

## A Data Appendix

In this section we discuss in detail the construction of the main datasets used in the paper. Section A.1 presents the construction of the bishop-level dataset. This provides the starting point for the construction of the diocese-level dataset, described in Section A.2. Combining these two datasets, we are able to identify bishops that move between dioceses. This is the focus of Section A.3. Section A.4 provides descriptive statistics, Section A.5 presents further results, and Section A.6 discusses further definitions and results on the effects of exogenous transitions. Finally, Section A.7 presents the construction of the bishop’s activism database.

### A.1 Details on the Construction of the Bishop’s Career Dataset

We start the construction of the bishops dataset using data on all members of the Catholic hierarchy (e.g., bishops appointed to dioceses or to other offices within the Catholic Church, such as apostolic nuncio, auxiliary bishop, etc...). These data were scraped from a digital version of the Pontifical Yearbook in the website <https://www.catholic-hierarchy.org/>. Each individual comes with a numeric identifier, with a field containing name and lastname and with information about his appointment(s). For individuals with the same name and lastname we create an additional name id which uniquely defines each individual. For each individual’s appointment, the dataset reports the starting date, we specifically focus on the years.

**Bishop appointments.** The Pope is the only person in charge of appointing bishops, typically choosing from a list of three candidates. This list is drafted by the *Apostolic Nuncio* (a Pope’s representative) after consultation with the former bishop (if alive), with the other bishops in the same ecclesiastical province (roughly corresponding to the territory of Italian regions), and with the president of the National Episcopal Conference. The Pope may decide not to appoint any of the three candidates, either requesting another list or selecting a bishop of his preference.

To construct a set of variables related to bishops appointment we use data from the Catholic hierarchy website. We first clean the name of the diocese of appointment by separating the name of the diocese from the name of the country and then we clean the name of bishop by keeping only his name and lastname and dropping any additional detail (i.e., titles such as “Father” or “Cardinal”).

For each individual we then focus on the following information: years of birth and death, year of ordination to priesthood, and year and dioceses of appointment for all bishop appointments in his career. We keep only bishops appointed to dioceses located in Italy.

We also track the affiliation to a religious order by constructing the dummy variable *Friar* taking value one if the ordination as bishop occurred within a religious order (such as the Society of Jesus) or if the ordination title includes either the keywords “Friar” or “Order of”.

**Other appointments.** We build four indicators for individuals who covered important non-bishop offices within the Church.

First, we construct the dummy *Pope-related offices* equal to one for all bishops that have been personal assistants of the Pope, or his Secretary of State, or Head of the Vatican Press. These information are from Wikipedia.

Second, we rely on the Catholic hierarchy dataset and track with the dummy variable *Other offices* if the individual has ever been appointed to any other non-bishop office. Thus, the dummy takes value one if the bishop has ever covered either of the following non-bishop offices: adjunct secretary, administrator, apostolic administrator, apostolic delegate, apostolic internuncio, apostolic nuncio, apostolic pro-nuncio, archpriest, archivist, cardinal-deacon, chamberlain, chancellor, datary, dean, vice-dean, vicegerent, grand master, librarian, major penitentiary, member of association, minister general, official, permanent observer, prefect, president, pro-secretary, secretary, secretary general, under secretary, pro-vicar general, rector, secret almoner, vice president, substitute, superior general, vicar apostolic, and vicar general.

Third, we construct a dummy *CEI President/Secretary* which is equal to one if the individual has ever been appointed as President or Regional General Secretary of the Italian Episcopal Conference during the 1948–1992 period. These data are from Wikipedia.

Finally, we track with the dummy variable *Catholic Action* if the individual has ever been appointed as the national president or general ecclesiastical assistant of the Catholic Action during the 1948–1992 period from Sportelli and Vian (2019).

**Place of birth.** The bishop’s place of birth was retrieved by scraping the “Event-Place” section of the Catholic hierarchy dataset that reports information on bishop’s city and country of birth. We select only bishops appointed to Italian dioceses. For those born in Italy, we match the municipality of birth with the coordinates of its centroid based on the 2011 shapefile of Italian municipalities. For bishops born abroad we retrieve the latitude and longitude of their birthplace by using the Openstreetmap API through STATA. If the API did not return the coordinates or reported the latitude and longitude of the centroid of the country, we manually corrected the geolocation.

**Bishops participating to the Second Vatican Council.** We construct the dummy variable *Participated CVII* taking value one if a bishop has ever participated to the Second Vatican Council. These data are from the Catholic hierarchy website.

## A.2 Details on the Construction of the Diocese Dataset

To construct our diocese dataset we follow several steps, combining information from different sources. We start from the Bishop appointments dataset described in Section A.1. First, we fill the bishop-diocese dataset with missing years that we can attribute to vacancies (temporary absence of a bishop in the diocese). Then, when trying to construct a balanced panel of dioceses, we face two main issues: (i) name changes (involving a change in the denomination of a diocese without a change of boundaries), and (ii) changes of boundaries (typically associated with changes of denomination as well).

Based on the “Historical summary” section of the webpages dedicated to each diocese from the website <https://www.catholic-hierarchy.org/>, we are able to reconstruct three key pieces of information: (i) the timing

of name changes (without changes of boundaries), (ii) whether a diocese has been united to another diocese, thus creating a new diocese (with its own new name), and (iii) whether a diocese has been split into two or more smaller dioceses (with their own name).

Within our period of interest there were more than 62 major changes of boundaries: 7 split and 55 unifications. Most of the boundaries' changes occurred in 1986 in the context of the revision of the Concordat between the Church and the Italian State. The new Concordat was meant to revise the Concordat signed during Fascism and to redefine the fiscal relationships between the State and the Church. To acquire legal status, dioceses had to specify their exact boundaries in terms municipalities under their jurisdiction, so that it would become clear which ecclesiastical buildings were subject to their administration.

The criteria for the unification of dioceses were the following: (i) *Pastorality*, meaning that the unification had to be based on religious, rather than political, historical, or cultural reasons; (ii) *Unity*, implying that after the reform no diocese would have shared the bishop with other dioceses and it would have been fully autonomous; (iii) *Common wellbeing*, so that the unification should have favored the mission of the Church at the local and national level; (iv) *Uniformity*, meaning that each diocese with an informal union should have been formally unified; (v) *Graduality* in the implementation; (vi) *Continuity*, as the name of the new diocese had to include the name of all the dioceses that were independent before the unification to keep the cultural and historical heritage of unified dioceses; and (vii) *Uniqueness*, meaning that each diocese had to create one seminar, one religious court, one Priests and Catholic council and one Coetus Consultorium with the possibility of some administrative decentralization (Moreira Neves, 1986).

We track with the dummy variable *UnitSplit* if a diocese has ever been united or split. For diocese that experienced a simple change of name, we exploit the aforementioned Historical Summary to homogenize the diocese's name throughout time. This allows us to build two variables for each diocese.

On the one hand, the variable *Diocesi\_name\_chang* reports the actual name of each diocese at each point in time, except in the case of simple name changes, for which we homogenize the name to the last name attributed to the diocese. On the other hand, the variable called *Diocesi\_final* reports the name of the dioceses after the process of unification/split for all dioceses involved.

For instance, in 1986 the dioceses of "Acquapendente", "Bagnoregio (Bagnorea)", "Montefiascone", and "Viterbo e Tuscania" were united in a unique diocese called "Diocese of Viterbo, Acquapendente, Bagnoregio, Montefiascone, Tuscania e San Martino al Monte Cimino", and in 1991 this diocese was renamed "Viterbo". In this case, the variable *Diocesi\_name\_chang* takes values "Acquapendente", "Bagnoregio (Bagnorea)", "Montefiascone", and "Viterbo e Tuscania" for the dioceses prior 1986, and the name "Viterbo" from 1986 onwards for the unique observation comprising the territory of the four dioceses that were united. The variable *Diocesi\_final* takes the name "Viterbo" for both the four dioceses prior to 1986 and the united diocese after 1986.

The diocese-level votes and fixed effects will be computed based on the variable *Diocesi\_name\_chang*. We drop from the final sample (i) the dioceses of Rome, because its bishop is the Pope; and (ii) the diocese of Aosta, as here the DC had peculiar denominations and programs.

**Diocese share votes to DC party.** To compute electoral data at the dioceses level we need to know which municipalities belong to each diocese at each point in time.

We start from the 2017 shapefiles reporting all municipalities within each diocese. These information are from the website <https://www.danieledapiaggi.it/>, based on data from the Italian Episcopal Conference. In particular, for each ecclesiastical region (roughly corresponding to an Italian region), we have a shapefile reporting for each municipality the corresponding diocese as of 2017.<sup>35</sup> On average each ecclesiastical region has 14 dioceses. After assembling all shapefiles and correcting the dataset for 5 missing municipalities, we carry out a manual revision of the set of all municipalities included in each diocese to historically trace back all changes of dioceses boundaries. We use a variety of sources including the yearly reports of the *Acta Apostolicae Sedis* and the historical section of each diocese's website.<sup>36</sup>

Once we have assigned municipalities to the correct diocese throughout time, we combine municipality-diocese data with the municipality-level data on votes. We sum-up the votes to the DC party and the total votes at the diocese level and then calculate the DC vote share for each diocese from 1948 to 1992.

**Archdioceses.** Archdioceses are dioceses whose bishop is placed at the head of an ecclesiastical province, or at the head of a very important diocese within a province (typically the diocese in which a provincial capital is located). Accordingly, we set up the dummy variable *Archdiocese* taking the value one for the following dioceses: Acerenza, Acerenza-Matera, Agrigento, Amalfi-Cava de' Tirreni, Amalfi, Ancona-Osimo, Ancona, Bari-Bitonto, Bari, Benevento, Bologna, Brindisi-Ostuni, Cagliari, Camerino-San Severino Marche, Camerino, Campobasso-Boiano, Catania, Catanzaro-Squillace, Catanzaro, Cosenza-Bisignano, Chieti-Vasto, Cosenza, Crotone-Santa Severina, Crotone, Fermo, Ferrara-Comacchio, Ferrara, Firenze, Foggia-Bovino, Foggia, Forli-Bertinoro, Forli, Gaeta, Genova, Gorizia, Lanciano-Ortona, L'Aquila, Lecce, Lucca, Manfredonia-Vieste-San Giovanni Rotondo, Matera-Irsina, Matera, Messina-Lipari-Santa Lucia del Mela, Messina, Perugia, Milano, Modena-Nonatola, Monreale, Napoli, Oristano, Otranto, Palermo, Perugia-Città della Pieve, Pesaro, Pescara-Penne, Pisa, Potenza e Marsico Nuovo, Reggio Calabria, Rossano, Salerno, Potenza-Muro Lucano-Marsico Nuovo, Ravenna-Cervia, Reggio Calabria-Bova, Rossano-Cariati, Conza-Sant'Angelo dei Lombardi-Bisaccia, Siena, Sorrento, Spoleto, Salerno-Campagna-Acerno, Sant'Angelo dei Lombardi-Conza-Nusco-Bisaccia, Sassari, Urbino, Siena-Colle di Val d'Elsa-Montalcino, Siracusa, Sorrento-Castellammare di Stabia", Spoleto-Norcia, Taranto, Torino, Trani-Barletta-Bisceglie, Trento, Udine, Urbino-Urbania-Sant'Angelo in Vado, and Venezia.

**Dioceses' headquarters and distance to Rome.** As dioceses are typically named after a city, for each diocese we retrieve the location of the main city giving the name to the diocese. Then, we manually check on each diocese' website if the diocese changed the location of the bishop's seat overtime and we accordingly change the headquarter name and geographical location. Finally, we compute the distance between the headquarter of the diocese and Rome.

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<sup>35</sup> See, for instance, <https://www.danieledapiaggi.it/z011702-dataset-1-diocesi-italiane.html>.

<sup>36</sup> A digital version of the *Acta Apostolicae Sedis* is available at [https://www.vatican.va/archive/aas/index\\_sp.htm](https://www.vatican.va/archive/aas/index_sp.htm).

**Diocese-level measures of religiosity in 1950.** Using dioceses’ webpages from the Catholic Hierarchy website, we collect different proxies for local religiosity: the share of Catholic individuals over population, the number of parishes, priests, and religious males and females over 1,000 Catholics around the year 1950 (if no information was available in 1950 we use information from the closest year).

### A.3 Details on the Bishop that Move across Dioceses

To track bishops that can be observed in at least two dioceses for at least three years (labelled *Movers*), we start from our bishop dataset.

We drop the dioceses of Aosta and Rome, for which we do not consider voting outcomes.<sup>37</sup> To calculate the number of dioceses where the bishop has been appointed throughout our sample period we rely on the *Diocesi\_fin* identifier described in Section A.2, that is the common identifier for all the diocese that were ever part of the same larger diocese. We do this because, prior the wave of diocese unifications in 1986, many bishops were simultaneously in office in the two dioceses that were then united, and in most cases they became the bishop in office in the newly created diocese. Similarly, if a bishop has been in office in a diocese that subsequently split and in one of the two afterwards, we do not consider this change of office as a switch. This allows us to build a conservative measure of the number of dioceses administered, which prevents the double counting of dioceses that were practically always administered by the same person within a given time period.

For instance, in 1951 Luigi Boccadoro was appointed as bishop simultaneously in the dioceses of “Acquapendente” and “Montefiascone”, while in 1970 he was additionally appointed as bishop of “Viterbo e Tuscania”. In 1986 all these dioceses were united with the diocese of “Bagnoregio (Bagnorea)” (vacant from 1971) into the unique diocese of “Viterbo, Acquapendente, Bagnoregio, Montefiascone, Tuscania e San Martino al Monte Cimino” (later denominated for simplicity “Viterbo”), and Luigi Boccadoro continued to administer the full territory up to 1987 when he retired. Bishop Boccadoro never administered for at least three year any other diocese beyond those that he also administered within the unique denomination “Viterbo”, therefore, we do not consider him as a mover.

Another example is provided by bishop Giovanni Proni. Bishop Proni started his career as bishop with an appointment in the diocese of “Termoli” from 1962 to 1970. In 1970 he was appointed bishop of “Bertinoro”, and became bishop of “Forlì” as well from 1976. In 1986 the dioceses of “Forlì” and “Bertinoro” united into the diocese of “Forlì-Bertinoro”, and Proni continued to jointly administer their territory until 1988 when he retired. We consider him as a mover because he administered for more than three years both the diocese of “Termoli” and the territory corresponding to the final diocese of “Forlì-Bertinoro”.

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<sup>37</sup>This implies that some bishops cannot be classified as movers if the only other diocese where they were appointed is either Aosta or Rome. For instance, Giovanni Battista Montini is not considered as a mover because his only two appointments include Milan from 1954 to 1958 and Rome from 1963. Consequently, when we construct the restricted sample of dioceses where at least one bishop can be observed in at least one other diocese for at least three years, the diocese of Milan is dropped as all its other bishops were not appointed to any other Italian diocese during the 1948–1992 period.

## A.4 Samples and Descriptive Statistics

We report descriptive statistics for the entire sample of dioceses and for the restricted sample used in the main analysis.<sup>38</sup> As explained in the text in the main analysis, following [Bertrand and Schoar \(2003\)](#), we consider the *restricted* sample of dioceses where at least one bishop can be observed in at least another diocese for at least three years (to ensure that bishops have the chance to "imprint their mark" on a given diocese).<sup>39</sup> Note that for these dioceses we include all observations, i.e., those periods in which the diocese has bishops that we do not observe in other dioceses.

Table A1 reports the related descriptive statistics for the full and restrictive samples—in columns (1) and (2) respectively. Among the 742 bishops in the full sample, 26% are bishops who moved from one diocese to another one. The percentage of movers is similar when we focus on the restricted sample (33%).

| Sample  | Full    | Restricted |
|---|---------|------------|
|   | (1)     | (2)        |
| Sh. votes DC                                  | 0.389   | 0.398      |
| (st.dev.)                                     | (0.100) | (0.096)    |
| Ln N electors                                 | 11.325  | 11.348     |
| (st.dev.)                                     | (1.026) | (0.985)    |
| Ln Distance Birthplace to Diocese Headquarter | 4.659   | 4.700      |
| (st.dev.)                                     | (1.026) | (1.258)    |
| N dioceses                                    | 341     | 281        |
| N bishops                                     | 742     | 605        |
| N bishops movers                              | 195     | 182        |
| N connected sets                              | 74      | 27         |
| N bishop deaths while in office               | 255     | 216        |
| N observations                                | 4,645   | 3,794      |

*Notes:* The table reports summary statistics for the full sample (column 1) and the restricted sample (column 2) of dioceses. The full sample includes all dioceses in our dataset. The restricted sample focuses only on those dioceses where at least one bishop can be observed in at least another diocese for at least three years. For more details on data construction, see [Appendix A.2](#).

<sup>38</sup>We only exclude dioceses for those electoral years in which they are vacant.

<sup>39</sup>Three years correspond to the 10th percentile of the distribution of the number of years a bishop stays in office (the median is 9 and the average is 11 years).

## A.5 Further results

In this Section we show a balancing exercise both on the entire sample and on the restricted sample following [Bertrand and Schoar \(2003\)](#) showing that there is no correlation between the likelihood of observing a bishop change and: (i) the electoral result of the DC in the previous elections (odd columns), and (ii) the electoral result of the DC in the next elections (even columns).

Table A2: Lags and Leads

| Dependent Variable | Probability to Switch |                  |                   |                  |                   |                   |                   |                   |
|--------------------|-----------------------|------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Sample             | Full                  | Full             | Full-Vac.         | Full-Vac.        | Restr.            | Restr.            | Restr.-Vac.       | Restr.-Vac.       |
|                    | (1)                   | (2)              | (3)               | (4)              | (5)               | (6)               | (7)               | (8)               |
| Lag sh. votes DC   | -0.278<br>(0.293)     |                  | -0.262<br>(0.318) |                  | -0.457<br>(0.334) |                   | -0.432<br>(0.364) |                   |
| Lead sh. votes DC  |                       | 0.053<br>(0.387) |                   | 0.053<br>(0.387) |                   | -0.052<br>(0.436) |                   | -0.052<br>(0.436) |
| Ln Electors        | ✓                     | ✓                | ✓                 | ✓                | ✓                 | ✓                 | ✓                 | ✓                 |
| Election Type FE   | ✓                     | ✓                | ✓                 | ✓                | ✓                 | ✓                 | ✓                 | ✓                 |
| Year FE            | ✓                     | ✓                | ✓                 | ✓                | ✓                 | ✓                 | ✓                 | ✓                 |
| Diocese FE         | ✓                     | ✓                | ✓                 | ✓                | ✓                 | ✓                 | ✓                 | ✓                 |
| Observations       | 3,826                 | 3,012            | 3,578             | 3,012            | 3,093             | 2,425             | 2,892             | 2,425             |
| Adj. R-Squared     | 0.051                 | 0.031            | 0.054             | 0.031            | 0.055             | 0.033             | 0.054             | 0.033             |

*Notes:* OLS estimates. Full sample of dioceses in columns 1-4, with the exclusion of electoral years in which the diocese was vacant in columns 3-4. Restricted sample of dioceses in columns 5-8, with the exclusion of electoral years in which the diocese was vacant in columns 7-8. The dependent variable is a dummy taking value 1 if the bishop in office is different from the bishop in office in the previous election year (within type of election, i.e., national, regional, and European). *Lag Share Votes DC* is the share of votes for the DC in the previous electoral year whereas *Lead Share Votes DC* is the share votes for the DC in the subsequent electoral year (within type of elections). All specifications control for baseline controls (the log number of electors and the log distance between the bishop's birthplace and the diocese headquarter), and election type, year and diocese fixed effects. Standard errors (clustered at the diocese level) in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## A.6 Further definitions and results on exogenous transitions

To compute the J statistic with the Wald test for the null hypothesis that the difference in the share votes to DC before and after each death is zero we follow [Jones and Olken \(2005\)](#) and compute

$$J = \frac{1}{Z} \sum_{i=1}^Z \frac{(\overline{POST}_z - \overline{PRE}_z)^2}{2\widehat{\sigma}_{\varepsilon i}^2/T}$$

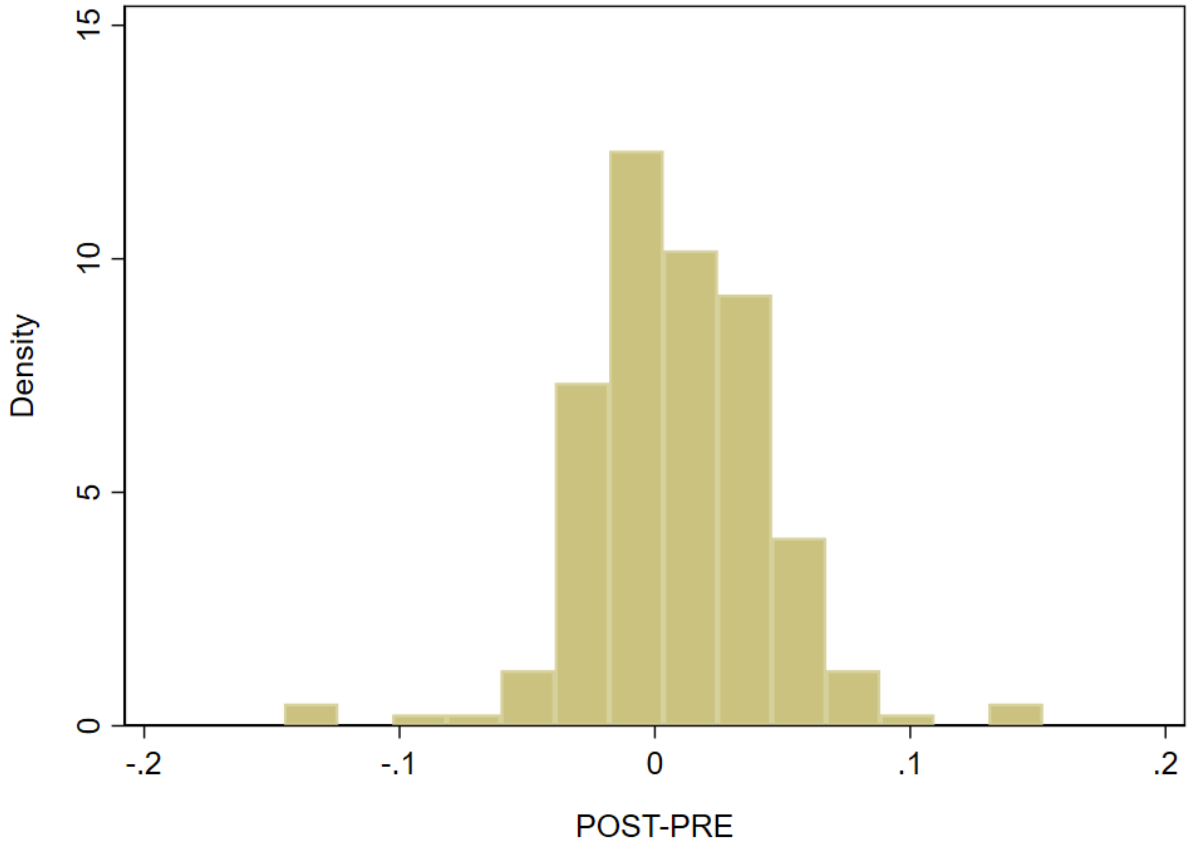
where  $Z$  is the number of bishop' deaths,  $\overline{POST}_z - \overline{PRE}_z$  captures the change in the share votes to DC around a bishop death in diocese  $i$ , and  $\widehat{\sigma}_{\varepsilon i}^2$  is an estimate of  $\sigma_{\varepsilon i}^2$  for diocese  $i$ . The test verifies the equality of the effect of two consecutive bishops before and after an exogenous transition in a particular diocese. The magnitude of the effect can be computed as

$$\theta = \sqrt{\frac{(J-1)\sigma_{\varepsilon}^2}{T\sigma_l^2(1-\rho)}}.$$

Normalizing  $\sigma_l$  to 1, setting  $\rho = 0$ , and substituting in the variance of the error process,  $\sigma_{\varepsilon}^2$ , provides a conservative estimate of how much one standard deviation in bishop quality affects the share votes to DC.



Figure A1: Distribution of POST-PRE coefficients estimates



Notes: Histogram of the distribution of the POST-PRE coefficient estimates from performing equation (2) on the full sample of dioceses and transitions due to death of the bishop in office. See Section 4.2 for further details on the empirical setting.

Based on the results in the first row of Table 3, the  $\theta$  estimate suggests that a one standard deviation increase in bishop quality is associated to a 2.1 percentage point increase in the share votes to the DC during the 5 years following an exogenous bishop transition. Note that, reassuringly, the histogram of the distribution of POST-PRE coefficient estimates of bishops that died while in office (see Figure A1) displays both negative and positive values and has a mean of 0.009 (very close to zero), suggesting that bishop's death are not systematically associated to, for instance, low bishop political influence due to high age.

### A.7 Mechanism: Details on the Measures of Bishops' Activism

To construct our measure of bishops' activism in different domains, we searched the historical archive of articles published in the national newspaper *Il corriere della Sera* during the 1948–1992 period.

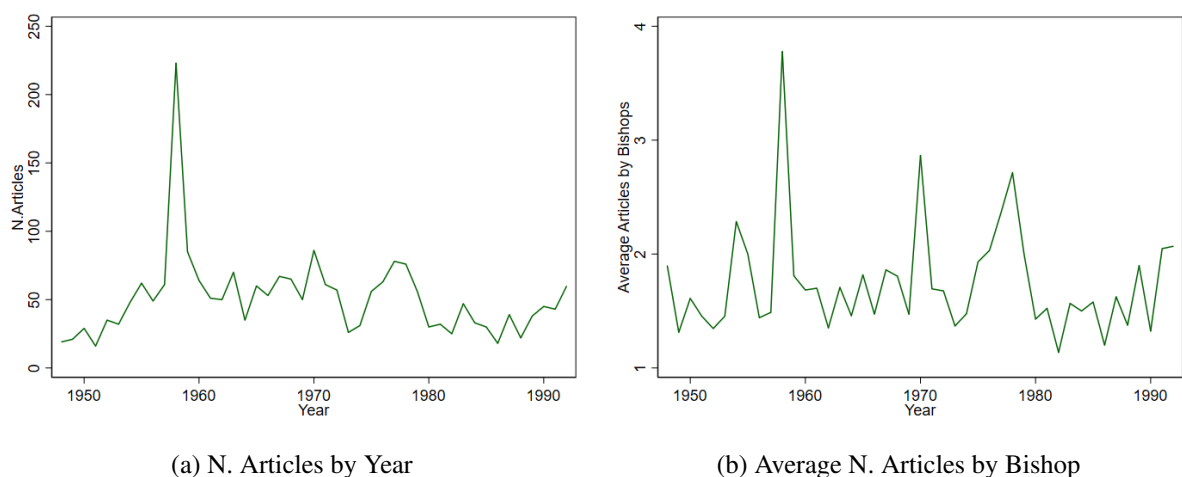
To identify articles mentioning bishops we use different combinations of the keywords “Monsignor,” “Mons,” or “Vescovo,” followed either by the name and lastname of the bishop, or by his lastname only. Note that for each search pattern the browser returns only the first entry, while more than one search pattern may appear within the same article. In the latter case, we combine all the text that can be related to the same

article. If an article mentions more than one bishop, it will appear more than once in the dataset, and each entry will be associated to a different bishop.

To avoid miscoding we manually checked all articles related to bishops with the same lastname, ambiguous lastnames (e.g., Agostino, that is also an Italian first name), or popular lastnames (e.g., Pirelli or Rossi). Finally, to avoid overreporting, we manually checked all articles for bishops holding non-bishop offices and dropped those articles related to the non-bishop mandates. For example, besides being bishop of Chieti and then of Loreto, Bishop Capovilla was Pope John XXIII’s personal secretary during the 1958–1963 period. After the Pope’s death, several articles reporting on Capovilla, were centred on the recently-died Pope—and, thus, reporting on Capovilla’s role as Pope’s personal secretary. These types of articles are excluded from our dataset.

Based on the sample of bishops from column 2 of Table 1, we find that 54% of them are mentioned in the *Corriere della Sera*. Panel a of Figure A2 presents the yearly evolution of the number of articles mentioning bishops. The time series shows a peak in correspondence of 1958, when the new pope had to be elected, and the Bishop Pietro Fiordelli was condemned for calling as “public concubines” and “public sinners” a couple that decided to only have a civil marriage. On average, a bishop appears in slightly more than one article.

Figure A2: Time Series of Number of Bishop-Related News and Average Number of Articles per Bishops



Notes: Yearly number of articles regarding bishops in panel (a) and yearly number of bishops cited in the news in panel (b). The sample comprises all bishops included in column 2 of Table 1. Source: *Corriere della Sera* and own elaborations.

For each article including the search pattern, the newspaper browser reports the title and a few words before and after our keywords. We combine these two pieces of information into a single document (an “extended title”) and conduct the text analysis on the corpus of all these documents.<sup>40</sup> To do this we exploit the supervised Latent Dirichlet Allocation (sLDA) algorithm (Mcauliffe and Blei, 2007).

The sLDA is a supervised machine-learning algorithm that, given a corpus of documents and an associated response variable, aims to detect latent topics that are predictive of the response. In our case, the response variable will be the estimated bishop effects. We prefer employing the sLDA rather than an unsu-

<sup>40</sup>We follow this procedure because (as of July 2022) it was not possible to download the full text of all articles.

pervised LDA, because the performance of the former algorithm is superior when the ultimate goal of the exercise is to infer latent topics predictive of a variable external to the corpus of documents (for more details see the discussion in [Mcauliffe and Blei, 2007](#)).

We allow the algorithm to classify articles in two topics, based on a  $\alpha$  parameter of 50/2 (the standard value when two topics are allowed), and a  $\eta$  parameter of 0.002.<sup>41</sup> Given the relatively small size of the available vocabulary, we chose this value of  $\eta$  to have a more defined classification of (words and) documents to topics. Robustness checks using lower or higher levels of  $\eta$  return similar results.

As standard in text-analysis exercises, we preprocessed the text to remove punctuation, numbers, and stopwords. Moreover, to render the text more general, we removed the Italian terms for “bishop,” “archbishop,” “cardinal,” and “pope,” as well as all bishops’ name and lastname included in the search pattern, and all names of dioceses and municipalities. Finally, we reduced the remaining words to their Italian stems. For instance, “cattolico” (the attribute “catholic”) and “cattolicesimo” (the noun “catholicism”) were all replaced with “cattol” in the analysis. We apply also the tf-idf filter to exclude most and least common words. The algorithm averages the word-topic probabilities and assigns to each document a weight that defines its belonging to each topic. We repeat the algorithm 100 times and then consider the average word-topic probability and document-topic weight to obtain the final classification of articles in two topics.

Figure A3 shows the two topics identified by the sLDA with the related 10 terms with the highest weight, while Figure A4 presents the wordclouds. A brief description of the two topics follows. We conclude this section by discussing how we computed the topic-related variables for the analysis of their correlation with the estimated bishop fixed effects reported in Table 4.

**Topic “Public engagement”.** Within the top terms identifying the first topic we read: “celebrate,” “death,” “John,” “diocese,” “saint,” “mass,” “priest,” “italy,” “mayor,” and “Montini.” These keywords refer to articles mentioning bishops for their celebration of masses (for deaths of important people, saints, and festivals) or their participation to events involving mayors and public authorities. In fact, the wordcloud in panel a of Figure A4 also includes keywords such as “inauguration,” “blessing,” and “funerals.” We report below some examples of titles and quotes from the articles that mostly represent this topic.

- 30 Jun 1960 – [Tambroni inaugura a Bergamo la «Cittadella» e due Musei](#) – generale, mons. Morstabilini, ha...

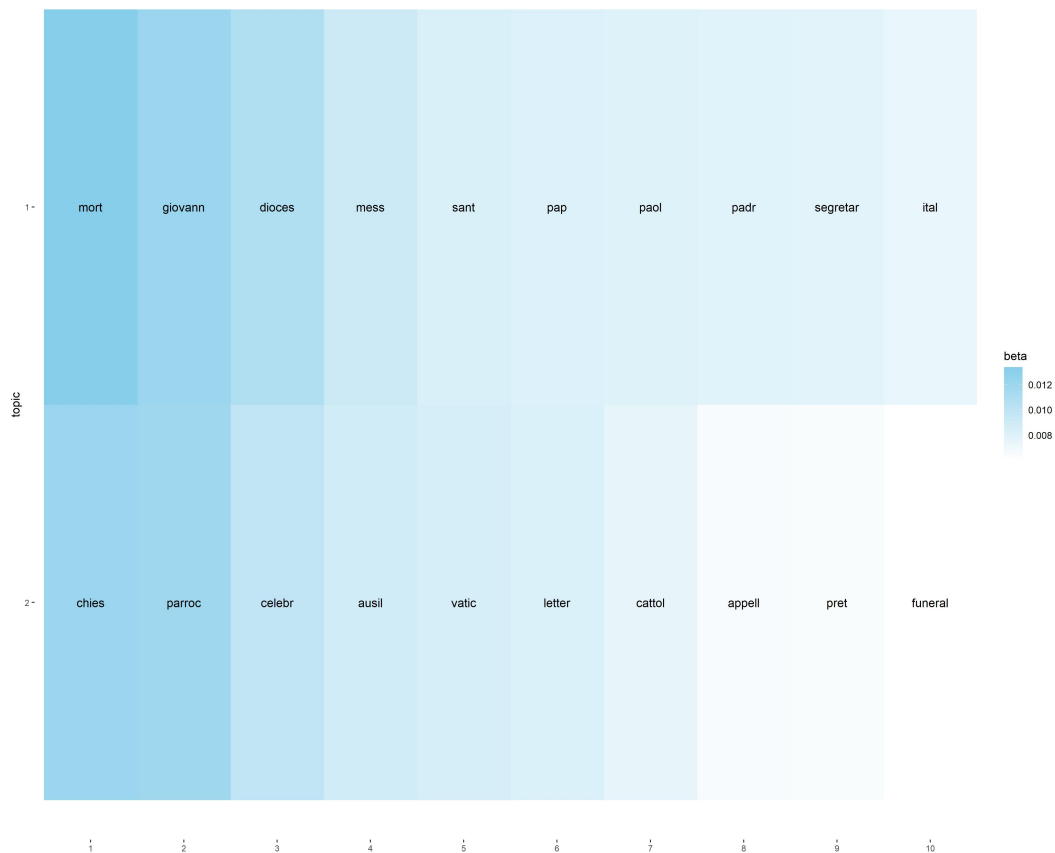
*English translation of extended title:* Tambroni inaugurates the “Citadel” and two museums in Bergamo – General, Mons. Morstabilini, has...

*Translated excerpt from article:* “Received on his arrival in the city by the Bergamo parliamentarians and by the civil, military and religious authorities [the Prime Minister] Tambroni reached the ‘Citadel’

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<sup>41</sup>The  $\alpha$  parameter controls the mixture of topics for any given document, lower values imply that documents will have less of a mixture of topics and viceversa. The  $\eta$  hyperparameter controls the distribution of words per topic. Lower values of  $\eta$  imply that the topics will be characterized by fewer words and viceversa.

Figure A3: Top Terms of Topics of the Supervised LDA



Notes: The matrix displays the 10 keywords with highest weight in defining the 2 topics of the supervised LDA. A lighter color is assigned to keywords with lower weight. Source: *Corriere della Sera* and own elaborations.

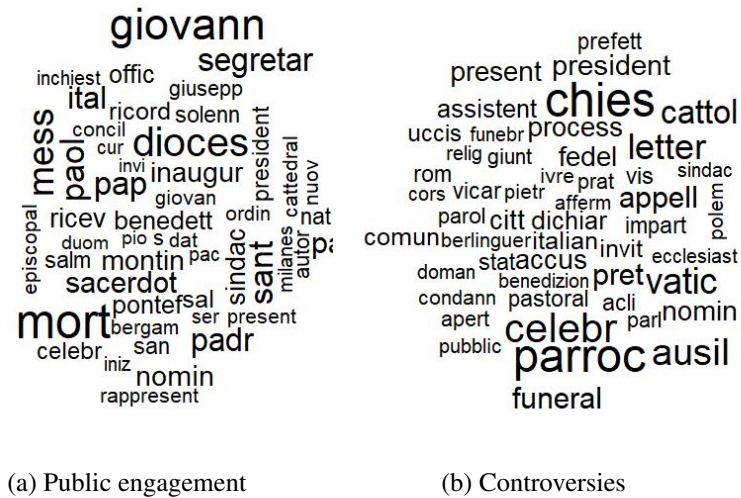
located in the heart of ancient Bergamo where the provicar general, Mons. Morstabillini blessed the new center and the adjoining museums that the Prime Minister subsequently inaugurated.”

- 27 Apr 1989 – [Il naso tappato dei vescovi per le elezioni](#) – Monsignor Caporello...

*English translation of extended title:* The bishops’ noses plugged for the elections – Monsignor Caporello...

*Translated excerpt from article:* “Punctual as the dovetail of St. Benedict the bishops return to invite Catholics to vote DC in the upcoming European elections. The Lombard CEI, gathered around Cardinal Martini, has prepared a demanding document ‘Educating to socio-political participation,’ in which Christians are urged in order to promote the singli ‘values’ and to safeguard their ‘unity,’ not to act ‘divided and dispersed.’ [...] Monsignor Caporello, bishop of Mantua and former secretary of the CEI, called for ethical reoxygenation. Rather than reoxygenation, the conclusion of the document makes us think of Indro Montanelli’s ‘let’s plug our noses.’ Which is very sad for the successors of the apostles.”

Figure A4: Wordclouds of Topics of the Supervised LDA



Notes: In each topic, larger words are most recurrent. Source: *Corriere della Sera* and own elaborations.

- 05 Aug 1968 – [Pellegrinaggio al Grappa](#) – Padova, monsignor Bortignon...

*English translation of extended title:* Pilgrimage to mount Grappa – Padua, Monsignor Bortignon...

*Translated excerpt from article:* “The bishop of Padua. Monsignor Bortignon celebrated Mass at the camp in suffrage of the fallen. During the ceremony, a patrol of Air Force jets repeatedly flew low over the summit.”

- 07 Sep 1950 – [Il mercoledì della fratellanza](#) – monsignor Agostini, Patriarca...

*English translation of extended title:* The Wednesday of Brotherhood – Monsignor Agostini, Patriarch...

*Translated excerpt from article:* “In the name of fraternity, today our bonds with the rest of the human race are working as never before; Each of us has a piece of sky within us. This blue Wednesday began with the ‘Mass of cinema’ that Monsignor Agostini, Patriarch of Venice, celebrated this morning in San Marco, for the benefit of the filmmakers gathered here for the exhibition and for the congresses: and ended tonight with the screening of a marzipan film, *First Communion* by Alessandro Blasetti.”

- 29 Dec 1958 – [La «Casa della Gioventù» inaugurata a Lodi](#) – vescovo di Lodi mons. Benedetti, dal sindaco comm...

*English translation of extended title:* The “House of Youth” inaugurated in Lodi – the bishop of Lodi mons. Benedetti, by the mayor comm...

*Translated excerpt from article:* “Received by the prefect dr. Vicari, by the bishop of Lodi mons. Benedetti, by the mayor comm. Vaccari and other authorities, the archbishop immediately went, between two wings of cheering people, to the sanctuary of Santa Maria Ausiliatrice, whence he moved a procession that escorted the urn of the young martyr San Felicissimo, which will henceforth be kept

in the chapel of the new House.”

- 28 Jan 1960 – [INAUGURATA DA TOGNI l’autostrada Ceva-Savona](#) – ministro, il vescovo di... , ha impartito la benedizione...

*English translation of extended title:* INAUGURATED BY TOGNI the Ceva-Savona motorway – minister, the bishop of... , imparted the blessing...

*Translated excerpt from article:* “At the end of minister Togni’s speech, the bishop of Mondovì, mgr. Briacca, imparted the blessing and then Togni himself cut the inaugural ribbon. Immediately afterwards, at about 4.00 pm, a very long line of cars, with all the authorities inside, took the motorway and headed towards Savona, which they reached after about forty minutes.”

- 18 July 1960 – [L’autostrada Torino-Ivrea inaugurata dal ministro Togni](#) – il cardinale arcivescovo...

*English translation of extended title:* The Turin-Ivrea motorway inaugurated by Minister Togni – the cardinal archbishop...

*Translated excerpt from article:* “Immediately after the minister [of public works Togni], who was welcomed by a large group of personalities and technicians, the bishop of Ivrea, mgr. Mensa, and the cardinal archbishop of Turin, Maurilio Fossati, came. [...] ‘This motorway - Togni said in the course of his speech - is a gateway to Italy and a gateway to the whole of Italy and as such it can be defined as of national utility’.”

- 23 Oct 1960 – [Inaugurato in Sicilia un nuovo complesso industriale](#) – mons. ha poi benedetto il complesso industriale...

*English translation of extended title:* A new industrial complex inaugurated in Sicily – the bishop then blessed the industrial complex...

*Translated excerpt from article:* ” “‘My government –said [Benedetto Majorana della Nicchiara, DC governor of Sicily]– has kept the commitment it assumed when it began its activity and has thus favored both private and public initiative: the inauguration of this industrial complex and the di Gela are the clearest proof of this.’ The Archbishop of Argigento, Monsignor Peruzzo, then blessed the industrial complex.”

- 11 Jul 1976 – [Occupati gli stabilimenti della Bloch Martedì un incontro con Donat Cattin](#) – lavoratori l’arcivescovo, monsignor (che celebrerà la messa nella fabbrica occupata), l’altro giorno c’è stato il sindaco Spaccinl..

*English translation of extended title:* Bloch factories occupied. Tuesday there will be a meeting with Donat Cattin... – workers the archbishop, monsignor (who will celebrate a mass in the occupied factory), the other day the mayor Spaccinl visited...

*Translated excerpt from article:* “This morning the archbishop, Monsignor Cocolin (who will celebrate a mass in the occupied factory) will be with the workers, the other day the mayor Spaccini was there. The interest is alive but the uncertainty is serious.”

- 10 Sep 1962 – [Colombo inaugura a Bari la XXVI Fiera del Levante](#) – Bari, monsignor Nicodemo, ha...

*English translation of extended title:* Colombo inaugurates the XXVI Fiera del Levante in Bari – Bari, Monsignor Nicodemo, has...

*Translated excerpt from article:* “After Minister Colombo’s speech, the Archbishop of Bari, Monsignor Nicodemo, officiated the rite of blessing. The vice-president of the council Piccioni and the ministers Colombo and Codacci Pisanelli then made the traditional visit to the district of the event.”

- 15 Jul 1963 – [Celebrata in valle Stura la festa della montagna](#) – di Cuneo, monsignor Tonetti...

*English translation of extended title:* Celebrated in the Stura valley the festival of the mountain – [the bishop]of Cuneo, Monsignor Tonetti...

*Translated excerpt from article:* “In a vast plateau, present a few thousand people gathered from Piedmont, Lombardy and Liguria, the archbishop of Cuneo, Monsignor Tonetti, celebrated Mass at the camp, after addressing words of homage to the mayor of Demonte, Abellonio, the lawyer Oberto, vice-president of the Union of municipalities and authorities of the mountains, the lawyer Andreis, president of the provincial tourism authority. The Minister of Agriculture and Forestry, Mr Mattarella, then gave the official speech.”

**Topic “Controversies”.** Within the top terms identifying the second topic we find: “parish priest,” “church,” “nomination,” “vatican,” “president,” “letter,” “appeal,” “present,” “process,” and “trial.” These keywords point to the involvement of bishops into judicial controversies, or matters concerning parish priests and the church in general. In the wordcloud in panel b of Figure A4 there are also references to the communist party (“pci,” “comun”) and to its secretary (“Berlinguer”). We report below some examples of titles and quotes from the articles that mostly represent this topic.

- 13 May 1984 – [Processo canonico a don Baget Bozzo](#) – resipiscenze, il vescovo di Isernia, monsignor Palmerini.

*English translation of extended title:* Canonical trial on the priest Baget Bozzo – awareness of mistake, the bishop of Isernia, monsignor Palmerini

*Translated excerpt from article:* “The priest Giovanni Baget Bozzo, theologian, writer and journalist, will end up in ecclesiastical court for having accepted the candidacy for the European Parliament on the PSI lists. [...] The suspension ‘a divinis’ was imposed on him, after four months, in the hope of reprieve, the bishop of Isernia, Monsignor Palmerini.”

- 27 Nov 1977 – [Anche un sacerdote ha abbandonato la chiesa con i fedeli contrari alla lettera del vescovo per il SI](#) – quando i celebranti hanno cominciato a leggere la notificazione del vescovo sul referendum. mantovani, che si sono...

*English translation of extended title:* Even a priest left the church with the faithful opposed to the



bishop's letter for the YES – when the celebrants began to read the bishop's notification on the referendum. mantuans, who are...

*Translated excerpt from article:* “Among the demonstrators there was also a priest, Don Sandro Monicelli, 27 years old, former curate of Cerese and now a working priest. 'I left mass - he declared - because I didn't feel like continuing a gesture that signifies communion at a time when this communion no longer existed. An attempt was made to capture votes from an exquisitely liturgical act such as the celebration of the word of God, citing faith as a motivation, going against freedom of conscience and fundamental human rights'.”

- 27 Nov 1977 – [Il consiglio dei vescovi ignora le lettere Berlinguer-Bettazzi](#) – lettera di Berlinguer a monsignor Bettazzi...

*English translation of extended title:* The bishops' council ignores the letters Berlinguer-Bettazzi – a letter from Berlinguer to bishop Bettazzi

*Translated excerpt from article:* “We do not believe that the attitude of Christians can change in the face of movements which remain substantially linked to ideologies incompatible with the Gospel'. This is the very concise sentence, contained in the press release of the permanent council of the Italian episcopal conference, with which the Italian bishops intervene in the debate sparked by Berlinguer's letter to Monsignor Bettazzi.”

- 10 August 1976 – [Il vescovo frusta, i fedeli applaudono](#) – monsignor che nel 1988 tuonò, accuse circostanziate perché fra i 30 consiglieri...

*English translation of extended title:* The bishop whips, the faithful applaud – monsignor who thundered in 1988, limited accusations because among the 30 councilors...

*Translated excerpt from article:* “The bishop whips the mayor and aldermen, godfathers and powerful personalities of Cefalù from the pulpit and the people applaud for a quarter of an hour, clapping their hands with a thousand eyes fixed on the administrators rebuked by Monsignor Rosario Mazzola: 'In our political situation private interests and infighting to the death shamelessly emerge. [...] The politicians at the ceremony listened to the homily with bowed heads.'”

- 09 Aug 1990 – [Il vescovo di Nuoro: con due milioni si assolda un sicario](#) – dal vescovo Giovanni Melis durante l'omelia pronunciata ai...

*English translation of extended title:* The bishop of Nuoro: with 2 millions you can hire an assassin – from bishop Giovanni Melis during the homily pronounced at...

*Translated excerpt from article:* “To hire a killer in the Nuoro area, 2-3 million are enough. By now people kill without justification and this is the sign of the utmost abjection: these are some of the phrases spoken by Bishop Giovanni Melis during the homily delivered at the funeral of the bartender Mauro Moreddu, assassinated on Sunday in the countryside of the capital of Barbagia.”

- 23 Oct 1958 – [Il Vescovo di Prato in appello oggi alla Corte di Firenze](#) – a mons. Pietro Fiordelli la



pena di 40 mila lire di multa...

*English translation of extended title:* The bishop of Prato at the appeal today at the Florence court – to mons. Pietro Fiordelli the sanction of 40,000 lire

*Translated excerpt from article:* “The appeal process against the bishop of Prato will open tomorrow morning [...] The magistrate should illustrate the complex precedents of the current judgment, from the now famous episode of the civil marriage of the Bellandi spouses, on August 12, 1956, up to the sentence of March 1, 1958 that inflicted on Mons. Pietro Fiordelli the penalty of 40 thousand lire fine.”

- 09 Dec 1991 – [Appello anti-criminalità dell’arcivescovo di Napoli](#) – Monsignor Giordano ha anche...

*English translation of extended title:* Appeal against criminals by the archbishop of Naples – Monsignor Giordano has also...

*Translated excerpt from article:* “The archbishop of Naples, Cardinal Michele Giordano, took the opportunity of the Immaculate Conception to remind his city that ‘spiritual emptiness is a cancer that spreads metastases not only in degraded ghettos, but also in places where political, economic and administrative power is managed’. He added: ‘To this inner emptiness is attributable the social and moral malaise widespread in the Neapolitan territory that distances so many men from God and leads them to trample on the dignity of others. Hence the urgency of the new evangelization. It is an epochal undertaking, in which I rely on families and Christian youth for a recovery of legality and the common good.’ ”

- 09 Jun 1990 – [Discoteche L’appello del vescovo Monsignor Tonini](#) – monsignor Tonini...

*English translation of extended title:* Discos, the appeal of bishop Tonini – Bishop Tonini...

*Translated excerpt from article:* “ ‘They play with the lives of young people for twenty denarii. It’s not enough to close the discos at two in the morning or leave the decision on times to the individual municipalities’. The Archbishop of Ravenna, Monsignor Ersilio Tonini, writes this in a note that will appear in the next issue of the Catholic magazine ‘Perspectives in the World’.”

**Computing the topic-related variables for the regression analysis.** The sLDA algorithm assigns to each document a set of topic-specific weights (called “gamma”) that define to what extent the document belongs to each of the topics (the weights sum to 1). We assign each document to the topic that displays the highest gamma and use this information to build 3 alternative bishop-specific measures of activism, that we relate to the estimated bishop effect.<sup>42</sup>

First, looking at the extensive margin of activity in the two topics, we build two dummy variables taking the value 1 if the bishop was mentioned in at least 1 document classified in the two topics, respectively. Second, focusing on the intensive margin, for each topic we build a variable tracking the number of documents classified in that topic. Third, we compute the share of documents that could be classified in each topic over

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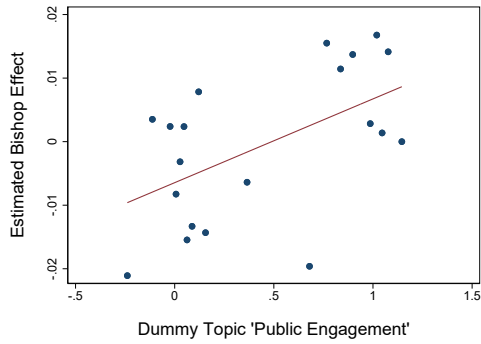
<sup>42</sup>We drop documents where both topics have gamma equal to one half.

the total number of documents mentioning the bishop.

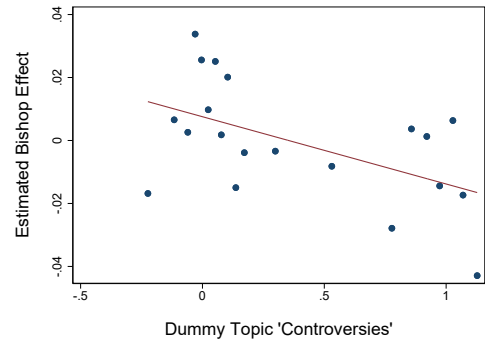
Figure A5 shows the binscatter of the correlation between the bishop fixed effects and our 3 measures of bishop's involvement into public events (left-hand side) and controversies (right-hand side), controlling for connected sets and region of birth fixed effects, the year of birth, and a dummy for bishops born abroad (as in specification 1 of Table 4). Independently on how we computed the involvement of bishops in the two types of activities, we find that the more bishops were involved in public activities (celebration of masses, inaugurations, etc.) the higher is the value of the estimated fixed effect, while bishops more involved in controversies with civilians or political authorities display a lower value of the estimated bishop effect.

Finally, Table A5 replicates estimates of Table 4 using only the subsample of bishops that are ever mentioned in the newspaper articles.

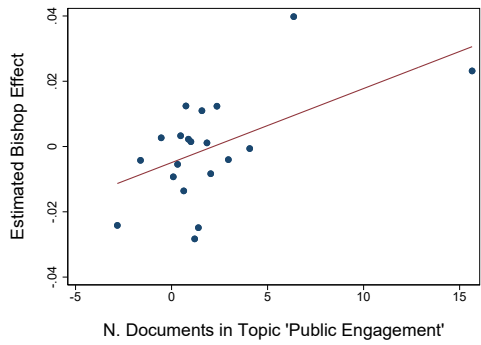
Figure A5: Correlation between the estimated bishop FE and different measures of bishop activism



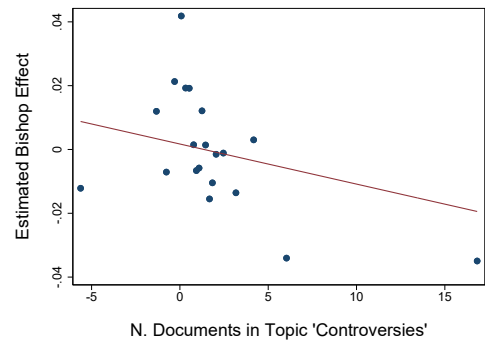
(a) Dummy Topic "Public Engagement"



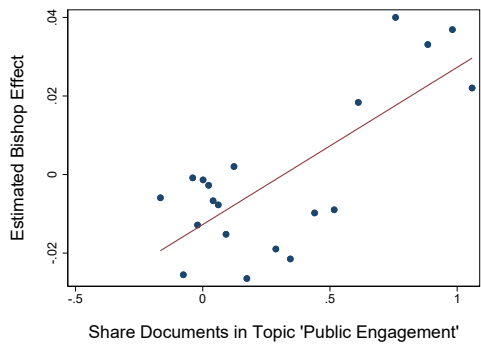
(b) Dummy Topic "Controversies"



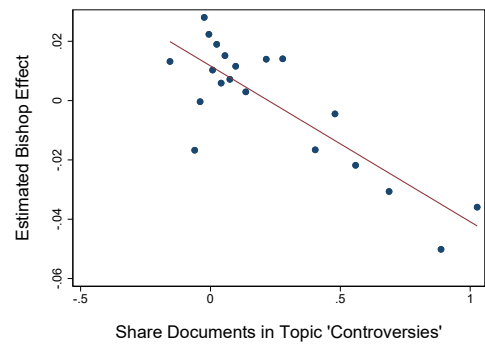
(c) N. Documents in Topic "Public Engagement"



(d) N. Documents in Topic "Controversies"



(e) Share Documents in Topic "Public Engagement"



(f) Share Documents in Topic "Controversies"

*Notes:* Binscatters of the correlation between the estimated bishop fixed effect from column 2 of Table 1 and different measures of bishop engagement into public events (left-hand side) and controversies (right-hand side), controlling for connected sets and region of birth fixed effects, the year of birth, and a dummy for bishops born abroad. Each dot represents about 30 bishops. Source: *Corriere della Sera* and own elaborations.

Table A3: Correlates of Bishop Fixed Effects - Excluding Bishops with No Articles

| Dependent Variable                 | Estimated Bishop FE |                     |                     |                     |                      |                      |                     |
|------------------------------------|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|---------------------|
| Activism (Documents)               |                     |                     |                     |                     | Dummy                | Number               | Share               |
|                                    | (1)                 | (2)                 | (3)                 | (4)                 | (5)                  | (6)                  | (7)                 |
| Year Born                          | -0.000<br>(0.000)   | -0.000<br>(0.000)   | -0.000<br>(0.000)   | -0.000<br>(0.000)   | -0.000<br>(0.000)    | -0.000<br>(0.000)    | 0.000<br>(0.000)    |
| Foreign                            | 0.052<br>(0.046)    | 0.062<br>(0.048)    | 0.063<br>(0.045)    | 0.063<br>(0.045)    | 0.058<br>(0.045)     | 0.045<br>(0.042)     | 0.044<br>(0.036)    |
| DC Vote Share in Birthplace (1948) | 0.074***<br>(0.025) | 0.078***<br>(0.025) | 0.076***<br>(0.024) | 0.076***<br>(0.024) | 0.067***<br>(0.023)  | 0.067***<br>(0.021)  | 0.054**<br>(0.021)  |
| Age Ordained Priest                |                     | 0.001<br>(0.003)    | 0.001<br>(0.003)    | 0.001<br>(0.003)    | 0.002<br>(0.003)     | -0.001<br>(0.003)    | 0.001<br>(0.003)    |
| Religious Order                    |                     | -0.030**<br>(0.013) | -0.029**<br>(0.014) | -0.030**<br>(0.014) | -0.021<br>(0.014)    | -0.031**<br>(0.013)  | -0.018<br>(0.013)   |
| Participated CVII                  |                     | -0.006<br>(0.008)   | -0.005<br>(0.008)   | -0.005<br>(0.008)   | -0.004<br>(0.008)    | -0.003<br>(0.008)    | -0.003<br>(0.007)   |
| Pope-related offices               |                     |                     | 0.081***<br>(0.014) | 0.081***<br>(0.014) | 0.078***<br>(0.011)  | -0.034<br>(0.056)    | 0.058***<br>(0.014) |
| CEI President/Secretary            |                     |                     | -0.010<br>(0.021)   | -0.011<br>(0.021)   | -0.011<br>(0.019)    | -0.010<br>(0.019)    | -0.010<br>(0.018)   |
| Other Offices                      |                     |                     | 0.002<br>(0.014)    | 0.002<br>(0.014)    | 0.000<br>(0.013)     | 0.003<br>(0.013)     | -0.001<br>(0.012)   |
| Catholic Action                    |                     |                     |                     | 0.004<br>(0.023)    | 0.010<br>(0.022)     | -0.004<br>(0.023)    | 0.003<br>(0.020)    |
| Topic Public Engagement            |                     |                     |                     |                     | 0.032***<br>(0.011)  | 0.004***<br>(0.001)  | 0.086***<br>(0.011) |
| Topic Controversies                |                     |                     |                     |                     | -0.035***<br>(0.009) | -0.004***<br>(0.001) |                     |
| Region of Birth                    | ✓                   | ✓                   | ✓                   | ✓                   | ✓                    | ✓                    | ✓                   |
| Connected Sets                     | ✓                   | ✓                   | ✓                   | ✓                   | ✓                    | ✓                    | ✓                   |
| Observations                       | 325                 | 325                 | 325                 | 325                 | 325                  | 325                  | 325                 |
| R-Squared                          | 0.130               | 0.134               | 0.141               | 0.138               | 0.238                | 0.246                | 0.332               |

Notes: OLS estimates. Observations are the estimated bishop fixed effects from column 2 of Table 1 for bishops that are ever mentioned in the newspaper articles. All specifications control for the bishop's year of birth, a dummy taking the value 1 if the bishop was born abroad, dummy variables tracking the bishop's region of birth if born in Italy, the DC share votes in 1948 in the bishop's municipality of birth, and connected sets fixed effects. Column 2 adds the age or ordination to priesthood, a dummy taking value 1 if the bishop was part of a religious order, and a dummy taking the value 1 if the bishop participated to the Second Vatican Council. Column 3 also controls for *Pope-related offices*, that is a dummy taking value 1 if the bishop collaborated with the Pope as his personal secretary, secretary of State, or head of Vatican press, a dummy taking value 1 if the bishop has ever been the president or secretary of the Italian Episcopal Conference (CEI), and a dummy tracking the bishop's appointment to any other non-bishop office within the Church. Column 4 includes a dummy taking value 1 if the bishop has ever been the president of the lay association *Catholic Action*. Columns 5-7 add to the specification two variables that define the bishop's activity in two domains (topics): participation to public events and controversies with civilians and public authorities, based on the text analysis of newspaper articles mentioning bishops. For each topic the bishop involvement is defined based on: a dummy taking value 1 if the bishop has ever been mentioned by a document related to either topic in column 5, the number of documents in column 6, and the share of documents in column 7. See the text and the Appendix for details on all variables. Robust standard errors in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1.