



# **Majority Governments and Investment:**

Evidence From Portuguese Municipalities

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# **Research Question**



# "Do majorities spend more than coalitions?"



Coalition governments involve continued negotiations. Do they complicate agreements on how to spend or are coalition members more interested in getting their share, inducing higher spending?



#### **Data**



#### Electoral and Political Data

National Electoral Comission (CNE)

#### Fiscal Data

General Directorate for Local Authorities (DGAL)

#### Socioeconomic characteristics of Municipalities

- PORDATA
- General Directorate for Energy and Geology (DGEG)
- Marktest Sales Index

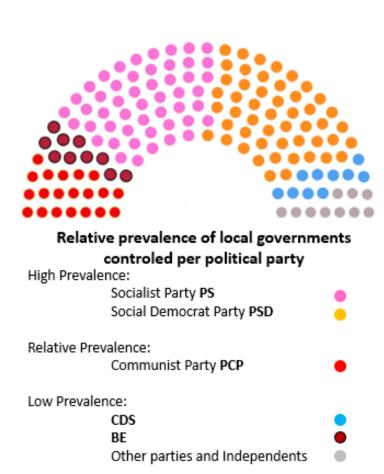


# **Institutional Setting**



#### **Portuguese Municipal Governments**

- City Hall Council Executive
  - Mayor and alderman
  - Odd number of seats
- Municipal Assembly Legislative
- Prevalence of center-left PS and centerright PSD local governments





# **Institutional Setting**



#### **Local Elections**

- Proportional elections held in all municipalities every four years
  - We explore the elections of 1993, 1997, 2001, 2005, 2009
- Votes translated into seats by the D'Hondt method
  - Favour larger parties' representation

Majorities per electoral term

	1994-1997	1998-2001	2002-2005	2006-2009	2010-2012
Nr	207	247	244	252	252
%	75,3%	$89,\!8\%$	$87,\!8\%$	$90,\!6\%$	$90,\!6\%$

Source: Author's using data from CNE.



# Methodology: 1. The Discontinuity



- There is a **discontinuity** in the type of government: either the most voted party is able to earn the seat that guarantees majority or not
- Take Torres Vedras as an example:
  - City Hall Council: 9 seats total
  - 5 seats are needed to control the majority
  - 2001: Most voted party earned 4 seats One fewer than needed for majority Just Coalition (C)
  - 2005: Most voted party earned 5 seats Exactly the seats needed for majority Just Majority (M)
- By considering only Just Majorities and Just Coalitions, the type of government can be attributed to randomness in voting behaviour and vote combinations



# Methodology: 2. Transition Analysis



- Consider municipalities **M** or **C** over two consecutive periods and define 4 transitions over a given election:
  - MC · MM
- CC CM
- Torres Vedras, in the example, represets a CM transition
- Compare MC with MM and CC with CM
- By comparing municipalities where government type changed around the threshold with muncipalities where it did not, differences in outcome can be attributed to government type variations



# Methodology



$$Y_{it} = \beta_0 + \beta_1 M_{it-4} + \beta_2 M_t + \delta' X + \gamma_t + \gamma_{NUTS3} + \varepsilon_{it}$$

 $Y_{it}$  is the natural logarithm of per capita investment

 $M_{it}$  is an indicator for majority government in municipality i in year t

 $M_{it-4}$  is an indicator for majority government in municipality i in year t-4

**X** is a vector of demographic, geographic, political and socio-economic controls

 $\gamma_t$  and  $\gamma_{NUTS3}$  are year and NUTS3 fixed effects

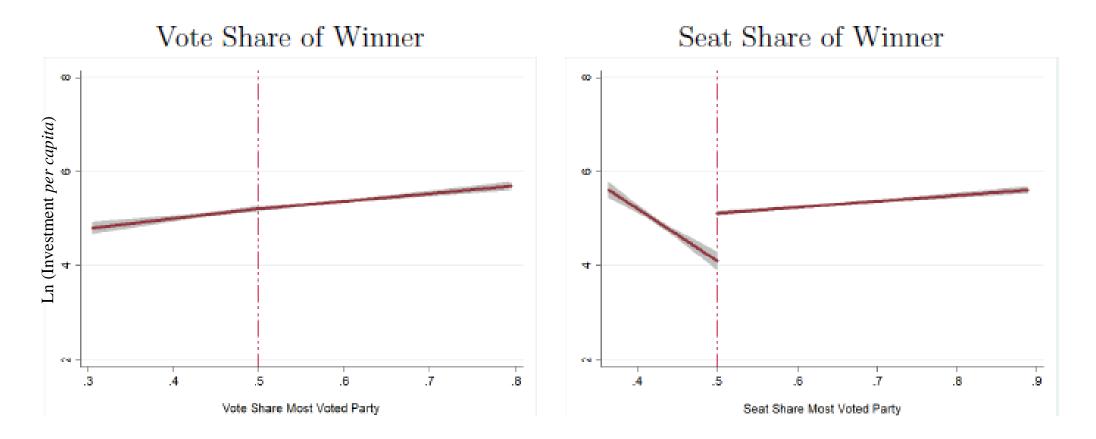
## Our coefficient of interest is $\beta_2$



# The Discontinuity



We observe a clear discontinuous increase in expenditure around the 50% seat share threshold







#### • (3) Main estimation

- Full set of controls
- *Year* and *NUTS* fixed effects

#### • (4) Excluding large cities

- Top 1% more populated
- Lisboa, Porto, Sintra, Vila Nova de Gaia

#### • (5) Excluding pre-electral coalitions

 Heterogeneous negotiation dynamics could confound the results

$Ln(Investment_{pc})$	(1)	(2)	(3)	(4)	(5)
$M_t$	0.268*** (0.073)	0.197*** (0.056)	0.102** (0.048)	0.083* (0.047)	0.091* (0.054)
Demographic Controls	-	-			
Pop Total			-0.003**	-0.002	0.011
Pop Share 65+			2.81***	2.44***	2.79***
Geographic Controls	-	-			
Area			-0.005	-0.002	-0.005
Coastal			-0.195**	-0.189**	-0.175**
Political Controls	-	-			
Left Wing			-0.070	-0.011	-0.195**
Alignment w/ Central Gov			0.045	0.049*	0.055*
Index			0.012	-0.016	-0.002
Nr of Seats in Council			-0.103***	-0.099***	-0.107***
Socioeconomic Controls	-	-			
Energy Consumption			0.044**	0.016	0.032*
Year FE	-	Yes	Yes	Yes	Yes
NUTS3 FE	-	Yes	Yes	Yes	Yes
Observations	2407	2407	2407	2382	2282
$R^2$	0.04	0.3636	0.4746	0.4599	0.4508





To be a **just majority induces** a significant **investment increase** of around 10% relative to being a just coalition – around 30€ *per capita* yearly (3)

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#### Large cities appear to act accordingly, but are not the sole drivers of the effect (4)

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# **Excluding** PPD-PSD/CDS-PP **pre-electoral coalitions** from the sample **confirms** positive significant **results** (5)

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#### What else is in the thesis?



#### Exploring possible confounding factors

- Transitions are not geographically concentrated
- Ideology does not drive the results

#### Robustness Checks and Extensions to the main model

- The increase in expenditure is enhanced by larger vote shares in the elections (political capital)
- Reduced vote share bandwidths confirm the results

#### Alternative identification strategy

- Fuzzy Regression Discontinuity Design or Regression Kink Design
- Explores the kinked increase in the probability of forming a majority government around the 50% vote share threshold



# **Policy Implications**



# 1. Majority governments significantly increase their expenditures relative to coalitions

- Between 8% and 10%
- In line with other results in the empirical literature

# 2. Political system that favours the formation of majority governments in the local executive

- Between 75% and 95% of municipal governments in Portugal between 1993 and 2012 are majority governments
- Increasing trend over the same period



# **Policy Implications**



#### Is this beneficial?

- Yes, if there is underivenstment and the additional investment is productive
- No, if the additional investment is wasteful and/or mainly driven by electoral manipulation objectives

#### How to check? → Future Research

- What type of investment is driving the differences? Categories of investment
- How does the ability to manipulate investment for opportunistic objectives vary between majorities and coalitions?
- Structural model which allows for comparisons in the efficiency and effectiveness in the provision of public goods



#### **Main Contributions**



- Original identification strategy
- Overcomes the small sample problem a standard RDD would be faced with
- Decentralization again on the Portuguese political agenda
- Important to include the consequences of local governance and the electoral system on the discussion





# THANK YOU! OBRIGADO!

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