The Determinants of Board Compensation in *SOEs* An Application to Italian Local Public Utilities

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Motivation of the study

❖ The remuneration of board of directors represents an internal corporate governance instrument aimed at providing them with the right incentives to behave in the best interests of the shareholders

❖ While CEO's pay has been a hot topic in the economic literature during the last decade, compensation of the board as a whole has received minor attention. The focus on board remuneration is justified by the redefinition of the agency problem, where the CEO and top executives are responsible to the board, and the board in turn is responsible towards the shareholders (Crespí-Cladera and Gispert, 2003).

❖As acknowledged by Hermalin and Weisbach (2003), not much is known about board decision making in non-private sector entities. The private sector usually defines the best practice standard, and it is almost uniform practice for Governments to seek to improve the performance of State Owned Enterprises (*SOEs*) by emulating the private sector's practices (see, for example, OECD, 2006).

Motivation of the study

❖ To attract well qualified executives and board members, efforts must be made to include rewards in the compensation schemes. However, for reasons of fairness and in order to avoid public controversy over unequal and excessive pay in the public sector, there are serious concerns about the extensive use of incentive remuneration schemes for companies owned by central or local governments:

"As a general rule, Governments tend to regulate and limit the remuneration and incentive awards of both executives and board members of SOEs. Some countries have policies that seek to align pay with market rates but not be market leading. Others prescribe remuneration levels. These prescriptions may be supplemented by prohibitions on share options, or restrictions on bonuses" (Frederick, 2011, p. 21).

Motivation of the study

❖ This paper sheds light on the determinants of directors' compensation in *SOEs*.

❖We analyse per capita board compensation in a sample of 106 Italian local public utilities observed over the years 1994-2004.

❖ The liberalization process changed the industrial and institutional landscape of the sector. New rules were established for the utilities' juridical forms, ownership structure and board composition. *corporatization process*→ From "*Azienda Municipalizzata*" to "*Azienda Speciale*" to "Corporation"

❖The compensation of boards of directors will be related with

- firm size, firm profitability, ownership structure, juridical form

- board size

- board composition (outsiders, independent, politically connected directors)

Literature Review

In the literature, admittedly, there is a sort a confusion between managerial compensation, CEO pay, executive and non-executive director pay, and total board compensation.

- Firm size (expected +)
- Board size ? Firth et al. (2007): “no relation exists between pay and board size”.
- Outsiders: expected + (but see Fernandes, 2008)
- Politicians: expected –
- Corporatization: expected +
- Private Blockholder: expected +

- Performance: expected + if pay-for-performance works

However, mixed results:
Kaplan (2012): “*on average, CEOs are paid for performance and penalized for poor performance*”
Goergen and Renneboog (2012): “*Whereas it is feasible to compensate CEOs for the value they create for the shareholders, this is rarely the case in practice: CEOs seem to benefit from windfall earnings beyond their control – they are compensated for luck*”.

Dataset description

Unique, hand-collected data set including economic, technical and governance variables of 106 Italian public utilities in the gas, water, electricity production, distribution and sale, surveyed annually in 1994-2004

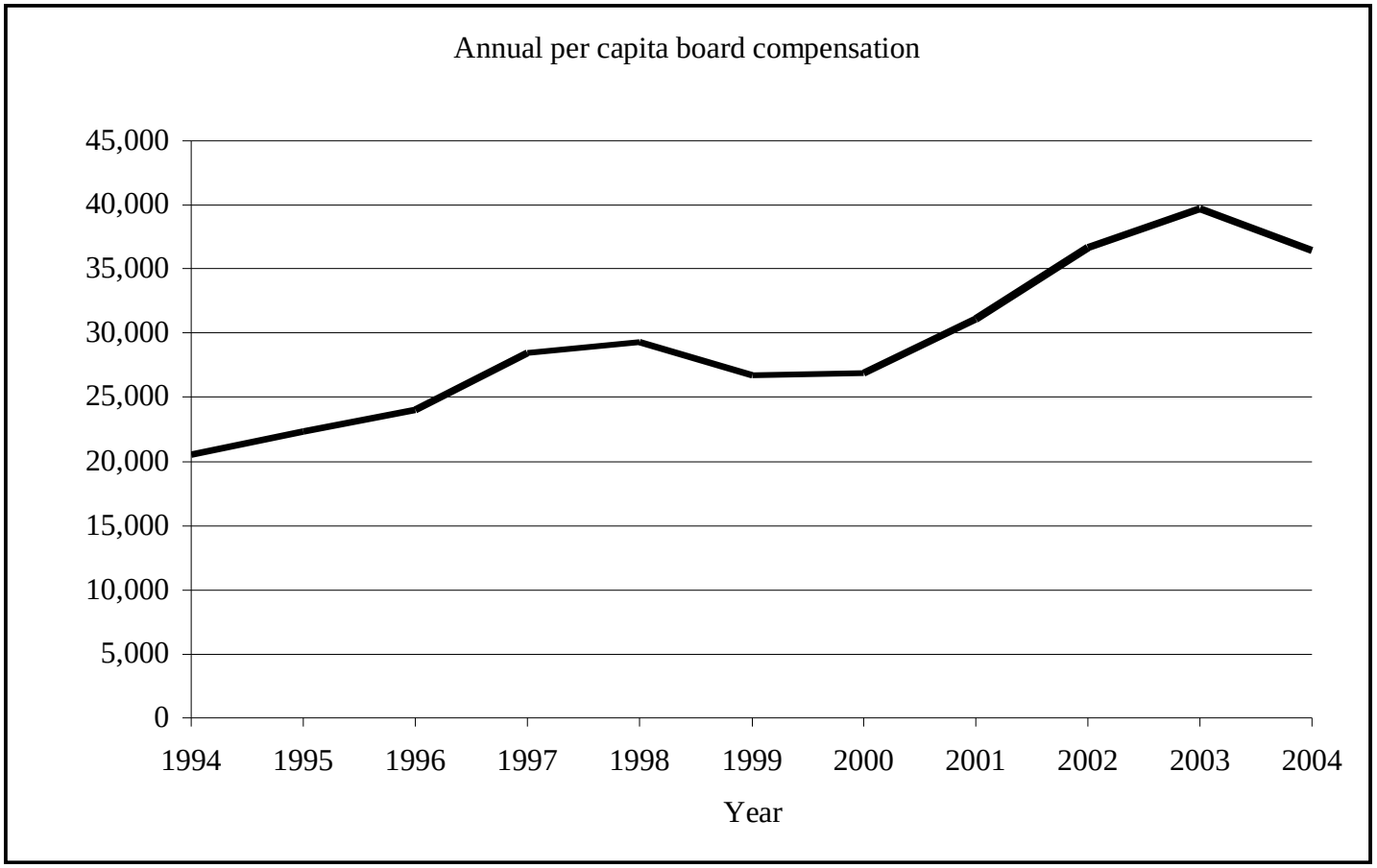
→unbalanced panel of 715 firm-year observations

Accounting data at the end of fiscal year. Original database Ceris-CNR and Hermes. Primary sources: paper balance sheets, AIDA and Osiris

The newly collected data on governance include the juridical form, the biggest three shareholders' identity, the percentage of equity they own, the directors' name, charge, profile: insider, independent and politician.

Per capita board compensation: total board compensation (including all forms of compensation earned by the directors for sitting on the board including commissions, bonuses, compensation in kind and social security contributions) divided by the number of directors serving on the board.

It excludes any salary, wage and related benefits due to the inside directors and accounted for in the payrolls


Annual per capita board compensation
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
0
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
Year

	Number Observ.	*25%*	*Median*	*75%*	*Mean*	*St. Dev*
Per capita comp (euro)	715	8993	15494	30622	28236	39275
ROI	715	0.021	0.050	0.090	0.069	0.098
ROA	715	0.013	0.033	0.056	0.037	0.037
ROE	715	0.007	0.037	0.091	0.065	0.120
Assets ('000 euro)	715	23024	63228	179306	212623	476818
Sales ('000 euro)	715	11625	27571	85907	96910	221688
N	715	53	164	399	385	673
Board	715	5	7	7	6.143	2.484
Polit	715	4	5	6	5.582	2.493
Indep	715	0	0	2	1.418	2.099
Out	715	4	5	6	5.013	2.454
		Mean				
Publock	18	0.023				
Lblock	550	0.790				
Prblock	147	0.187				
Azmun	139	0.212				
Azspec	179	0.264				
Corp	397	0.524				
Gas	125	0.166				
Water	170	0.218				
Electricity	35	0.069				
Multiutilities	385	0.547				

Regression

Main Regression:

$$Per\ capita\ comp_{it} = \beta 0 + \beta 1 size_{it} + \beta 2 G_{it} + \beta 3 X_{it} + \lambda t + \eta i + \varepsilon it$$

*G*it is a set of governance variables concerning board composition: *Board* is the total board size, *% Polit*, *% Indep*, *% Out* are the percentage of politicians, independent and outside directors as a fraction of total board size.

*X*it represents a set of control variables (*Water*, *Electricity*, *Gas*, *Multiutilities*). *λt* is a time dummy, *ηi* an individual, time invariant variable

Extended Model

$$Per\ capita\ comp_{it} = \beta 0 + \beta 1 size_{it} + \beta 2 G'_{it} + \beta 3 X_{it} + \beta 4 perf_{it} + \lambda t + \eta i + \varepsilon it$$

*G'*it is a set of governance variables: *Board*, *% Polit*, *% Indep*; *Azmun*, *Azspec,Corp*, are dummies for juridical forms; *Publock*, *Lblock, Prblock*, for blockholders;

*perf*it is measured as ROI, ROA and ROE

Estimation Methods: OLS, Fixed Effects, GMM-diff, GMM-sys in order to deal with endogeneity of *Board*, *% Polit* and *% Indep*

	OLS	Fixed Effects	GMM-sys	GMM-sys2
VARIABLES	Dependent variable: *Per capita comp*			
	(1)	(2)	(3)	(4)
Board	-4,965***	-2,177***	-2,805**	-2,787**
	(605.0)	(518.9)	(1,234)	(1,359)
% Polit	-3,024***	-6,965***	-5,093*	-4,656*
	(785.8)	(2,322)	(2,938)	(2,421)
% Indep	-6,301	-3,280	5,907	3,491
	(4,825)	(7,105)	(34,947)	(31,619)
Small	-24,414***	-9,610**	-18,183***	-18,445***
	(3,576)	(4,307)	(5,847)	(5,820)
Medium	-12,161***	-2,404	-7,558*	-7,676*
	(3,364)	(2,949)	(4,281)	(4,358)
Water	-15,617***	-7,701*	-14,805**	-15,185*
	(4,040)	(4,442)	(7,215)	(7,962)
Gas	6,320**	6,570	8,004	8,043
	(3,094)	(4,924)	(6,234)	(4,901)
Electricity	-1,938	-1,149	-2,621	-2,822
	(3,073)	(4,890)	(4,957)	(5,163)
Multiutilities	2,404	2,760	-226.1	885.8
	(4,170)	(2,995)	(6,760)	(6,496)
Constant	106,063***	43,142***	91,020**	91,189***
	(10,333)	(11,034)	(39,684)	(34,064)
AR(2) p-value			0.238	0.269
Hansen Sargan p-value			0.912	0.965
Time dummies	yes	yes	yes	yes
Observations	715	715	715	715
Number of firms	106	106	106	106

VARIABLES	Dependent variable: *Per capita comp*				
	(1)	(2)	(3)	(4)	(5)
Board	-2,787**	-3,508*	-3,570*	-3,818***	-3,226**
	(1,359)	(1,791)	(1,832)	(1,466)	(1,389)
% Polit	-4,656*	-2,664**	-4,883**	-4,108**	-2,342*
	(2,421)	(1,199)	(2,915)	(1,849)	(1,288)
% Indep	3,491	-26,460	-27,019	-7,419	-17,843
	(31,619)	(21,909)	(21,083)	(14,095)	(12,327)
Small	-18,445***	-21,428***	-21,743***	-19,506***	-17,961***
	(5,820)	(8,089)	(8,333)	(5,807)	(5,900)
Medium	-7,676*	-10,835	-10,992	-10,246**	-9,435*
	(4,358)	(7,514)	(6,708)	(5,203)	(5,191)
Water	-15,185*	-15,109*	-15,084**	-11,994**	-17,336**
	(7,962)	(7,879)	(7,403)	(5,673)	(7,571)
Gas	8,043	4,618	3,040	6,058	4,264
	(4,901)	(4,912)	(4,644)	(4,856)	(3,910)
Electricity	-2,822	-2,236	-2,507	-1,793	-1,895
	(5,163)	(5,007)	(5,004)	(4,372)	(5,230)
Multiutilities	885.8	1,310	1,628	1,774	2,140
	(6,496)	(6,011)	(5,952)	(4,699)	(4,386)
Azmun		-13,099*	-14,158*	-12,254*	-10,339*
		(7,823)	(7,923)	(7,188)	(5,445)
Azspec		-15,359**	-15,292**	-14,266**	-11,638**
		(6,247)	(6,903)	(5,778)	(5,478)
Publock		4,771	-226.6	7,678	6,148
		(21,873)	(23,048)	(18,694)	(17,309)
Prblock		-5,867	-7,339	-2,093	-4,473
		(9,386)	(10,430)	(8,406)	(8,047)
ROI		-648.4			-20,346
		(25,783)			(21,796)
ROA			56,184		
			(69,543)		
ROE				-16,453	
				(18,842)	
*ROI * % Indep*					138,132*
					(71,829)
Constant	91,189***	88,768**	90,801**	83,531***	98,874***
	(34,064)	(41,769)	(40,203)	(27,025)	(27,326)
AR(2) p-value	0.269	0.193	0.184	0.199	0.209
Hansen Sargan p-value	0.965	0.342	0.258	0.790	1.000
Time dummies	yes	yes	yes	yes	yes
Observations	715	715	715	715	715
Number of firms	106	106	106	106	106

Results

Results of the baseline model:

- Firm size (+)

- Water sector: lower compensation

- Board size (-): in large boards directors have a suboptimal compensation package

- Politically connected directors reduce the level of board remuneration

- No correlation between independent directors and board compensation. This finding casts some doubts about the monitoring role of non-executive directors

Further results from extended model:

- No significant effect of ownership (differently from Firth et al., 2006 and 2007)

- Positive effect of corporatization (Cambini et al. 2011; Menozzi et al. 2012)

- No effect of performance … but …. we have tested the pay-for-performance link by including the interaction terms *ROI*Prblock*, *ROI*%Polit* and *ROI*%Indep*. Only *ROI*%Indep* shows up with a positive and significant sign: independent directors somewhat help to align the interests of managers and shareholders.

Conclusions

The pay of top executives and board members in public sector entities affects the entity's ability to attract, motivate, and retain suitable talent. However, if public sector companies pay too much, they will be criticised and pressured by the public opinion because taxpayers will see their tax euros wasted.

This paper contributes to this field by investigating the relationship between board compensation and governance mechanisms using a sample of 106 Italian public utilities observed for the years 1994-2004.

Our findings suggest that both board size and board composition matter for director's compensation. In firms where boards are **bigger** and dominated by **politicians**, remunerations are lower. On the contrary, per capita pay increases for **big firms** and for utilities that take on the **limited company form**. There is not a clear-cut relationship between **performance** and the average compensation of board of directors.

Finally, **independent directors** are found to positively affect board pay only in correspondence with high performance levels, a result consistent with the view that the appointment of independent directors could be of some help in reducing the agency problem between top executives and shareholders.