Centre for Market and Public Organisation

Alternative Organisation of Public Service Provision

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1. Background and some basic ideas

2. Alternative Models of Delivery

3. ‘Political Economy’ and unexplored ideas

Background and some basic ideas

Public sector/public services are different things:

- Public sector comprises the economic activities controlled by the government.
- Public services are the set of services provided for large numbers of citizens in which there are potentially significant market failures (broadly interpreted to include equity as well as efficiency) that justify government involvement, whether in production, finance or regulation (from **Grout and Stevens (2003) OXREP** – not a great definition!).

Examples: Health, education, water, telecommunications, energy networks, rail networks,

- Most of 20th century around the world saw growth of state provision of public services - replacing private sector, local providers, and voluntary/not for profits, and filling huge gaps in provision.
- 1970s ‘high point’ where in many countries the public sector provided so much of the public services that they were indistinguishable.
- 1980s onwards shift of public services out of public sector:
  - Economic incentives (remove soft budget constraints)
  - Right wing
    - Reduce size of the state as end in itself (choice and non-intervention)
    - Shift voters to right and reduce worker power
  - Left wing
    - Avoid constraints and free up finance for traditional ‘left’ activities

- By 2003, $3.24 trillion of assets had been transferred to the private from the public sector in the preceding 20 years, a significant proportion of which consists of public services. This is about 18% of the global stock market value and 39% of the total non-US value.

- Within developed economies, privatised companies account for a significant fraction of the stock markets: more than 13% in Germany and nearly 12% in Australia, most of which are public services.

- Over 1,000 ‘public-private partnerships’ (PPPs) projects – again mostly public services – had reached financial closure in the European Union alone by 2007 with a total capital investment of around €200 billion.

But private provision is ‘surprisingly’ unpopular with the general public.

Ipsos MORI for the 2020 Public Services Trust showed that:

> The idea of private provision of public services tends to be greeted with suspicion. In general, alternative service provision by the private sector is rejected by many, both because the remit of private provision is perceived to lack a public sector ethos and because the profit motive is usually considered unacceptable in public services.’

‘Alternative service provision is unpopular with many participants because it is too often considered to be synonymous with private provision, which is felt by some to compromise the kind of ‘reactive security’ which the public hold so dear in public service arrangements’.

But role of private finance and market incentives in provision of public services will not go away and will probably grow.

Traditional pure public provision versus pure for-profit provision

Basic insights can be found in **Hart, Shleifer, Vishny (QJE 1997):** incomplete contracts story

Private provider:

good at lowering cost but wherever there is scope because of incompleteness of contracts will ignore damage to ‘quality’

Public provider:

takes ‘quality’ impact into account which helps but employees have to be incentivised

Models of delivery

Almost infinite set of models between conventional public provision and full private provision but the following four capture the big areas:

- Introducing incentives, competition and consumer choice within existing public provision
- Provision by the not for profit sector
- Provision through partnership between private and public sectors (PPPs)
- Regulated pure private provision (notably regulated utilities).

Health, education, social services more biased towards top end: gas, electricity, water, transport more biased towards lower end.

Not for profit

Two defining characteristics:

- Non-distribution constraint
- Mission lock

What follows from this?

Since profit cannot be extracted then any selfish benefit to management would have to come from perks which are costly to extract hence nfp less likely reduce quality where there is a cost of quality.

- This idea associated with **Arrow (AER 1963)** – trust signal - and **Hansmann (1980).**

- **Gleaser-Shleifer (JPubEcon 2001)** model selfish entrepreneurs choice of nfp against for profit, showing that a selfish entrepreneur can opt for nfp if ex-post opportunities to cut quality are high.

Pro-social motivation also has a big role to play.

- **Francois (JPubEcon 2000, EJ 2003, RAND 2007)** argues that pro-social workers donate more effort in nfp than for profit. Argument hinges on interaction of incomplete contract and non-distribution constraint (my hospital example).
- **Besley-Ghatak (AER 2005, OXREP 2003)** suggest mission matching is the core driver and hence high powered incentives are inefficient.
- **Ghatak-Mueller (JPubEcon 2011)** argue that these models are not fully specified (they suggest that for-profit firms should bid up the wage for pro-socially motivated workers removing the advantages of nfp).

Evidence?

Sloan (2000) surveys large literature on nfp in hospitals and finds no clear overall evidence of nfp better or choosing more socially desirable outputs.

Delgaauw et al (2011) find nfp score less well on management practices than for profits and application of good management practices translate less well into output improvement in nfp.

Cowley and Smith (Th&Decision, forthcoming) find workers in public sector exhibit higher intrinsic motivation in most countries but not if corruption is high.

There are some papers showing employees are more pro-socially motivated in the public than private sector but almost nothing asking whether this is the individuals or the institutional form?

Gregg, Grout, Ratcliffe, Smith and Windmeijer (2011, JPubEcon) tackles this question.

We use British Household Panel Survey and use unpaid overtime as measure of donated labour

We separate employees according to whether they work in caring (proxy for public services) or non-caring activities and the profit or non-profit sectors

Table 3. Linear model, unpaid overtime, pooled estimation results

Dependent variable: whether individual does unpaid overtime (0/1)

	Column I	Column II
For-profit caring (omitted)		
Non-profit caring	0.174***	0.123***
Non-profit non-caring	-0.062**	-0.148***
For-profit non-caring	-0.045	-0.118***
Observations	24,135	24,135

Table 6. Linear fixed effects model, unpaid overtime

Dependent variable: whether individual does unpaid overtime (0/1)

	Column I	Column II
For-profit caring (omitted)		
Non-profit caring	0.000	0.002
Non-profit noncaring	-0.042	-0.061
For-profit noncaring	-0.015	-0.037
Observations	22703	22703

Conclusion: individuals differ in degree of intrinsic motivation but the organisational structure does not determine intrinsic motivation.

Introducing incentives, competition and consumer choice within existing public provision

It is fashionable to suggest these policies lead to lower quality with little gain but considerable evidence to suggest this is not so.

- **Bloom, Propper, Seiler and Van Reenen (NBER 2010)** find management quality improves financial and clinical outcomes and that competition increases management quality.

- **Propper and Van Reenen (JPE 2010)** find impact of fixed national wage regimes in National Health Service increase aggregate death rates suggesting that more flexibility and reflection of market conditions would make the public sector more efficient.
- **Gaynor, Moreno-Serra and Propper (AEJ: Economic Policy, 2013)** find introducing competition to the NHS saved lives without increasing cost.
- However sometimes financial gains may be associated with increase in deaths, e.g., **Propper, Burgess and Green (JPubEcon 2004)** find greater competition led to a statistically significant but small increase in death rates.
- Performance tables – evidence they improve outputs at constant cost **Burgess et al, JPubEcon, forthcoming–** but may have distributional implications.

Partnerships

- PPPs discussed by Eduardo Engel

All I would add is:

- There is considerable evidence that contracting out short term PPPs have been successful (see Australian Industry Commission (1996) and references therein).
- Avoids constraints and frees up finance for traditional ‘left’ activities

Regulation

Covered by Andrei Shleifer earlier in week.

In utility regulation, lots of evidence around the world that privatisation cut costs enormously (e.g., **Newbery and Pollitt (1997)** and **Galal et al (1994)).** Most evidence implies that effects are greatest when associated with liberalisation and independent regulation.

Price cap regulation better than rate of return although there is some evidence quality falls.

‘Political Economy’ and ‘unexplored ideas’

- Public services remain ‘close to the state’ regardless of legal structure and delivery mechanism. This causes political economy problems that affects attitudes and the treatment of suppliers.

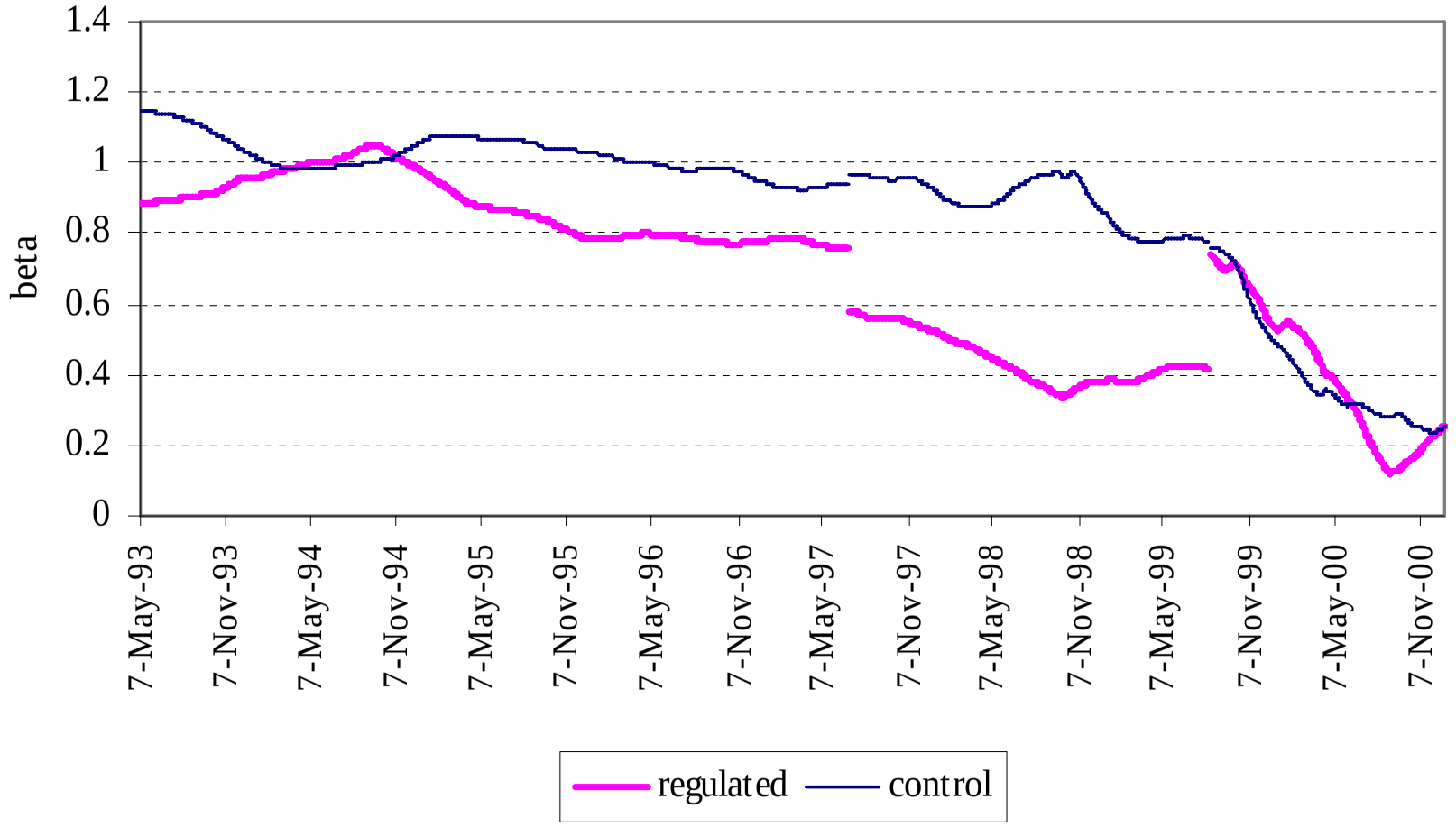
- General acceptability of delivery mechanisms matters. Economists tend to ignore these constraints. How important are they? What should we do?

Political economy

Grout and Zalewska, Journal of Financial Economics, 2006

The paper shows how the political debate concerning how regulated companies and customers ought to share profits has immediate and considerable impact on stock market risk of regulated companies

Figure 1. Regulated and control portfolios' beta coefficients estimated for sub-periods



Grout and Zalewska, Business History, forthcoming,

Title: The treatment of regulated assets: A case-study of the 20th century

Two important periods:

US 1897 to 1945

UK privatisation programme

US regulation (Supreme Court cases)

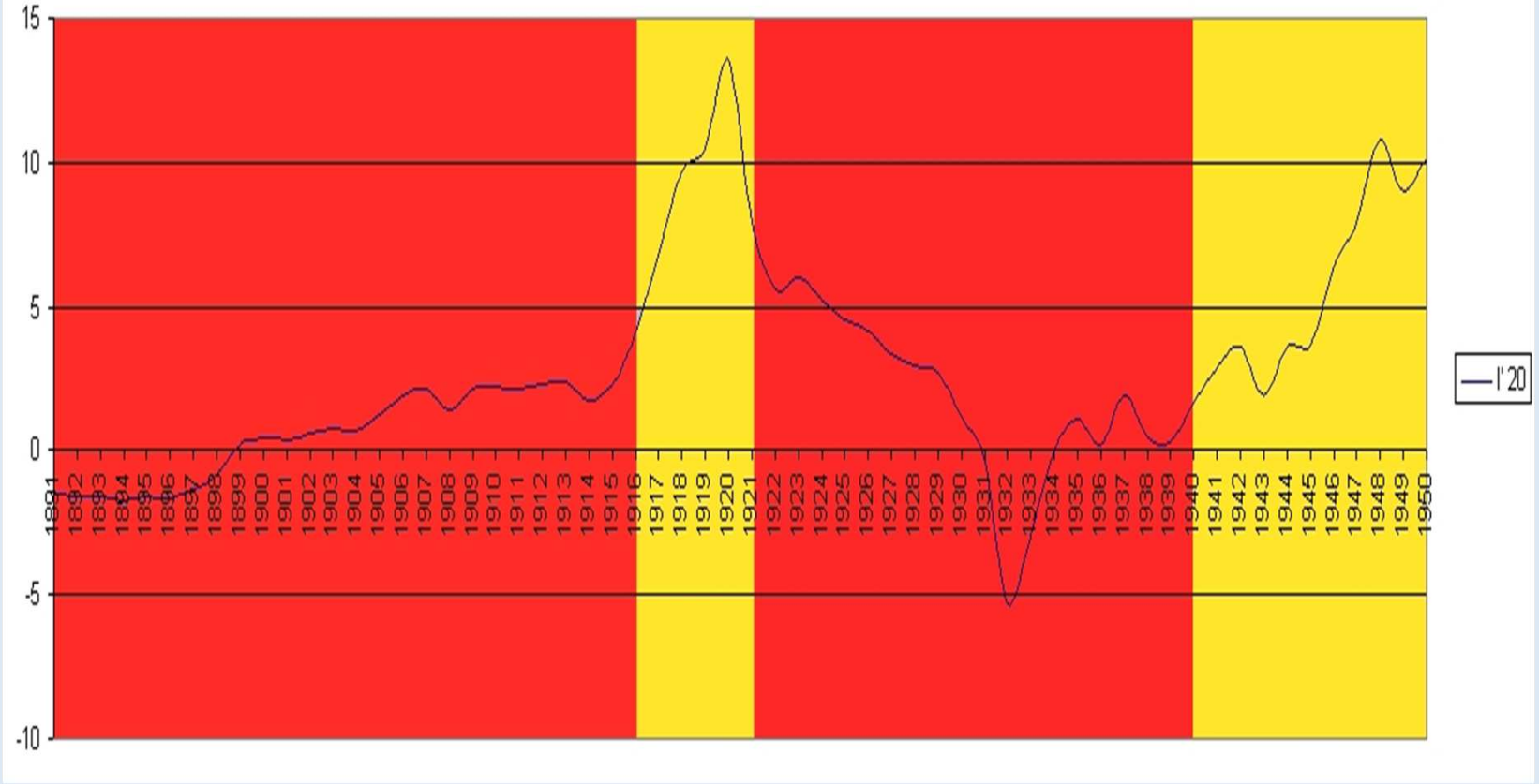
Smith v Ames (1898) identifies two determinants of asset base:

- the original cost of construction and the amount spent on permanent improvements
- the present as compared with the original cost of construction

This left regulatory confusion until:

Hope Natural Gas (1944). The doctrine of the end result, i.e., as long as the company was able to operate successfully and to attract capital, the courts should not become involved.

Figure 1: US regulators choice of asset base



UK privatisation raised new issue - what is the cost of an asset (for regulatory purposes) that has been privatised? What happened was slow movement from US model to the lower market purchase price even though privatisation preceded regulatory changes:

- Telecoms (1984): HC moved to CCA in 1997
- Gas (1986): CCA then ‘market value’ (1993)
- Water (1989): Indicative values then market value (1993)
- Electricity (1990): 1993 Market value with uplift of 50%, then reduced to 15%.
- Rail (1996): Market value, no uplift.

Garside, Grout and Zalewska, Economic Journal, 2013.

‘Does Experience Make you Tougher?: evidence from competition law.’

Treatment of monopoly firms, we look at determinants of ‘guilty’ outcomes of the UK Competition Commission (1970 to 2003).

We find the experience of the chairman conducting the investigation is one of the most important determinants of the verdict. More experience implies far more likely to be found guilty.

Marginal effects of probit estimates at company-level and case-level.							
	Dependent variable: Guilty						
	Company-level				Case-level		
	i		ii		i		ii
Experience	0.027***		0.054**		0.029***		0.096***
	(0.006)		(0.025)		(0.008)		(0.012)
Market share	0.045		0.158		0.171		-0.961**
	(0.146)		(0.145)		(0.257)		(0.405)
Multi	0.438***		0.457***		0.454***		0.557***
	(0.054)		(0.037)		(0.071)		(0.053)
Repeat	-0.441***		-0.472***		-0.249**		-0.266***
	(0.087)		(0.115)		(0.114)		(0.055)
Post ‘79 election	0.479***				0.294		
	(0.125)				(0.227)		
Post ‘89	-0.336***				-0.386***		
	(0.080)				(0.059)		
Chairman dummies	Yes		Yes		Yes		Yes
Year dummies	-		Yes		-		Yes
Pseudo R-squared	0.5399		0.6267		0.4757		0.6215

Marginal effects of probit and IV probit estimates at company-level.				
	Dependent variable: Guilty			
	Probit		IV Probit	
Experience	0.027***		0.027***	
	(0.006)		(0.009)	
Market share	0.045		0.046	
	(0.146)		(0.146)	
Multi	0.438***		0.532***	
	(0.054)		(0.100)	
Repeat	-0.441***		-0.418***	
	(0.087)		(0.121)	
Post ‘79 election	0.479***		0.415***	
	(0.125)		(0.143)	
Post ‘89	-0.336***		-0.493***	
	(0.080)		(0.189)	
Chairman dummies	Yes		Yes	
Estimated correlation of unobservables ( )			-0.022	
			(0.301)	

OLS estimation and two-stage least squares estimations			
	OLS		**2SLS Second stage**
Constant	0.264		0.264
	(0.177)		(0.169)
Experience	0.023***		0.023**
	(0.005)		(0.010)
Market share	-0.114		-0.114
	(0.165)		(0.160)
Multi	0.535***		0.535***
	(0.098)		(0.101)
Repeat	-0.488***		-0.489***
	(0.135)		(0.136)
Post '79	0.527***		0.527***
	(0.179)		(0.174)
Post '89	-0.605***		-0.604**
	(0.220)		(0.249)
Chairman dummies	Yes		Yes
R-squared	0.5463		0.5463

‘unexplored ideas’

Some casual observations as to why public acceptability of private provision of public services may be low and what could be done if this is a concern.

Economists do not spend enough time on this problem

- Self interest, high variance, public sector information
- Persuasive definitions
- Impact of incentive mechanisms on opinion
- ‘Fat tails’
- Social impact of public’s prejudices and inertia

Self Interest

Some obvious candidates:

- Labour unions
- Professions (notably in health)
- Politicians [Secretary of State for Health (Lansley) blames Labour PFI for health sector finance problems – Treasury review of PFI]

High Variance

London Underground – biggest ever PFI

Evidence of major projects in 20th century [e.g., Flyvbjerg et al on transport projects: almost ubiquitous cost escalation, global phenomenon, not decreased over the past 70 years, average cost escalation for private fixed link roads is 34% compared with 110% for public]

So case studies need careful interpretation

Information

Government does not see the big picture when it collects information.

UK NAO:

‘We have yet to come across truly robust and systematic evaluation of the use of private finance built into PPPs at either a project or programme level. The systems are not in place to collect comparable data from similar projects using different procurement routes.;’

Reasons:

- Government departments do not collect data on whole-life costs of projects in a systematic way.
- Costs of ongoing services for conventionally procured buildings are rarely monitored.
- Different procurement routes collect data on different bases.

Persuasive definitions

- Persuasive definitions: a definition chosen for the purpose of influencing a person’s attitude or feelings towards the subject in question.
- Choice of definitions provide information of views and motives of those providing the definition.

PFI: Definition focuses on the source of money not the outcome.

The source of money is important but mainly because of what it brings.

PFI model:

- The government buys the service not the physical asset.
- The private sector owns the asset and the public sector buys the flow of services
- Single supplier has some ex-post monopoly power. This is ‘removed’ by a competitive bidding process

Two big things follow from the introduction of private delivery in this way:

- The private consortium is forced to focus on whole life costs, i.e., this is a change of emphasis for public projects.

- Given that the government buys services as they are ‘consumed’ then the future cost implications may not appear on the government balance sheet as debt. [This is potentially a very good thing although it is rarely painted as such].

PFI – ‘unpersuasive’ definition that has three potential impacts:

- Provides information about motives of those adopting PFI
- Focuses attention on something that is not popular
- Reduces focus on the real issue

Focusing on ‘whole life’ highlights the positive aspects of PFI and in particular brings focus onto a major problem that should be addressed:

> How can we ensure that public projects are developed in ways that minimize whole life cost?

The solution needs to take into account public sector incentives to cut on ‘opex’ (i.e., recognising the time inconsistency problem).

One possibility is to replace PFI with ‘Whole-life Infrastructure Partnerships’ and try to broaden the model to embrace certain public sector projects.

‘Fat tails’ – media particularly to blame but also a result of the political process

- Demand side management in energy networks (role for the EU?)
- Make unravelling truth difficult may affect confidence and investment
- Statistical discrimination equivalent.

Incentive mechanisms and public opinion

Incentive mechanisms affect perception of what matters and also are a source of information (within an organisation, to the general public, etc.)

Unless private profits are generally perceived to be the legitimate reward for better delivery and hard work then there will always be pressure for government agencies and regulatory bodies to reduce returns and public pressure to retain public provision will remain.

Crudely put, a private company will always struggle to justify profit from delivery of public services unless it is ‘legitimised’.

RPI-X and fixed price contracts deliver cost reductions but have encouraged scepticism.

A reward structure that is heavily based on quality improvements provides a positive association between quality and profitability, even when there is uncertainty about how hard it really was to earn the money. Also implies government and regulators think quality matters.

Although payment systems that heavily reward quality improvements may be sensitive to subjective assessments it is possible that the gain in perceived legitimacy of profit could offset this ‘cost’.

- UK Energy industry

  RIIO

  [Revenue = Incentives + Innovation + Output]

- UK water industry – price cap is now a function of customer service.

Utilise public ‘prejudices’ and inertia

General point that public policy tends to see these as negative and (unlike the private sector) does not tend to define policies that take advantage

Harness the prejudice e.g., opt for Non Profit Infrastructure Bank along lines of EIB to give halo effect.

January 2011 Pension fund assets in the 13 largest pension markets hit a record high of $26.5 trillion

Twelve dedicated infrastructure funds worth a combined $5.2bn reached final close during 2010 (more than double that of 2009 in terms of both size and number). Many of those funds were oversubscribed.