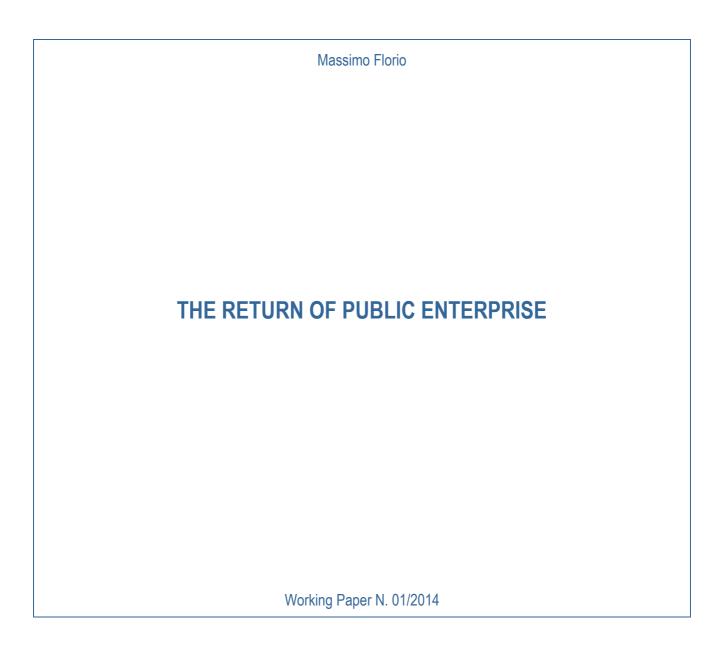


# **Working Paper Series**



## THE RETURN OF PUBLIC ENTERPRISE

Massimo Florio\*

\*University of Milan

#### **Abstract**

Public enterprises never disappeared in spite of several privatization waves in the last three decades. This paper offers some trends and possible rationales for their resilience. In a sample of the Forbes 2000 top corporations, as reviewed by OECD economists (Kowalski et al. 2013), we show that the around ten per cent of state-owned enterprises perform better in financial terms than their private counterparts. The Great Recession has also shown that governments had to take over failing major private enterprises, including particularly banks. In several countries, particularly in Western Europe, there is municipalization of electricity and water distribution. In the EU/15, there is also evidence that in electricity and gas, government owned incumbents offer fairer prices to households than private competitors. Recent research on mergers and acquisitions confirms that in the last ten years there has been an increase of publicization relative to privatization, including through trans-border deals.

Jel codes: H44; L32; L33

**Keywords**: Public enterprise; privatization.

This version: January 29, 2014

#### 1. Introduction

This paper summarizes different research perspectives on contemporary public enterprise. There is a renewed interest in this topic for several reasons. Despite mass privatization, since the 1980s governments still own and manage substantial productive assets. According to "The Economist" (January 11-17, 2014, p. 7):

"State-owned enterprises in OECD are worth around USD 2 trillion. Then there are minority stakes in companies, plus USD 2 trillion or so in utilities and other assets held by local governments. But the real treasures are 'non financial' assets – buildings, land, subsoil resources – which the IMF believes are worth three quarters of GDP on average in rich economies: USD 35 trillion across the OECD".

While these figures, perhaps confusingly, mix assets of very different nature, it is true that governments around the world still control substantial shares of productive capital. This fact has revived the interest for privatization, but has also raised the question: what is the importance of contemporary public enterprises? Why do governments still own productive capital?

A related research perspective is the evidence that following the global slump since 2007-2008, nationalization or other forms of publicization were the immediate response by several governments to the collapse of a range of corporations, from core banks in the UK, as the Royal Bank of Scotland, to car companies in the US, as General Motors. Such countries are the cradle of the Anglo-Saxon neo-liberal thinking and the simple fact that their governments have considered and implemented such moves, even if admittedly as exceptional and temporary emergency solutions, is similar to what happened during the Great Depression in the 1930s, when many SOEs were created for similar reasons. Is emergency nationalisation a feature of government in capitalist economies?

A trend in several countries is republicization of formerly privatized firms providing services of general interest. There is some evidence that particularly municipal governments (Paris is a notable example) after the experience of concessions or other form of involvement of private capital in water or other local services, concluded that it was not in the interest of citizens to go ahead with these experiences, and reverted to direct management of public services. What are the drivers of these changes?

Then, the paper focuses on the role of SOEs in network industries, particularly in energy and telecoms, and mainly in the European Union, and their performance in the perspective of consumers. How is this performance in terms of prices offered? Eventually, the OECD and other international organizations have noticed the new acquisition activism of state-owned enterprises, from China to Brazil, from France to Russia, which have been involved in important acquisition deals involving as targets privatized or private firms, including some abroad. Thus, how happened that SOEs, a supposedly moribund type of organization, one that would have been supplanted as an anachronism by privatization, is in fact able to shop assets around the world?

The paper covers these topics very selectively in the next five sections, and concludes with some suggestions for further research and some policy implications.

## 2. Contemporary public enterprises

To discuss the persistence of SOEs in contemporary economies we need a definition of public enterprise, and there is none which has no drawbacks, given the multifaceted nature of these organizations (Christiansen 2011). For example, a rather restrictive definition is provided by a CIRIEC working document (CIRIEC 2012):

"For the purpose of this project, we shall refer to "public enterprises", in the broad meaning of organizations (a) directly producing public services, either through liberalized market arrangements or under franchised monopoly, (b) ultimately owned or de facto controlled by public sector entities, (c) with a public mission, (d) whose ownership in principle can be shifted to the private sector".

This definition would exclude from our scope of research several other organizations:

- manufacturing companies owned directly or indirectly by the public sector:
- departments or agencies, which deliver core government functions (defence, law and order, administration, etc.)
- companies which have been put temporarily under government control following a bankrupt, or for other reasons, but for which no public mission can be identified (more on this below).

Differently from this definition, in the discussion below we shall drop items (a) and (c) of the CIRIEC definition. These allows to include for example oil companies or manufacturing firms, and also those service providers which are de facto controlled by the public sector, perhaps by minority stakes, for which a permanent public mission is not easily identified. The enlargement of perspective reflects the exploratory nature of this paper, that includes for example emergency nationalizations, or purely financial considerations related to government ownership.

Under a similar broad definition, Kowalski et al. (2013) offer some evidence related to companies included on the Forbes Global 2000¹ list, augmented with the Orbis database². They consider sales, profits, assets, and market value, equally weighted to rank

\_

<sup>&</sup>lt;sup>1</sup> Available at http://www.forbes.com/global2000/list/

<sup>&</sup>lt;sup>2</sup> http://www.bvdinfo.com/en-gb/products/company-information/international/orbis-(1)

global firms, and they attribute the SOE label to those companies for which according to Orbis the ultimate ownership is more than 50.01% of the shares.

Before reporting and commenting the findings here below, we need to express some reservations about two issues. First, Forbes Global 2000 excludes from the list some organizations which are in fact among the largest in other world rankings, this is acknowledged by Kowalski et al. (2013, fn 15). Second, some of the core SOEs in the world, particularly in Europe, are effectively controlled by governments with a stake of 20-25% (see the Economist (2014), p. 18), to be compared with much more dispersed equity owned by other shareholders. For both reasons, we believe that the importance of government ownership in the largest world enterprises is only very conservatively represented by the <<50,01%>> threshold. The OECD paper, however, is one of the few attempts to study the issue in a systematic way. Some findings are summarized here below. The Forbes 2000 market value would represent 81,9 % (at 2010) of the global capitalization of listed companies, and they are parent to around 330,000 firms (domestic or foreign subsidiaries).

The authors find that around ten per cent of the companies they analyze (204 out of 2000) are SOEs. Putting together world reference figures about some benchmarks (such as world GDP, see Kowalski et al. (2013, Tables 1 and 2), in our Table 1 we have re-evaluated the figures in the above mentioned OECD paper. We suggest that 'Forbes' SOEs would represent between 11% and 16% of total sale, profits, assets, market value of the Forbes Global 2000 aggregate.

Table 1. Aggregate financial indicators, % of GDP, and Ratios (2010)

	Forbes Global 2000	SOE	SOE/Total
Total sales	51.1	5.7	11.15
Total profits	3.7	0.5	13.51
Total assets	218.6	35.8	16.38
Total market value	58.4	7.8	13.36
ROS (profits/sales)	7.24	8.77	1.21
ROA (profits/assets)	1.69	1.40	0.82
ROE (profits/market value)	6.33	6.41	1.01

Source: own elaboration from Kowalski et al. (2013, tables 1 and 2)

Given that, as mentioned, the share of SOEs in the list is 10.02 %, in terms of number, it seems safe to conclude that the average SOE performs better than the average Forbes company in the list<sup>3</sup>, around 11% more in terms of sales per firm; 35% more profits per firm; 64% more assets per firm; 34% higher market value per firm.

Since the total list includes the SOEs themselves, it must be true that the direct comparison of public-private subsamples would even more confirm that the SOEs outperform their private counterparts on several indicators.

As usual in the sampling of firms, distribution of variables are skewed, and the average may be influenced by particularly well performing SOE. In any case it is worth noticing that, even in terms of profitability, public enterprises (in the strict definition of majority owned by the public sector) are far from appearing weak as compared to their private counterparts.

There are three other indicators that may be interesting. Taking ratios of profits and sales, we can get a crude ROS estimate; and the ratio of profits and assets, or market value, respectively, would give us a crude estimate of ROA and ROE.

Under this perspective the average ROS in the list is 7.2%, while SOEs show a brilliant 8.8%. ROA in the total list is around 1.7%, while it is 1,4% in the SOEs; and ROE is respectively 6.3% and 6.4%.

Thus, using the most common financial ratios, the large SOEs outperform the world league of major companies in terms of ROS; slightly also in terms of ROE; while they underperform in terms of ROA (given the substantial assets they own). This picture, while crude and partial, may contribute to explain the survival and activism of SOEs: simply, they perform well, even better than private (listed) firms, at least in the league of major global players, own substantial assets and earn profits.

Where are the major SOEs headquarters located? And in which industries? In terms of geographical distribution, and importance within their origin national economy, some OECD countries stand out more significantly: for example France (5), Poland (6) or Korea (4). But also Switzerland (6) and the US (3) own important SOEs at the time of the survey. Outside the OECD, China, with 70 out of the 204 identified major SOEs is leading the list, but other countries with high numbers are Brazil (7), India (30), Indonesia (6), Russia (9). Moreover, in some cases, the importance of the SOEs in the economy is not represented by counting them, but looking to their contribution to GNP. Countries as, for example, Japan, New Zealand, Italy, France, US, Britain, Norway, Canada, Germany<sup>4</sup>, should be considered in this perspective.

<sup>&</sup>lt;sup>3</sup> Taking the ratio of SOE/Total financial indicators with their share (10.02%) in terms of numbers.

<sup>&</sup>lt;sup>4</sup> See The Economist (2014, p. 19) that using IMF data shows that the government of these countries owns non-financial assets worth at least 40% of GDP.

Finally, sectors where the share of SOE in the domestic economy is high (more than 10% of GDP) include coal mining, land transport, transport via pipelines, oil extraction, electricity and gas, but also telecommunications, financial intermediation, engineering, warehousing, manufacturing, air transport.

We conclude that SOEs, particularly the large ones, are still important actors in the economic arena. They are present in many countries, both developed and developing, and in several industries, with quite different technological characteristics. Their survival is probably linked, at least in part, to a good performance in terms of standard financial indicators. A fact that would need a more careful consideration in future research and policy debate.

### 3. Public enterprises and the Great Depression (s)

As far as we know there is no systematic evidence about the extent of renationalization, de jure or de facto, in the last five years, following the global 'financial' crisis (which in fact has had a huge real impact, and perhaps real origins, see Florio 2012). Historically, the Great Depression in the 1930s was at the origin of public enterprises in several countries. In the case of Italy, for example, the collapse of private banks, forced the government to rescue them by nationalization. As these banks in turn owned substantial shares in the equity of their illiquid creditors, including many major manufacturers: IRI was established to manage these companies. As a result, a considerable part of the economy was under the control of government, even when there still were private minor shareholders in the companies.

It is interesting to acknowledge that around 80 years later, governments had to face similar circumstances. The financial sector is particularly prominent in this perspective (Yeyati et al. 2007; Panetta et al 2009). Below we cite just a small sample of episodes since the 1980s (i.e. at the same time of the privatization decades).

In Mexico, in 1982 most of the banking system was nationalized after the debt crisis (then reprivatized around ten years later). In Israel, following the stock crisis in 1983 the major banks were nationalized: Bank Happalim, Bank Leumi, Discount Bank, Mezrachi Bank. Sweden nationalized a substantial part of its banking system in 1992. There were several other episodes in the 1990s, but the recent global crisis had a major impact on bank ownership by governments. In the Baltic countries Parex Bank (Latvia) was nationalized in 2008, Soras (Lithuania) in 2011. In the Netherlands the government nationalized the Dutch branch of Fortis a Belgian-Dutch banking and insurance company. More recently, 2013, SNS Bank has been also nationalized as well. BPN - Banco Português de Negócios was nationalized in 2008. In 2009 the same happened with Seylan bank in Sri Lanka.

According to Iversen and Sjögren (2012) an interesting case history is offered by Denmark, a country with no tradition of government ownership of banks: in just four years, from October 2008 to the end of 2012 Finansiel Stabilet (a rescue organisation established and guaranteed by the Danish state) had to take over:EBH Bank (November 2008) ,Roskilde Bank (July 2009, after one year ownership of the National Bank), Amagerbanken (February, 2011), Fionia Bank (March 2009), Capinordic (April, 2009), Løkken Sparekasse (June 2009), Eik Banki (January 2010), Fjordbank Mors, Max Bank later on. These acquisitions, needed by solvency problems of these banks and the inability of the private sector to provide an injection of equity capital, transformed in few years the Danish government in a major player in the banking industry of the country.

Perhaps the most surprising nationalizations in the financial sectors have been recorded in the homeland of privatization, Great Britain: in one year, 2008, the government had to rescue Northern Rock; part of Bradford & Bingley; the Royal Bank of Scotland; and HBOS-Lloyds TSB was also partly nationalized. The Government share in RBS equity, one of the largest bank in the world, was initially 60% and eventually 80%. The government's share in HBOS-Lloyds TSB was 40%. The amount of equity funding by the government for RBS and Lloyds is around 66 billion pounds, and difficult to be recovered<sup>5</sup>. This emergency funding was in fact only part of a £500bn bank rescue package for British banks and building societies<sup>6</sup>.

Other countries where governments needed to act to rescue banks include inter alia Ireland, Iceland, Switzerland, Germany, France, and many others in the last decades only (not to mention more distant episodes over more than one century of financial history).

To conclude this very incomplete list of examples, the United States had to take control of a very large number of Savings & Loans in the 1980s, through the Resolution Trust Corporation. More recently, the TARP has bailed out (through de facto nationalization) City Group, and the government had also to intervene to rescue AIG, an insurance company, and other core players in the mortgage industry, as part of the first 700bn USD emergency intervention, later followed by other very large funding in different forms.

Looking at these case histories, it seems that La Porta, Lopez-de-Silanes, and Shleifer (2002) should update their much cited paper on 'Government Ownership of Banks', which stated:

"The data show that such ownership is large and pervasive, and higher in countries with low level of per capita income, backward financial systems, interventionist and inefficient government, and poor protection of property rights. Higher government of banks in 1970 is associated with slower subsequent financial development and lower growth of per capita income and productivity".

<sup>&</sup>lt;sup>5</sup> According the Public Account Committee, November 2012, who stated that privatization is not an option in the next years. <sup>6</sup>See the Chancellor's statement on October 8, 2008, available at http://www.hm-treasury.gov.uk/statement\_chx\_081008.htm

This may be true, but the fact that governments in countries as the US, the UK, Sweden, and many others in core capitalist economies have had to rescue banks through nationalization, temporary or otherwise, suggest that these emergency measures are far from exceptional, and occur even in the most advanced economies.

There are similar examples of recurrent government rescue in other industries providing services of general interest: notably the airways, railways, and other transport services. Some of these episodes are also related to the occasionally failing general economic conditions of each country. No sector, however, is more revealing than banking about the emergency role that may be played by government ownership in capitalist economies. This caretaker role is very far from having disappeared, and it should be seriously studied, to provide governments with research and policy advice in this area of intervention, which is part of a wider issue of crisis management.

#### 4. Republicization of public services

While technically not necessarily falling under the definition of nationalization, there is evidence that governments have often reconsidered franchising or concession to private firms of services of general economic interest, such as water, electricity, and others, particularly at the local level.

Hall (2012) reviews water and electricity republicization in respectively France and Germany. He considers as re-municipalization "change from private to wholly public ownership of assets or companies; changes from outsourcing or contracting-out of service to direct provision by a public authority; and the replacement of concessions or lease contracts by direct provision by a public authority". In his article, Hall considers not only municipal governments, but also regional ones, inter-municipal public entities, etc.

The case history of water in France is interesting because, in spite of the traditional interventionism of the French governments, this was a service largely managed by the private sector, in the form of very large firms (such as Veolia). Republicization has been decided or at least considered as a policy option inter alia in Bordeaux, Brest, Cherbourg, Grenoble, Nantes, Rouen, Toulouse, and, most notably, Paris. The drivers of remunicipalization of water in France seem to be the evidence of higher prices, and environmental issues.

The evidence concerning electricity in Germany includes between 2007-2012, 63 new 'Stadtwerke', i.e. municipal firms; 14 remunicipalisations of firms; 192 remunicipalisations of distribution networks, four case of major repurchase of major assets. Hence, more than 50% of electricity distribution in Germany is now managed by public enterprises (while generation is mostly handled by the private sector). There have been strong campaigns and legislative debates around this policy trend, that seems currently firmly established in some Laender, and actively discussed in others.

The United States hosts a very large number of municipal or inter-municipal companies (Warner 2012) and remunicipalisation is not unknown as in Atlanta and Felton for water. Other examples worldwide are available at http://www.remunicipalisation.org/, which mentions interesting case histories in Uruguay, Argentina, Bolivia, Spain, Indonesia and elsewhere. Several episodes are explored by the Municipal Services Project, a think-tank (http://www.municipalservicesproject.org), and by McDonald (2014)

While there is no systematic evidence, and it is likely that the trend of privatization in the local public services is still prevailing worldwide, it is important to acknowledge that republicization occurs, in different countries, under different political environments, often driven however by similar rationales: excessive prices charged to users by private concessionaires, concerns about the sustainability of investment, environmental issues, affordability and quality of service. In some cases there may be also a fiscal issue, as municipalities would prefer to keep the long term net cash flows arising from some services, rather than relinquishing them to the private sector.

In a financial perspective, this suggests a biased market for local public services, as the price the private investors may be willing to pay for the franchise may reflect a degree of risk aversion (e.g of expropriation), which is not relevant in the public sector. Hence a mismatch between demand and supply price in this market for the concessions, and possibly a component of a mismatch between service price to consumers offered respectively by a public and private enterprise.

#### 5. Network industries in Europe<sup>7</sup>

When we focus on network industries in advanced economies, such as the member states of the European Union before its enlargement, the EU-15, it is apparent that public enterprises, while less significant after three decades of privatizations, are surprisingly resilient. For example, around 2009,out of the seven major electricity companies in the EU (GDF Suez, EON,EDF, ENEL, RWE, Iberdrola, Vattenfall), with a combined yearly turnover of more than 384 billion Euro, four are controlled (fully or partially) by governments <sup>8</sup> (Thomas 2010). Interestingly, in countries as diverse in terms of political orientation and institutional quality as Austria, Denmark, France, Greece, Ireland, the Netherlands and Sweden, the incumbent is state owned.

As for natural gas, two countries with their own natural gas reserves and production, the UK and the Netherlands, have adopted very different policies, despite being both committed to market opening. The UK has wholly privatized British Gas, initially as an integrated regulated monopoly, and then has forced entry and unbundling. The Netherlands, which initially had a vertically

<sup>&</sup>lt;sup>7</sup> This section draws from Florio (2014)

<sup>&</sup>lt;sup>8</sup>According to Thomas (2010), the seven major electricity companies around 2009 are GDF Suez (36% state-owned, turnover 80€bn), EON (listed, turnover 82€bn), EDF (85% state-owned, turnover 67€bn), ENEL (32% state-owned, turnover €64bn), RWE (listed, turnover 48€bn), Iberdrola (listed, turnover 25€bn), Vattenfall (100% state-owned, turnover 20€bn).

integrated industry dominated by a partnership between the government, Royal Dutch Shell and Esso, has currently a 100% state owned gas transport operator, and mostly municipally owned distributors and retail suppliers. In Italy and France the incumbent is still de facto controlled by the government, while in Spain and Germany the extent of private ownership is traditionally much larger.

In telephony, the industry where the large scale privatization policy started in Europe, some of the core players, such as France Telecom, Deutsche Telekom, the Scandinavian main operators, and others, are partially owned by governments.

Why public enterprises even in Western Europe, with abundance of capital and of managerial resources, and something as a broad consensus against SOEs, are public enterprises still far from being marginalized?

A possible answer is that they offer lower prices to the residential consumer, and are better perceived, than their private counterparts, without any need of subsidies by governments to achieve this performance.

There is in fact clear evidence (see Table 2 and 3) that consumers pay lower electricity net-of-tax prices in countries where there are still incumbents owned by national governments. As Table 2 shows, based on previous research of our team at the University of Milan, statistically significant negative coefficients in dynamic panel models of electricity net-of-tax IEA prices have been estimated in the EU-15 for the OECD indicator of ownership, after controlling for other reform indicators and control variables such as lagged prices (with different lags), per capita GDP, type of fuel used in generation, year fixed effects, and others. For the econometric details and new findings see Fiorio and Florio (2013). The magnitude of the net effect is not negligible (up to 30% on net-of-tax prices, or 20% on gross-of-tax prices) and robust to different model specification, inclusion or exclusion of countries, and the standard econometric tests. As the OECD indicators (ECTR database) are such that a higher score implies more government ownership, the negative coefficient means that prices are lower where government ownership is higher.

In other words, for the average EU-15 household it was rather more beneficial to be in a market where one or more players were under government control between 1980 and around 2007. More recent data and for EU-27 confirm this finding. Moreover, there is also some evidence that on average respondents to the Eurobarometer survey are more likely to consider 'fair' the electricity prices they pay in countries where public ownership is a feature of the industry structure than elsewhere: see Fiorio and Florio (2011), see Table 3. Thus, state-owned electricity utilities are still strong players in the EU liberalized markets, they often offer reasonable prices to households, without incurring losses than would need subsidies from the tax-payers.

The evidence is fairly similar for natural gas service. In the eleven EU countries we consider (in some EU countries the consumption of natural gas is negligible or zero), public ownership of the incumbent company as reported by the ECTR indicators is correlated to lower net-of-tax prices, after considering other reforms, lagged prices, the price of Brent oil, (because of the well known link between natural gas long term contracts and oil price index, see Brown and Yücel 2008), other factors, and year and country fixed effects, for some technical details see Brau et al. (2010).

In fact, the price for households in Euro per Gigajoule in 2007 (IEA) data was slightly higher in the UK than in the Netherlands, quite higher in Germany and Spain than in France and Italy. Thus, both directly looking at prices, and econometric analysis confirm the same finding for gas. Again, a double check with consumer satisfaction with Eurobarometer data, and with lagged prices, macroeconomic controls, individual characteristics, country and year fixed effects, taking into account other concurrent regulatory features, points to higher satisfaction with prices paid by the respondents to comparable surveys in countries where there are one or more state-owned major players.

The evidence for telecommunications goes in the same direction, even here in fact there is not such a clear message in favour of public ownership (see Bacchiocchi et al. 2008).

If SOEs in essential services offer fair prices to consumers, do not incur in losses, and are well perceived, some governments may have concluded that – to say the least- it is not urgent to sell them. The unpopularity of the privatized energy utilities in the UK (Del Bo and Florio, 2012), where it seems that there has been considerable underinvestment against high transfers from the consumers to the firms, added to environmental issues, show that the case for privatization in energy has now lost some ground in Europe.

Table 2. Household net-of-tax electricity and gas prices (dependent variable). EU15, around 1980-90 to 2007. Different empirical models.

MAIN REGRESSORS	ELECTRICITY	GAS
Regulatory variables	Coefficients	Coefficients
ECTR aggregate regulatory index (0 to 6,more to less reformed countries)	Not significant	Negative **
Public ownership	Negative***	Negative ***
Vertical integration	Not significant	Not significant
Entry regulation	Negative* (or not significant)	Not significant (positive* in some models)
Dynamics		
Price inertia	Positive***	Positive***
Year fixed effects	Included	Included
Controls		
Macroeconomic variables	Included	Included
Combustible fuels	Positive** (or not significant)	-
Share of nuclear energy	Negative**	-
Brent oil price	-	Positive**
Other controls	Included	Included
Number of observations	402	295
Number of countries	15	11

<sup>\*\*\*</sup> p< 0.01; \*\* p < 0.05; \* p< 0.1

From Florio (2014). Source of data: IEA, EUROSTAT, OECD/ECTR. Estimation methods: GMM dynamic panels, OLS, 'within'-time period, number of countries, number of observation, results for the preferred models. For details see Florio (2013), Fiorio and Florio (2013), Brau et al. (2010). A negative coefficient implies that prices are lower when the ECTR indicator is higher, for example, when there is a greater share of public ownership in that industry in each country.

Table 3. Customer dissatisfaction (dependent variable) with prices of electricity and gas. EU15, years 2000 to 2006. Different empirical models

MAIN REGRESSORS	ELECTRICITY	GAS
Regulatory variables	Coefficients	Coefficients
ECTR aggregate regulatory index(0 to 6,more to less reformed countries)	Not significant	Negative ***
Public ownership	Negative**	Negative **
Vertical integration	Not significant	Not significant
Entry regulation	Positive*	Not significant
Dynamics		
Price	Positive***	Positive***
• Price (T-2)	Not significant	Not significant
Year fixed effects	Included	Included
Controls		
<ul> <li>Individual characteristics</li> </ul>	Included	Included
Macroeconomic variables	Included	Included
Country mixed effects	Included	Included
Number of observations	57, 153	30,757
Number of countries	15	15

<sup>\*\*\*</sup> p< 0.01; \*\* p < 0.05; \* p< 0.1

From Florio (2014). Source of data: Eurobarometer, 2000 to 2006 waves; ECTR/OECD (same years), EUROSTAT. Estimation method: Probit – number of countries and of observations for selected models. For details, see Florio (2013); Fiorio and Florio (2011). Results for the preferred models. A negative coefficient implies that a dissatisfaction is lower when the ECTR indicator is higher.

#### 6. Acquisitions and the multinational public enterprise.

While privatization have been extensively studied and regularly recorded<sup>9</sup>, it is worth mentioning that publicization is also occurring worldwide, for a number of reasons, in different sectors, and countries.

Recent research and preliminary findings by the University of Milan Team (see Clò et al. 2014), based on extensive use of Zephy and Orbis, two global databases maintained by Bureau Van Dijk, reveals a number of interesting facts. In a sample of 13,475 deals recorded from 2004 until 2012 (selected on the basis of data availability out of a much larger database):

- a) There are 1034 privatizations, where the acquiror has an ultimate owner private and the target was a public enterprise, the latter defined as ultimately owned by a government entity (with at least 25% of equity). In the same years, there were also 1140 acquisitions by public enterprises. Out of these, 61% were deals where the acquiror was a company ultimately owned by the government, and the target a private company. Excluding by the sample both acquirors and targets with less than 10 employees, this leaves 450 cases of publicizations, i.e. deals with a public acquiror and a private target, and 690 acquisitions of public enterprises by other public enterprises. In the following we shall refer to the subsample that excludes micro-firms with less than 10 employees, including a total of 13,475 deals, see Table 4
- b) There is some evidence in this sample that the ratio of number of publicization/number of privatizations peaked from slightly more than 20% in 2004, to slightly more than 80% in 2007 (the year before the global crisis), and then went back to near 40% in 2012: we consider this boom of publicizations as a response by governments to the crisis. Privatization deals substantially decreased in 2006 and 2009, and recovered in the subsequent years, see Figure 1.
- c) Turning from number of deals to the characteristics of acquirors and targets, a p-value test on the differences of the median values between acquirors and targets, shows that in both publicizations and privatizations, the acquiror is larger than the target company in terms of operating revenues, total assets, Ebit. In terms of financial ratios, the ROS (Ebit/Operating Revenues) is also higher for acquirors than for targets. The differences are not statistically significant for other financial ratios, both for publicizations and privatizations such as the Roa. This points to the fact that the financial health of government owned acquirors relative to their private targets is not different from the financial health of private acquirors relative to their public targets. For a smaller sample, there is also some evidence that the public acquirors are financially stronger in terms of ROS relative to their respectively private and public targets, see Table 5.
- d) In the sample there are 3,844 cross-border deals, i.e. acquisitions where the acquiror and the targets have their main operations in different countries. Interestingly, while 265 such deals are privatizations, 163 deals are publicization (public acquiror and private target) and there are also 68 deals involving a public enterprise on both sides of the transaction. In proportion, there are more cross-border publicizations (36% of the total publicizations sample) than cross border privatizations (26% of the privatizations sample), see Table 6.

In fact, one surprising effect of globalization has been an opportunity for major public enterprises to go abroad. There are different aspects in this trend:

- a) Strong government owned or partly government owned companies in profitable industries such as electricity, gas, telecommunications, have diversified abroad their portfolio of investments (see Clifton et al. 2012)
- b) Sovereign funds have invested their gargantuan resources abroad, in some cases following a strategy that goes beyond a purely financial one (Clò et al. 2014).
- c) National oil companies are increasingly dominant players in their markets (Clò et al. 2014). This also applies to some companies in other activities such as mining, engineering, and others.

Table 4. Matrix of total number for typology of Acquires and Vendor/Target at the time t of the deal (2004-2010) orbis-Zephyr sample – Guo at 25%

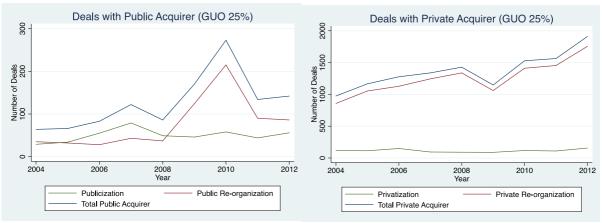
		Acq	uirer	
		Public	Private	Total
Vendor/Target	Public	690	1,034	1,724
	Private	450	11,301	11,751
	Total	1,140	12,335	13,475

Source: own elaboration, Orbis-Zephyr Dataset (after merging with Orbis and after cutting the left side tail), from Clò et al. (2014)

\_

<sup>&</sup>lt;sup>9</sup> See www.privatizationbarometer.net

Figure 1. Number of deals with public and private acquirers



Source: Clò et al. (2014)

Table 5. Financial indicators: differences between acquirer and target (median value)

Variables	Public re-organization		Private re-organization		Publicization		Privatization	
	Obs	Median	Obs	Median	Obs	Median	Obs	Median
Total Assets°	337***	1,085,360	3,209***	130,226	188***	1,766,507	412***	67,282
Turnover°	321***	30,212	2,907 ***	121,898	177***	605,275	372***	43,591
Ebit°	271***	1,479	1,977***	5,542	112***	29,652	282***	1,468
ROS°°	271***	2.8	1,977***	1.2	112***	4.7	282***	1.5
ROA°°°	271***	-3	1,970***	0.5	111	1	280	0.1

Source: Clò et al. (2014)

Table 6. Number and percentage of cross-border deals

	Public re- organization	Publicization	Privatization	Private re- organization	Total
	Non-missing Obs	Non-missing Obs	Non-missing Obs	Non-missing Obs	Non-missing obs
Deal with acquirer and target in the same country	622	287	769	7,942	9620
Deal with acquirer and target in different countries (cross-border)	68	163	265	3,359	3,855

Source: Clò et al. (2014)

### 7. Concluding remarks

According to the Economist the world is just expecting a new privatization wave:

While privatization is still the dominant policy mood, in this paper we have identified five drivers about the return of public enterprises as active players in the economic arena, in contrast with the perception that privatizations would have lead to their disappearance.

<sup>&</sup>quot;...for governments who are serious about bringing their spending in line with revenues, privatisation is a useful tool. It allows governments to cut their debts and improve their credit ratings, thus reducing their outgoings, and it improves the economy's efficiency by boosting competition and by applying private-sector capital and skills to newly privatized assets. Thatcher and Reagan used privatization as a tool to transform utilities, telecoms and transport. Their 21st-century successors need to do the same for buildings, land and resources. Huge value is waiting to be unlocked." (The Economist, January 11, 2014, page 7).

- a) Looking at the top global companies, particularly those listed in Forbes Global 2000, more than 10% are public enterprises. They are present in different countries, both developed and developing, from Usa to China, from France to Brazil, and in several industries, with quite different technological characteristics, from energy to telecommunications. The survival of large SOE is probably linked, at least in part, to their good performance in terms of standard financial indicators, such as ROS. We suggest that within the above mentioned top 2000 companies, the average SOE outperforms its private counterpart.
- b) The recent global financial crisis, as it happened during the Great Depression in the 1930s and in other episodes, has seen a strong reappearance of an emergency role of government ownership, most notably, but not only, in the banking sector: this implies that managers appointed by governments are now running enterprises mismanaged by managers appointed by private shareholders.
- c) There is some evidence of privatization reversal, particularly by local governments, probably disappointed by the price, investment, and sustainability performance offered by private sector control of such services as water and electricity supply.
- d) In network industries in the EU-15 there is clear evidence that households pay a lower bill for energy (and possibly other services) when the incumbent is ultimately owned by the government, and this may contribute to explain why despite a wide political consensus around privatization, public or partly public enterprises are still important in Europe.
- e) There is also evidence that SOEs are active in acquisition deals, both in their origin country and cross-border. In proportion there are more cross-border deals involving public enterprises as acquirors than cross-border privatizations. Moreover, there is no evidence that the public acquirors are performing less than private acquirors relative to their targets respectively in publicization and privatizations.

These findings may contribute to explain what seems a surprising resilience of public enterprises, and perhaps their return. Some of the best performing global players are under government ownership. Failing private banks (and other firms) have been rescued by public capital and management. There is evidence of occasional republicization of formerly privatized utilities. Consumers in advanced economies are happier about prices of energy under a government owned incumbent. There is eventually some evidence that government-owned acquirors are indeed in better shape than their targets, including in cross-border deals. These are all ingredients of a puzzle: the successful survival of public enterprises in spite of the privatization mantra.

Economists should not necessarily subscribe The Economist's view. Or at least not without some reservation about advising governments that the best that they can do now with the assets they own is to sell them, and "unlock huge value". Well managed public enterprises, with a clear rationale, may still be a feature of good government.

#### References

Alonso J. M., Clifton J., Díaz-Fuentes D., Fernández-Gutiérrez M. & Revuelta J. (2013), 'The race for international markets: Were privatized telecommunications incumbents more successful than their public counterparts?', International Review of Applied Economics, Volume 27, Issue 2, pages 215-236.

Amir H., Warner M. E. and Vigoda-Gadot E. (2012), "Privatization and Inter-Municipal Contracting: US Local Government Experience 1992-2007," Environment and Planning C: Government and Policy 30 (4): 675-692.

Bacchiocchi E., Florio M. & Gambaro M., 2008, "Telecom prices, regulatory reforms, and consumers? satisfaction: evidence for 15 EU countries," Departmental Working Papers 2008-10, Department of Economics, Management and Quantitative Methods at Università degli Studi di Milano, revised 20 Jun 2008.

Brau R., Doronzo R., Fiorio C., Florio M., (2010), 'EU gas industry reforms and consumers' prices', Energy Journal - 31:4, pp. 163-179

Brown, S. P.A. & Yücel, M. K. (2008), "Deliverability and regional pricing in U.S. natural gas markets," Energy Economics, Elsevier, vol. 30(5), pages 2441-2453, September.

Christiansen, H. (2011), "The Size and Composition of the SOE Sector in OECD Countries", *OECD Corporate Governance Working Papers*, No. 5, OECD Publishing.

CIRIEC (2012), The future of public enterprise mission, performance and governance: Learning from success and failures. A research agenda 2012-2014. Paper drafted by Massimo Florio and adopted by the Steering Committee of the Project: available at <a href="http://www.ciriec.ulg.ac.be/fr/telechargements/CIRIEC\_project\_FUTURE%20of%20PE2012-2014\_%20with%20template.pdf">http://www.ciriec.ulg.ac.be/fr/telechargements/CIRIEC\_project\_FUTURE%20of%20PE2012-2014\_%20with%20template.pdf</a>

Clò S., Del Bo C., Ferraris M., Fiorio C., Florio M., Vandone D. (Forthcoming 2014) 'Publicization versus Privatization: Preliminary Findings 2000-2012', CIRIEC working papers, http://www.ciriec.ulg.ac.be/en/pages/6\_2working\_papers.htm

Del Bo C. F. & Florio M. (2012), "Electricity investment: an evaluation of the new British energy policy and its implications for the European Union," Departmental Working Papers 2012-15, Department of Economics, Management and Quantitative Methods at Università degli Studi di Milano.

Fiorio, C.V. and Florio, M. (2013), "Electricity prices and public ownership: evidence from the EU15 over thirty years", Energy Economics, 39, pp. 222-232

Hall D., Lobina E. & Terhorst P. (2013), 'Re-municipalisation in the early twenty-first century: water in France and energy in Germany', International Review of Applied Economics, Volume 27, Issue 2, pages 193-214.

Iversen M. & Sjögren H. (2012), Between Bank and Bankruptcy: A Comparative Analysis of Government Intervention in Recent Swedish and Danish Banking Crises, Paper presented at The 16th Annual European Business History Association (EBHA) Conference/ 1st Joint Conference with BHSJ (Business History Society of Japan), Paris, France.

Kowalski, P., Büge M., Sztajerowska M., Egeland M., (2013), "State-Owned Enterprises: Trade Effects and Policy Implications", *OECD Trade Policy Papers*, No. 147, OECD Publishing.

La Porta R.. Lopez-De-Silanes F. Shleifer A., (2002), Government ownership of banks, Journal of Finance, American Finance Association, vol. 57(1), pages 265-301, 02.

Levy Yeyati E., Micco A., Panizza U. (2007), "A Reappraisal of State-Owned Banks" Economia: Journal of the Latin American and Caribbean Economic Association. – Washington, DC: Brookings Institution Press, Vol. 7.2006/07, 2, p. 209-247.

McDonald D. (Forthcoming 2014), 'Rethinking Corporatization and Public Services in the Global South', Zed Books, London.

Panetta F., Faeh T., Grande G., Ho C., King M., Levy A., Signoretti F. M., Taboga M., Zaghini A., (2009), "An assessment of financial sector rescue programmes," BIS Papers, Bank for International Settlements, number 48, May.

The Economist, January 11-17, 2014

Thomas, S. (2013), The Seven Brothers: Then There Were Three, PSIRU, Business School, University of Greenwich.