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**THE BRITISH PRIVATISATION PROGRAMME:  
A LONG TERM PERSPECTIVE**

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# The British Privatisation Programme: A Long Term Perspective

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## Abstract

The British privatisations were concentrated on the infrastructure industries of transport, communications and energy. It is important to assess the efficiency impact in a long-term context. The Milan study goes some way towards this but even better is to compare different countries of the Western world over the whole period since 1945. A distinction is made here between 1945-73 and the 1973-95 period, which followed the oil shocks and ushered in a general phase of de-regulation and privatisation. It is suggested that factors like the reconstruction after the Second World War, the process of catch-up and convergence in technologies and the resource endowments of different countries had much bigger effects on productivity levels and growth rates in the infrastructure industries than the shift from nationalised to privatised regimes. This article also, more briefly, critically evaluates two other elements of the Milan study, the treatment of excess profits and of the move to more differentiated price structures.

Key words: Nationalization, Privatization, Great Britain

JEL Code: L33, L32

## Introduction\*

In the current climate, when the World Bank is totally committed to privatisation and the European Union to liberalisation of markets, a critical in-depth evaluation of the British privatisation programme is long over-due. In this paper I wish to draw attention to the necessity of evaluating privatisation in a long-term comparative perspective. A key dimension of the move from a nationalised regime to a private one is the efficiency dimension, usually measured by levels and growth rates of productivity. This is an important element of the Milan study as summarised in the paper by Florio in this collection<sup>1</sup>. In essence his research does go some way to placing productivity change in

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a long-term perspective. What is needed is a more detailed evaluation of how these institutional changes fitted into the general picture of productivity growth in the advanced economies of the Western world in the 50 years since the end of the Second World War. From 1980 productivity grew significantly in the privatised industries and prices fell relative to the general price level. But productivity growth in these industries also increased significantly during the nationalised regime and, since 1980, in continental European countries that did not move so quickly to privatisation.<sup>2</sup> Indeed much of the period since 1945 can be seen as a process of catching-up and converging on USA who did not suffer the same physical devastation during the Second World War and of exploiting an industrial technology which was increasingly coming to be a common pool of knowledge. The speed with which each European country was catching up was potentially affected by the different regulatory and ownership regimes but they have to be unscrambled from the wide range of other factors.

### Ownership versus Liberalisation

First it is relevant to assess the Milan study in its own terms. The research has some weaknesses, but, given the breadth of the perspective it seeks to achieve, it is impressive in its analytical foundations and empirical content. Some major features of British privatisations are brought out clearly; the under-pricing of assets, the huge decline in the public net worth, the large rise in management salaries in a context of very little management turnover. The important message for my purposes is that privatisation made little difference to long term trends in productivity and prices. There were no structural breaks associated with the onset of privatisation<sup>3</sup>. Of course that conclusion relies on being able to distinguish privatisation from, firstly, liberalisation of markets, and secondly, the regulatory regime. The separation in the Milan study of privatisation from the nationalised period, the announcement period, the recessionary squeeze and the most recent period implicitly invites us to view liberalisation and various regulatory regimes as options even with public ownership. Other contributors to this journal will see this as

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<sup>1</sup> M.Florio, "A State Without Ownership: The Welfare Impact of British Privatisation 1979-97".

<sup>2</sup> As exemplified for telecommunications in Foreman-Peck and Manning, 1988.

<sup>3</sup> Florio, Table 4.

a weakness. There are three things which may be said in defence of isolating privatisation in this way.

An important theme of the academic literature of the 1960s and 1970s was that ownership does matter. From the classic work of Alchian, Demsetz, Pelzman, Niskanen, de Alessi and others, the property rights and public choice approaches stressed the inherent inefficiency of public ownership<sup>4</sup>. One source was that the taxpayer could not sell ownership rights unilaterally, as could the equity shareholder, so the pressure on managers was expected to be less in public firms. The other was the tendency of politicians to use public enterprises for logrolling and for civil servants to expand their empires. Much of this literature stemmed from USA and had a large influence on the microeconomic foundations of the analysis of public and private firms. The role of American economists is important here since they were drawing on the experience of a very politicised civil service at state and local government levels. In Britain in the three decades after World War II, the broad approach of many economists, naively or not, was that the civil service and boards of public agencies were run by disinterested officials. The boundary between public and private ownership was rarely analysed, mirroring the political consensus of the period. Herbert Morrison, a member of the 1945-51 Labour government and architect of the post-war nationalisations, classically asserted that members of the Board of Directors of each nationalised industry should be “high custodians of the public interest”. If there was an agenda for civil servants it was unrelated to the political parties and had more to do with the traditions inherited from Gladstonian public finance, an active local government and from the administration of the vast British empire. The British civil service, after all, was the ‘apotheosis of the dilettante’. In other European countries like France, the civil service had a long tradition of elite corps of engineers and officials dedicated to promoting the public interest as they saw it<sup>5</sup>.

Secondly, the industries which were privatised did not, prior to nationalisation, have competitive market structures. The major nationalisations were in the 1940s and cannot be characterised simply as a socialist party device to impose state monopolies. Manufacturing, the extractive industries, land, finance and commerce were barely

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<sup>4</sup>Alchian, 1965; Alchian and Demsetz, 1972; de Alessi, 1974; Niskanen, 1971; Pelzman, 1971.

touched, outside coal and steel. Instead the focus was the infrastructure industries in transport, communications and energy which, before the 1940s, had been operated, by private companies or municipalities, as local or regional monopolies. Indeed the problems of regulating this sector, with its pervasive natural monopoly elements, in the 1919-39 period was a key element of the lead up to the 1940s nationalisations<sup>6</sup>. Thus nationalisation was very much a matter of changing ownership rather than market structure. The immediate impact of the 1980s privatisations was to reverse that process.

Thirdly, it is clear that the Conservative governments, which ushered in the privatisations of the 1980s, felt that ownership mattered. Competition was also a key element but, as John Moore, the Minister of Industry, classically declared in 1985: “ We will encourage competition where appropriate but where .. [competition}.. does not make business or economic sense we will not hesitate to extend the benefits of privatisation to natural monopolies”<sup>7</sup>. A meaningful way of evaluating the Milan study is therefore as a test of the hypothesis that ownership had a significant impact. From the detailed work reported, it seems we cannot reject the idea that the impact was insignificant. In this sense, the Milan study is consistent with the few detailed cost function studies of public and private firms when they did co-exist in Britain in the late 19<sup>th</sup> and early 20<sup>th</sup> century, with the productivity record of the UK nationalised industries, relative to the more privately owned American infrastructure industries, and with the wider empirical literature which has stressed that, in terms of efficiency gains, market structure is much more important than ownership.<sup>8</sup>

### Price Structures and Profits

There are two elements of the Milan study which are obscure. One relates to the costs of supplying different customer groups and the potential gains from the introduction of more differentiated price structures. The other is the treatment of ‘excess’ profits in the overall evaluation. The measure of consumer benefits from privatisation takes the form of estimating the consumer surplus gain from the fall in the prices of the products of the

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<sup>5</sup> Smith, Jr., 1990.

<sup>6</sup> Millward and Singleton, 1995.

<sup>7</sup> Moore, 1987.

<sup>8</sup> Aharoni, 2000; Foreman-Peck and Waterson, 1985; Iordanoglou, 2001; Millward and Ward, 1987; Millward, 1990.

privatised industries, relative to the movement of all other prices. The prices to final consumers, charged by these industries, fell by about 10% relative to the general level of prices<sup>9</sup>. Taking into account the size of household expenditure on these products during the period 1984 –97, this yields a gross annual gain in the region of £4.1- 4.8 billion and, taking a figure somewhere in the middle, this works out as £80 billion in present value terms using a 5% discount rate. It is assumed that one half of this would have occurred anyway under public ownership. This yields a figure of £40 billion as a first approximation of the consumer gain from privatisation before any adjustments for shadow prices or distributional weightings. This may be generous, given the absence of any great structural breaks in the long term trends of prices and productivity. On the other hand no credit is given for the fall in the prices of products sold to the business sector<sup>10</sup>.

What appears to be missing or at best obscure in these calculations is any estimate of the benefits of moving to more differentiated price structures, in the context of industries where marginal costs are low and differ across customer groups. The distributional impact of the new price structures are well documented, with business customers often gaining from lower telephone, gas, electricity and water charges at the expense of residential and other non-business groups, leading sometimes to water and energy poverty. Because the study makes no attempt to estimate cost functions, it is unable to say whether the price structures have moved nearer to reflecting patterns of marginal costs. The nationalised industries were renowned for charging uniform fares, tariffs and rates across different routes, customer groups and regions. In part this was a product of the vague public purpose objectives set out in the Nationalisation statutes of the 1940s and the way industry managers interpreted them as requiring that the freight rate per ton mile, the fare per mile, the tariff per kilowatt hour of electricity or per therm of gas, was the same whether the journey was in the Scottish Highlands or London and whether the electricity or gas was demanded on a cold February morning or a warm Summer evening. There is evidence from as early as the early 1970s that private electricity supply firms in USA offered more differentiated tariff structures than public firms and so the change in Britain should not be surprising<sup>11</sup>.

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<sup>9</sup> Florio, p.27.

<sup>10</sup> Ibid, p.35.

<sup>11</sup> de Alessi, 1977.

In general the efficiency gain from a more differentiated price structure depends on how far prices moved nearer to marginal costs. Consider a benchmark natural monopoly case where prices are initially the same for all consumers and set equal to average costs, notwithstanding that, after a lumpy investment, marginal costs are zero. No productivity change need be assumed from privatisation but price discrimination is possible and occurs. Marginal prices are lowered, intra-marginal prices are raised. In general as long as the prices charged track the willingness to pay of different customer groups clear efficiency gains accrue. At one extreme, all the area under the demand curve accrues as revenue to the firm, total costs are the same, profits rise more (by definition) than the loss of consumer surplus. But there will in practice be a host of other scenarios reflecting the complexity of marginal costs and where both consumers and producers gain. It is possible that some of the gains are captured in the Milan study's estimate of the rise in profits from privatisation but that is not explicit.

A second area where the study is obscure is the treatment of profits in the evaluation of the overall benefits from privatisation. The net welfare gain is measured as the sum of the gains to consumers, taxpayers and shareholders. The starting point is the £40 billion of discounted present value gains to consumers quoted earlier. Shareholders gain \$14 billion arising from the difference between the present value of their after-tax profit stream and the purchase price of the shares<sup>12</sup>. The loss to taxpayers is exactly the same amount. Hence a first approximation of the overall net welfare gain is £40 billion, or less than £1000 per head of population, a fairly small figure given the publicity associated with the British privatisation programme. There are big problems here of course in specifying the counterfactuals -- what the value of assets would have been if left in the public sector, what would have happened to costs and so on. Some might also want to take issue with the further downgrading of the £40 billion figure through the use of shadow prices and distributional weightings, which raise the prospect of a negative welfare change<sup>13</sup>. There is however one further adjustment which warrants closer examination. This is the "need to subtract the extra profits paid by consumers, because they are just transfers to monopolistic firms"<sup>14</sup>. The amount is estimated to be £7 billion

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<sup>12</sup> Florio, p.36.

<sup>13</sup> Ibid, p.37.

<sup>14</sup> Ibid, p.35.

per annum and if it is assumed that half of this would have accrued under public ownership, then “ around £ 3.5 billion net extra profits should be deducted from the consumers’ surplus, or £70 billion in present value terms”<sup>15</sup>. This is a large amount, converting a small net gain into a small net loss and yet the rationale for its deduction is not clear. What it seems to imply is that prices did not fall as much as they would have done if the extra profits had not arisen. There is a loss to consumers to set against the gain to shareholders. But there is a loss to taxpayers and this appears to have been counted already as the £14 billion quoted earlier; to deduct it again would involve double-counting. These observations suggest it is safer to stick to the proposition of a small overall net gain of £40 billion and argue about its distributional incidence.

### The Long term Productivity Pattern

In the absence of data on costs under different regimes, the productivity data are central to any evaluation of the efficiency of privatisation. The Milan study argues that the trends in total factor productivity (TFP) and labour productivity since 1979 in the UK “..do not show a better performance than most EU countries”<sup>16</sup>. In terms of manufacturing and national output this is a debatable point when comparisons are made with countries regarded as peers: France, Germany and Italy. In Table 3 of the Milan study, the growth in TFP in the business sector 1960-73 is well below France and Italy, in 1973-9 it is well below Germany, France and Italy but in 1979-93 TFP growth, at 1.1% per annum, is equal to Italy and only slightly below Germany and France.

A more robust conclusion, and more important for present purposes, is possible at the level of the firm, where privatisation had no impact on long-term productivity trends<sup>17</sup>. The implication is that productivity growth was quite healthy for these industries whilst nationalised. This is confirmed by other studies. In a recent detailed investigation of 30 British industries, Iordanoglou concluded that productivity growth in the publicly owned firms ( in transport, communications and energy) was higher than that in the private firms (in manufacturing) and than in comparable infrastructure industries in

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<sup>15</sup> Florio, pp.35-6.

<sup>16</sup> Ibid., p.6

<sup>17</sup> Ibid, Table 4.

USA<sup>18</sup>. By the mid-1970s the nationalised sector was in a pretty parlous financial state as a result of price controls exercised as part of government anti-inflation policies. The productivity data suggest that financial performance was not reflecting anything about managerial efficiency, at least in so far as that is captured in productivity measures.

More important is that productivity trends through the second half of the century were affected by the problems of reconstruction after the Second World War and by the increasing accessibility of modern technology, allowing modern economies to catch-up and converge on each other's income levels. In order to assess the place of the infrastructure industries in this picture, it is important to recognise that they are part of the service sector which has come to account for over two-thirds of the labour force of the advanced economies in the last quarter of the twentieth century. Developments in the service sector have proved central to an understanding of the pattern of economic growth across different countries. By the end of the 19<sup>th</sup> century, USA had overtaken Britain's GDP per head and its faster growth rate was due to two factors; the contraction of agriculture's share of economic activity ( so also France and Germany) and a faster growth rate of productivity in services. Relative productivity levels in manufacturing remained roughly the same over the long term<sup>19</sup>. World War II then widened the gap in productivity levels between USA and Europe whose capital stock was severely run down, especially that in the infrastructure industries. Hence the period since 1945 has in part been one of retrieving the pre-war relative productivity levels. The top half of Table 1 covers the period 1950-73 and confirms the earlier estimates of the superior productivity performance in the British nationalised industries (railways excepted), relative to USA. The element of catch-up is suggested by the fact that TFP in manufacturing was also growing faster than in USA manufacturing and that France and Germany, more devastated by the war than Britain, were doing even better in all sectors for which comparable data are available.

TABLE 1

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<sup>18</sup> Iordanoglou, 2001; see also Millward, 1990.

<sup>19</sup> Broadberry, 1998.

The dividing point in Table 1 is taken as the early 1970s - following the oil shock and the subsequent retreat from Bretton Woods and marking the shift to more de-regulated economies. What can we deduce about productivity growth as between the two periods? The first period in Britain is one where the infrastructure industries were nationalised, the second one of de-regulation and privatisation from 1979, albeit at different speeds in different industries, as emphasised in the Milan study. Some writers have argued that British performance in the infrastructure industries improved relative to other countries as it moved to more de-regulated and privatised institutions<sup>20</sup>. Table 1 is derived from the appendix tables in O'Mahony 1999 and involves new data on hours worked and capital services which represent a considerable improvement on earlier studies. If we focus first on comparisons with USA, it seems that in electricity, air transport and communications ( as well as manufacturing) the TFP growth rates in the UK exceeded those in USA in both periods. The American rates are of the order of 60-80% of the British growth rates. At the most, one might argue that Britain does slightly better, relative to America, in the second period, though of course all the growth rates (except telecommunications) are less. As for the other sectors, the improved performance in gas 1973-95 is largely a product of the newly discovered North Sea natural gas coming on stream in the 1970s whereas US gas sales were declining faster than labour and capital could be shed. The outputs of coal and of railway services were declining in Britain throughout the second half of the 20<sup>th</sup> century and remained in public ownership for all but the last few years. Employment also declined throughout but whereas railway equipment was kept more or less intact, the decline in coal output was so severe that eventually it lead to closure of mines, disposal of assets and hence a rise in capital productivity which did not emerge until the last quarter of the century. In France and Germany the whole process started later since coal output was rising in the first period. In USA, coal and railway business continued to rise but the geological and geographic context was such that railway productivity raced ahead of Britain's while in coal it lagged behind. These trends seem unrelated to the pattern of ownership.

## TABLE 2

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<sup>20</sup> O'Mahony, 1999, pp.20/23; Broadberry 1997, p.258; Broadberry and Ghasak 2001, p.21

In order to extend the comparisons with France and Germany, we have, because of data limitations, to use broader industry groupings, as in Table 2, where the nationalised sectors are not so easily identifiable. Table 2 includes one group for transport and communications as a whole and one for the utilities: gas, electricity and water combined. Such group data have prompted Broadberry and O'Mahony to argue that the British performance in the infrastructure industries improved in the second period<sup>21</sup>. The table records index levels of TFP (with UK =100) in 1950, 1973 and 1995. It also includes index measures of capital per unit of labour (K/L) and labour productivity (Q/L). It does appear from that table that, in comparison to the USA, the British utilities show a deterioration in TFP in the first period whilst in the second period they show a large gain. But the 1970s saw, as we have seen, the start of returns from North Sea oil and gas. Moreover, the trends were similar in financial services, which were not nationalised. The distributive trades, which were not strongly regulated, declined relative to USA in both periods. The transport and communications group includes many private sector road transport firms in both the first and the second period as well as the railways which were in public ownership for both periods. TFP and labour productivity improved relative to USA in the first period and even more so in the second. Whilst it is possible to point to the healthy investment record of the privatised utilities and transport sector in the 1973-95 period, the same could be said about the 1950-73 period, as is clear from Table 2.

The picture of public ownership is also muddled once it is recognised that the German and French infrastructures were heavily regulated and also largely publicly owned in the 1950-73 period. If the big gains in productivity in the British utility sector relative to Germany in the period 1973-95 are attributed to privatisation (as opposed to North Sea Gas), how is one to account for transport and communications where German growth was greater in both periods, perhaps because in terms of productivity levels, Germany was still behind Britain in the 1990s? Similarly whilst capital intensity in French utilities (electricity in particular) was two or three times higher than in Britain, the overall TFP level was still lower than in Britain in the 1990s. The sheer size of the investment programme in French electricity was reflected in big gains in labour productivity relative to Britain but one should recognise that *Électricité de France* was a nationalised

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<sup>21</sup> Ibid.

enterprise and it dominated the energy sector for much of the second half of the twentieth century.

### Conclusions

The Milan study is to be welcomed as an excellent piece of applied economics providing an empirically well based estimate of the welfare impact of privatisation. The treatment of excess profits and of the move to a more differentiated price structure appears to involve weaknesses. On the other hand, the demonstration that in the infrastructure industries there was no structural break in productivity trends, undermines the claims that there were significant efficiency gains. In this paper productivity trends are evaluated in a wider setting, that of the various factors affecting the long-term productivity levels in some of the major Western countries, and it reinforces the results of the Milan study. It does not appear that the shift to privatisation and de-regulation in Britain during the last quarter of the twentieth century, following the oil shock of the early 1970s, was associated with a superior productivity record to that in other countries or to Britain under the nationalised regime of the 1945-73.

TABLE 1

PRODUCTIVITY GROWTH : INTERNATIONAL COMPARISONS

(Annual average growth in total factor productivity)

**1950-73**

	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

**1973-95**

Electricity	2.27	1.56	n.a.	1.91
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

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 O'Mahony, 1999.

TABLE 2

INTERNATIONAL COMPARISONS OF LEVELS OF CAPITAL INTENSITY AND  
PRODUCTIVITY 1950/1973/95

(Indexes based on UK =100 : selected sectors)

	USA			FRANCE			GERMANY		
	K/L	TFP	Q/L	K/L	TFP	Q/L	K/L	TFP	Q/L
Electricity, gas and water									
1950	345	214	425	319	37	64	112	120	109
1973	228	219	370	220	88	143	121	119	134
1995	158	115	163	168	87	120	104	79	84
Transport and Communications									
1950	338	141	189	157	66	68	223	56	65
1973	223	139	174	130	107	113	166	81	92
1995	121	111	113	135	110	117	156	85	100
Distributive Trades									
1950	405	113	162	208	93	126	178	71	76
1973	188	119	146	172	116	139	182	90	106
1995	151	135	155	165	126	143	141	106	111
Finance and Business services									
1950	245	136	194	77	104	92	57	73	55
1973	106	182	187	57	215	169	79	150	134
1995	87	122	115	75	134	112	119	141	169
Manufacturing									
1950	273	216	290	104	72	77	92	84	74
1973	173	159	186	142	89	101	152	102	115
1995	161	142	171	171	103	130	156	108	126
Total economy									
1950	339	146	195	133	74	79	135	65	63
1973	193	138	168	120	109	116	168	104	119
1995	128	112	121	149	118	132	172	109	129

Note : K/L measures capital intensity as capital services (K) per employee hour (L). Q/L is labour productivity measured as net output (Q) per employee hour. TFP is total factor productivity measured as output per unit of labour and capital weighted by their base year shares of value added. All the 1950 entries for levels (except for Q/L) were derived from the growth rate data for the different countries and the 1973 level data.

Source : Derived from O'Mahony 1999.

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