Department of Health Policy

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Health System Decentralisation: Evidence from Tax Funded Health Systems

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Health Policy

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1. Decentralisation when the default is a publicly funded health system
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6. Alternative Models of decentralisation: federacies

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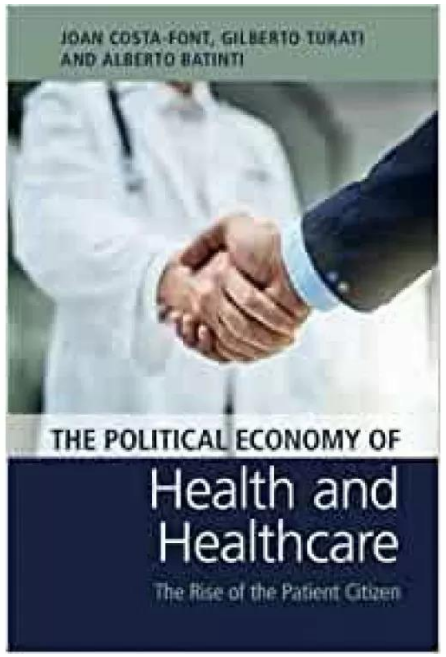
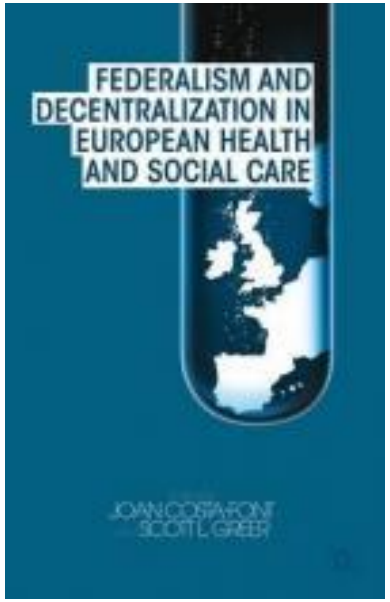
Materials

Chapter 2



Country specific chapters



Journal articles:

"Does Devolution Alter the Choice of Public versus Private Health Care?" (Costa-Font, J Ada Ferrer-i-Carbonell). *Journal of Economic Behaviour and Organisation, 2022.*

"Regional health care decentralisation in unitary states: equal spending,equal satisfaction" (Costa-Font, J Gilberto Turati).*Regional Studies*, 2018, 52(7): 974-985.

"Vertical Competition in the Spanish National Health System (NHS)", (Costa-Font, J Ana Rico) *Public Choice*, 2006,128 (3-4): 477-498.

"Policy interdependence and the models of health care devolution:"Systems or federacies"?. *Regional Science Policy & Practice*, (Costa-font , J and Pedikis,L)*13*(3), 492-500.

"Exploring the pathways of inequality in health, health care access and financing in decentralized Spain. *Journal of European Social Policy*, (Costa-Font, J., & Gil, J)*19*(5), 446-458.

"Divided We Survive? Multi-Level Governance and Policy Uncertainty during the First Wave of Covid-19," (Marta Angelici & Paolo Berta, Costa-Font, J & Gilberto Turati), 2021, *CESifo Working Pap Series* 8999.

Decentralisation (I): What? Why? How?

- **What?** Descentralisation refers to stewardship (or vertical power) sharing between different levels of government, when constitutionally defined we refer to it as ‘federalism’
  - Fiscal (power to tax)
  - Political (power to regulate and spend)
- **Why?** To match the scope of the government to the scope of the publicly funded services e.g., health care
  - More efficient if **preferences and needs heterogeneous (Oates, 1972)**, and **information is spread** (Hayek, 1945) as they make ‘one size fits all’ regulations less efficient
  - But when **economies of scale and spillovers** are large then centralisation is more efficient
- **How?** Create districts that match the demand for health services, and decide which functions to keep centralised or descentralised
  - Districts interact (compete and cooperate)

Decentralisation (II): basic calculus with two jurisdictions 1,2

- **Full Centralisation**
  - Joint government health care spending E (E=E1+E2) and taxes T (T=T1+T2) to maximize a joint utility (U=U1+U2)
    - A common budget constraint **T1+T2 = E1+E2**
    - Uniformity **E=E1=E2** (‘one size fits all’)
- **Full Decentralisation**
  - Each government sets **E1=T1** to maximize U1 subject to E1=T1, and E2=T2 to maximize U2 subject to **E2=T2**
- **Partial Decentralisation**
  - Transfers (TR), and federal and state taxes and expenditures to maximize U1 subject to **E1=T1+TR1**, and U2 subject to **E2=T2+TR2**, and TR1= -TR2

Decentralisation (III): Benefits

- **Matching government structure with health care preferences and needs of local communities**
  - The demands of citizens for public spending are revealed by subnational political cycles
- Improves allocative efficiency via making health systems
  - **Politically accountable**
    - Each health system has non-subordinate regulation
  - **Fiscally Accountable**
    - Each health system has control of financial resources
- Provides a "**field for innovation and lower cost experimentation"** and **policy diffusion (e,g., smoking bans, COVID-19 regulations)**

Decentralisation (IV): Costs

- **Economies of scale** makes descentralisation less efficient
  - As the cost of proving those services declines with volume
- **Spillovers effects makes regulation by a higher level of government more efficient**
  - e.g., shopping around for health care in the European Union?
- **Coordination (transaction) costs** of providing information makes decentralisation less efficient
- Decentralisation **weakens the monopoly power of labour unions**
- Bring territorial diversity
  - but depends on policy imitation and uniformity or **inequality aversion** which might be different between communities (e.g., high concern in Germany and low in Switzerland)

Decentralisation (V): health care is typically a joint responsibility mainly

Responsibility sharing between local and central administration								
	Albania	Bulgaria	Czech Rep.	Hungary	Poland	Romania	Slovakia	Slovenia
Police	☐	☐	■	☐	☐	☐	■	☐
Education	■	■	☐	■	■	■	☐	■
Health	■	■	☐	■	■	■	■	■
Transport	■	☐	■	■	■	■	■	🏳
Roads	■	☐	■	■	■	■	■	■
Pensions	☐	☐	☐	☐	☐	☐	☐	☐
Dwelling	■	🏳	■	■	■	■	■	■
Culture	■	■	☐	-	■	■	■	■
Unemloyment	☐	■	☐	☐	☐	■	■	☐
Social protection	☐	■	☐	■	■	■	■	🏳
Justice	☐	■	☐	☐	☐	☐	☐	☐
☐ - nnational 🏳 - subnational ■ - mixt								

Descentralisation (VI): models of federalism

Cooperative (Germany)

- **Cooperative autonomy** - the federation makes "framework laws" and states are responsible for implementation regulations
- Financed is via **shared taxation and transfers**
- **Soft budget** constraints (bail-outs)
- Upper chamber representing subnational units and **acts as a veto player** even of some state reforms (**'joint decision-making trap'**)
- Limited regulatory diversity

Competitive (US)

- **Competitive autonomy** - subnational governments have primary autonomy to make their own regulations
- Financed via **own taxes and transfers**
- **Hard budget** constraints (balanced subnational budgets)
- Upper chamber only veto federal reforms only but **not state reforms (high experimentation!)**
  - Though Medicaid and Medicare are federal programs
- Wide regulatory diversity

Decentralisation (V): but fiscal autonomy is hard to measure!!!

- % expenditure/ revenue in the hands of sub central units
  - But does not account for legislative of administrative constrains on expenditure and taxes (with and without regulatory power)
  - **And Fiscal Autonomy= own taxes+ % federal taxes (FT)**
- Grant Transfer (TR) - conditioned/unconditional
  - "**Flypaper effect**" grants encompass an expenditure expansion - rather than reducing taxes

Decentralisation (VI): A European model?

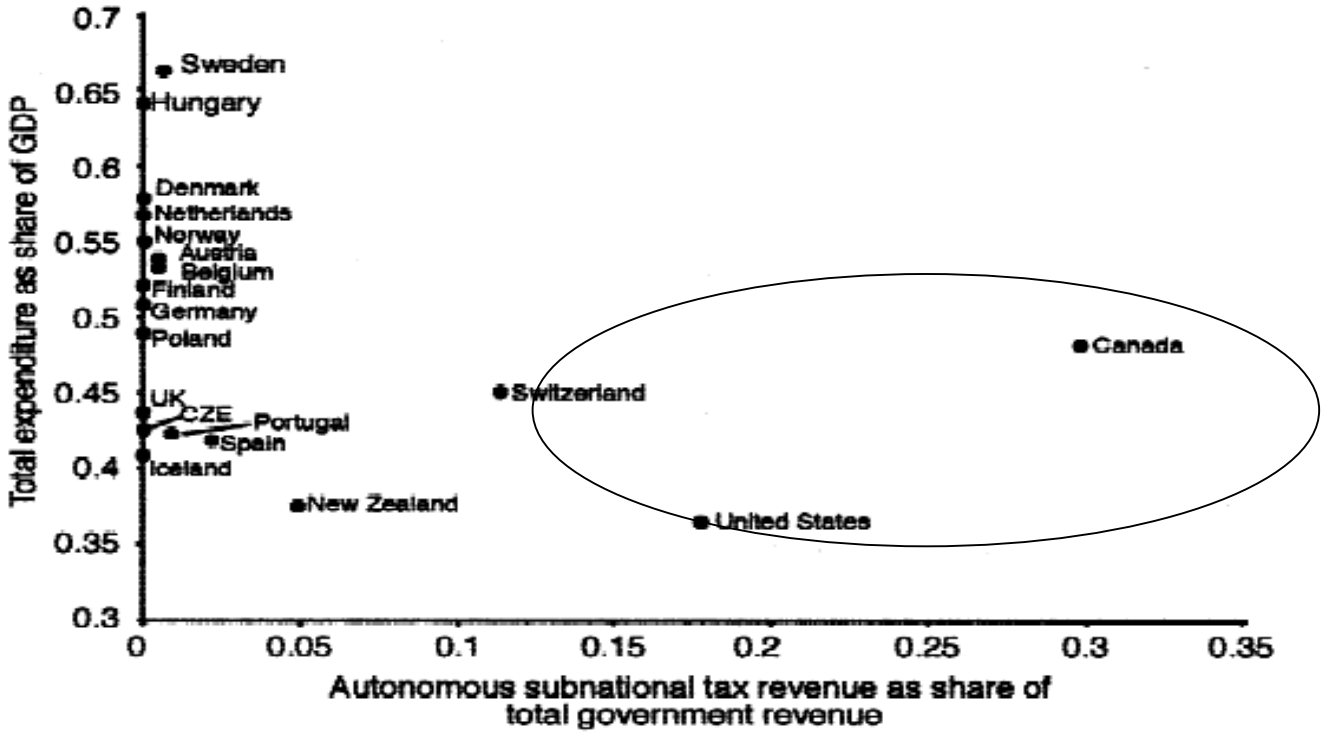


FIGURE 3. *Subnational tax autonomy and the size of government*

Inequalities (I): Reduction in Inequalities after devolution in Italy and Spain

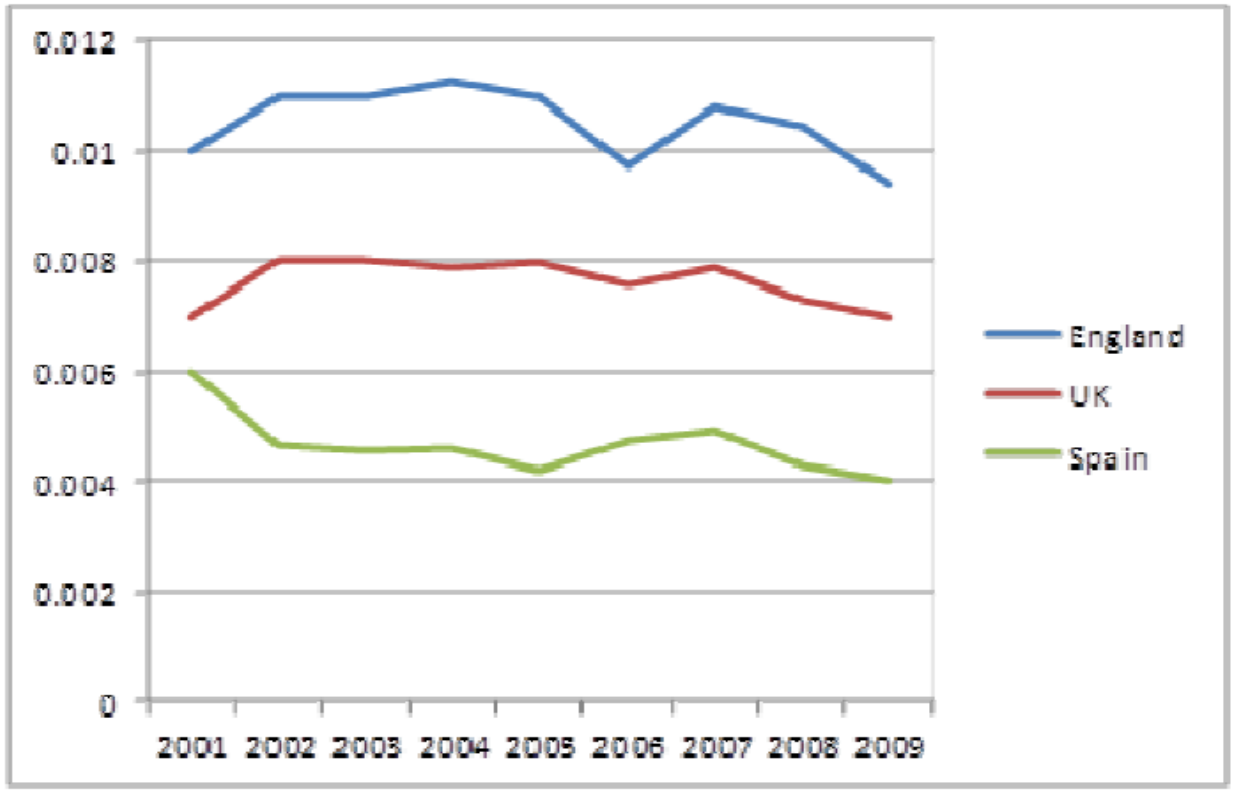
Tab. 1. Inequality in resources and outcomes (Gini index)

Spain	**All yrs.**	**1998-2002**	**2003-2009**
Quality ('Health system satisfaction')	0.034*	0.019	0.062**
	[0.018]	[0.029]	[0.023]
Output ('Public spending per capita')	0.093***	0.031***	0.026***
	[0.009]	[0.008]	[0.009]
Italy	**All yrs.**	**1998-2001**	**2002-2009**
Quality ('Health system satisfaction')	0.147***	0.146***	0.157***
	[0.009]	[0.015]	[0.012]
Output ('Public spending per capita')	0.057***	0.047***	0.028***
	[0.006]	[0.007]	[0.005]

Note: This table reports the Gini index of health systems satisfaction (Quality) and unadjusted output (spending per capita) across regions in Spain (upper panel) and Italy (lower panel) for the whole period examined 1998-2009 in column one. Columns two and three provide the Gini for the subperiods 1998-2002(2001) which refer to before as the 'second decentralization wave' and the period 2003(2002)-2009 which refer to post decentralization wave. SE in square brackets. Sig. lev.: *** 1%, **5%, * 10%.

Inequalities(II): lower inter-regional Inequalities than centralised systems

Figure 2. Regional Inequalities (unadjusted health care output)



Inequalities (III): No increase in intra-regional Inequalities

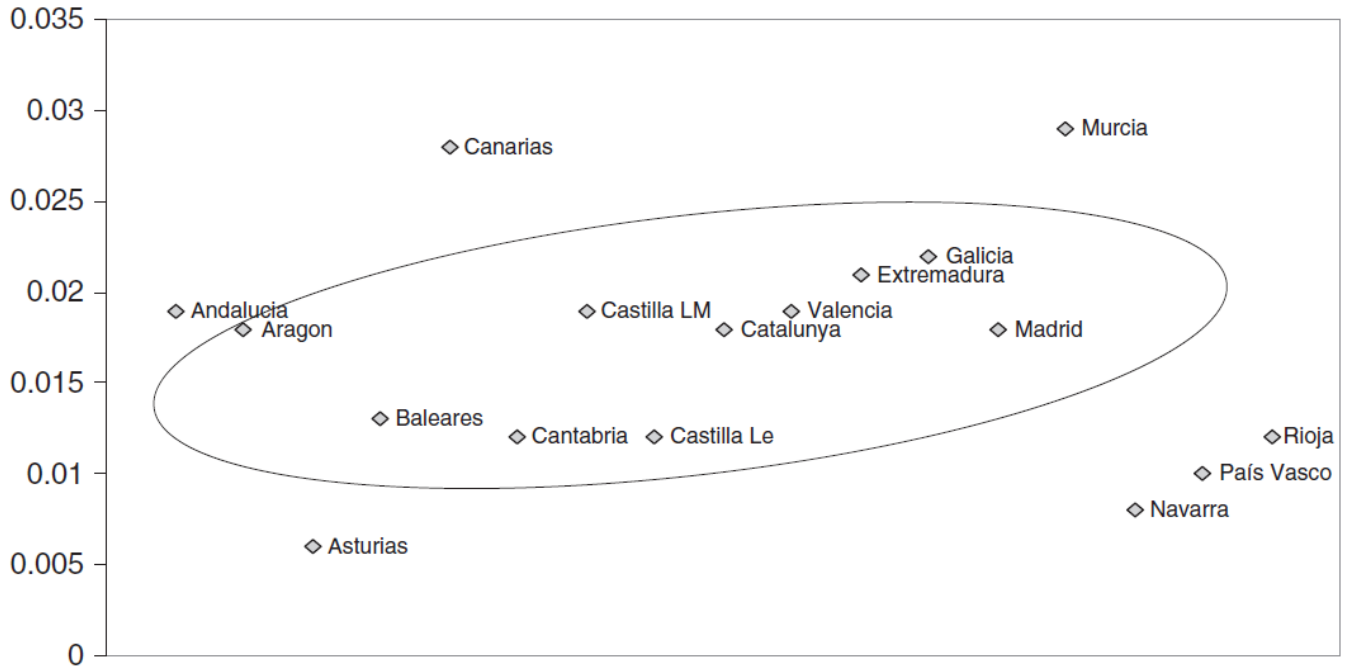
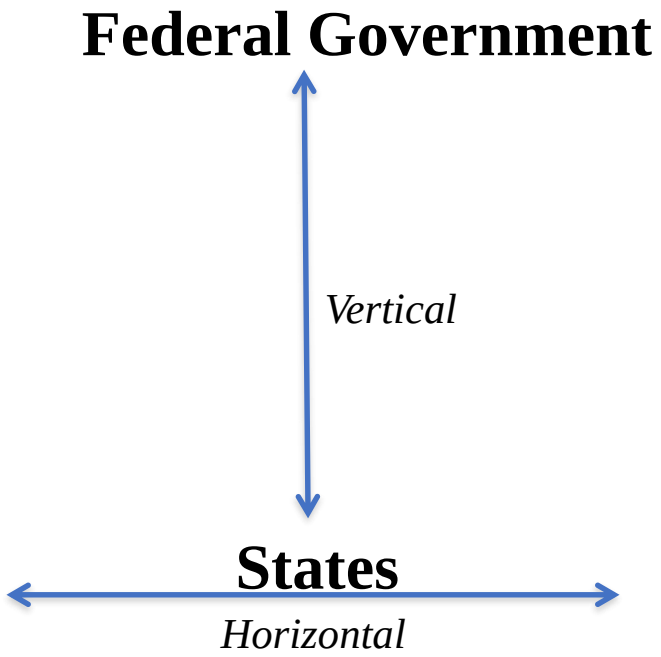


Figure 1 Inequities in health by AC

Notes: Bootstrapped standard errors. Andalucia=Andalusia, Baleares=the Balearic Islands, Canarias=the Canary Islands, Catalunya=Catalonia, Castilla LM=Castile la Mancha, Castilla Le=Castile Leon, Navarra=Navarre, País Vasco=the Basque Country.

Mechanisms (I): Interjurisdictional Competition

- **Patient citizen (PC)**: Individual can form wicksellian connections **Wi=Ei/Ti**
- E=E(Q) where Q=quality
- The PC decides either by
  - **moving** ('voting with ones feet') and supporting reforms
  - or actual electoral **voting**
- **Horizontal:** governments at the same level.
  - Mobility based (voting by feet)
  - Yardstick (voting through elections)
- **Vertical:** Governments at different levels
  - Yardstick (Salmon, 1987)



Mechanisms (II): Horizontal Competition

- Interactions between **same level of government**
  - Patient citizens shop around and compare tax rates (T) and health care services that can differ in quality (Q)
  - Congestion stands as the main limit to mobility as well as subnational 'differentiation'
- Mechanisms:
  - **Mobility of citizens** "voting with their feet" (limited!)
  - **Political agency** "voting political programs proposing credible improvements along the lines of other jurisdictions"
- Competition on ***price*** or ***quality***? But not specific hypothecated tax on health care, and quality is not always observable except for waiting lists.

Mechanisms (III) : Horizontal competition and policy innovation

Table 2. Policy innovation and diffusion in health care within Spanish region-states

Policy/coverage expansion	First implemented	Diffused
Integration of health and social care	Catalonia (1986)	Cantabria, Basque country and other ACs
Dental care for children under 15	Basque Country and Navarra (1993)	Andalucia and other ACs
Right to second specialist opinion	Canary Islands (2002)	Andalucia and other ACs
Integration of primary care physicians within the NHS system	Andalucia (1990)	Andalucia and all
Private hospital care contracting – out system	Catalonia (1986)	Insalud and all
Health Technology Agency	Catalonia (1990)	Andalucia, Basque Country and others

Mechanisms (IV): Vertical Competition

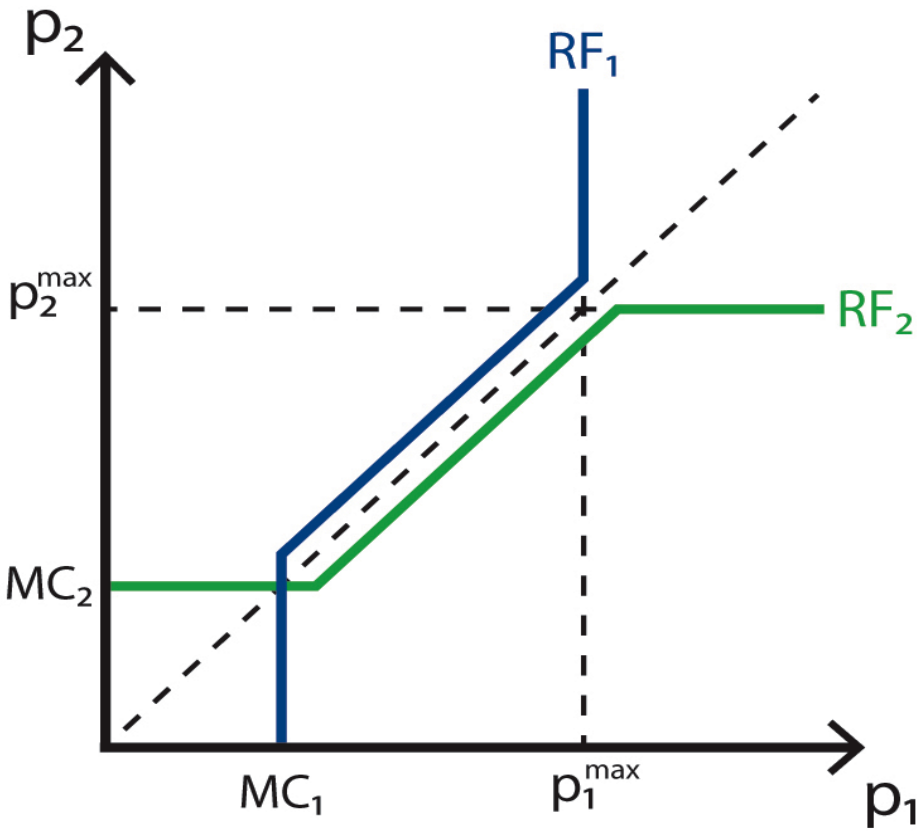
- Between different government tiers (federation v states) when there are some **overlapping power allocation**
  - Still relies on Yardstick competition
- **Constitutional flexibility** to allow pre-emption of the regulatory space of each jurisdiction at different levels of government
- Competition forces **governments to specialise in those functions a jurisdiction is relatively more efficient (pricing drugs or epidemic management at the central level)**
  - End point: over time constitutional assignment will be left open are given a new interpretation (EU case for further intervention in health care)

Mechanisms (V): Cooperation and Coordination

- Collusion (cooperation) or monopolisation (coordination) of governmental actions is more likely when:
  - In the presence of equalisation grants or **transfers, and limits of divergence (especially when grants are conditional)**
  - There is **information sharing** - to avoid losses from competition though and share economies of scope
  - Collusion or **complementarities** exist among services provided are in place

Race to the bottom (I): Reaction Functions if competition is on price but not on quality?

$$P_1 = RF(P_2)$$

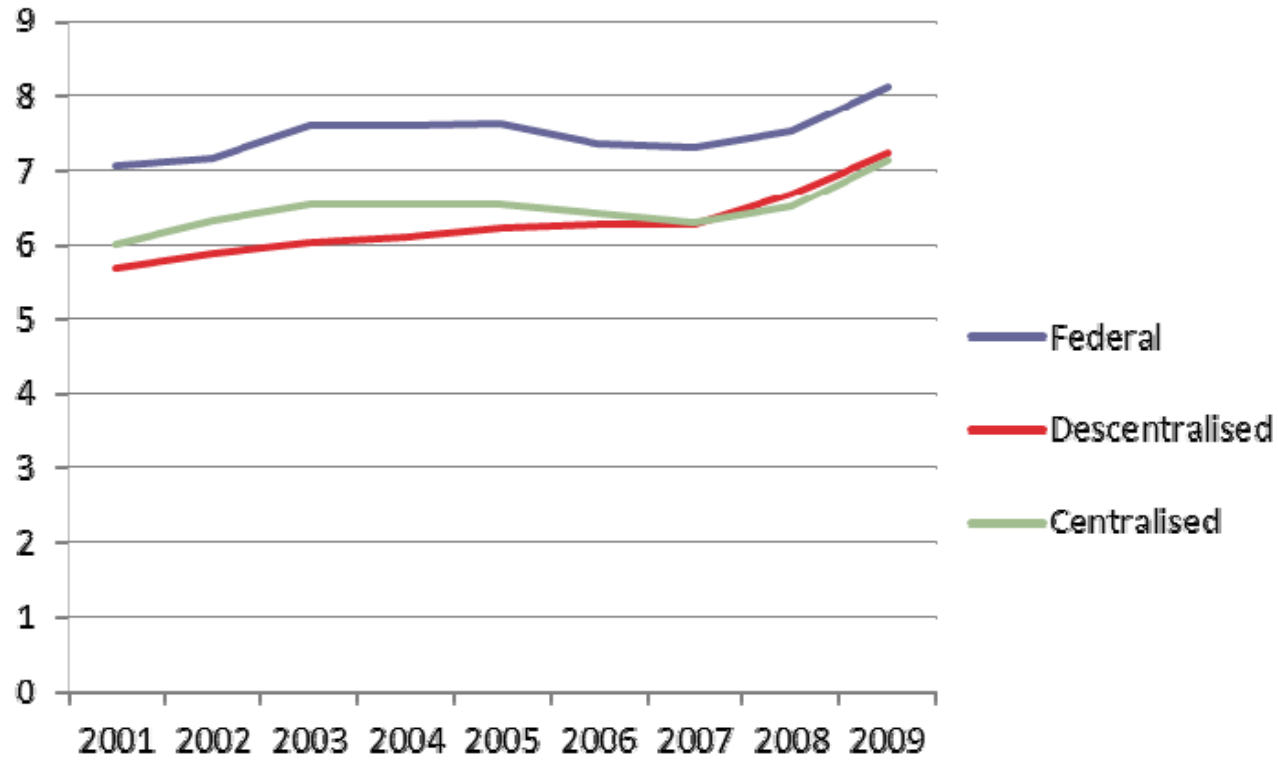


$$P_2 = RF(P_1)$$

Interdependence of governmental actions (fiscal interactions)
Produces fiscal competition
"race to the bottom" (e.g. mobile taxes, co-payments)

Race to the bottom (II): An alternative race to the top on quality and spending?

Figure 1. Relative Public Health Expenditure by health care constitutional form



Source: OECD, 2011.

Race to the Bottom (III): Why not?

- Because **horizontal competition might be on quality** (race to the top)
- Other explanations:
  - **The median voter might be pro-government involvement**
    - US: the federal government spending on health and welfare is 34% it was only 1% of total state revenues on welfare in 1902
  - Decentralisation incentivises vertical competition and policy innovation too **not just horizontal competition**
    - Federal government very proactive such as Obamacare (ACA), CHIPS, Medicare and Medicaid (Johnson)
  - Health services are goods with **limited tax – benefit linkages** (wicksellian connections are weaker)
  - Mobility is still restricted for the 'voting with ones feet' to happen
  - Matching grants are the norm (see next slide)

Race to the Bottom (IV): Limited by Transfers to correct imbalances

- **Vertical Imbalances** (different levels of government)
  - When the federation collects taxes more easily and at lower economic cost than states
    - Might prompt resources that states might have used otherwise
- **Horizontal Imbalances (same level)**
  - Arising because of the heterogeneity in the regional economies
    - Transfers account for income, population, tax effort, fiscal discipline etc
    - Barnett formula in the UK (proportion of population compared to England)

Race to the Bottom (V): International Evidence

- We draw upon probably one of the main experiences of countrywide health care decentralization in Europe which took place in **Spain** since 1981 and then in 2002
  - **United Kingdom**'s devolution of health care to Scotland, Wales and Northern Ireland after 2000,
  - Decentralization in **Italy** after 1978 and 1997.
  - Scandinavian countries have been traditionally managed at the local level and some Eastern European countries too (though Norway and Poland have been subject to recentralization)
  - Germany, Belgium and Austria are federal states same as Canada and the US, Brazil, India and Argentina
  - China is a system of 'informal federalism'

Race to the Bottom (VI): Differences between Europe and the US

- **In the US "federalism precedes public health insurance" (Pierson)**:
  - Pierson "(competitive) federalism is an impediment to asd veto players and balanced budgets create a "race to the bottom)
- **In Europe, "public health insurance precedes federalisation" (Obinger)**:
  - Federalism in Europe is cooperative
  - Main policy responsibilities lie in areas where the European median voter is pro-welfare and willing to pay more taxes
  - Competition can be limited by means of equalisation grants
  - Role of trade unions in Europe as opposed to the US

Outline

ELSEVIER
Journal of Economic Behavior & Organization
Volume 202, October 2022, Pages 632-653

Does devolution influence the choice and quality of public (vs private) health care? ☆

Joan Costa-Font [a], Ada Ferrer-i-Carbonell [b]

https://doi.org/10.1016/j.jebo.2022.08.022

Abstract

Government decentralisation also called 'government devolution' (GD) can provide an alternative to the 'build in' accountability mechanism of markets by influencing both the choice as well as the perceived quality of public versus private health care.

Decentralization and Health Care (I)

- The feasibility of tax funded national health services (NHS) is compromised if citizens question the quality
- If NHS falls short of expectations (e.g., waiting list and times, amenities, etc.), individuals can use private health care substitutes ex post (Propper, 1996) or ex-ante (Besley *et al*, 1999).
- How to keep individuals using the NHS?
  - Private health care lessens pressure to the NHS and improve the quality of those who stay.
  - However, can also compromise the political support of the NHS
- **An institutional response is regional decentralization, more so if preferences are heterogeneous to increase quality of care**

Decentralization and Health Care (II)

- Political decentralization fragments the median voter at the regional level
  - incumbent in each region has **incentives to deliver visible quality of care** that satisfies the median regional voter
  - Regional decentralization strengthen political agency (Besley, 2006)- incumbents either **deliver or risk re-election**
- Government decentralisation can provide an alternative to the accountability mechanism of markets.
  - GD can influence choice, preference, & perceived quality of public vs private health care.
- We exploit the gradual of the Spanish NHS on a DiD.

Decentralization and Health Care (III)

- Transfers of health care responsibilities:
  - First wave: Catalonia 1981; Andalusia 1984; Basque Country & Valencia 1988; Galicia & Navarre, 1991; & Canary Islands, 1994.
  - Second wave: remaining 10 regions in 2002 (*treatment group*) (before that NHS remained centrally run)
- All 17 regions but 2 were subject to the same financial constraints (Lopez-Casasnovas et al, 2005) → differences in access to public NHS between region is not driven by differences in resources, but by policy differences.
- We run a DiD and exploit different sources of heterogeneity

Decentralization in Spain: financing

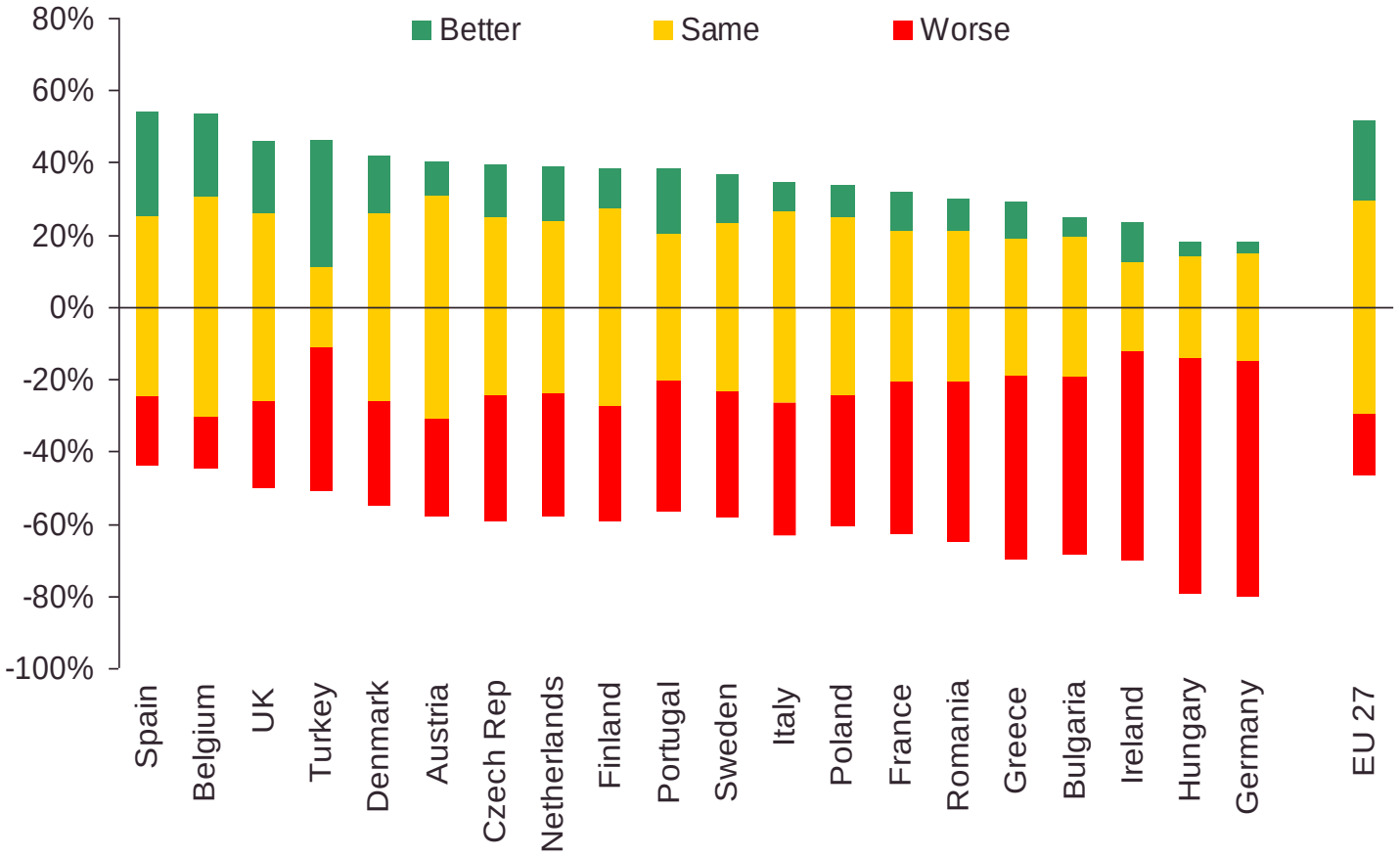
- Regional governments could allocate their health care budgets
- But, very limited capacity to raise taxes
- GD transferred political responsibilities, but most funding remained centrally allocated via block grants (except Navarra and the Basque Country)
- Total health spending remained stable from 1995 to 2005 (7.6%) and, only increased to 8.7% in 2009. [Robustness to 1998 - 2009 and exclude Navarra & Bask country].

Decentralization in Spain : political agency

- GD however modify political agency in health care:
  - Regional governments had a new policy responsibility to prove themselves of value to constituents
  - Regions were equipped with legislative capacity to adjust their health services to regional preferences
  - There has been large legislation activity. E.g., Castilla-La Mancha introduced a legal limit to waiting list for surgical interventions and diagnostic tests in 2003
  - This led to **yardstick competition on quality**: new policies (policy innovations) were disseminated.

Spain toped the rank in 2008/9

Compared with five years ago, would you say things have improved, gotten worse or stayed about the same when it comes to *Healthcare provision* in our country?



Source: Eurobarometer/nVision
Base: 1,000 respondents per country aged 15+, 2009

DESCRIPTIVES	Total sample			Treated		Control	
	# Obs.	Mean	St.dv.	Mean	St.dv.	Mean	St.dv.
Dependent variables							
Perception Health System	67,828	1.871	0.82	1.917	0.82	1.829	0.81
Preference for Public Health	67,795	2.556	1.70	2.587	1.70	2.528	1.71
Satisfaction with Public H	55,402	6.432	1.61	6.592	1.60	6.293	1.61
Private Health Insurance	47,841	0.114	0.32	0.126	0.332	0.103	0.304
Control variables							
Years of exposure	68,608	10.496	8.39	3.003	3.063	17.265	5.383
Female	68,589	0.513	0.50	0.513	0.500	0.513	0.500
Age	68,568	46.249	18.28	46.764	18.435	45.783	18.125
Income, if not missing	49,766	3.395	1.27	3.407	1.277	3.384	1.271
Missing income	68,608	0.275	0.45	0.263	0.440	0.285	0.451
Education Level, if not missg	65,189	2.465	1.24	2.475	1.255	2.456	1.226
Missing education level	68,608	0.050	0.22	0.042	0.201	0.057	0.231
Occupation:							
Employed/Working	68,475	0.454	0.50	0.450	0.50	0.457	0.50
Retired	68,475	0.205	0.40	0.208	0.41	0.203	0.40
Unemployed	68,475	0.080	0.27	0.075	0.26	0.084	0.28
Student	68,475	0.060	0.24	0.055	0.23	0.065	0.25
At home	68,475	0.092	0.29	0.097	0.30	0.088	0.28
Other	68,475	0.109	0.311	0.116	0.32	0.103	0.30

Empirical Strategy

$$Y_{it(g)} = \gamma_1 D_{(g)} + \gamma_2 \left(POST_{(t)} \cdot D_{(g)} \right) + \gamma_3 POST_{(t)} +$$

$$\gamma_4 X_{it(g)} + \gamma_5 \mu_t + \gamma_6 \vartheta_g + \varepsilon_{it(g)}$$

- Identification strategy: variation resulting from the 2002 decentralisation rollout to all regions.

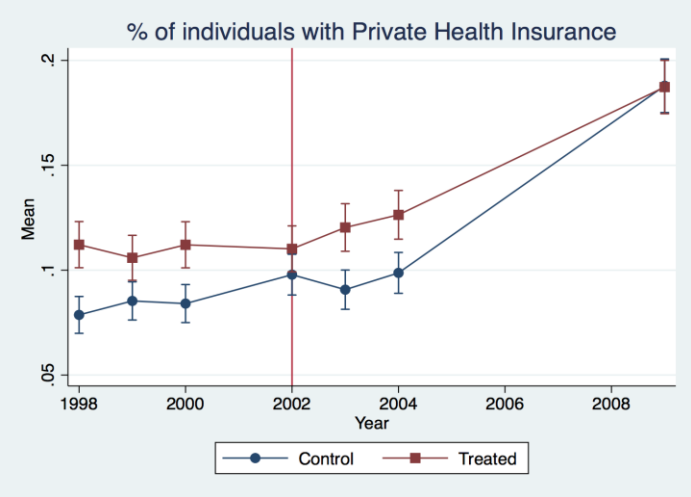
Parallel Trends:

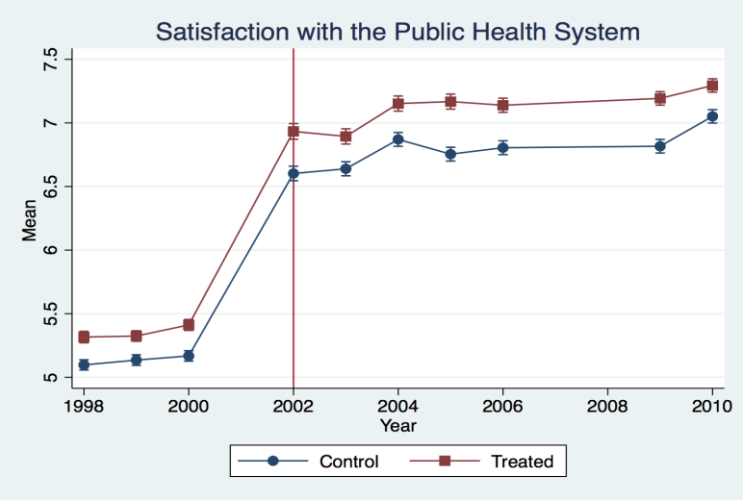
- Control regions were decentralized 20-12 years before → impact had already flattened → we expect pre-trends (1998-2002) to be parallel (8-17 years)

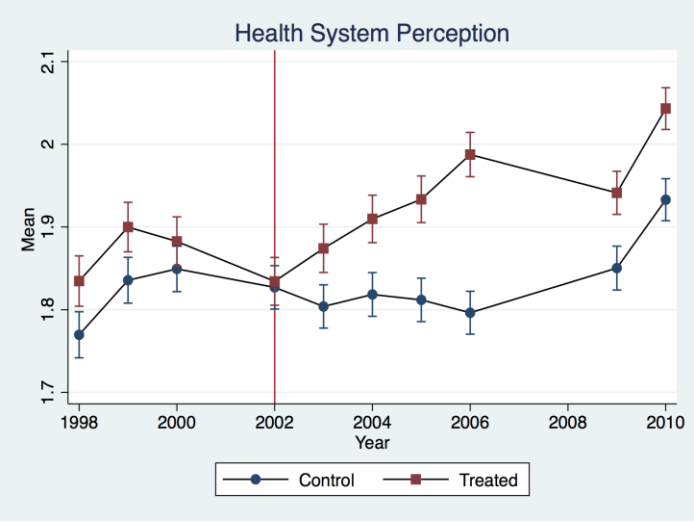
- Seen as two different reforms

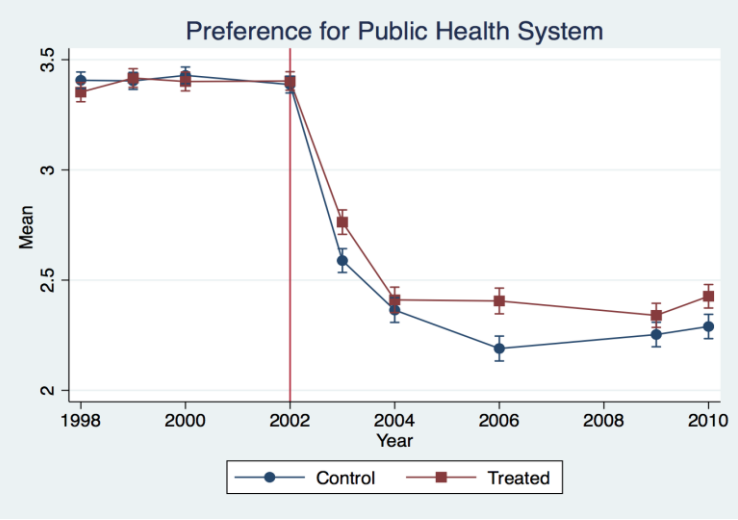
- Levels: differences in tastes & expectations, demographic characteristic, etc.

Parallel trends







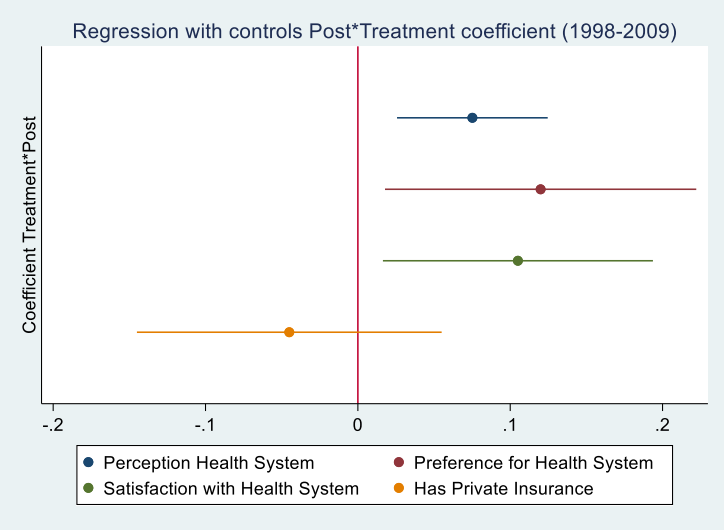


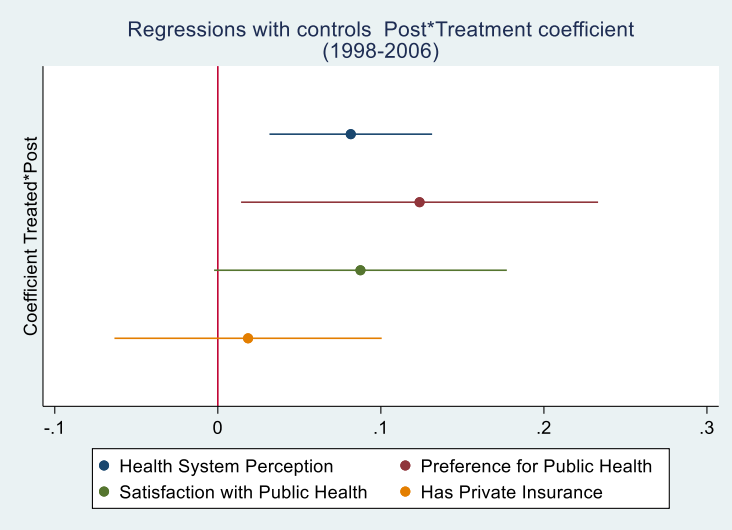
Baseline Results

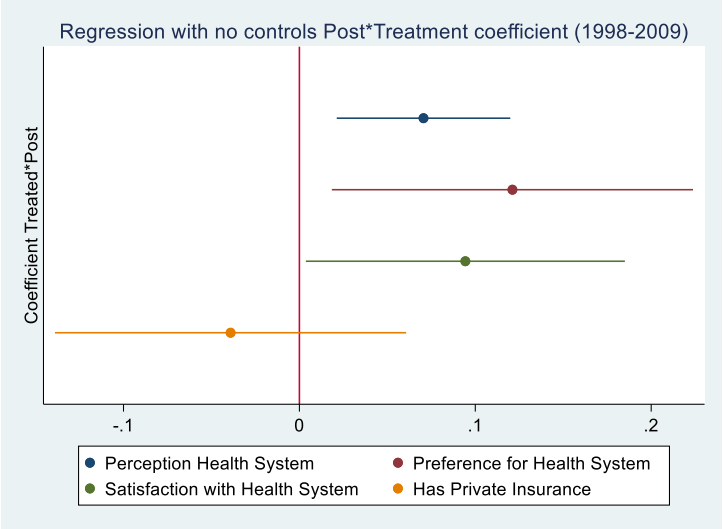
We find

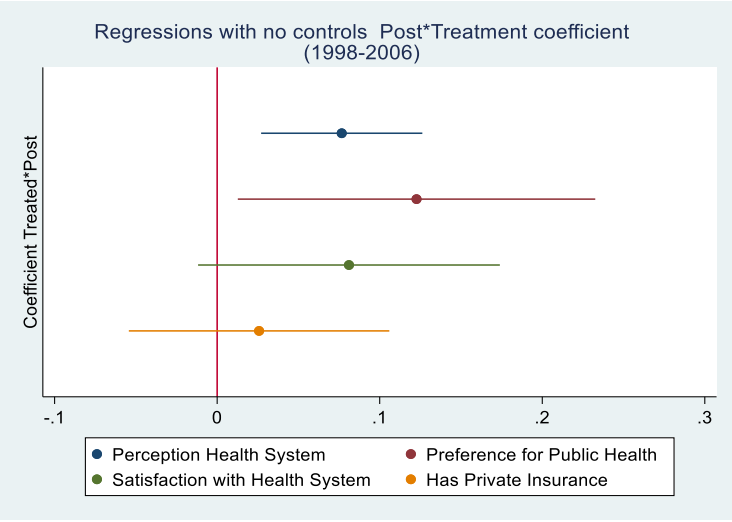
- 7.5pp increase in the perception that the public health system is working well (mean 1.87)
- 12pp increase in the preference for public health care (mean 2.57),
- 10.5pp increase in the satisfaction with the public health (mean 6.43).
- Small (-0.045) and imprecisely estimated (s.e=0.051) coefficient for the uptake of private health insurance,

Baseline Results









Errors clustered at the year*region level. Controls : female, age, income, education, occupation, dummy missing income & education.

Perception (mean 1.87); preference (mean 2.57), satisfaction (mean 6.43).

Robustness

- Results consistent to:
  - Exclude Navarra & Bask Country → indicate hat political, rather than fiscal decentralization, drive the results.
  - Exclude Madrid
  - Include trend and trend square instead of year FE
  - Controlling for regional health spending per capita
  - Including only more exposed to migration: Catalonia, the Canaries, Valencia, Madrid, Balearic Islands, and Murcia.
  - Assuming ordinality (OP)
  - Excluding Canary Islands, that was more recently decentralized (1994)

Falsification test

Interested in	Education	Health	Housing	Pensions
Treated	-0.052***	0.001	-0.005	0.028***
	(0.011)	(0.012)	(0.009)	(0.008)
Post 2002	0.027***	-0.017*	0.031***	-0.020***
	(0.008)	(0.009)	(0.007)	(0.006)
Treated*Post	-0.003	0.023***	-0.007	0.003
	(0.006)	(0.007)	(0.006)	(0.005)
	66633	66633	66633	66633
N				

Same specification as the baseline

Heterogeneous effects: income

Treated*Post	Income<900	900<inc.<1800	Income>1800
Perception	0.130***	0.084***	0.123***
	(0.029)	(0.021)	(0.027)
Preference	0.142***	0.067*	0.290***
	(0.043)	(0.036)	(0.053)
Satisfaction	0.121***	0.018	0.020
	(0.028)	(0.020)	(0.027)
PHI	-0.038	-0.028	-0.131**
	(0.115)	(0.061)	(0.060)
N	25%	50%	25%

Same specification as the baseline

Reduction of PHI take up in a similar magnitude for both high-income (13.1pp) and high education (14pp) individuals.

Heterogeneous effects: education

Treated*Post	Low education	Middle education	High education
Perception	0.060***	0.099***	0.047
	(0.017)	(0.022)	(0.035)
Preference	0.085***	0.140***	0.213***
	(0.027)	(0.041)	(0.073)
Satisfaction	0.014	0.043**	-0.017
	(0.016)	(0.021)	(0.037)
PHI	0.038	-0.095*	-0.140*
	(0.050)	(0.054)	(0.084)
N	65%	25%	5%

Same specification as the baseline

Heterogeneous effects: age

	Perception	Preference	Satisfaction	PHI
Treated*Post	0.061***	0.101***	0.014	-0.039
	(0.013)	(0.022)	(0.012)	(0.034)
Tr'd*Post*Old	0.099***	0.162***	0.049***	-0.064
	(0.017)	(0.030)	(0.018)	(0.062)
N	67692	67641	55297	47723

Old =1 if individuals older than 70

Older respondents are more likely to use health care and thus to be more sensitive to changes in the public health care quality

Incumbent

	Perception	Preference	Satisfaction	PHI
Treated	0.251***	-0.066*	0.160***	0.077
	(0.021)	(0.037)	(0.021)	(0.059)
Post 2002	0.123***	-1.102***	-0.039***	0.589***
	(0.015)	(0.026)	(0.014)	(0.035)
Treated*Post	0.142***	0.133***	0.074***	-0.119***
	(0.016)	(0.028)	(0.016)	(0.046)
Treated*Post* Incumbent	-0.101***	-0.026	-0.062***	0.146***
	(0.017)	(0.029)	(0.016)	(0.047)
Incumbent	0.048***	-0.015	0.060***	-0.008
	(0.008)	(0.015)	(0.008)	(0.025)
N	67692	67641	55297	47723

Vertical competition: the effect of GD smaller when the regional and central governments are ruled by the same party

Mechanisms: Resource Allocation

- Reallocation of regional spending out of other services.

	Public Health Spending	Surgical theatre rooms	Number of specialists	NMR equipment	Satisf. waiting lists hosp.	Satisf. wait. times specialist
Treated	872.831***	0.213	0.448***	0.687***	0.689***	1.079***
	(22.811)	(0.210)	(0.034)	(0.052)	(0.156)	(0.144)
Post	116.291***	0.236	-0.018	-0.305***	0.854***	0.838***
	(24.258)	(0.231)	(0.037)	(0.057)	(0.186)	(0.173)
Treated*Post	81.149***	0.033	0.038	-0.024	0.162	0.216*
	(15.965)	(0.147)	(0.024)	(0.036)	(0.123)	(0.114)
Nbr. Observ.	238	252	252	250	210	210

Anual increase in public health spending of 81 euros pc in treated regions as compared to the control group

Nevertheless, baseline results do not change significantly after controlling for health spending (it is only (81 euros).

Mechanisms: Quality and Priorities

	Public Health Spending	Surgical theatre rooms	Number of specialists	NMR equipment	Satisf. waiting lists hosp.	Satisf. wait. times specialist
Treated	872.831***	0.213	0.448***	0.687***	0.689***	1.079***
	(22.811)	(0.210)	(0.034)	(0.052)	(0.156)	(0.144)
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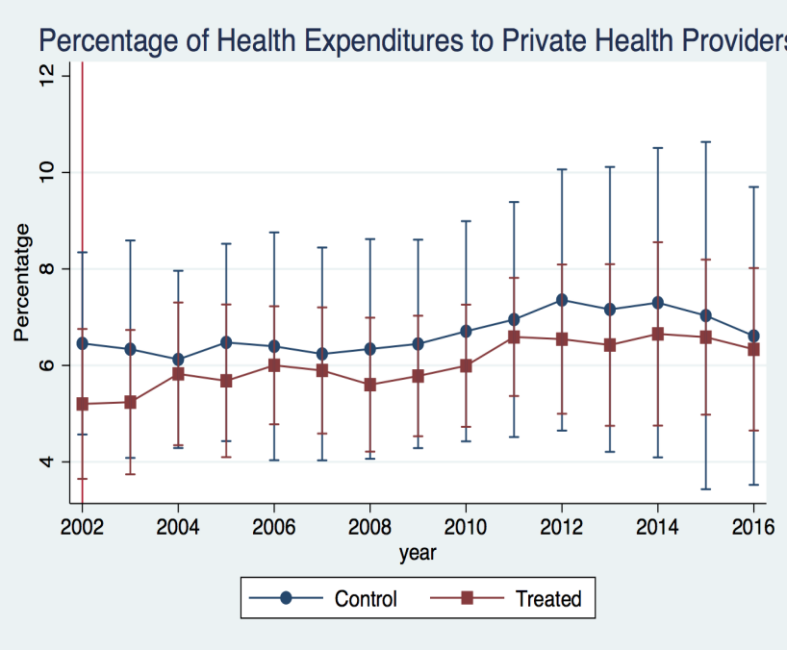
	(15.965)	(0.147)	(0.024)	(0.036)	(0.123)	(0.114)
Nbr. Observ.	238	252	252	250	210	210

Imprecise & small estimates for all three variables

Unlikely that higher capacity underpins the effects of GD on the increase of preference and satisfaction with the public health system.

Mechanisms: Contracting out

- GD → outsource publicly funded health care activity to private providers.
- Can this explain increased satisfaction, while not increasing public health capacity substantially and containing the health expenditures?
- We do not have data from before 2002, but suggests a small increase (Catalonia is a clear outlier).



Mechanisms: Migration

Spain exhibited a large inflow of migrants.

Robustness of our results to regions more heavily exposed to migration (Catalonia, the Canaries, Valencia, Madrid, Balearic Islands, and Murcia).

Mechanisms: Policy innovation and diffusion

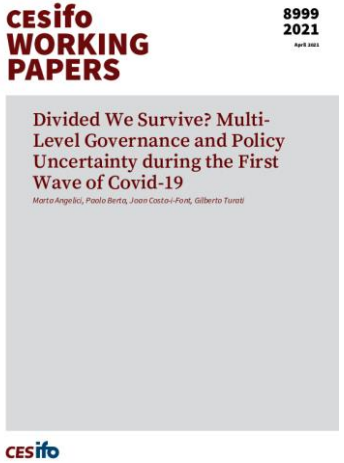
- GD allows for lower cost innovation, which if successful can be easily disseminated.

- It is efficient for decentralised governments to choose policies of similar (benchmark) jurisdictions

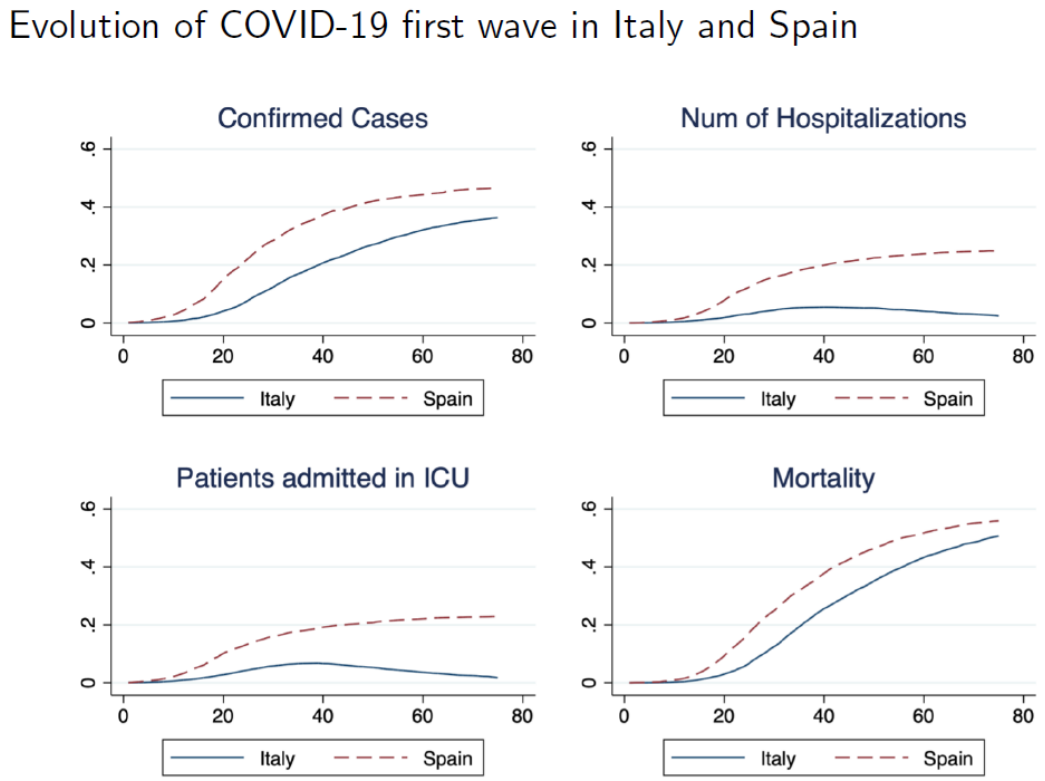
- In Spain, experiences of innovation and diffusion are important (after 2002 decentralized regions had significant legislative activity):
  - Madrid's new school nursing program initiative,
  - Heavier prioritization of robotics in cancer care,
  - Extremadura's and the Balearics pioneering the implementation of electronic prescription
  - Automatic substitution of originators drugs for generics in Castilla-La Mancha

Multilevel Governance and COVID 19 (I)

- The COVID-19 pandemic is a global crisis with **large spillovers**, but regulation was different across Europe (**collective action problem**)
- Its is fundamental that information and expertise are shared across government units (coordination)
  - **Hierarchical centralisation**: Central Command (Spain) no possibility of differentiation
  - **Decentralised coordination** (Italy) there was experimentation in Veneto and Lombardy and information sharing
  - Regional governments imposed restrictive measures beyond those adopted at the national level (Alber et al, 2021),
    - closure of regional borders in Campania,
    - obligatory flu vaccinations in Lazio,
    - and the closure of all educational institutions in Marche



Multilevel Governance and COVID 19 (II)



Alternative models of decentralisation (I): federacies

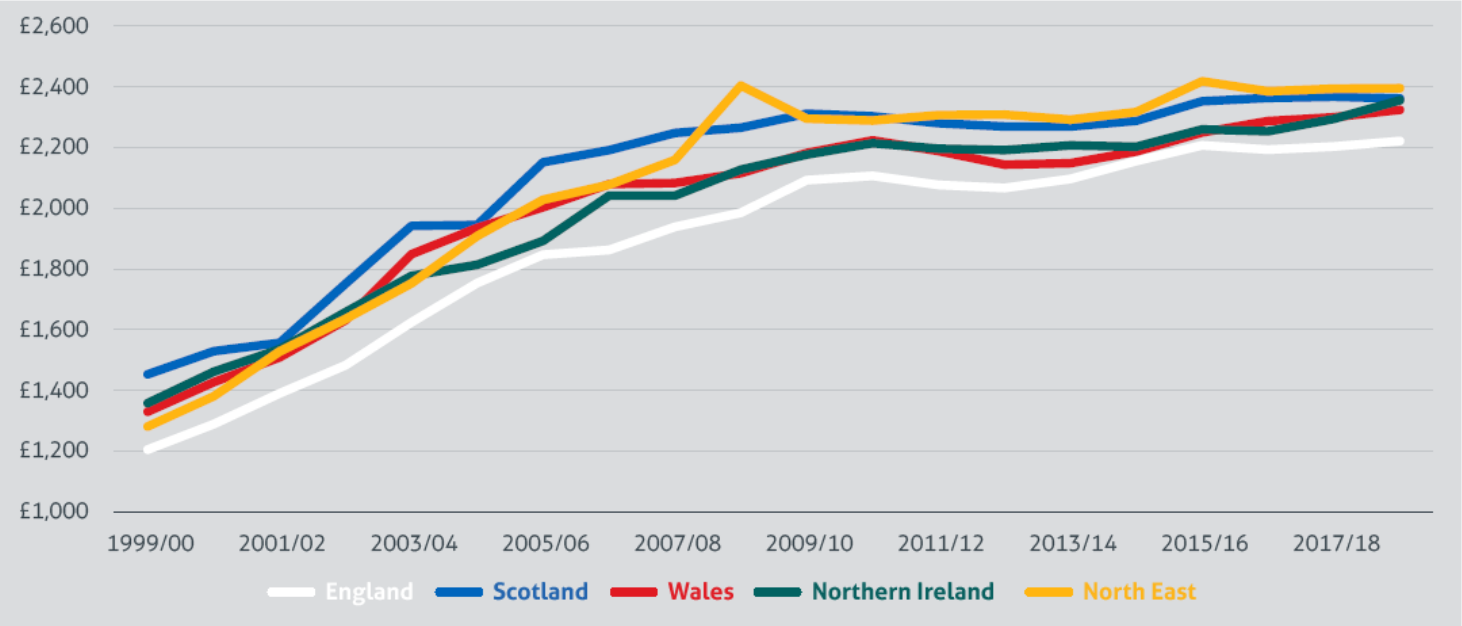
- 2000s Devolution in the four countries of the UK (federacies)

- The November 2017 DevoManc in Greater Manchester evidence to follow
  - Aim to accelerate policy innovation
  - Accountable for their local health economy
  - England also remains one of the most fiscally centralised countries in the world

Alternative models of decentralisation (II): Policy differences after devolution in the UK

	Purchaser/ provider split	Commissioning organisation(s)	Payment by activity	Foundation trusts*	Administrative integration between health and social care
England	Yes	NHS England and clinical commissioning groups (CCGs)	Yes	Yes	Integrated care systems (proposed)[3]
Scotland	No	N/A	No	No	Integration authorities
Wales	No	N/A	No	No	Regional partnership boards (under consultation)[4]
Northern Ireland	Yes	Health and Social Care Board (being phased out)[5]	No	No	Fully integrated health and social care

Alternative models of decentralisation (III): Devolved administrations spend more in health care



Source: Institute for Government analysis of Her Majesty's Treasury, Public Expenditure Statistical Analyses, 2005–2020.

Conclusions,….

- Decentralization is a response to the inefficiency of ‘one size fits all’ problem when preferences and needs are heterogenous
  - Questions is: what functions to decentralize? How much vertical and horizontal competition and cooperation is desirable?
- Limited evidence of a ‘race to the bottom in Europe where the default is a public health system nor “voting with ones feet” –political agency/competition is key
  - Political decentralization increases the preferences for the use of public health care without increasing regional inequalities in Europe (alternative to privatization)
  - Competition is mainly on quality of care
- Evidence that devolution increases policy innovation and policy diffusion and does not increase regional inequalities
- Devolution responds mainly to political and fiscal incentives

LSE Department of Health Policy

Thank you!

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