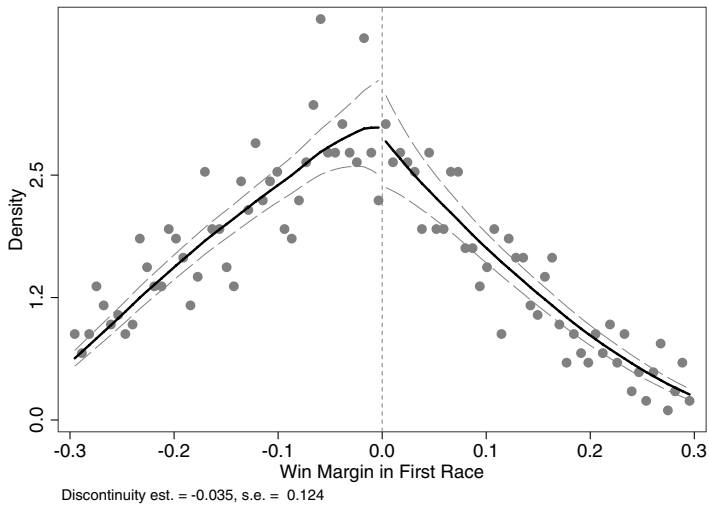

Figure 3: McCrary density test.
The figure shows the McCrary (2008) test for discontinuity in the density of observations around the threshold. The sample includes the first race of nondynastic congressional and gubernatorial candidates for the period 1946–2007. The figure focuses on candidates that won or lost the election by a margin of 30% or less.

time of the election.[18] For the period 1988–2007 I also use electoral data for other offices and create a previous experience dummy that takes a value of 1 if the candidate held a different provincial or local elected office prior to the election. Finally, for the whole sample (1946–2007) I use first names to create a *female* dummy to test for a discontinuity in gender across the threshold.

Table 5 reports regression discontinuity estimates, based on the linear specification, to test for balance in these candidate characteristics across the threshold. In Columns 1 and 2, I focus on elections in the 1995–2007 period. There is no evidence that candidates from parties in the president's coalition or with previous political experience are more or less likely to win close races. The estimates are small and not statistically significant. Similarly, in Column 3, I find no evidence of sorting based on the candidate's gender. In Appendix Table A2 I report estimates using dummies for each individual party as a dependent variable. All estimates are small and statistically insignificant as well.

While the results in Columns 1–3 suggest there are no differences in available candidate characteristics across the threshold, for robustness in Table 6 I report

[18]Coalition parties for the different election years are: LAKAS and LDP for 1995; LAKAS for 1998; LAKAS, NPC, LP, AKSYON, and PDP for 2001; LAKAS, KAMPI, NP, LP, and NPC for 2004; and LAKAS, KAMPI, and LDP for 2007.

Table 5: OLS reduced from regressions balance on covariates.

	Dependent Variable					
	Coalition (1)	Previous exp. (2)	Female (3)	Against incumb. (4)	Against dynast. (5)	Against seasoned (6)
Winner	0.061	−0.065	−0.015	−0.052	−0.007	−0.028
	(0.185)	(0.177)	(0.041)	(0.053)	(0.046)	(0.052)
Bandwidth (h)	0.11	0.11	0.11	0.11	0.11	0.11
Control function f(Win Margin)	Linear	Linear	Linear	Linear	Linear	Linear
Province fixed effects	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES
Observations	224	224	808	808	808	808
R-squared	0.314	0.354	0.129	0.377	0.273	0.341

Robust standard errors in parentheses. Standard errors clustered at the province level. Sample in Columns 1 and 2 includes the first race of all nondynastic congressional and gubernatorial candidates (winners and runners-up) for the period 1995–2007. Sample in Columns 3–6 includes the first race of all nondynastic congressional and gubernatorial candidates (winners and runners-up) for the period 1946–2007. Dependent variable in Column 1 is a dummy that takes a value of 1 if the candidate's party is part of the president's coalition at the time of the election. Dependent variable in Column 2 is a dummy that takes a value of 1 if the candidate held a provincial or local elected office prior to the election. Dependent variable in Column 3 is a dummy that takes a value of 1 if the candidate is female. Dependent variable in Columns 4–6 is a dummy that takes a value of 1 if the candidate is running against an incumbent, a dynastic candidate or a seasoned candidate, respectively. The independent variable, Winner, is a dummy that takes a value of 1 if the candidate wins the election.

OLS and 2SLS regression discontinuity estimates after controlling for a full set of party dummies, as well as the *coalition*, *previous experience* and *female* dummies. Naturally, sample sizes fall considerably since these candidate characteristics are only available for 1995–2007.[19] Reassuringly, the magnitude and statistical significance of the coefficients remain mostly unchanged.[20] Incidentally, by focusing on a shorter and more recent sub-period, the results in Table 6 also show that the causal effect of incumbency operates in the short run. Incumbents who first enter office in 1995 or later are able to increase the electoral success of their relatives in a relatively short span of time. I return to this issue in the discussion.

Another potential concern is whether the outcome of close races depends on the identity of the opponent. Nondynastic candidates in my sample who

[19]I do not report specifications based on a 2.5% bandwidth, since sample sizes become prohibitively small.

[20]The regressions in Table 6 differ from those in Tables 2–4 in terms of both the sample and the inclusion of control variables. Thus, in Appendix Table A3 I report the estimates from regressions based on the same smaller samples used in Table 6 (for the period 1995–2007) but without including controls. Point estimates in this subsample without controls are roughly similar to those from Tables 2–4.

Table 6: Robustness Checks I: Controlling for Candidate Characteristics.

Dependent variable is posterior relatives dummy						
	OLS regressions			2SLS regressions		
	(1)	(2)	(3)	(4)	(5)	(6)
Winner	0.130	0.170	0.196			
	(0.094)	(0.082)	(0.061)			
Served				0.255	0.229	0.191
				(0.073)	(0.110)	(0.034)
Bandwidth (h)	0.11	0.05	1	0.11	0.05	1
Control function f(Win Margin)	Linear	None	Order=3	Linear	None	Order=3
Province fixed effects	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES
Observations	223	110	710	223	110	710
R-squared	0.407	0.536	0.226	0.357	0.537	0.198

Robust standard errors in parentheses. Standard errors clustered at the province level. Sample includes the first race of all nondynastic congressional and gubernatorial candidates (winners and runners-up) for the period 1995–2007. All regressions control for a female dummy, a full set of party dummies, a dummy for whether the candidate served prior to the election in a provincial or local office, and a dummy for whether his party belongs to the president's coalition at the time of the election. Dependent variable is a dummy that takes a value of 1 if the candidate has any relatives entering Congress or the provincial governorship in the 20 years following the election. Winner is a dummy that takes a value of 1 if the candidate wins the election. Served is a dummy that takes a value of 1 if the candidate ever serves in Congress or as provincial governor.

are running for these offices for the first time may be less likely to win a close race when facing an incumbent, a dynastic opponent or a seasoned candidate who has run for these offices in the past.[21] In Table 5, I rule out this concern and find no evidence of sorting around the threshold for candidates facing an incumbent (Column 4), a dynastic candidate (Column 5), or a seasoned candidate (Column 6). All estimates are small and statistically insignificant. This suggests that candidates in my sample win, on average, 50% of close races, irrespective of the opponent they face. Nonetheless, in Table 7 I show the robustness of the results to considering alternative subsamples based on the type of opponent. In Panel A, I exclude races in which the candidates in my sample face an incumbent or a dynastic candidate in their first race. Both the OLS and 2SLS estimates are very similar to those reported in Tables 2–4 for the whole sample. In Panel B, perhaps the most demanding specification, I restrict the analysis to races in which both the winner and runner-up are nondynastic candidates running for the first time. By construction, exactly

[21] For the U.S. case, recent papers by Carpenter *et al.* (2011), Caughey and Sekhon (2011), and Snyder (2005) criticize regression discontinuity design studies, arguing that incumbents and candidates from the party in control of state offices win noticeably more than 50% of close races.

Table 7: Robustness Checks II: Alternative Samples.

Dependent variable is posterior relatives dummy						
	OLS regressions			2SLS regressions		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Excluding races with an incumbent or a dynastic candidate as winner or runner-up						
Winner	0.144	0.145	0.152			
	(0.071)	(0.054)	(0.051)			
Served				0.180	0.181	0.169
				(0.038)	(0.067)	(0.027)
Bandwidth (h)	0.11	0.05	1	0.11	0.05	1
Control function f(Win Margin)	Linear	None	Order=3	Linear	None	Order=3
Province fixed effects	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES
Observations	402	200	784	402	200	784
R-squared	0.263	0.408	0.179	0.264	0.408	0.182
Panel B. Keeping races in which both the winner and runner up are non-dynastic candidates running for the first time						
Winner	0.112	0.127	0.155			
	(0.078)	(0.059)	(0.061)			
Served				0.184	0.167	0.176
				(0.052)	(0.077)	(0.040)
Bandwidth (h)	0.11	0.05	1	0.11	0.05	1
Control function f(Win Margin)	Linear	None	Order=3	Linear	None	Order=3
Province fixed effects	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES
Observations	288	142	556	288	142	556
R-squared	0.335	0.443	0.219	0.331	0.444	0.216

Robust standard errors in parentheses. Standard errors clustered at the province level. Sample in Panel A includes the first race of all nondynastic congressional and gubernatorial candidates (winners and runners-up) for the period 1946–2007, excluding races in which the other candidate (winner or runner-up) was an incumbent or a dynastic candidate. Sample in Panel B includes only congressional and gubernatorial races during the period 1946–2007 in which both the winner and runner-up are nondynastic candidates running for the first time. Dependent variable is a dummy that takes a value of 1 if the candidate has any relatives entering Congress or the provincial governorship in the 20 years following the election. Winner, is a dummy that takes a value of 1 if the candidate wins the election. Served is a dummy that takes a value of 1 if the candidate ever serves in Congress or as provincial governor.

50% of the individuals in this sample win the race, while the remaining 50% lose. The estimates are in line with those reported for previous samples and specifications.

Finally, in Appendix Table A4 I report both OLS and 2SLS estimates reported in Tables 2–4 but using Post_Relative_Ever as the dependent variable

(i.e., not restricting subsequent relatives to a 20-year window following the election). The estimates remain very similar (magnitude of the coefficients is slightly larger), showing that the coding of the dependent variable does not affect the results.

4 Channels of Dynastic Persistence

The estimates in Tables 2–7 provide robust evidence of the existence of dynastic persistence in the Philippines. A natural question in light of this result regards the mechanisms by which an incumbent is able to reproduce his or her political power and enhance the electoral performance of other relatives. In this section, I explore some of the potential channels that may explain this phenomenon. In doing so, I also highlight the differences in the process of dynastic persistence in the Philippines versus the United States as studied by Dal Bo *et al.* (2009).

4.1 Occupational Choice

A simple channel through which incumbency may affect the political success of future relatives is occupational choice. As with many other occupations, a politician's son or daughter may be more likely to follow the same career as his/her parents. Relatedly, it is plausible that relatives of former incumbents can inherit the experience, political knowledge, and skills required to run a province. This would make dynastic candidates better suited for public office in the eyes of the voters and would explain their electoral success.

In Panel A of Appendix Table A5 I report OLS and 2SLS regressions for different bandwidths and functional forms where the dependent variable is a dummy Posterior_Candidate that takes a value of 1 if the candidate has a future relative *running* for Congress or the provincial governorship in the 20 years following the election. All estimates are positive and statistically significant, and are larger in absolute value than the baseline estimates in Tables 2–4. This could be consistent with occupational choice because it suggests that relatives of former incumbents are more likely to participate and attempt to become politicians in the first place than are relatives of previous election losers who never served. Moreover, in Panel B of Appendix Table A5 I re-run a subset of the OLS and 2SLS regressions reported in Tables 2–4, but controlling for whether the candidate has a future relative running for office. In other words, Panel B explores whether, conditional on participating in elections, relatives of previous election winners are more likely to win than relatives of previous election losers. The estimates in this case, while positive, become noticeably smaller and are only statistically significant in Columns 4, 5, and 8. Thus, the evidence in Appendix Table A5 suggests that the causal effect of incumbency on future relatives in office documented in Tables 2–4 is mainly

driven by relatives of former incumbents being more likely to participate in the first place. However, these estimates must be interpreted cautiously, since participation decisions (related to occupational choice) are also driven by expectations of electoral success.

While occupational choice and interest in politics may play an important role in explaining dynastic persistence, other evidence suggests that this is not the only (or the most important) mechanism in the Philippines. A mechanism based on occupational choice or the acquisition of experience/skills tends to operate in the long run. However, results that focus on the most recent 1995–2007 sub-period, reported in Table 6, suggest that incumbents are able to bring their relatives into politics a couple of years after entering office for the first time. Moreover, case studies reported by Coronel *et al.* (2007) and interviews I conducted with members of Congress in the Philippines show that dynastic candidates are very diverse in their professions and occupations prior to running for office, and often run reluctantly to secure the family's political dominance. Thus, many relatives of incumbents enter politics *after* their occupational choice has been made, and after years of experience in non-political occupations. The distribution of family links for election winners documented in the first column of Table 1 further supports this finding. Almost half (47.78%) of the future relatives are from the same generation as the winning candidate (spouse, sibling, brother or sister-in-law, or cousin). This contrasts with the U.S. case, in which siblings, cousins, and spouses account for less than 30% of future relatives.[22] Thus, many of the subsequent relatives in the Philippines are often relatively old (and thus in an established occupation) when their relative first enters office.

Finally, there is no evidence that dynastic candidates have greater political experience in local offices prior to running for Congress or the provincial governorship — a fact that is also documented for the United States by Dal Bo *et al.* (2009). For the 1995–2010 period, 24% of dynastic candidates have previous experience in other offices (mayor, vice-mayor, councilor, vice-governor or provincial board). The corresponding proportion for non–dynastic candidates is essentially identical, 25%. This may simply reflect that dynastic candidates are able to run directly for higher office without having to go through local positions. Nonetheless, this is inconsistent with the theory that dynastic candidates are advantaged due to greater formal experience in other offices.

4.2 Use of Office for the Electoral Advantage of Relatives

Perhaps the mechanism most often cited in the media and academic literature is the use of office, in particular patronage and public resources, to entrench

[22]The difference is particularly large for spouses, who represent 20% of future relatives in the Philippines but only 4% in the United States.

an incumbent's family in politics. Incumbency and access to public resources are fundamental for funding the clientelistic networks and machinery that deliver votes. A politician can then bequeath these networks to his relatives in order to expand the political dominance of the family. In fact, clientelistic networks enjoy substantial economies of scale, and can support two or more members of the same family who run for different offices (i.e., Congress and provincial governor). Consistent with this, I find that a large majority (72%) of election winners with future relatives in office have their relative first enter office while they are still an incumbent. Moreover, half of the incumbents who are replaced by relatives remain in either the same or another office after their future relatives enter office. This contrasts with the U.S. case documented by Dal Bo *et al.* (2009), where a majority of relatives enter office after the initial incumbent (dynasty founder) has retired from office.[23] Thus, the process of dynastic persistence in the Philippines involves incumbents having relatives run for office while they are still in power (and can benefit from their relative's access to public resources), which often leads the dynasty to spread its control over several offices.

To illustrate the importance of having a relative in office at the time of the election, in Table 8 I report standard OLS regressions of a candidate's vote share against the two measures of dynastic status introduced in Section 3.2 — Dynastic_Recent and Incumbent_Relative. Regressions include a full set of province and year fixed effects. I focus only on each candidate's first election attempt, and thus the regressions exclude all incumbents running for reelection. The coefficient on the dynastic dummy in Column 1 shows that dynastic candidates enjoy a substantial electoral advantage and obtain vote shares that are 15 percentage points higher on average. In Column 2, I differentiate between dynastic candidates with and without a relative in office at the time of the election. The estimates reveal a substantial electoral advantage for all types of dynastic candidates, but particularly for incumbent relatives. Candidates whose relative is the incumbent at the time of the election receive an average vote share that is 25 percentage points larger relative to other nondynastic candidates — more than twice the advantage observed for other dynastic candidates without a relative in office at the time of the election. These estimates from Table 8 are presented only for descriptive purposes, in order to illustrate the electoral advantage of dynastic candidates. They do not necessarily provide evidence that incumbency at the time of election has a

[23]This is not directly reported by the authors, but can be inferred from the descriptive statistics reported in the paper. Roughly 57% of family links in their dataset involve relatives from a different generation — i.e., parent–child, uncle–nephew, grandfather–grandchild, etc. The average age at entry is 44, and congressmen serve on average four terms (8 years) for an average retirement age from Congress of 52. At the age of retirement, the children of the average congressman are younger than 44, the average age at entry. This suggests that the majority of subsequent relatives enter office after their previous relative has retired and therefore do not have a relative in office when they first run.

Table 8: OLS regressions for vote share and dynastic status.

Dependent variable is vote share		
	(1)	(2)
Dynastic	0.148	0.116
	(0.007)	(0.007)
Incumbent relative		0.135
		(0.017)
Province fixed effects	YES	YES
Year fixed effects	YES	YES
Observations	6,623	6,623
R-squared	0.149	0.164

Robust standard errors, clustered at the province level, reported in parentheses. Sample includes only the first race of all congressional and gubernatorial candidates for the period 1946–2007. Dynastic is a dummy variable that takes a value of 1 if the candidate had a relative who served as congressman or governor in the 20 years prior to the election. Incumbent relative is a dummy that takes a value of 1 if the candidate has a relative who is the incumbent at the time of the election.

causal effect on the electoral success of an incumbent's relatives. Nonetheless, they point to potential incumbency advantages from office that spill over to other relatives of the incumbent. The incumbent's relatives are particularly likely to win elections and enter office if they run while their relative is the sitting incumbent and has at his or her disposal all the resources that fund the patronage and clientelistic practices that characterize Filipino politics.

The use of office to further the family's private economic interests is also widely cited as a channel behind dynastic entrenchment. In the context of a renowned dynasty in the province of Cebu, Cullinane (1994, p. 187) mentions, "all the assets of the family's domain — revenues, land, agricultural commodities, industries, power and influence — were derived from success at the polls." He then argues that "much of the profits from their enterprises were invested in elections to guarantee the family's continued dominance." In the context of the 2007 elections, Fafchamps and Labonne (2015) also show that an incumbent's relatives are disproportionately more likely to be employed in the public sector. Similarly, they find that relatives of unsuccessful candidates are disproportionately less likely to work in the public sector. This illustrates how patronage can be used to benefit an incumbent's relatives and punish members of the opposition.

Finally, incumbents can also bequeath to their relatives their connections to the central bureaucracy, which allow them to secure the flow of pork barrel funds to their provinces and districts. In this sense, voters may find themselves stuck in an equilibrium in which electing dynastic politicians is the best strategy

when other districts are also electing dynastic (and connected) politicians. Otherwise, they risk losing their connections to the central bureaucracy and cutting the flow of funds to their district. This argument is similar to the one made by McKelvey and Riezman (1992) for seniority advantage.

5 Conclusions

In this paper I present evidence of dynastic persistence in the Philippines. Incumbent congressmen and governors are roughly five times more likely to have a relative serve in these offices in the future, relative to similar candidates who run but do not serve. A large majority of these dynastic successions occur while the first incumbent from the family (dynasty founder) is still in office. Similarly, relatives of sitting incumbents enjoy a large electoral advantage, almost twice as large as that enjoyed by other dynastic candidates whose relative has already retired. I argue that access to office and public resources — important in clientelistic democracies like the Philippines — allows incumbents to give relatives an electoral advantage.

This result is closely related to the literature on incumbency advantage, that argues that candidates from an incumbent party enjoy an electoral advantage and are more likely to win. I argue that in dynastic democracies like the Philippines such advantage can often spill over to other family members and allow the family to consolidate its power and often control several offices simultaneously. However, the consequences in the case of dynasties are, potentially, very different than in the case of parties. A crucial difference between dynasties and parties is that membership in the former, by definition, is restricted to those related by blood (the one exception being marriage). Thus, a political system organized around dynasties creates tighter entry barriers into the political system and creates the potential for capture by an even narrower set of interests.

These results also provide important insights regarding the persistence of political elites over time. Political power does not flow uniquely from sources of power outside the political system such as land ownership or wealth. *De jure* political power — that is, control of elected office — is an important determinant of the electoral success of other members of the family. Access to office allows previously unconnected individuals (in my sample, non-dynastic candidates) to amass political power that they can bequeath to their relatives. As argued by Coronel *et al.* (2007, p. 50) "new families join the gilded circle with each election, and they and their kin have to keep winning at the polls in order to stay in that circle. At the same time, older dynasties fail in elections and they fade out of the political scene sooner or later."

Future research should study in more depth the exact channels behind dynastic persistence. In this article, I have focused on estimating carefully

the causal effect of incumbency on the likelihood of future relatives in office, but have only offered a brief discussion on the driving mechanisms of this phenomenon. Similarly, future work should attempt to study the consequences of dynastic persistence on policy outcomes and public goods provision. This is important for determining whether reforms aimed at curbing political dynasties are desirable.

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