

# **Keynesian Hospitals: Public Employment and Political Pressure**

**Andrew E. Clark (Paris School of Economics and IZA)  
Carine Milcent (Paris School of Economics)**

<http://www.pse.ens.fr/clark>

Questions: Should the State intervene in Market Economies?

Are there some services/activities that are better provided by the Public rather than the Private Sector?

State intervention often hinges on efficiency and equity considerations

Can we show that the public sector is more, or less, efficient than the private sector?

If there are differences in efficiency, why do both sectors exist (rather than a corner solution)?

Shleifer and Vishny (2002) provide a useful overview of various ways in which government intervention may be viewed. They distinguish between the “Helping Hand”, where government intervention serves to overcome market failure and raise social welfare, and the “Grabbing Hand”, where government agents act at least partly in their own self-interest.

*A priori*, the efficiency difference between public and private sector not clear. Public production might be less efficient than private production for incentive reasons, but then again “cost-containment is hopeless in a fee-for-service system”

Empirical evidence difficult to come by. Partly because it is so difficult to measure outputs in many public-sector activities (think health and education).

We use administrative data on the universe of French hospitals, where outputs can be fairly carefully measured. Our contribution is to relate hospital employment to matched in local-level data on unemployment and recent election results.

We suggest that:

- ❖ Public hospitals employ more staff than do other hospitals
- ❖ Overmanning is positively correlated with the local unemployment rate
- ❖ The response to local unemployment is greater in left-wing constituencies
- ❖ But the above only holds when the last election was a tight one.

French hospitals are of three broad types: Public, Private Not-For-Profit (NFP), and Private For-Profit.

Two key differences:

- ❖ Private hospitals are able to select their patients, whereas this is not possible in either NFP or Public.
- ❖ Employees in NFP and Private hospitals are private-sector workers, whereas those in Public hospitals are civil servants

Data: 1999 SAE survey (Statistiques Annuelles des Etablissements), which collected information on hospital staff and activities.

The data covers the universe of French hospitals. These 1788 establishments are split up into 736 Public hospitals, 193 NFP hospitals, and 859 Private hospitals.

Staff split up into Administrative staff, Support staff, Medical staff and Doctors.

Public hospitals employ more staff than others.

#### Hospital Employment Levels

Hospital Type	No. of Hospitals	No. of Employees	Std. Dev.	Minimum	Maximum
Public	736	825.7	3143.0	17.4	77253.6
NFP	193	282.8	287.2	10.8	1906.0
Private	859	139.3	104.9	4.0	935.3

Some of this explained by different numbers of beds, different illnesses, and different client populations.

Table 2. Hospital Employment Regressions

	<b>Coeff.</b>	<b>Std. Err.</b>	<b>Coeff.</b>	<b>Std. Err.</b>
Public (<5000)	168.45*	(92.87)	142.59	(101.9)
Public (5000-10000)	489.24***	(180.39)	169.46	(108.24)
Public (10000-16000)	802.40***	(217.03)	142.79	(112.17)
Public (16000+)	3133.63***	(162.84)	549.13***	(107.33)
NFP (<5000)	148.90	(171.29)	-22.62	(106.3)
NFP (5000-10000)	394.33	(257.47)	-25.20	(116.2)
NFP (10000-16000)	644.40	(570.46)	-127.81	(185.17)
NFP (16000+)	1339.85*	(772.4)	66.53	(230.03)
Private (<5000)	89.53	(77.89)	-112.37	(98.93)
Private (5000-10000)	211.77*	(128.14)	-140.61	(103.54)
Private (10000-16000)	377.39	(285.23)	-148.66	(125.3)
Private (16000+)	578.56	(715.11)	-354.25	(216.97)
Number of Beds	-	-	7.52***	(.06)
Illness Severity	-	-	7.14***	(.61)
Bed Occupancy Rate	-	-	-1.81***	(.69)
Local Unemployment Rate (/100)	-	-	510.87*	(271.88)
Local Foreign-Born Rate (/100)	-	-	88.87	(306.67)
Local Aged 60-74 Rate (/100)	-	-	-764.73	(683.58)
Local Aged 75+ Rate (/100)	-	-	411.42	(621.66)
Number of observations	1788		1712	
Adjusted R-squared	0.182		0.943	

Weakly positive effect of local unemployment on hospital employment. But this effect is actually very different by hospital type.

Table 3. Hospital Employment and Local Deprivation

	<b>Coeff.</b>	<b>Std. Err.</b>
Public	112.86	(111.29)
NFP	106.25	(143.59)
Private	-24.40	(107.39)
<b>Public*Local Unemployment</b>	<b>1737.35***</b>	<b>(423.79)</b>
NFP*Local Unemployment	-28.70	(755.00)
Private*Local Unemployment	257.32	(387.21)

So any Public Sector Overmanning depends on the Local Unemployment Rate.

Is that because greater unemployment implies greater need for health? Probably. Private hospitals can cherry-pick, so are immune from this perhaps.

Both Public and NFP cannot select. Any public health effect should be the same for both. Yet the estimated coefficients are very different. Public hospital employees are civil servants; NFP employees are private sector.

This separate effect of unemployment on public sector employment holds for all staff types, except Doctors.

	<b>Nurses</b>		<b>Support Staff</b>	
Public	70.99	(68.22)	45.04*	(23.16)
NFP	46.14	(88.03)	63.95**	(29.89)
Private	-30.20	(65.84)	21.69	(22.35)
<b>Public*Local Unemployment</b>	<b>1074.80***</b>	<b>(259.8)</b>	<b>465.49***</b>	<b>(88.21)</b>
NFP*Local Unemployment	-22.36	(462.86)	-53.21	(157.15)
Private*Local Unemployment	189.37	(237.38)	30.13	(80.60)
	<b>Administrative Staff</b>		<b>Doctors</b>	
Public	-0.69	(12.84)	-2.49	(11.76)
NFP	6.47	(16.57)	-10.31	(15.17)
Private	-14.08	(12.39)	-1.81	(11.35)
<b>Public*Local Unemployment</b>	<b>142.17***</b>	<b>(48.89)</b>	<b>54.90</b>	<b>(44.77)</b>
NFP*Local Unemployment	9.43	(87.10)	37.44	(79.77)
Private*Local Unemployment	17.88	(44.67)	19.93	(40.91)

Another way of testing whether this is a public health issue, or an example of government intervention: introduce local politics (results from 1995 municipal elections).

Calculate expert evaluation scores regarding parties' social policy position. This score takes values between 2.5 to 18.9, with higher scores referring to more right-wing parties

		<b>All</b>
Public	832.20***	(209.95)
NFP	196.64	(366.1)
Private	42.13	(185.61)
<b>Public*Right</b>	<b>-35.90**</b>	<b>(14.41)</b>
NFP*Right	-11.04	(31.00)
Private*Right	-3.05	(11.54)

Public sector hospitals employ fewer staff in more right-wing constituencies.

Now look at the double interaction between unemployment and politics.

Public	208.52	(182.31)
NFP	159.49	(229.42)
Private	104.29	(162.16)
<b>Public*Local Unemployment</b>	<b>4822.78**</b>	<b>(1209.79)</b>
NFP*Local Unemployment	1453.98	(2006.60)
Private*Local Unemployment	491.43	(934.85)
<b>Public*Local Unemployment*Right</b>	<b>-233.75***</b>	<b>(89.88)</b>
NFP*Local Unemployment*Right	-114.15	(192.33)
Private*Local Unemployment*Right	-28.58	(69.92)

Public sector hospitals employ more staff in deprived regions, but this effect is muted in more right-wing constituencies.

	<b>All</b>	<b>Nurses</b>	<b>Support Staff</b>	<b>Administrative Staff</b>	<b>Doctors</b>
Baseline	724.8	458.9	146.7	70.9	48.3
10% vote switch Left to Right	-4.4%	-4.5%	-2.9%	-4.4%	-8.3%
Unemployment rate drops from 15% to 10%	-15.7%	-15.1%	-19.7%	-14.8%	-10.8%

## Explanations of effect of unemployment on hospital employment.

- 1) Wages. But should affect all equally, and public-sector wages are national.
- 2) Unions? But almost 100% collective bargaining coverage, and Doctors are most unionised group
- 3) Government intervention. But Helping Hand or Grabbing Hand?

We test 3) by looking at the closeness of the most recent election.

Helping hand: parties have greater latitude to push through their priorities when their majority is larger: the political effect on employment is then greater in not-tight races.

Grabbing hand: parties may try more to please voters when there is more of a chance of being voted out next election: here we expect the political effect on employment to dominate in tight races.

	All	Nurses	Support Staff	Administrative Staff	Doctors
<i>Tight Electoral Races</i>					
Public*Local Unemployment	5020.017** (1618.76)	3093.889** (949.754)	1040.909** (360.702)	474.975** (172.618)	410.244* (159.923)
Public*Local Unemployment*Right	-280.741* (116.120)	-168.326* (68.130)	-58.873* (25.875)	-24.913* (12.383)	-28.629* (11.472)
<i>Not-Tight Electoral Races</i>					
Public*Local Unemployment	3576.289* (1415.138)	2174.481** (839.223)	759.022* (311.338)	325.817* (151.603)	316.970* (141.015)
Public*Local Unemployment*Right	-92.309 (108.695)	-55.987 (64.460)	-15.725 (23.913)	-6.006 (11.644)	-14.590 (10.831)

Politics only matters when there is a chance of losing. This looks something like the grabbing hand.

## Conclusion

- \* Public hospitals employ more staff than do non-public hospitals, conditional on size and illnesses treated. Not explained by cherry-picking of patients
- \* Employment in public hospitals is strongly positively correlated with the local unemployment rate.
- \* The more left-wing the local commune the stronger is the relationship between local unemployment and public hospital employment.
- \* Public hospitals play a Keynesian role.
- \* Comparing efficiency between public and non-public hospitals should arguably take this into account.
- \* Grabbing hand or helping hand? Local politics only matters when the previous election was relatively tight: suggests the latter.

- \* Do the same employment effects exist in other areas of Public sector activity, such as the railways, education and local administrations?
- \* Have we uncovered an “*exception française*”, or does this hold in other countries?