

4.Data

4.1.Data Sources

The data for this paper comes from a variety of sources. The candidates' full names were collected from *Tribunal Superior Eleitoral* (TSE), which provides results for the 1996, 2000, 2004 and 2008 elections. This data also contains the number of votes that each candidate received along with individual characteristics such as the candidate's gender and education. We complement this data by using records of *Tribunais Regionais Eleitorais* (TRE), which collected the full names of elected mayors in the 1988 and 1992 elections. Therefore, it is possible to track dynasties that emerged since Brazil's 1988 Constitution, as will be explained in Section 4.2. TSE also provides data on the municipal legislators which are used to construct our measure of legislative coalition, following (Amorim Neto, 2000)⁵.

We also benefit from two surveys of *Instituto Brasileiro de Geografia e Estatística* (IBGE). The first one is the Brazilian 2000 Census, which provides a number of socioeconomic and demographic characteristics that are used as controls in the regressions, and also to describe the sample. These characteristics include municipalities' population, income per capita, income inequality, share of the population that lives in urban areas and share of the population that is illiterate⁶. The second survey is the 1999, 2005, 2006 and the 2008 municipality survey: *Perfil dos Municípios Brasileiros*. The 1999 survey provides a key measure of availability of media, namely the presence of AM radio stations in the municipality. As argued by Ferraz and Finan (2008), since the redemocratization of Brazil in the 1980's, these radio

⁵ While Amorim Neto (2000) uses the proportion of legislators in the same party, we use the proportion of legislators in the same coalition as a measure of the executive legislative support.

⁶ In some specifications, I use the average number of years of schooling as an alternative measure of education, which is provided by the same source.

stations have become the central source of information for local politics in smaller municipalities. On the other hand, the other surveys supply the number of employees in the direct administration (measure of the apparatus size), the number of these employees with a college degree (measure of the apparatus efficiency) and whether the municipality is currently working on Zoning Laws. Although this last indicator is very specific, it has the advantage of capturing just the current administration's efforts to improve municipal legislation. Moreover, since most of the municipalities in Brazil are in expansion⁷ and a greater part does not have well defined zoning legislation⁸, this specific aspect of the mayor's administration is important to most of Brazilian towns.

Following Ferraz and Finan (2008), we use the data source from the Census of Brazil's Municipal Councils. In 2005, 206 surveyors, hired by a sub-secretary of the Brazilian Senate, collected data on number of municipal legislative bills submitted and approved. These bills were classified by their origin: submitted by legislators, by the population and by the executive power (mayor). The information was collected for approximately 5,000 municipalities. This data is used to measure the mayors' engagement in the legislative branch of government.

Additionally, we make use of the report about the municipal revenue and expenditure (FINBRA) published by *Secretaria do Tesouro Nacional* (STN). In particular, we use the total direct investment to measure the effect of dynasties on long term expenditures and the personnel expenditures to measure the size of the public apparatus.

Finally, we exploit the data provided by *Controladoria Geral da União* (CGU). This data includes the Discretionary Transfers signed between the federal government and each municipality. As mentioned in the previous section, these transfers are agreement of wills among members of the public administration, which aim to achieve common goals. These agreements establish which efforts are to be made to accomplish the same public interest, and are a major form of transfer of financial resources of the Union for decentralized execution of municipal governments' programs. Hence, these grants are an alternative measure of the effort of the mayors.

⁷ 75% of the municipalities presented growing populations during the period.

⁸ There was no occupation legislation in 83% of the municipalities in 2005

4.2. Identifying Political Dynasties

To identify a candidate as dynastic, we match them with previous mayors of the same municipality with common family names. This matching intends to capture which of the candidates belong to the same family as that of a previous mayor, and therefore are considered dynastic. Since data on candidates are available only from 1996 on, the sample is restricted to dynastic candidates which ran for election since that year. Moreover, for reasons that will be explained in the Section 6, the candidates in the 1996 and 2000 elections were removed from the sample. Therefore, we used only the elected mayors in 1988, 1992, 1996 and 2000 municipal elections to identify the political dynasties.

Consider the example given in **Erro! Fonte de referência não encontrada.** In the municipality *Bom Jardim de Minas*, *Manoel Rodrigues* was elected in 1988 elections and governed the municipality until 1992, when *Valdencir de Paula Nunes* became the mayor. He remained in power until 1996 elections, which granted the mayor's office to candidate *Genivaldo Marques de Paula*. *Valdencir* won the elections again returning to power in 2000. In the 2004 elections then, *Carlos Roberto Marques* is considered a dynastic candidate as he shares a common family name with the 1997-2000 mayor (*Marques*).

A natural concern with this matching procedure is that individuals who share a last name might not necessarily be relatives. The fact that the only considered dynasties are in the same municipality reduces this concern, since half of the municipalities in the sample are populated by less than 12,000 inhabitants. Hence, it is unlikely that many families with the same name are politically involved in the same municipality, especially considering that in the average electoral race there are only 2.8 candidates. Nevertheless, the possibility of some wrong dynastic identification remains. To address this issue, a robustness test is conducted, excluding common family names from the sample in Section 8.