The Catholic Church and Redistributive Conflict: The Effects of John Paul II's Rollback of Progressivism in Brazil *

Monica Martinez-Bravo[†]

Daniela Solá ‡

Guadalupe Tuñón§

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Abstract

Papal transitions can lead to shifts in doctrinal emphasis within domestic churches. This paper examines the impact of such shifts by analyzing the Catholic Church's rollback of progressivism in Latin America following Pope John Paul II's 1978 appointment, which curbed the influence of progressive priests and bishops who had actively promoted redistributive agendas and supported numerous redistribution movements. Focusing on Brazil, where progressives played a central role in the landless movement, we leverage the staggered replacement of progressive bishops with conservative successors upon reaching retirement age, to study the effect of this rollback on land conflict. We find that the removal of progressive leaders significantly reduced land invasions, primarily by curtailing new conflicts under conservative bishops. This effect is most pronounced in areas where the Church itself was a major landholder, suggesting that conservative bishops acted at least partially to preserve institutional interests by limiting redistribution. These findings highlight how shifts in Church leadership can shape the conditions under which redistributive movements emerge or are suppressed, offering broader insights into the role of religious institutions in social conflict.

Keywords: Leadership, social conflicts, Catholic Church.

JEL Codes: D74, N36, P48, Z12.

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[†]Monica Martinez-Bravo, Generalitat de Catalunya and CEMFI. Email: mmb@cemfi.es

[‡]Daniela Solá, Universidad Carlos III de Madrid. Email: dsola@eco.uc3m.es

[§]Guadalupe Tuñón, Princeton University. Email: tunon@princeton.edu

1 Introduction

A growing literature in economics has examined the multiple ways in which religion affects socio-economic outcomes. Scholars have evaluated the effects on fertility decisions (Bassi and Rasul, 2017), household financial decisions (Renneboog and Spaenjers, 2012); literacy rates (Valencia Caicedo, 2019); economic growth (Campante and Yanagizawa-Drott, 2015); tolerance (Clingingsmith et al., 2009); and voting behavior (Gerber et al., 2016; Solá, 2025). Most of these studies conceptualize religiosity as a fixed set of beliefs and preferences among adherents of a given religion.

Yet, religion is also characterized by complex institutions formed by a diverse set of religious leaders, organizational structures, and extensive networks of clergy and lay members. As a result, an individual's on-the-ground religious experience is mediated by interactions with these various elements. The actions and priorities of religious leaders, the reach of religious organizations, and the activities of lay communities can shape how religion impacts socio-economic outcomes.

In this paper we study the impact of the Catholic Church, one of the oldest and most influential institutions in human history, on social movements. In particular, we investigate how large doctrinal changes at the top of the Church hierarchy, triggered by the appointment of John Paul II (JPII) as pope in 1978, affected the internal organization of the Church and ultimately the intensity of social conflict at the grassroots level.

The historical literature has argued that during the 1960s and 1970s the Catholic Church in Latin America was one of the most progressive churches in its history. The Papacies of John XXIII (1958-1963) and Paul VI (1963-1978) marked the progressive period of the Church in which the redistribution of wealth and the concern of well-being of the poor were at the core of the doctrine of the Church. This changed with the appointment of JPII in 1978. JPII made a clear and explicit effort to dissuade the Catholic Church from assuming an active role in addressing inequality, particularly in Latin America, and viewed the limitation of the Church's political engagement as one of his foremost objectives.

This change had large implications in the context of Brazil, where the progressive Church had been strongly committed to improving the economic welfare of the poor. Brazil has one of the highest levels of land inequality in the world, with rural poverty and informal land ownership being longstanding issues. These problems rapidly became a focal concern for progressives within the Church. Progressive Catholic leaders were actively involved in the landless movement - a redistributive conflict in which poor and landless peasants invaded large landholdings to force land redistribution. At the local level, progressive bishops, priests, and nuns played a crucial role in

organizing groups of landless peasants to advocate for their rights.

We collected data on all bishops in office in Brazil from 1978 to 2015, including their names, nationality, appointment dates, birth dates, vacancy dates, and reasons for the vacancy. We also collected detailed data on the identity of all priests who served in Brazil between 1965 and 1997. To do this, we digitized and analyzed records found in seven editions of the Brazilian Catholic yearbooks published between 1965 and 1997. We combine this with data on conflicts at the municipality-year level. Specifically, we have information at the municipality level from 1965 to 2000 on the number of conflicts distinguished between different types, such as land disputes, labor disputes, and conflicts related to natural resources.

To study the causal effect of the doctrinal change of the Catholic Church on social conflicts, we exploit the papal succession alongside the institutional rules governing bishops' tenure. While the pope exercises ultimate authority over Catholics throughout the world, he entrusts his leadership to a bishop in each diocese, the main administrative unit within the Catholic Church. Within their dioceses, bishops have autonomy over religious policy and are responsible for governing. For instance, bishops have complete power over the assignment of priests to parishes. A key element of our setting is that bishops cannot be dismissed, and their vacancy only arises upon retirement at the age of 75 or death. The main way through which a pope can extend his influence is by appointing bishops once a vacancy arises.

We build on the framework developed by Tuñón (2022) and exploit the staggered replacement of pre-JPII bishops for bishops appointed by JPII. While most bishops abide by the retirement-at-75 rule, there are a few exceptions. To strengthen our empirical strategy, we will exploit the *expected timing* of replacement of a pre-JPII bishop in each dioceses as the main explanatory variable of interest. We define expected replacement timing as the year in which the bishop serving as of October 1978—when JPII assumed the papacy—either reached the mandatory retirement age of 75 or passed away, whichever occurred first. Given the staggered nature of the treatment, we examine the effects of the staggered replacement of pre-JPII bishops using a Difference-in-Differences approach that accounts for heterogeneous treatment timing.

First, we show that the retirement age of the pre-JPII bishop is a strong predictor of the timing of JPII bishop appointments. Specifically, the results indicate that, on average, the probability of a bishop being appointed by JPII increases by 52 percentage points when the pre-JPII bishop reaches retirement age or passes away. Second, we find that the when a pre-JPII bishop reaches retirement age or passes away, the number of active land conflicts and new land conflicts decreases significantly. Then, by combining these results, we find that the appointment of a bishop by John Paul II reduced the active land conflicts in Brazil by 17% between 1975 and 1994. These results

indicate that the removal of progressive religious leaders halted the land invasion movement in Brazil. Furthermore, we find no significant effect on conflicts related to other disputes, such as labor or natural resources disputes.

We also explore the dynamics of these effects using an event study design. Our findings show no evidence that active land conflicts were declining prior to the expected replacement year of a pre-JPII bishop, supporting the parallel trends assumption. This is expected, given the highly unpredictable timing of papal appointments. The event study further reveals a significant negative effect in the years leading up to the expected replacement of a pre-JPII bishop, which aligns with our main results.

Next, we examine whether the presence of a parish within a municipality influences our primary findings. Parishes function as a fundamental local units of the Catholic Church, serving as centers for religious activity, community engagement, and social mobilization. By 1977, 27% of municipalities lacked a parish within their boundaries, reflecting a weaker Catholic Church presence in these areas. The findings indicate that the effects of the expected replacement of a pre-JPII bishop on land conflicts are primarily concentrated in municipalities with at least one parish. Our findings suggest that the Church's institutional presence played a crucial role in mediating the impact of pre-John Paul II bishop turnover on land conflicts, likely by strengthening local organizational capacity.

Next, we investigate whether Church land ownership influenced our findings. By 1975, approximately 27% of municipalities in our sample contained land owned by religious institutions. The presence of Church-owned land may have shaped bishops' incentives to either support or suppress disputes. Our analysis reveals that the effect of a pre-John Paul II bishop's replacement on active and emerging land conflicts is significantly stronger in municipalities where the Church was a major landholder. This finding suggests that bishops appointed under JPII acted, at least in part, to protect institutional interests by limiting redistribution.

The present empirical analysis is a first step that we plan to expand on several dimensions on future versions of this paper. First, we have collected detailed data at a much finer geographic level: the parish. In particular, we have digitized data on the identity of all priests in Brazil between 1965 and 1997. We plan to investigate whether the estimated effects are mediated by turnover at the priest level, which may follow the change in bishop. Furthermore, we also plan to extend the analysis beyond conflict to examine possible effects on preferences and other outcomes.

Our paper contributes to the existing literature on leadership, which has studied the influence of leaders on a range of outcomes, including social norms, identity, governance, and state perfor-

mance. For instance, Jones and Olken (2005) and Besley et al. (2011) find that leaders matter for economic growth. Assouad (2020) studies the role of individual leaders in constructing a national identity. Dippel and Heblich (2021) examines the role of leaders in social movements. More related to our work, Tuñón (2022) provides evidence of religious leaders' effect on the electoral success of left-wing parties. We contribute to this literature by finding empirical evidence that changes in the leadership within the Catholic Church can have important consequences for the emergence or suppression of social conflict.

Additionally, this paper relates to the literature studying the emergence and consequences of land invasions. Alston and Mueller (2010) conducted a cross-sectional analysis across municipalities in Brazil to study how land conflict impacts the prevalence of tenancy agricultural agreements. They utilized the number of Catholic priests as an instrument for land conflict and found a negative effect, which they interpreted as a sign that land conflict exacerbates property rights insecurity. Furthermore, Hidalgo et al. (2010) find that negative economic shocks lead to more invasions in Brazil, particularly in areas with higher land inequality. Also, Falcone and Rosenberg (2022) show that the expansion of capital-intensive agriculture in Brazil increased the number of land occupations.

We also contribute to the increasing literature on Economics of Religion summarized by Mc-Cleary and Barro (2006), Iyer (2016) and Carvalho et al. (2019). Most studies have examined the effects of different religions on socio-economic outcomes, such as Basten and Betz (2013), Cantoni (2015), Becker et al. (2021). Another literature has examined religious adherence as the dependent variable, such as Costa et al. (2023) and Chen (2010).

Fewer papers have examined the internal structure of a given Church to try to measure its influence and how it emerges through its internal organization. Some notable exceptions include Tuñón (2022) and Engelberg et al. (2016). Focusing on a single religious denomination allows us to hold the characteristics of the particular organization constant, to understand how a doctrinal change interacts with these characteristics in shaping its effect on society.

The rest of the paper is organized as follows. Section 2 describes the background: the Brazilian land movement, the involvement of the Catholic Church on the landless movement and the organization structure of the Church and the doctrinal change; Section 3 describes the data used in the study and the empirical strategy; Section 4 presents the main set of results and finally, Section 5 concludes.

2 Background

2.1 The Brazilian Land Movement

Brazil has the eighth-highest land inequality in the world, with a Gini coefficient consistently near 0.84 from 1967 to 1998 (Hidalgo et al., 2010). According to the 1995-96 agricultural census, properties exceeding one thousand hectares comprised only 1 percent of all farms but accounted for 45 percent of the total agricultural land (Malin, 2002, 180).

Rural poverty, extreme land concentration, and informal land ownership have been persistent challenges in Brazil since the colonial era, when vast estates were established (Albertus et al., 2018). The 1850 Land Law (*Lei de Terras*) granted legal recognition to informal holdings, legitimized pre-independence imperial land grants, and required that future land acquisitions occur through purchase rather than squatting or enclosure (Mangonnet, 2020). In 1889, land policy was decentralized, shifting responsibility to state governors for adjudicating land claims. However, the close relationship between the agricultural elite and political power holders led to selective enforcement of land laws—cracking down on landless occupiers while overlooking the enclosure of public land by well-connected elites.

Agrarian activism became widespread in the late 1950s, beginning with tenant farmers in Pernambuco's sugarcane region before spreading to other states. These movements demanded radical land reform and threatened violence if their demands were ignored (Ondetti, 2010, 11). João Goulart, a left-leaning populist elected president in 1961, sought to implement agrarian reform, but his efforts were blocked by influential landowners in Congress. His eventual ousting in the 1964 military coup led to the repression of the land movement under the military regime.

In the late 1970s and early 1980s, agrarian activists in Brazil's smallholder regions began organizing large-scale land occupations and roadside encampments (Brown et al., 2011). These grassroots efforts culminated in the formation of the Landless Workers' Movement (Movimento dos Trabalhadores Rurais Sem Terra, or MST) in early 1984. The landless movement expanded rapidly in the late 1980s, largely driven by the MST, which extended its geographic reach and strengthened its internal structure (Albertus et al., 2018). From its inception, the MST embraced large-scale land occupations as its core strategy. Occupations were meticulously planned, with activists recruiting families from rural areas and small urban centers. The MST identified large, underutilized properties that could qualify for expropriation under the constitutional mandate for agrarian reform, effectively pressuring the government to act (Ondetti, 2010). Occupations ranged in size from 50 to several thousand families.

With the transition to civilian rule in 1985 under President José Sarney, optimism for land reform grew. However, despite pressure from social movements and increasing rural unrest, Sarney's agrarian reform efforts were severely weakened by landowners lobbying for the integration of public lands rather than private estates and demanding higher compensation. Their influence not only crippled the reform program but also significantly weakened pro-agrarian reform forces during the 1987-88 constitutional convention (Ondetti, 2010).

2.2 The Catholic Church and the Landless Movement

Throughout the 20th century, the Catholic Church underwent several cycles of progressivism and conservatism, reflecting its evolving social and political role. A major progressive shift was driven by the Second Vatican Council (Vatican II), held between 1962 and 1965, which introduced sweeping reforms aimed at modernizing the Church's teachings and practices (Wilde et al., 2010; Wilde, 2004).

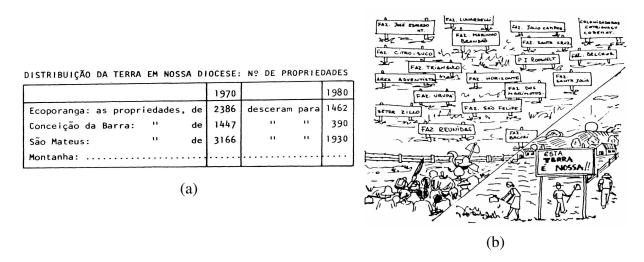
Following Vatican II, the Catholic clergy in Latin America deepened its commitment to the economic welfare of the poor. This shift—often described as the "preferential option for the poor" and associated with "liberation theology"—was particularly pronounced in Brazil. The Brazilian Church became one of the most progressive in the region, actively advocating for social justice and reform (Bruneau, 1974; Mainwaring, 1986). During the 1960s and 1970s, amid military rule, the Brazilian National Bishops Conference (CNBB) issued a series of progressive documents and public statements calling for significant socioeconomic reforms. Rural inequality quickly emerged as a focal point for the Church's progressive wing, serving as a tangible arena where its commitment to the poor translated into direct action. In 1963, for example, the CNBB issued a statement in support of land reform, declaring that all individuals should have access to land (Cleary, 1997; Mackin, 2010).

At the local level, progressive bishops, priests, and nuns played a crucial role in organizing landless peasants to advocate for their rights. These religious leaders introduced ideas about social injustice and inequality that resonated deeply with the lived experiences of rural communities (Houtzager, 2001). Church dioceses distributed leaflets and brochures explaining land inequality, framing it as unjust, outlining the right to land, and assessing government land reform policies (see examples in Figures 1). Through these materials and other outreach efforts, clergy emphasized

¹These illustrations come from a collection of brochures, pamphlets, and newsletters published by the Brazilian Catholic Church and archived by the U.S. Library of Congress's overseas office in Rio de Janeiro (Library of Congress, 1986).

the structural causes of economic inequality and poverty, encouraging political action to address these issues. By linking these concerns to religious principles, they imbued them with a heightened sense of legitimacy.

Figure 1: Rural Inequality Reflected in Church Publications



Panel (a) presents a table from a publication by Diocese of São Mateus (1982, p.5) aimed at raising awareness about land inequality within the diocese. It is titled 'Distribution of land in our Diocese - Number of properties' and lists the municipalities in the diocese along with the number of properties recorded in 1970 and 1980. The data illustrate a clear trend of increasing land concentration across all municipalities. Panel (b) features a cartoon from a publication by Diocese De Ji-Paraná (1986) highlighting the injustice of land inequality and the need for redistribution. In the top left, the illustration depicts vast private rural estates (*fazendas*) lying idle, with no one working on them, while a large group of landless workers observes from outside the fence. The second part of the cartoon shows the fence removed and a sign declaring, "this land is ours!!", reinforcing the call for land reform.

Beyond providing moral support and education, progressive Catholic leaders in Brazil actively leveraged the Church's deep-rooted presence in rural communities to organize and mobilize rural workers. Clergy and lay activists successfully galvanized small farmers and peasants by drawing on the Church's extensive associational network, hierarchical structure, and shared religious identity (Houtzager, 2001).

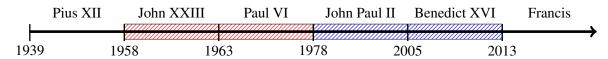
A 1980 government report on land conflicts in the Brazilian northeast highlighted the role of the Pastoral Land Commission (CPT) as a key mediator between the government and marginalized communities. The report acknowledged the CPT's efforts to address land disputes and improve living conditions for the rural poor while also noting that its persistent advocacy—particularly its work in educating landless workers about their rights and fostering solidarity—could intensify land conflicts, as squatters increasingly received support from the clergy (SNI, 1980).

Overall, the Catholic Church played a pivotal role in raising awareness, organizing rural workers, and empowering emerging rural movements in their struggle for land rights and justice. This activism peaked during Brazil's democratic transition (1975–1985) and has been widely recognized by scholars of the period, including Mainwaring (1986); Adriance (1985); Hewitt (1990); Krischke (1991); Ondetti (2010).

2.3 The Appointment of John Paul II and the Rollback of Progressivism

In this paper, we study the influence of Brazilian Catholic bishops in the decades following the 1978 transition from the progressive papacy of Paul VI to the conservative papacy of John Paul II. John Paul II's appointment in 1978 was a watershed moment within the Catholic Church. Popes John XXIII and Paul VI (1958 to 1978) supported progressives within the Church and led the Latin American Catholic Church through two decades of progressivism (see Figure 2). The appointment of John Paul II in 1978 ended this progressive period and began a process of "restoration" which entailed an explicit effort to curb the influence of progressives in the Church hierarchy.

Figure 2: Catholic Popes from 1939



The timeline indicates the progressive period of the Catholic Church during the Papacies of John XXIII and Paul VI (1958 and 1978), shaded in red. The "restoration" period that followed and was led by John Paul II and Benedict XVI is shaded in blue. Pope John Paul I, not included in the timeline, was appointed in 1978 but died only a month after his appointment.

The 1978 transition had important consequences for the direction of the Catholic Church across the world, but its impact was most notable in Latin America (see e.g. Mainwaring (1986)). For example, in her book on the growing tensions between progressive Catholic movements in Latin America and the Vatican following the 1978 transition, Lernoux (1989) argues that "[John Paul II challenged] local churches that work with the poor" and attempted to reduce the influence of progressive bishops through "the appointment of conservative bishops and the emphasis on orthodoxy." Indeed, the "election of John Paul II to the papacy strengthened the traditional clergy in Latin America. (...) The most visible aspect of this conservative shift was the appointment of new bishops" (Betances, 2007, 55). This strategy was particularly significant in Brazil, which had one of the largest and most influential progressive factions in Latin America (Adriance, 1985; Bruneau,

1974; Mainwaring, 1986). Upon his appointment, John Paul II swiftly focused on reducing the power of progressives, making bishops his primary target.

While the pope holds supreme authority over Catholics worldwide, he delegates leadership to a bishop in each diocese, the fundamental administrative units of the Catholic Church.² Bishops, in turn, wield ultimate authority over their dioceses. Within their diocese, bishops maintain all executive, legislative, and judicial ecclesiastical power, control religious policy, and are responsible for teaching, governing, and sanctifying the faithful (Code of Canon Law, 1983, 391). They control the creation of new parishes in their diocese and have complete power over the assignment of priests to parishes.³ bishops are also responsible for overseeing the interpretation of the Catholic doctrine, the proper and regular celebration of all acts of devotion, and the fostering of the vocation of priesthood and religious life (Woywod, 1918).

Appointing conservative bishops was a critical aspect of his strategy to diminish the progressive influence within the Brazilian church (Alves Barbosa, 2007; Lowy, 2000). In 1988, the New York Times reported that, having been unsuccessful in aligning the Brazilian church with his views, the Pope was "quietly using his authority to appoint new cardinals and bishops as a means of reasserting Vatican control over Brazil's influential and outspoken Roman Catholic hierarchy." John Paul II's appointees were "clergymen who unquestioningly accept Rome's authority and share the Pope's interpretation of church doctrine," and would "guide the church in the direction he believes it should follow" (The New York Times, 1988).

3 Data and Empirical Strategy

3.1 Data

Land conflicts Our primary measure of land conflicts comes from data collected by Brazil's Pastoral Land Commission (*Comissao Pastoral da Terra*, CPT), an NGO dedicated to monitoring rural conflicts. CPT systematically gathers and analyzes data on land use and ownership disputes

²Dioceses are exhaustive and mutually exclusive geographical areas akin to states or provinces (Code of Canon Law, 1983, 368-430). We use "dioceses" generically to include dioceses, archdioceses—dioceses that are especially important and prestigious, usually those in large metropolitan areas—and ecclesiastical prelatures—districts that have yet to achieve formal diocesan status but are functionally equivalent to dioceses (see e.g. Wilde (2007); Wilde et al. (2010)).

³The parish is the territorial subdivision of the diocese. For a description of the role of priests within the Church, see e.g. Dondeyne (1964).

across Brazil.4

The CPT dataset is structured at the conflict-news report level. To analyze it systematically, we first aggregate the data to the conflict-year level, constructing two binary indicators: the first equals one if the given year marks the first instance of news coverage on the conflict, and the second equals one if the conflict remained active in a given year (i.e., if there was any news coverage of it that year). We supplement this with key conflict-level information from the CPT dataset, including the municipality where the conflict occurred and its classification—such as land disputes, labor disputes, or conflicts over natural resources. Finally, we aggregate the data at the municipality-year level, creating two key measures: the annual count of newly initiated conflicts and the total number of active land conflicts each year.

Figure 3 presents the time series of active conflicts over time, categorized by conflict type. Land disputes are the most prevalent category, aligning with historical accounts that identify land inequality as the primary driver of conflict during this period. The data figure also shows a rise in conflict intensity during the late 1970s, followed by a decline beginning in the second half of the 2000s. In this study, we focus on conflict measures from 1975 to 1994, capturing the peak period of conflict intensity. During this timeframe, the dataset documents approximately 43,060 conflicts.

The CPT data has two potential limitations. First, conflicts in remote areas may be underreported due to limited media coverage and accessibility. Second, as a Church-affiliated organization, the CPT may have greater capacity to monitor conflicts in regions with a stronger Catholic presence, which could introduce bias in its coverage. While our empirical strategy exploits within-municipality variation in conflicts, mitigating some of these concerns, we also validate the CPT data by comparing it against the primary alternative dataset on land conflict, produced by Dataluta.⁵ Although Dataluta does not capture identical conflict details, it provides data on land occupations—a metric closely related to land conflicts. However, Dataluta's coverage begins only in 1988, limiting its temporal overlap with CPT.

Figure A3 in the Appendix presents a set of graphs comparing the time series of active land conflicts (from CPT) and land occupations (from Dataluta) across different regions of Brazil. The trends in both datasets align closely, not only at the national level but also within each region. Specifically, at the municipality-year level between 1988 and 2005, the correlation between the CPT and Dataluta measures is 0.95, with a standard error of 0.00. This strong correlation provides

⁴CPT's primary source of information is media reports, including newspapers, radio, and television broadcasts, which it monitors to identify and verify conflict occurrences. Additionally, CPT tracks court cases related to land disputes, collects court documents, and, in some cases, supplements its data with field observations.

⁵Dataluta was established in 1998 as a research initiative by the Center for Agrarian Reform Study, Research, and Projects (NERA) at São Paulo State University.

2500 2000 1500 1000 500 0 1965 1990 1995 2010 1985 2000 Land conflicts Labor conflicts Agricultural policy conflicts Drought conflicts Other conflicts

Figure 3: Active conflicts over time

Note: This graph illustrates the number of active conflicts per year available in the CPT data. Other conflicts include conflicts related to: gold-digging, water, and other.

evidence that the CPT data reliably captures the evolution of land conflicts, mitigating concerns about potential reporting bias.

Catholic Church We integrate data from multiple sources to map the geographic boundaries, administrative structure, and leadership of the Brazilian Catholic Church, including detailed information on bishops and priests. To define the geographic boundaries of Catholic dioceses in 1978, we construct a crosswalk linking Brazil's municipal and diocesan borders from 1970 to 1995. This crosswalk is derived from data provided by the Brazilian Institute of Geography and Statistics (IBGE) and the *Anuário Católico do Brasil* (Brazilian Catholic Yearbook) from 1970 to 1997. Appendix Figure A2 presents a map illustrating the diocesan and municipal boundaries. At the time of John Paul II's appointment in 1978, Brazil had 221 dioceses, each encompassing an average of 20 municipalities.

Data on bishops, including their names, appointment dates, birth dates, and vacancy dates for all bishops in office between 1970 and 2000, comes from the Catholic Church's *Annuario Pontificio*

(Pontifical Yearbook) as reported by Catholic Hierarchy.⁶

We also collected original data on all parishes in Brazil and the priests who served in each parish between 1965 and 1997. This involved digitizing and processing records from seven editions of the Brazilian Catholic Yearbook published during this period. These yearbooks provide comprehensive listings of all priests, including their assigned parishes, denomination, birthdate, nationality, religious order, ordination date, and diocese of incardination. While the current analysis does not incorporate much of this information, we plan to extend the study to leverage these additional details in future research.

Land Ownership We digitized municipal-level agricultural data from the 1975 Brazilian Agricultural Census. This dataset includes the total number of properties, total land area (in hectares), and the number of properties and hectares classified as publicly or religiously owned.

3.2 Sample

We use municipalities, as defined by their 1970 boundaries, as the primary geographic unit of analysis. When municipalities were subsequently subdivided, we aggregate data to align with their original 1970 configuration. In a limited set of tests focused on diocese-level outcomes, we conduct the analysis at the diocese level, using boundaries as of 1978.

Given our focus on the role of religious leaders in shaping rural land conflict, we exclude 26 municipalities that reported no rural land in the 1975 agricultural census. We also exclude the Diocese of Guamá—comprising 10 municipalities—which was vacant as of October 1978; further details on this exclusion are provided in Section 3.3. The resulting sample consists of 3,914 municipalities, representing 99.1% of all municipalities with stable boundaries since 1970.

Our analysis of land conflict focuses on the period from 1975 to 1994—a critical phase in which land invasions emerged as a widespread strategy of rural mobilization across Brazil. This timeframe captures the intensification of agrarian struggles and the organizational expansion of the landless movement. By focusing on this period, we examine the dynamics of land conflict during a time of profound social and political transformation in the Brazilian countryside.

Table 1 presents summary statistics at both the municipality and diocese levels for our sample and study period. In 1978, the average diocese had 28 parishes, equivalent to approximately 8.5

⁶https://www.catholic-hierarchy.org

⁷Yearbooks were published in 1965, 1970, 1977, 1985, 1989, 1993, and 1997. An additional yearbook was published in 1981, but it does not include information on the identity of the priest leading each parish.

parishes per 100,000 people. At the municipality level, religious institutions owned a small share of the land, averaging just 0.2%. However, there was considerable variation across municipalities, with some recording religious landownership as high as 44%.

Table 1: Summary statistics

	Municipality level			
Variable	Mean	Std. dev.	Min	Max
Active Conflicts per Year	0.37	1.90	0	135
Active Land Conflicts per Year	0.29	1.69	0	116
New Land Conflicts per Year	0.07	0.45	0	32
Other active conflicts per Year	0.07	0.40	0	19
Population size 1970	23,559	126,163	874	5,924,612
Share of rural population 1970	0.67	0.21	0	0.99
Number of Parishes 1970	1.5	6.6	0	319
Parishes per 100,000 inhabitants 1978	8.8	8.6	0	84
Share of religiously owned land	0.002	0.011	0	0.44
	Diocesis level			
Variable	Mean	Std. dev.	Min	Max
Number of Municipalities of 1970	19.75	18.0	0	179
Population size 1970	16.1 million	25.6 million	230,368	294 million
Number of Parishes 1978	27.6	116.04	1	356
Share of religiously owned land	0.002	0.003	0	0.034

Note: This table presents summary statistics for the municipalities-year of the sample used in the study, which includes 2,525 municipalities and 221 dioceses. When the year is not specified, the variables are averaged for the 1975 to 1994.

3.3 Empirical Strategy

To estimate the effects of the Catholic Church's doctrinal shift following John Paul (JPII) appointment, we build on Tuñón (2022) and exploit the papal succession alongside the institutional rules governing bishops' tenure. The Church's territorial governance is organized into dioceses, each led by a bishop. JPII's ability to replace Brazil's progressive bishops was constrained by Church law, which stipulates that bishops cannot be arbitrarily dismissed; vacancies arise only upon a bishop's death or mandatory retirement at age 75.8

⁸At this age, a "bishop who has completed his seventy-fifth year is asked to voluntarily submit his resignation to the pope" Code of Canon Law (1983, 401). However, bishops can be removed before reaching retirement age in exceptional cases, such as serious misconduct, negligence, or doctrinal dissent.

Figure 4 presents the age distribution of bishops serving in Brazilian dioceses as of October 1978, when JPII assumed the papacy (hereafter, "pre-JPII bishops"). The distribution indicates, for example, that approximately 10% of bishops were 60 years old in 1978. Under the tenure rules, JPII would be unable to replace this bishops until 1993.

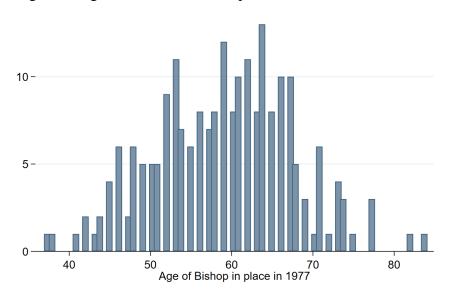


Figure 4: Age distribution of bishops in office as of October 1978

Our primary independent variable is the expected year of turnover for the last pre–John Paul II (JPII) bishop in each diocese. This is defined as the year in which the bishop serving as of October 1978—when JPII assumed the papacy—either reached the mandatory retirement age of 75 or passed away, whichever came first. Because JPII's papacy began in late 1978, we set 1979 as the earliest possible retirement year for bishops who were in office at the time. Since the variable is constructed based on the bishops in office in October 1978, we exclude the Diocese of Guamá (now known as Bragança do Pará), which was vacant at that point. Figure 5 presents a series of maps illustrating the geographic distribution of our independent variable. The figure shows that the expected timing of bishop turnover exhibits no clear spatial clustering, suggesting that the timing of pre-JPII bishop replacements was not systematically correlated across regions.

Note that while the death or retirement of a pre-JPII bishop allowed JPII to appoint a successor, it does not perfectly predict the timing of the actual turnover. For instance, a pre-JPII bishop may resign before reaching 75, or the pope may take additional time to select a suitable replacement. Therefore, our estimates should be interpreted as capturing the *Intention to Treat* effects of pre-JPII bishop turnover. Next, before outlining our estimation strategy, we demonstrate that our independent variable strongly predicts actual turnover.

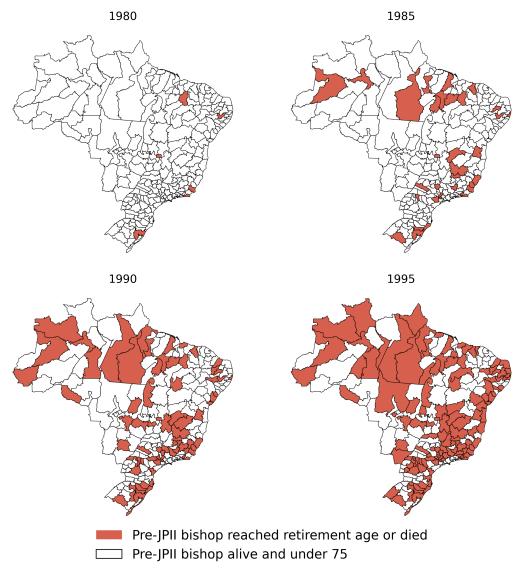


Figure 5: Expected Appointments by John Paul II

Note: The maps show dioceses where the pre-JPII bishop was projected to be replaced, based on the year in which the bishop serving at the time of JPII's appointment either reached retirement age or passed away.

3.4 Expected Replacement of pre-JPII bishops and JPII Appointments

Does the timing of a pre-JPII bishop's death or 75th birthday predict their turnover and subsequent replacement by a JPII appointee? To evaluate this, we estimate the following equation:

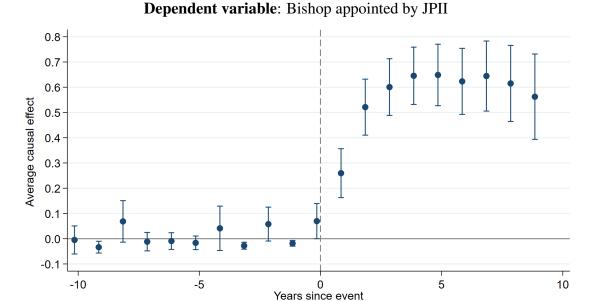
$$JPIIbishop_{dt} = \sum_{p} \beta_{p} YearsSinceExpRep_{dtb} + \psi_{d} + \psi_{t} + \epsilon_{dt}$$
 (1)

The variable $JPIIbishop_{dt}$ is an indicator that takes the value 1 if the bishop in office in diocese d at year t was appointed by John Paul II and 0 if it was appointed by a pre-JPII pope. The variable $YearsSinceExpRep_{ptb}$ takes the value 1 if the pre-JPII bishop in diocese d is dead or has reached the age of 75 p years from the current year t, and 0 otherwise. Here, p < 0 denotes years preceding the expected replacement by JPII, while p > 0 indicates years following the point at which a JPII appointment would be expected. The coefficient vector β_p is a vector of coefficients that captures the effect of the number of years relative to the expected replacement of the bishop in office at the time of JPII's appointment. Finally, ψ_t refers to time fixed effects, ψ_d denotes dioceses fixed effects, and ϵ_{dt} corresponds to robust standard errors clustered at the diocese level. Given that we have a staggered treatment, we estimate Equation 1 using the imputation approach of Callaway and Sant'Anna (2021).

Figure 6 presents the results of this analysis, showing a sharp increase in the likelihood of a JPII replacement once the pre-JPII bishop either dies or reaches the age of 75. By age 76 (or one year after the pre-JPII bishop's death), the probability of receiving a JPII-appointed bishop rises by nearly 30%. This probability exceeds 50% by age 78 (or three years post-mortem) highlighting the strong association between a bishop's 75th birthday or death and the timing of their replacement. Crucially, we find no difference in the probability of a JPII appointment before the pre-JPII bishop dies or turns 75. This suggests that the year the bishop reaches retirement age or dies, "the expected year of replacement," is a strong predictor of the actual timing of the first JPII appointment.⁹

⁹In Section A of the Appendix, we provide further evidence indicating that the turnover of bishops can be predicted by their 75th birthday.

Figure 6: Exogenous variation in timing of conservative bishop appointed



Note: The figure illustrates the estimated β_b coefficients from Equation 1 using the imputation approach of Callaway and Sant'Anna (2021). The unit of analysis is the diocese-year. Confidence intervals are based on robust standard errors clustered at the dioceses level (95% confidence intervals).

3.5 Estimation

We now turn to detailing the estimation strategies we employ to study the effect of pre-JPII bishop turnover on social conflict. in Brazil.

Event-Study To analyze dynamic effects, we conduct an event study that extends the estimation in Equation 1 to municipal-year level data. Specifically, we estimate the following equation:

$$y_{mt} = \sum_{p} \alpha_{p} YearsSinceExpRep_{ptd} + \psi_{t} \times X_{m1970} + \psi_{m} + \psi_{t} + \epsilon_{mt}$$
(2)

where y_{mt} is the outcome of interest for municipality m at time t, for instance the number of active land conflicts. The variable $YearsSinceExpRep_{ptb}$ is defined as in Equation 1. Then, α_p is a vector of coefficients that captures the effect of the number of years relative to the expected replacement of the bishop in office at the time of JPII's appointment. ψ_t refers to time fixed effects and ψ_m to municipality fixed effects. Additionally, Equation 2 includes the interaction of time fixed effect

with municipality initial characteristics X_{m1970} ; share of rural population in 1970, indicator for whether the municipality experienced a land conflict before 1975, the number of parishes in 1978, and the log of the number of establishments in 1978. Finally, ϵ_{mt} refers to the robust standard errors clustered at the dioceses level. As before, we estimate Equation 2 using the imputation approach of Callaway and Sant'Anna (2021).

Difference-in-Differences Analysis We examine the effects of the staggered replacement of pre-JPII bishops using a Difference-in-Differences approach that accounts for heterogeneous treatment timing. Given the staggered nature of the treatment, we employ the imputation-based estimator proposed by Callaway and Sant'Anna (2021) to estimate the following equation:

$$y_{mdt} = \beta PostExpRep_{dt} + \psi_t \times X_{m1970} + \psi_m + \psi_t + \epsilon_{mdt}$$
(3)

where y_{mdt} denotes the outcome variable of interest for municipality m at time t, such as the number of active land conflicts. The key explanatory variable, $PostExpRep_{dt}$, is a binary indicator that equals one if the pre-JPII bishop of diocese d either passes away or reaches the age of 75 at time t. Then, the primary coefficient of interest, β , captures the effect of having a pre-JPII bishop replaced.

The term ψ_t represents time fixed effects, which account for time-invariant unobserved determinants, while ψ_m denotes municipality fixed effects, that capture changes over time that affect all municipalities in a similar way. Additionally, the interaction between time fixed effects and initial municipality characteristics is included, following the specification in Equation 2. The error term, ϵ_{mdt} , is clustered at the diocese level.

3.6 Identifying Assumptions

The main identifying assumption for our estimation is that the timing of pre-JPII bishops' expected replacement is as good as randomly assigned—that is, exogenous to underlying factors that could have influenced social conflict during the period we analyze. We find that this assumption is plausible for several reasons. First, the appointment of the last cohort of pre-JPII bishops preceded JPII's papacy. Second, the deaths of Paul VI and his brief successor, John Paul I—who passed away less than two months after his appointment—were unexpected and unrelated to Brazilian social dynamics, ensuring that the transition in papal leadership was not strategically timed in response

to local conditions. Third, the identity and ideological leanings of papal successors are unknown prior to their selection, preventing any anticipatory adjustments based on expected ideological shifts. Taken together, these factors suggest that the timing of the expected replacement of the last pre-JPII bishops was likely uncorrelated with potential diocesan outcomes after the transition. In Appendix Table A1, we provide empirical evidence supporting the exogeneity of the expected timing of the replacement of the pre-JPII bishop. We show that it is uncorrelated with a number of predetermined diocese and municipal-level characteristics, such as the total population size, rural population size, population growth, and rural population growth.

4 Results

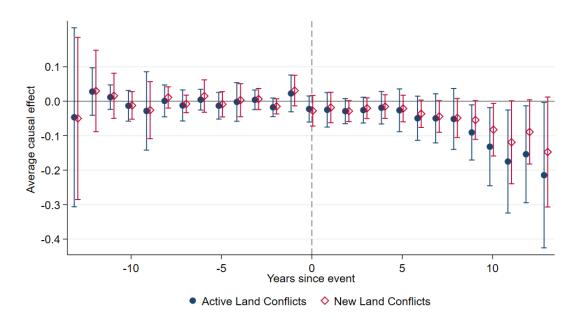
4.1 Effects of JPII Bishops on Land Conflict

Event Study Figure 7 presents the results from estimating Equation 2 using the imputation approach proposed by Callaway and Sant'Anna (2021). We focus on two main dependent variables: (i) the number of active land conflicts, and (ii) the number of new land conflicts, defined as those that originate in period t.

First, we find no evidence of pre-existing trends in either active or new land conflicts prior to the expected replacement of a pre-JPII bishop. This supports the parallel trends assumption, reassuring that the outcomes of interest for municipalities with earlier versus later JPII bishop appointments would have evolved along parallel trends absent the difference in timing of the appointment. The lack of pre-trends also alleviates potential concerns that bishops might alter their behavior in anticipation of their retirement.

The event-study analysis further reveals a significant and negative effect on active land conflicts following the expected replacement of a pre-JPII bishop. This effect becomes statistically significant approximately seven years after the expected appointment of a JPII bishop and persists in the subsequent years. Furthermore, the results in Figure 7 indicate that the replacement of pre-JPII bishops also suppressed the emergence of new land conflicts. The temporal dynamics suggest that, in the initial years following a bishop's replacement, the primary effect is a reduction in the incidence of newly initiated conflicts. Over time, this effect evolves to include both the reduction of new land conflicts and a reduction in active ones. These patterns suggest that the replacement of pre-JPII bishops led to a sustained decline in land conflicts across municipalities in Brazil.

Figure 7: Event study



Note: The figures display the estimated α_b coefficients from Equation 2, using the imputation approach of Callaway and Sant'Anna (2021). The unit is the municipality-year. The analysis covers the period from 1975 to 1994. Confidence intervals, shown at the 95% level, are based on robust standard errors clustered at the diocese level.

Difference-in-Differences Analysis The results from estimating Equation 3 are presented in Table 2. We begin by examining the effect of the expected replacement of the pre-JPII bishop on the likelihood of a municipality falling under the leadership of a JPII-appointed bishop. This analysis builds on the findings in Figure 6, shifting the unit of analysis from dioceses to municipalities. The estimated coefficient is highly positive and statistically significant. Specifically, the results indicate that, on average, the probability of a municipality being led by a JPII-appointed bishop increases by 48 percentage points after the pre-JPII bishop reaches retirement age or passes away. The magnitude of this effect closely aligns with our event-study findings, reinforcing the conclusion that the expected timing of a pre-JPII bishop's replacement strongly predicts the actual timing of JPII appointments.

Columns 2 and 3 of Table 2 report the estimated effects on land conflicts. The coefficient is negative and statistically significant for both active and new land conflicts, indicating a substantial decline in conflict intensity following the expected replacement of a pre-JPII bishop. Specifically, when a pre-JPII bishop reaches retirement age or passes away, the number of active land conflicts

decreases by 17% relative to the mean. 10 Likewise, the incidence of new land conflicts drops by 54% relative to the mean. 11 These findings provide evidence that the expected turnover of a pre-JPII bishop leads to a significant reduction in land conflicts.

To assess the impact of the actual replacement of the pre-JPII bishop by JPII on land conflicts, we construct a Wald estimator by combining the results from Columns 1 and 2 of Table 2. Specifically, we compute the ratio of the estimated coefficients from the reduced-form (Column 2) and first-stage (Column 1) specifications. This yields a Wald estimate of -0.1 for the effect of a JPIIappointed bishop on active land conflicts. 12 This result suggests that the appointment of a JPII bishop is associated with an approximately 36% reduction in active land conflicts relative to the mean during the period from 1975 to 1994. Note that this result relies on the following exclusion restriction assumption: the expected replacement of a pre-JPII bishop—determined by retirement age or death—affects land conflicts solely through the actual appointment of a JPII bishop

Finally, Columns 4 and 5 of Table 2 present the results of estimating Equation 3 using a dependent variable that captures all non-land-related conflicts, including disputes over labor, drought, and agricultural policy. The findings indicate that the expected replacement of a pre-JPII bishop had no significant effect on these types of conflicts. This aligns with historical accounts emphasizing that the Catholic Church's involvement was primarily concentrated in the landless movement.

4.2 **Heterogeneous Treatment Effects**

In this section, we explore whether our results vary across different dimensions and present the findings in Table 3.

We begin by assessing whether the presence of a parish within a municipality influences our main effects. Parishes serve as the primary local units of the Catholic Church, acting as centers for religious activity, community engagement, and social mobilization. Their presence indicates a stronger institutional footprint of the Church. By 1977, 27% of municipalities lacked parishes within their boundaries, signaling a weaker Catholic institutional presence in these areas.¹³

The first two columns of Table 3 present the results from estimating Equation 3, splitting the sample based on whether a municipality had a parish in 1977. The findings indicate that the effects of the expected replacement of a pre-JPII bishop on land conflicts are primarily concentrated in

 $[\]overline{{}^{10}\text{Calculated as: } \left(\frac{-0.050}{0.29}\right) \times 100} = -17.1\%.$ $\overline{{}^{11}\text{Calculated as: } \left(\frac{-0.038}{0.07}\right) \times 100} = -54.3\%.$

¹²Calculated as: $\hat{\beta}_{Wald} = \frac{\hat{\beta}_{RF}}{\hat{\beta}_{FS}} = \frac{-0.050}{0.478} = -0.1$.

¹³A4 in the appendix illustrates the geographic distribution of municipalities with and without parishes as of that year.

Table 2: Main results

	Bishop Appt.	Land C	Conflicts	Other Conflicts		
	by JPII (1)	Active (2)	New (3)	Active (4)	New (5)	
Post Expected	0.478***	-0.050**	-0.038**	0.008	0.007	
Replacement	(0.050)	(0.025)	(0.018)	(0.010)	(0.005)	
Mean Dep var	0.32	0.29	0.07	0.07	0.02	
Municipality FE	yes	yes	yes	yes	yes	
Year FE Year FE × Controls Observations	yes	yes	yes	yes	yes	
	yes	yes	yes	yes	yes	
	78,700	78,700	78,700	78,700	78,700	

Coefficients are estimated using the imputation approach proposed by Callaway and Sant'Anna (2021). The unit of observation is the 1970 municipality, with the analysis covering the period from 1975 to 1994. Control variables include an indicator for whether the municipality experienced a land conflict before 1975, the share of the rural population in 1970, the number of parishes in 1978, and the log of the number of establishments in 1978. * p < 0.10, *** p < 0.05, *** p < 0.01.

municipalities with at least one parish (Column 1). In contrast, the estimated effect is close to zero for both active and new conflicts in municipalities without a parish (Column 2). This suggests that the Church's institutional presence played a crucial role in mediating the impact of episcopal turnover on land conflicts, likely by facilitating local organizational capacity.

Next, we investigate whether Church land ownership influenced the effects of the expected timing of a pre-JPII bishop's replacement on land conflict. By 1975, approximately 27% of municipalities in our sample had land owned by religious institutions.¹⁴

The presence of Church-owned land may have shaped the impact of pre-JPII bishop replacements on land conflicts by influencing episcopal incentives to either support or suppress disputes. In municipalities where the Church owned land, conflicts over property could pose a direct institutional threat, prompting bishops to strategically engage with land disputes. If pre-JPII bishops were sensitive to this concern, they may have been less inclined to support land conflicts in areas where the Church held significant land assets, suggesting that their replacement would have had a more pronounced effect in municipalities without religious land holdings. Conversely, if pre-JPII bishops did not prioritize protecting Church-owned land but their successors did, JPII-appointed

¹⁴As shown in Appendix Figure A5, religious land ownership varied considerably across Brazilian municipalities. This data comes from the 1975 Agricultural Census, which records land owned by religious institutions rather than specifically by the Catholic Church. However, given that the Catholic Church was the dominant religious institution in Brazil at the time, it is reasonable to assume that the vast majority of religiously owned land in the dataset belonged to the Church.

bishops would have had stronger incentives to actively suppress conflicts in these areas. As a result, the reduction in land disputes following episcopal turnover would be larger in municipalities where the Church had substantial land holdings.

We assess this possibility by estimating Equation 3, dividing the sample based on whether the municipality contained any religiously owned land. Our results show that the expected replacement of a pre-JPII bishop significantly suppresses land conflicts in municipalities where the Church was a major landholder, affecting both active and new land conflicts (Table 3, Columns 3). In contrast, episcopal turnover has smaller and statistically insignificant effects in contexts without religiously owned land (Columns 4). These findings suggest that the Church's institutional interests played a particularly influential role in shaping the behavior of JPII-appointed bishops, who seemed to have concentrated their demobilization efforts in municipalities where Church property faced the most direct threats.

Finally, given that land conflicts are more prevalent in rural areas, we examine whether there are heterogeneous effects depending on the share of the rural population in each municipality. Column 5 of Table 3 presents the results for municipalities where the rural population share is above 40%, and Column 6 shows the results for those where it is below 40%. The results indicate that the main effects are driven by rural areas, which aligns with the nature of the conflict.

Table 3: Heterogeneous Effects

	(1)	(2)	(3)	(4)	(5)	(6)	
Sample	Parish presence in municipality		C	Religiously owned land in municipality		Rural Population above 40%	
	Yes	No	Yes	No	Yes	No	
	Dependent Variable: Active Land			Conflicts			
Post Expected Replacement	-0.063**	0.016	-0.142**	-0.015	-0.053**	-0.022	
	(0.028)	(0.055)	(0.056)	(0.024)	(0.024)	(0.058)	
Mean Dependent Variable	0.33	0.15	0.46	0.22	0.30	0.25	
	Dependent Variable: New Land Conflict			Conflicts			
Post Expected Replacement	-0.041*	0.019	-0.089**	-0.014	-0.043**	-0.029	
	(0.022)	(0.066)	(0.044)	(0.014)	(0.021)	(0.043)	
Mean Dependent Variable	0.08	0.03	0.12	0.06	0.07	0.08	
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	
Year $FE \times Controls$	Yes	Yes	Yes	Yes	Yes	Yes	
Observations	63,000	15,700	23,340	55,360	68,860	9,840	

Coefficients estimated using the imputation approach of Callaway and Sant'Anna (2021). Time period 1975 to 1994. Robust standard errors clustered at the diocese level are in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01.

5 Robustness checks

As a robustness exercise, we conduct a placebo test leveraging the papal transition that occurred in 2005 with the appointment of BenedictXVI. Unlike the 1978 transition to John PaulII, which marked a substantial ideological shift within the Church's leadership, the transition from John PaulII to BenedictXVI largely preserved the same conservative orientation. In this placebo test, we construct an analogous measure of the expected replacement of bishops appointed prior to 2005, based on the year in which the bishop serving as of April 2005 either reached the canonical retirement age of 75 or passed away, whichever occurred first. This specification allows us to evaluate whether the estimated effects we document are specific to the substantive doctrinal reversal introduced by John PaulII rather than simply reflecting any turnover in diocesan leadership.

Furthermore, this placebo exercise allows us to distinguish between two scenarios. In the first scenario, BenedictXVI replaces bishops who had themselves been appointed by John PaulII, effectively resulting in a transition from conservative to conservative leadership. In this case, we would expect little to no change in the Church's stance toward redistributive conflict, since the doctrinal orientation remained stable. In the second scenario, BenedictXVI replaces bishops who had been appointed prior to John PaulII—progressive bishops who remained in office until the mid-2000s. This transition entails a shift from progressive to conservative leadership, comparable in nature, though occurring later in time, to the replacements we analyze following the 1978 papal transition. Notably, only 10 dioceses still had pre–John Paul II bishops in place by 2005, covering approximately 197 municipalities; this limited set of late-retiring progressive bishops provides a useful comparison group for isolating the consequences of doctrinal change.

This exercise allows us to analyze two important features. First, it helps assess whether the main effects we document are attributable to substantive changes in doctrinal orientation or simply to shifts in episcopal leadership that may be accompanied by changes in tenure, organizational practices, or local networks. Second, by examining both types of turnover, we can evaluate whether the effects on land conflict are unique to the doctrinal shift initiated by John PaulII or whether similar dynamics emerged whenever progressive bishops were replaced by more conservative successors, even under a different papacy.

Table 4 shows that the placebo test yields results consistent with our interpretation. In Panel A, where Benedict XVI replaced bishops previously appointed by John Paul II (a conservative-to-conservative transition), we find no significant effects on either active or new land conflicts, as expected given the continuity in doctrinal orientation. By contrast, Panel B shows that when Benedict XVI replaced bishops appointed before John Paul II (a progressive-to-conservative transition).

sition), there is a large and statistically significant decline in both measures of land conflict. These findings reinforce the conclusion that the reduction in land conflict is driven by the replacement of progressive leaders with more conservative ones rather than by episcopal turnover itself.

Table 4: Robustness check

	Bishop Appt.	Land Conflicts		
	by BenXVI (1)	Active (2)	New (3)	
Panel A: Bishop in place by 20	005 appointed by JPI	I - Conservative	to Conservative	
Post Expected Replacement	0.294***	0.013	0.015	
	(0.030)	(0.055)	(0.056)	
Mean Dep var	0.34	0.16	0.06	
Observations	84,544	84,544	84,544	
Panel B: Bishop in place by 20	005 appointed pre-JF	PII - Progressive	to Conservative	
Post Expected Replacement	0.706**	-0.015	-0.225***	
	(0.302)	(0.340)	(0.079)	
Mean Dep Var	0.47	0.15	0.05	
Observations	3,297	3,297	3,297	
Municipality FE	yes	yes	yes	
Year FE	yes	yes	yes	
Year $FE \times Controls$	yes	yes	yes	

Coefficients are estimated using the imputation approach proposed by Callaway and Sant'Anna (2021). The unit of observation is the 1970 municipality. The analysis covers the period from 2000 to 2015, corresponding to the years leading up to and following the 2005 papal transition. Control variables include an indicator for whether the municipality experienced a land conflict before 1975, the share of the rural population in 1970, the number of parishes in 1978, and the log of the number of establishments in 1978. * p < 0.10, ** p < 0.05, *** p < 0.01.

6 Conclusion

The present empirical analysis is a first step that we plan to expand on several dimensions on future versions of this paper. First, we have collected detailed data at a much finer geographic level: the parish. In particular, we have digitized data on the identity of all priests in Brazil between 1965 and 1997. We plan to investigate whether the estimated effects are mediated by turnover at the priest level, which may follow the change in bishop. Furthermore, we also plan to extend the analysis beyond conflict to examine possible effects on preferences and other outcomes.

TBC.

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Appendix

A Bishop turnover

In this section, we provide further evidence to support the predicted timing of the turnover of bishops. Specifically, we estimate the following equation

$$TurnoverBishop_{dt} = \sum_{p} \alpha_{b} IVage_{dtb} + \psi_{d} + \psi_{t} + \epsilon_{dt}$$
 (A1)

where $TurnoverBishop_{dt}$ takes value 1 if the bishop in dioceses d at time t is different from that at time t-1, 0 otherwise (i.e. takes value 1 if there is a new bishop in time t). $IVage_{mtp}$ takes value 1 if the bishop assigned in dioceses d at time t-1 is d0 years old in time d1 (Age grouped in intervals of 3 years). Then, d1, d2 represent dioceses and year fixed effects.

The results presented in Figure A1 indicate a significant increase in the probability of a new bishop being appointed at time t when the incumbent bishop reaches 75 years of age at time t-1. This result provides reassurance that the year when the bishop in office in 1977 (i.e., the last progressive bishop) turns 75 years old is a suitable for predicting the timing of the appointment of a conservative bishop.

Figure A1: Exogenous variation in turnover of bishop



Note: Graph illustrates the estimated α_b coefficients from Equation 1.

B Tables and Figures

Dioceses boundaries

Municipalities boundaries

Figure A2: Dioceses and Municipalities boundaries, 1970

Note: The map displays the Dioceses and Municipalities boundaries as of 1970, which are the ones used throughout the study. At the time of John Paul II's appointment in 1978, Brazil had 221 dioceses, each encompassing an average of 20 municipalities.

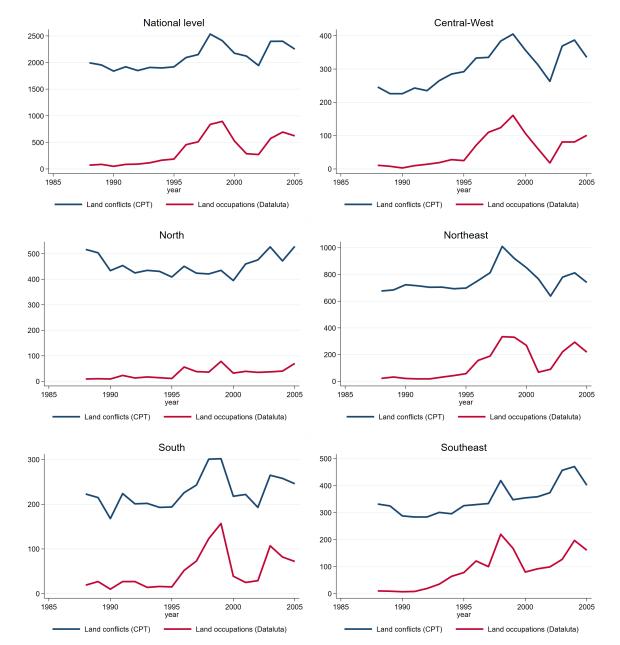


Figure A3: Data validity check

Note: This set of graphs illustrates the evolution of the number of active land conflicts and land occupations in each region of Brazil based on data from CPT and Dataluta, respectively.

Table A1: Endogeneity Check

	Year predicted appointment of bishop		
	Coefficients (1)	Standard Error (2)	
Total population 1970	-0.015	0.460	
Total population growth 1970-1960	0.035	0.130	
Rural population 1970	-0.022	0.272	
Land rented 1970	-0.008	0.710	
Land occupied 1970	0.005	0.820	
Land owned by producer 1970	0.005	0.820	
Productive land not used 1970	-0.008	0.681	
Parishes in 1978	-0.024	0.241	

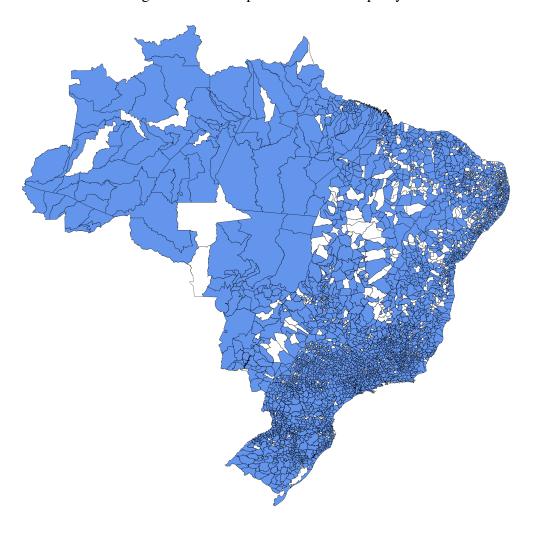
Note: This table presents the correlation between the year the bishop in place in 1977 reaches its retirement age and different characteristics of the municipality in 1970.

Table A2: Effect of Expected JPII-Bishop on Non-Land-Related Conflicts.

	Active Conflicts related to				
	Labor (1)	Agricultural Policy (2)	Drought (3)	Logging (4)	Gold-digging (5)
Post Expected	0.012	-0.000	-0.004	0.000	0.003
Replacement	(0.008)	(0.001)	(0.004)	(0.000)	(0.002)
Mean Dep var	0.04	0.002	0.02	0.00	0.01
Municipality FE	yes	yes	yes	yes	yes
Year FE	yes	yes	yes	yes	yes
Year FE × Controls	yes	yes	yes	yes	yes
Observations	78,700	78,700	78,700	78,700	78,700

Coefficients are estimated using the imputation approach proposed by Callaway and Sant'Anna (2021). The unit of observation is the 1970 municipality, with the analysis covering the period from 1975 to 1994. * p < 0.10, ** p < 0.05, *** p < 0.01.

Figure A4: Parish presence in municipality



Parish presence in the municipality in 1975

Yes No



Figure A5: Religously owned land in municipality

Religiously owned land in the municipality in 1975

Yes No