

The Rise and Fall of State Enterprise in Western Europe 1945-90: Economics or Technology or Ideology?

By

Robert Millward

Emeritus Professor of Economic History, History Subject Group, School of Arts,
Histories and Cultures, Lime Grove Building, University of Manchester, Oxford Rd.
Manchester M13 9PL, United Kingdom
Email Robert.Millward@manchester.ac.uk

Paper for Session 73, Evolution of Forms of Property Since 1945, Tuesday morning, 22 August, 2006, **International Economic History Conference, Helsinki, Finland**

Note : Apologies for the note form of this paper. It is based on a presentation at a pre-conference meeting in Santander, Spain, related to Helsinki Session 119 ('Transforming Public Enterprise', organised by Judith Clifton, afternoon of Tuesday 22 August). This paper will not be presented at that session but will appear, in a different form, in J.Clifton, D.Fuentes and F.Comin (eds.), Transforming Public Enterprise in Europe and the Americas: Networks, Integration and Transnationalisation, Palgrave, 2006.

1) Introduction

There is a considerable literature which explains the rise and fall of state enterprise in ideological terms, that is, in terms of changing attachments to socialist and capitalist forms of business organisation. This paper puts the case that technology changes, economic forces and geo-political factors were more important and applies the argument to the case of nationalisation, privatisation and de-regulation in the period c 1945-90 in Western Europe.

2) The Debate: Socialism and Pragmatism

In the literature on the history of state enterprise there are two themes which are questionable:

- a) A populist characterisation of state enterprises in Western Europe is that they were established as state owned monopolies (NCB, EDF) in the 1940s in the wake of
 - i) the economic depression of the 1930s,
 - ii) the rise of social democratic parties
 - iii) the success of administrative planning in the Second World War.
- b) An altogether different thread seeks to emphasise the very different origins and rationales for state ownership across different Western European countries. The argument is that the former fascist regimes in Italy, Germany and Spain never experienced the process of socialist inspired nationalisations seen in France and the UK in the 1940s, nor did Sweden where public enterprises, so the argument goes, were set up over a long period dating from the middle of the 19th century, in a fairly pragmatic way.
- c) The problems with these arguments are:
 - i) Whatever their origins, most of the infrastructure industries in Western Europe were under the control of the state. By 1948, British Railways, the General Post Office (embracing telecommunications) and the British Overseas Airways Corporation had been established as state enterprises but railways, telecommunications and airlines were in complete or near complete state ownership also in the other countries on which this paper focuses – France, Germany, Italy, Scandinavia and Spain. Coal, electricity and gas supply were nationalised in France and Britain in 1946-8 and Italy followed suit for electricity supply in 1962. The central state exerted a strong control on electricity networks in Scandinavia and Germany. The Swedish trunk network in rails and telegraph together with the major part of the electricity and gas industries were in the hands of state or municipal bodies, before the war, and there was no coal industry to nationalise.
 - ii) Moreover the socialist nature of state enterprises in France and the UK has been exaggerated. Socialism seemed to stop at the gates of manufacturing industry (apart from steel in Britain which was nationalised).

1951 and the Renault car company in France, the latter deemed to have collaborated during the war) and left land and commerce in the private sector. It was not a takeover of the means of production as some socialist had wanted. Moreover the central governments of France and Britain had a strong grip on all the infrastructure industries by the end of the 1930s, before the electoral success of social democratic parties in the 1940s. By the end of the 1940s it was clear that the outcome was not fundamental socialism. Thus socialist views on the way state enterprises should be organised and administered were not widely accepted (they were boards of specialists in finance, engineering, rather than trade union leaders).

3) The Origins and Objectives of Government Policy in the Network Industries

- a) If then the extent of state ownership did not differ much across Europe and was not predominantly socialist inspired, what accounts for its existence and its institutional form? History is absolutely central and we have to look at the whole 19th and 20th century experience though time here allows only a brief indication of these issues.
 - i) The origins of government involvement in the infrastructure industries date back to the early 19th century. Question: Why in a period when free enterprise and free trade were dominant philosophies did governments ever get involved in these sectors? It can be traced back to the need for rights of way for railway track, telegraph lines and gas and water mains. Parliaments granted compulsory expropriation rights and governments followed up the easing of rights of way by controlling prices and profits and by monitoring the engineering and financial soundness of the companies.
 - ii) The interest of the Continental states extended beyond monopoly controls (promote development in Spain and Italy, political and cultural unification in Sweden and Belgium and military strategy in France and Germany) but here again arm's length regulation or subsidies could be the limit of government involvement – by guaranteeing rates of return for investors in railways and providing subsidies for particular sections of track.
 - iii) Public ownership came in only when speed in the introduction of a new infrastructure was deemed vital and this seems to have been the case in Belgium in the 1830s, Sweden in the 1850s and Italy in the 1860s. Also central governments were very sensitive to communication channels which had military potential and the desire to exercise close control seems to explain why everywhere telegraphs came into state ownership and why the Prussian state took over its railways in the 1870s.
 - iv) Public ownership was important at the local level and municipal enterprise. It flourished in gas, electricity, trams and water supply in the growing industrial towns of Manchester, Nottingham, Lyons, Bilbao, Dortmund, Hamburg. The historical record suggests that this

reflected a desire to control local monopolies by milking their profits. So we find little municipalisation in rural areas without the need for expensive public health problems or where local government was weak.

b) At the end of the nineteenth century and turn of the new century, the technical possibilities and economic gains from the development of national networks in telecommunications and electricity supply became apparent. This was by no means easy to achieve but by the end of the 1930s most central governments were committed to intervention. The collapse of capitalism in the 1930s and the perceived failure to regulate the private firms generated a growing uneasiness of many states in dealing with private sector regional or national monopolies – and the potential was certainly there in railways, telecommunications and electricity. The growing distrust of arm's length regulation of private monopolies whilst providing subsidy made for an additional argument for public ownership. The classic case was railways which were nationalised in France, Sweden, Spain and the UK in the period 1937-47.

4) The Network Industries c.1950-80

- a) This accumulated set of complex objectives was not significantly disturbed in the 1950s and 1960s. State enterprise emerged by 1950 distinguished from other institutions in being required to both serve the public interest and to break even financially. The guiding statements were however notoriously imprecise about what was the public interest. eg 1946 legislation for the National Coal Board in Britain required the Board “ to develop coal mining in ways which, as may seem...[to the Board]...best calculated to serve the public interest”
- b) One solution to all these problems, for the network industries at least, of defining public interest was to go for ‘universal service’ - standardising prices and service quality throughout the country and it is here where state enterprises simply continued past practice with respect to the network industries. Access to services, in the context of a one nation state, could not be markedly different in different parts of the country. Hence the charge for electricity per kwh would be the same in remote parts of rural Wales as in the middle of large towns irrespective of the costs of transmission. The idea of the ‘universal service’ became common. There would be uniform fares per kilometre, freight rates per ton kilometre for similar goods, gas rates per cubic metre and electricity tariffs per kilowatt hour in different parts of the country irrespective of the varying costs of supply.
- c) How these requirements, even when specific, were to be reconciled with the second broad aim, to break even, was never spelled out in the legislation nor in the early guidelines, which was significant for the later shift to privatisation.

5) Oil, Coal and Airlines

- a) Major characteristics for our purposes are
 - i) Governments wanted to secure some leverage on the development of these resources to ensure their availability as a tax source (via rents and royalties) and because of their strategic value.

ii) On the other hand the business of producing and distributing coal and oil and operating airlines does not involve natural monopoly conditions so that it might be expected to generate competitive conditions with lots of suppliers. And this is what emerged for coal and oil in the nineteenth century and in the first half of the twentieth.

b) The nationalisations of the coal industries of France and Britain in 1946 had little to do with their strategic significance but rather with poor working conditions and the emergence of a politically active labour force who demanded nationalisation (an important exception to the main drift of this paper). Indeed the coal industries of France, Germany and Britain all declined in the latter part of the twentieth century and all were protected in various ways.

c) When it came to oil supplies, before the Second World War, the known exploitable deposits were located outside Europe and this explains why governments held shareholdings in companies like British Petroleum and AGIP. For the indigenous deposits of oil and natural gas exploited from the 1960s in the North Sea, the important issue was to secure clear property rights and this was achieved by various forms of a concession system. In the long term, state ownership was not needed to secure tax revenues and property rights and the privatisation of these companies from the 1980s is perhaps not surprising.

d) In the case of airlines, governments first sought control over airspace (in 1919) . A further complicating factor was that they, as well as airspace, were deemed to have strategic significance. It would not be enough for a country to rely on services from any old company. Each country wanted at least one national carrier and the normal military reasons for such a transport facility were greatly enhanced by the desire of countries like Belgium, France, Italy and Britain to secure good links and supplies with their colonies in Africa and Asia. However the finances of these airlines were rather shaky in the early embryonic days of air transport and there was an even greater threat posed by the economic superiority of American airlines who had flourished in their huge land mass, uncluttered as it was by national frontiers. The result was firstly that, by the end of the 1930s the combination of regulation and subsidies was proving politically unpalatable. When this was added to the inability to support some services even with subsidy, the balance was tipped towards state enterprise. The result was firstly that by the 1950s each country had its own national flag carrier (Iberia, Sabena etc.). Secondly some of the national carriers like Air France, British European Airways and British Overseas Airways Corporation were 100% state owned while in others like Lufthansa, Alitalia, SAS and Iberia, central governments had a clear majority holding. Secondly the IATA system established in 1945 ensured that fares were set at such a level as to protect even the highest cost European carriers against American competition.

6) The Institutional Forms of State Enterprise

The above considerations go a long way to explaining how and why state enterprise was institutionally organised 1950-90.

- a) For post and telecom the advantage of a single national network and the growing unwillingness to achieve this by arm's length regulation of private monopolies, prompted public ownership and *the fact that the state wanted to directly control the flow of information explains why they finished up as part of a government department*. Hence the GPO in Britain (which included telecom) was part of the Ministry of P&T. So also for the PTT, the Italian state railways, the Azienda Autonoma delle Ferrovie dello Stato, and in Germany the Deutsche Bundesbahn, where similar motives were present (at least historically).
- b) The 'établissement public' / the public corporation reflected recognition by the 1940s that state enterprise was an important distinctive element in the economy. *It was the classic form for a network monopoly which was state owned but where security considerations were generally not important*. Used in energy in UK (NCB, Gas Council Br.El.Auth.), France (EDF, Gde Fr., CHarb.de France) and electricity in Italy (ENEL) and in Spanish railways (RENFE).
- c) In the case of state ownership of shares, *the aim was to allow government access to, or leverage on, resources and services, but where the enterprise was essentially a profit making business*. The technology of these sectors was not such as to generate natural monopoly conditions and profit here was controlled via domestic and/or international competition.
- d) There are several cases which do not fit this pattern but some of the gaps can be reconciled with the above framework. Electricity was generated and distributed by various companies and groupings like RWE, VIAG, VEBA in Germany and ELKRAFT and ELSAM in Denmark but the state and the municipalities had dominant shareholdings and when it came to transmission, they all came together as joint participants in the national grid. Similarly the desire for controlling monopoly profits and exercising close scrutiny over communications was manifest in Denmark by the Post-og Telegrafvaesenet providing postal and telegram services and inter-regional and international telephone lines while the rest of the telephone network was provided by regulated concessionary companies. More problematic are the Swedish trading agencies though their institutional set up was a source of much concern and change. Finally Telefonica? Why not a government department?

7) The Core Economic Problems of State Enterprise

- a) What then were the problems of regulation and public enterprise which paved the way for privatisation and de-regulation? Here it is first of all relevant to initially reject two themes from the economics literature. The first is that state enterprise was undermined by deficiencies in the productivity performance. Evidence in Table 1 contradicts. That is, performance of state enterprise 1950-73 in Britain, France and Germany no worse than comparable industries in USA nor than privatised regime in Britain 1973-95.
- b) Secondly, the marginal cost pricing policies promoted by economists were never (outside France) accepted by governments because they flew in the face of the objectives and guidelines which governments set for their state enterprises. There

- are many examples: governments were loathe, in times of shortages, to let prices clear markets; a true marginal cost pricing regime would allowed coal prices to be determined at the world level but , nor were governments willing to expose their coal industries to the full blast off market forces. The Universal service concept was a complete contrast to costs based prices.
- c) Historically it was not the above efficiency issues which paved the way for privatisation and deregulation but rather that the industries had come to their current position as a product of a wide ranging set of objectives, for which the current institutional format was no longer necessarily optimal. Why for example should telecommunications be run by a section of a government department? The origins were in questions of national security. Was the telecoms sector still the dominant instrument for security? The second central problem was that the procedures and institutions for meeting these obligations were not sufficiently planned and costed. All state enterprises were expected to break even and, for the large part, they rarely did. Thereby they failed to meet one of their few quantifiable management targets. These two issues, when allied to the technological changes of the last 30 years, provide the key to understanding the shift to de-regulation and privatisation.

8) Conclusions: Road to Privatisation

The process of change was then as follows:

- i) All state enterprises from the 1950s onwards saw the gradual introduction of cost based tariffs, rates, and fares but the process was slow and was much more the result of growing financial pressure on managers from the 1960s onwards and of growing competition from other firms, rather than from following the advice of economists. The financial pressures came from an inability to reconcile the breakeven requirement with state enterprises' public duties. The tradition of universal service provision with uniform prices per kilometre travelled, or per cubic feet of gas, distance of telephone call etc. had been sustained under the hope that the unprofitable sectors would be sustained by the more profitable ones. The associated financial deficits (illustrated in Table 2 for the energy industries) and in some cases reduced self-financing became a target for governments wrestling as they were with rising public expenditure programmes. It is significant that many observers of the shift to de-regulation, but especially privatisation, place much emphasis on the impetus given by rising budget deficits, that is, rising public sector borrowing requirements. The timing of the privatisations varied across Europe but closely followed financial crises. That is, they were not prompted by productivity failures but by financial problems (Spain, Portugal, Italy Germany UK).
- ii) The other element in the process of change was increased competition arising in part as a product of technological changes.

Coal, rail and scheduled airlines faced competition from new products and services in the form of road transport, oil, faster aircraft and charter airlines. The introduction of cost based pricing structures invariably made some groups worse off and some better off. This was the case in telecommunications where the shift to a more cost based tariff system was ushered in by the great technological changes in customer premises equipment and proved economically beneficial for businesses, urban areas and long distance callers at the expense of the residential, rural and short distance customer groups.

- iii) One of the driving forces behind state ownership was the desire to secure social and political unification but much had been achieved by the second half of the twentieth century and it was no longer clear that the old institutions were the best. There were new means of communication (roads, airlines and telecommunications) other than railways for securing links to remote communities, the colonies had now become independent and universal provision had been closely associated with financial failure. The strategic significance of certain resources and services remained. But there was no need for each country to give one airline a monopoly of all air travel. The financial returns to government for indigenous oil and natural gas deposits together with the necessary affirmation of sovereignty could be achieved by asserting property rights, granting concessions and levying taxes. Neither is it clear that control of information flows required that telecommunication networks be operated from within a government department.
- iv) This still leaves many sectors where natural monopoly conditions apply and where there would be advantages for a single supplier, supported for non-commercial obligations by explicit subsidy schemes. Electricity transmission grids, natural gas distribution networks, water supply systems, trunk telecommunications networks, railway systems - all were still dominated by the single supplier. Despite all the claims during the privatisation debates about the importance of competition, little had emerged by the 1990s. The reservations which grew in the inter-war period about arm's length regulation of private sector monopolies had disappeared by the 1990s. On the other hand the evidence does not suggest that privately owned networks in Europe are more efficient than publicly owned networks. Nor moreover is the claim that privatisation is essential to pave the way for de-regulation all that convincing, even though it did work that way in Britain. De-regulation preceded privatisation in many parts of Continental Europe. The classic case for de-regulation seems stronger than that for privatisation.

R.Millward
June 2006

TABLE 1
PRODUCTIVITY GROWTH : INTERNATIONAL COMPARISONS
(Annual average growth in total factor productivity)

	<u>1950-73</u>			
	U.K.	U.S.A.	FRANCE	GERMANY
Electricity	5.51	3.93	n.a.	n.a.
Gas	4.71	3.02	n.a.	n.a.
Coal mining	1.34	0.82	6.86	2.47
Railways	1.60	4.45	n.a.	n.a.
Air transport	11.53	9.55	n.a.	n.a.
Commun- -ications	2.13	1.73	n.a.	4.18
Manufacturing	3.28	1.95	4.22	4.12
	<u>1973-95</u>			
Electricity	1.53*	2.57*	3.69*	2.17*
Gas	4.16	-4.09	n.a.	0.79
Coal mining	7.89	3.09	2.21	0.37
Railways	1.17	5.90	n.a.	1.69
Air transport	4.48	2.81	n.a.	n.a
Commun- -ications	4.08	2.84	5.55	4.23
Manufacturing	1.85	1.21	2.47	1.89

* 1979-97

Note : Total factor productivity growth is calculated as the growth rate of net output per hour weighted by labour's share of value added, plus the growth rate of net output per unit of capital services weighted by the remaining share of value added. In several cases, shares in value added had to be approximated by the data for wider industry grouping. Source : Derived from tables in chapter 4 of M. O' Mahony, Britain's Productivity Performance: An international perspective (London: National Institute of Economic and Social Research, 1999). The 1979-97 data for electricity are from M.O' Mahony and M. Vecchi, "The Electricity Supply Industry: A Study of an Industry in Transition", National Institute Economic Review 177 (2001), Table 4.

TABLE 2
NET PROFITS* IN STATE ENERGY ENTERPRISES

(Selected years 1949-81)

	<u>United Kingdom</u>			<u>Den.</u>		<u>France</u>			<u>Germany</u>		<u>Italy</u>
	£ million		kroner	'000	mark	million francs		DM million	million lira		
	Electr.	Gas	Coal	Electr.	Electr.	Gas.	Coal	Electr.	Gas	Coal	El.
1949	7		9.5			-5.5	1.2				
1951	3		-8.2		4.4		0.9				
1952	7		0.5				-4.7				
1954	19		-19.6		3.1		-9.4				
1956	12	3.8	12.8								
1960	16	2.1	-21.3				-120				
1965	85	11.1	-24.8		2						
1966	21	3.9	0.3		25			130			0
1967	55	-12.9			-12			109			0
1968	101	17.5	-8.9	116	-157	-272	-166	112			0
1969	65	13.7	-26.1	138	-16	-190	-54	117	1.6	-161	0
1970	-56	2.0	0.5		-56	-180	-4	135	-2.3	-59	0
1971	-23	15.1	-157	115	-179	-115	-29		-8.6	-41	0
1972	2	5.6	-83.7		51						-268
1973					2	-107	-124				-520
1974					-1420	-282	--12				
1975					-341	91	-566				
1980					-655	17					
1981											-2000

* Net profits comprise all receipts and grants less all operating expenses, depreciation, taxes, interest and all other capital charges.

Notes and Sources

United Kingdom: For 1949-54 the sources for coal and electricity are the Annual Accounts of the National Coal Board and of the Electricity Boards in England, Wales and S. Scotland. Thereafter the electricity entries exclude S.Scotland and, together with coal, are taken from G. and P. Polanyi, Failing the Nation: The Record of the Nationalised Industries (London: Fraser Ansbacher, 1974), p.20. This is also the source for the Gas Council and Area Boards.

Denmark: Aggregate of all the seven major electricity distribution companies (except IFV) reported in CEEP, The Evolution of Public Enterprises, p.53

France: Entries relate to Charbonnages de France, Électricité de France and Gaz du France (combined with EDF for 1949). Note that the 1949-54 data are in billion old francs. Sources are W. C. Baum, The French Economy and the State (Princeton University Press, 1958), Table 26; CEEP, Evolution of Public Enterprises, pp.139 and 148-51; CEEP, Public Enterprises in the European Community (London: CEEP English Editions, 1978), pp.84-93; F. Vinck and J. Boursin, "The Development of the Public and

Private Sectors of the Coal Mining Industry in Europe: A Comparative Study", Annals of Public and Collective Economy XXXIII (1962), 385-491. The 1968-71 entries for coal are aggregates of the data in CEEP Evolution of Public Enterprises for CDF and the Houillères du Bassins for Centre du Midi, Lorraine and Nord et Pas de Calais.

Germany: The electricity entries relate to Vereingte Industrie -Unternehman AG (VIAG) which accounted for 7.6 % of electricity generated in W. Germany in 1970. See Tables III and XIV of R. Keutgen, "The Vereingte Industries-Unternehmen AG: A German Public Enterprise", Annals of Public and Collective Economy 42 (1971), 305-46. The entry for gas covers the 10 publicly owned gas enterprises and the entry for coal covers the four mining enterprises with large state holdings on p.101 of CEEP, Evolution of Public Enterprises.

Italy: Source is the data on ENEL compiled by A. Giuntini in the statistical appendix of Zanetti (ed.), Glisviluppi dell ENEL, pp.869-70. See also N. Lucas, Western European Energy Policies (Oxford: Clarendon Press, 1985), p.161.