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# Privatisation in the Transport Sector: Some of the Key Issues

This paper examines the recent trends towards privatisation of transport provision. These trends transcend national borders and cover infrastructure provision as well as that of transport operations. The aim is to provide some explanation of why this move is taking place and to consider why it should be the 1980s when it has occurred. Further it looks at the limited experiences we have to-date, especially from the UK perspective, of the performance of transport industries which have recently been privatised. The question of how one might take privatisation further, and especially the issue of privatising road track and railway systems, together with the problems associated with doing so are reviewed at the end of this paper.

#### Introduction

There has been a significant change in attitude towards the importance of ownership of transport facilities in recent years. Until the past decade or so the attitude towards public ownership was either positive or at worst neutral. Advocates of public ownership pointed to the direct role which public ownership could play in meeting social criteria in transport provision. The majority of economists, however, took the view that the question of ownership was really immaterial provided prices were set correctly and investments in infrastructure were made on a rational basis. In other words, an appropriately regulated private sector could achieve exactly the same ends as a nationalised transport system. It should also be recalled that these views were general and transcended the narrow confines of transport policy formulation.

The past decade has witnessed a considerable change of view (Yarrow, 1989; Swann, 1988) and the idea has gained ground that positive

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benefits would accrue if significant parts of the public sector were in some way privatised. What exactly one means by privatisation in this context is not always clear. It does not, for example, always mean private ownership in the form of a conventional corporation or company. The question of meaning is not one we addressed in detail here - it is considered, for example, by Kay and Thompson (1986) and Vickers and Yarrow (1988) - but it is important to realise that privatisation in the transport sector has taken a variety of forms. In the UK these have ranged from the complete transformation of public into private companies (e.g. the National Freight Consortium and British Airways), through a range of franchising arrangements (e.g. some London Regional Transport bus services) and development agreements Je.g. the so-called Section 278 Agreements (under the 1980 Highway Act) or Section 52 agreements (under the 1971 Town and County Planning Act) whereby land developers, as a quid pro quo for development rights, provide transport infrastructure], to new contractual arrangements in the provision of public services (e.g. the so-called leasing arrangements employed in motorway maintenance activities). Equally significant pieces of new infrastructure, such as the Dartford Bridge and the Channel Tunnel, have been financed from the private sector. Diversity of approach has been one of the most notable features of privatisation in the UK transport sector but equally a diverse range of similar changes has been taking place in other parts of the world (e.g. see Heaver, 1991, on Canadian experiences).

No mode has been entirely free from the privatisation trend although some have been significantly more affected than have others. Aviation is a mode where there have been extensive measures of privatisation in countries as far apart as Canada and the UK with more gradual private involvement taking place elsewhere such as in Australia and Greece. Road provision is still essentially a public sector activity although through the private involvement of companies in toll road construction, bridge and tunnelling investment and track maintenance, together with development agreements in the UK and USA (especially in Florida, Texas and California) private sector inroads are being made here (Button, 1990). For example, about £ 100 million or 5 per cent of road expenditure in the UK for 1988 came from the private sector and more is being encouraged (UK Department of Transport, 1989).

The remainder of the paper covers several themes. To begin with the question is addressed as to why ownership has become a relatively important topic amongst transport policy-makers over the past decade. This is followed by an examination of the main forms recent

privatisation processes have taken while offering at the same time some critical examination of the alternatives which have been adopted. Finally, there is a rather more detailed consideration of the problems of privatising transport infrastructure and especially rail infrastructure.

While most of the points made in the paper are of a general nature and empirical evidence and examples are taken from a range of countries, there is something of a bias in favour of focusing on the UK experience (see also Rickard, 1988). The current trend towards liberalising UK transport markets began with the passing of the 1978 Transport Act, which relaxed some of the regulations governing the licensing of bus services, and this was extended in 1980 when private companies were allowed to compete with the publicly owned National Express in the express bus market. Privatisation on a large scale was initiated in 1982 with the employee buyout of the National Freight Consortium which was followed in turn by the government selling-off Associated British Ports, British Airways, British Rail Hotels, and the British Airports Authority. The 1985 Transport Act took the trend forward by deregulating the entire bus industry outside of London and paved the way for the privatisation, in a number of units, of the state-owned National Bus Company. Some indication of the scale of these activities is given by the revenues raised from these sales in current prices (table 1).

Table 1
Privatisation Proceeds in the UK

Property and the contract of t	
National Freight Company	1982 £ 7 million
British Rail Hotels	1983 £ 30 million*
Associated British Ports	1983/84 f 34 million
Sealink	1984 £ 66 million*
British Airways	1987 £ 892 million
British Airports Authority	1987 £ 1200 million
National Bus Company	1988 n.a.

<sup>\*</sup> Proceeds retained by British Rail, though with subsequent adjustments to the borrowing levels from the National Loans Fund.

### The Forces for Change

It is always difficult to pin-point the forces which bring about change especially when that change is evolutionary rather than revolutionary. In the context of the renewed interest of private provision of transport no single force emerges but rather there have been a number of factors at work.

Perhaps the most important general influence has been the move towards more liberalised markets throughout the 1980s – a trend which certainly extends far beyond the narrow confines of transport provision – e.g. see the papers in Button and Swann (1989) for an international perspective. Governments have, however, been particularly active in the transport sphere (Van Gent and Nijkamp, 1991). In itself, however, this liberalisation – or as the American would have it, deregulatory – process is simply a front for a variety of other, more basic pressures for change. Amongst the latter, more specific forces at work one must include the following inter-related factors.

Concern about the efficiency of public involvement on the supply-side. Mounting evidence from academic studies in the 1970s, especially involving comparative analysis of public and private sector supply, showed that public sector undertakings were less efficient than they could be. In particular, this was often seen as associated with high levels of X-inefficiency (see Leibenstein, 1966, for the relevant theory) which was consistent with the supplying industry "capturing" the public sector policy makers. While much of this evidence related to issues of regulation rather than ownership per se (although studies of the latter, especially in the context of urban transit provision in the US, did show high costs associated with public sector provision), it did bring into doubt the ability of public sector undertakings, whatever the economic theory of the time suggested, to act efficiently in the real world.

Linked to this was also a perception in many countries, but especially in the UK, that there existed a high level of indirect capture, especially by the Labour unions. This led, it was felt, to high remuneration for the workers compared to comparable employment in the private sector together with high levels of job security. The Dock Labour Scheme in the UK is often cited as a classic example of this but the subsequent impact of deregulation and privatisation on pay and working practices in many other transport sectors suggests that it was probably more widespread. This indirect capture also had implications for management and removing much of their ability to manage effectively made publicly owned transport an unattractive career option. At lower levels, the incentive to maximise effort was perceived to be lacking.

The need for injections of investment. In a way linked to the above point, by the 1980s it had become clear that there were insufficient funds flowing from the public sector to meet the needs of new investment and maintenance of many transport systems. The problem was not

entirely one of inefficient public sector management of its transport assets but also stemmed from the role transport was seen to play in macroeconomic policymaking. At times of recession, and following the Keynesian doctrines of the time, transport investment and operational expenditure was boosted to stimulate aggregate demand while it was constrained during times of expansion. Setting aside the microeconomic implications of this policy for the overall efficiency of transport, the outcome was that longer term planning of the public transport element was exceedingly difficult. With the on-set of "stagflation" in the late 1970s, and the general appreciation that microefficiency was, in addition to demand management, central to the good management of the overall macroeconomy, greater private sector provision of goods and services accompanied the general withdrawal of the State (Swann, 1988).

Since this ideological change arrived at a time when public sector investment and maintenance expenditure on transport had, in most countries, been held back for a number of years, there was a serious shortfall of monies going into the sector. Major expansions of roads etc. some twenty or so years earlier in the 1950s and 1960s also meant that renewals were becoming essential in many countries. It has been estimated, for example, that by the late 1980s something like \$ 286 billion was needed to bring existing US roads up to an acceptable level and a further \$ 67 billion for bridges – for further details see Roth (1990). Allowing greater private sector participation would both encourage greater efficiency in the ways in which monies designed to meet these needs is spent and also limited public sector expenditure in line with current macroeconomic thinking.

The optimal use of the transport system is more likely to be achieved through private ownership. Even if transport infrastructure were efficiently provided by the public sector, and budgetary problems could be overcome, there is still a tendency for transport infrastructure to be used inefficiently. In particular, with roads the charging mechanism favoured by the public sector – namely annual licence fees and fuel taxation – it does little to foster economy in their use – see case studies in Barde and Button (1990). The result is that traffic speeds are restricted by congestion (e.g. they have fallen from 11.8 mph during the evening peak in London in 1968/70 to 11.0 mph in 1986/88) with severe concomitant travel time costs placed upon the road user. Obviously in some instances the problem is one of insufficient capacity and reverts back to a point made earlier but in the main it is due to inappropriate pricing of what is available.

Privatisation will not in itself solve this type of problem, and indeed continued public ownership with appropriate economic charging principles applied could generate the optimal outcome, but politically it is often argued that private provision:

- (a) will make it easier to directly charge for road use, and,
- (b) providing the form and control of ownership is correctly formulated, will keep the relevant charges to a minimum.

The investment/maintenance mix of expenditure is distorted when there is public supply. Adam Smith (1776) claimed that there is a natural proclivity for public sector decision-makers to devote excessive energies to new investments to the neglect of maintenance because the former, "not only flatter[s] his vanity, but also contribute[s] to support his interest in court". Certainly there is plenty of evidence of maintenance backlogs developing within the transport sector in the 1979s and 1980s.

The issue is, however, slightly more complex than simply a neglect of maintenance factors, it is rather that there is evidence of a serious neglect of full-life costing in decision-making which has led to inefficient investments themselves. In particular, in the case of roads there is evidence that lower engineering standards (e.g. thinner than optimal pavement depth) have been adopted to permit more mileage to be constructed within a given budget (Small et al., 1989). The result, given the inadequacy of user changes to limit heavy goods vehicle traffic in particular, is an excessive deterioration of the system and, *ipso facto*, even higher maintenance outlays in the longer term.

The greater involvement of the private sector would speed up investment and maintenance actions. It is not only the nature of financial arrangements, which are seen as impediments to efficient provision of transport infrastructure by the public sector, there are also concerns over the time the bureaucratic process takes to carry through actions. The UK road building programme, for example, normally involves at least a seven year period between a scheme entering and its completion while a recent European Roundtable of Industrialists' study suggests the normal planning phase for transport infrastructure across Europe is 10 to 12 years. Privatisation is seen as one possible means of reducing this delay not simply by injecting more immediate funds but also by streamlining the management processes involved.

At the level of microeconomic theory the growth of influence of Public Interest and other similar schools of thought has produced a different attitude to public sector supply. It has become recognised that, in some instances, those involved in public sector decision-making being rational "economic men" seek to maximise their own welfare and this may result in actions which run counter to the maximisation of society's well-being. Modern corporate theory suggests that the private sector is not always free of such trends but the balance of opinion and thought swung in the 1980s in favour of the view that the public sector was even more prone to such distortions. In some ways this is an extension of the Adam Smith argument presented earlier but it applies as much to the operation of transport services such as buses, trains and airlines as it does to investment/maintenance trade-offs.

This type of argument was further supported by the upsurge of interest in the role that potential competition may play in ensuring that once privatised, transport would be provided in conformity with economic criteria. The notion of contestable markets developed by Baumol and others (e.g. Baumol et al., 1982) is something of an ideal but the empirical evidence that is available, especially from the aviation sector in the USA (e.g. Morrison and Winston, 1987), indicates that free market entry will produce many, if not all, the benefits of actual competition. Since the traditional motivation behind many previous measures of nationalisation has been that the transport services concerned were not being confronted by actual competition, this theoretical development provided a basis for privatising them provided that free market entry and exit is permitted. For example, this was one reason advanced for the privatisation of the UK bus industry (UK Department of Transport, 1984).

The creation of the Single European market after 1992. A freer market within Europe and the further development of the Common Transport Policy means that national border constraints on transport supply will be much less relevant. (One could extend similar types of argument to the Free Trade Agreement between Canada and the USA although, since air transport was explicitly excluded, this has not been that significant in influencing Canada's aviation privatisation programme.) While the exact details are still being decided, the inevitable extension of cabotage rights will remove the shelter enjoyed by domestic operators in most EC Member States and put pressure on supplies to improve efficiency. Where economies of scale, scope and density exist these will need to be exploited to the maximum.

The national transport supply industries, especially in aviation and railways, will inevitably need to reorganise after 1992 to take full advantage of the new environment. It is by no means clear in this

context that state owned companies really have a major role to play in a European wide market. European markets may well require European wide supplying companies or, if local supply is also relevant, transport undertakings which offer services in market areas which do not conform to existing national boundaries. The transport industry, especially in aviation with the linking up of such units as British Midland Airways and SAS, and KLM and Air UK is already moving in this direction and the forces are for more such measures which must ultimately and seriously dilate the relevance of state ownership.

#### The Forms of Privatisation

We have already noted the heterogeneous forms which privatisation can take in the transport sector – indeed inventiveness seems to be almost the by-word in the privatisation process. The aim of this section is not simply to outline the intellectual elegance of the thought which has gone into designing private sector participation programmes but, in addition, it comments on the usefulness of the options and, where possible, offers some insights into the experiences of schemes to date. In this way the space devoted to each option is not balanced and should not be seen as indicative of the relative importance or otherwise of an option – it is simply that some approaches have attracted more study than others.

Build and development places all the risk on the private sector in that it takes the initiative and then carries out the necessary investment. While the jargon is more relevant to infrastructure provision – indeed it comes originally from the construction industry – the principle in practice extends to transport operations where, for example, a supplier of transport services provides and operates the vehicles. In this latter context, it is the notion of building-up and operating a new service which is analogous to the physical, engineering structures of the more traditional build and operate concept. In many cases build and develop activities may be seen as supplementing public sector supply (e.g. the opening up of European air routes to private operators or the development of private port facilities such as Felixstowe in the UK) and as such are often in direct competition to it.

The main advantage of the build and develop approach is that the private sector may seek out new transport markets which have, possibly because of the risks perceived or because of budgetary constraints, been ignored by the public sector. The actual risks involved

for the private sector in this context may well be exaggerated given the ability of the private sector to sell unprofitable assets, albeit at a loss, and to recoup at least part of the capital outlay – public undertakings find it difficult to write down capital assets in such a flexible way. Build and development also have the oft neglected benefit that it enables track to be abandoned more easily if it ceases to generate significant user benefits (or allows for its quality to deteriorate in line with reduced demands) than is normal with the public sector. There is a tendency for the public sector to be captured by local communities and often retain and maintain road, rail or other infrastructure after it has ceased to secure a useful economic purpose. This diverts resources from more socially benefited ends.

Of course, the arguments are not all one way. There are problems with build and develop and not least of these is the potential for suppliers not to take account of the full costs of their actions in decision-making. Inadequate consideration of environmental impacts is the most obvious problem in this regard. Ideally these external costs should be built into the market mechanism but in the absence of this, some form of regulatory control seems almost inevitable. Indeed, most countries, and all EC members, now require some form of environmental impact assessment as an input into the public decision-making process. There may also be problems of potential monopoly power being held by the developer although this is unlikely to be substantial in a free entry/free exit type of system or where there is direct competition from an incumbent public sector supplier.

Build, operate and transfer involves private suppliers constructing and operating transport facilities which are ultimately transferred to public ownership. This approach has been used regarding road building in Europe (Organisation for Economic Cooperation and Development 1987). The transfer may be after a specified period (e.g. as with the Channel Tunnel where ownership reverts to the government after 55 years and the current concession is for 27 years) or after a specified income has been earned (e.g. as with the Dartford Bridge in the UK). Normally this system involves a government initiative aimed at gaining private finance for elements in its transport infrastructure programme. In this sense it provides useful supplementary aid although there are potential practical difficulties at the end of the arrangement when the transfer is due. Theoretically, the facility should be transferred in a well maintained manner but inevitably there may be pressures on a private supplier to limit maintenance outlays over these final years. There may also be problems in determining user charges for such facilities especially since, unlike build and develop schemes, free market entry/ exit does not exist. There is inevitable pressure for the public authorities to try to keep charges low not only to satisfy critics who oppose monopoly private supply but also often to encourage traffic to switch from congested public transport facilities.

A variation on the build, operate and transfer theme involves the notion of shadow tolls and was explored in the UK in the mid-1980s (Goldstein, 1987). This essentially involved the idea that the private sector would build and operate roads (specifically the so-called "Black Country Route" in the West Midlands of England) which would ultimately transfer to the state. Rather than directly charge users, the idea was that the public sector would pay the construction/operating company an agreed "shadow toll", for each vehicle using the facility. This option helps alleviate short term public sector financial constraints but, since users are not made directly aware of the costs of travel, does nothing to ensure the infrastructure is used efficiently. In practical terms there is the further difficulty of agreeing the toll level, especially since the government wants to ensure that no excessive profits are earned by the private sector supplier while the latter wishes to insure against possible financial losses which tend to accompany longer term investments of this type. The proposal was never operationalised.

Transfer of ownership (e.g. by share issues, employee buyouts, management buyouts, etc.) of on-going transport activities to the private sector has taken place on a relatively large scale in several countries in the 1980s. On many occasions it has involved a complete transfer (e.g. as with British Airways) while in others it has involved partial transfers (e.g. minority private sector share holdings). The usual motivation for measures of this kind is to enhance efficiency.

How one should privatise transport undertakings in these circumstances depends upon both the intrinsic nature of the supplying industry and the state of demand for its output. Beesley and Littlechild (1983) suggested that in cases where demand is strong and the industry is naturally competitive (in that multiple supply would appear the norm) then privatisation should create small, independent firms left to compete unimpeded by regulation. This, for example, is what has happened with regard to UK bus operations. Where multiple supply is not feasible, perhaps because of the existence of natural monopoly, then privatisation as a single unit but within a framework of price and other regulations was suggested. In cases of decreasing demand, privatisation was still advocated albeit with the possible need for

subsidies to ease transitional arrangements and to meet social objectives (the question of franchising is addressed below). Withdrawal of services, however, was seen as a long term prospect irrespective of the nature of the supplying transport market.

If one looks at the efforts to privatise existing transport operations then the results are mixed, in part, one suspects, because of the trial and error approach which has inevitably had to be adopted in the light of little previous experience. Additionally, the changes have often occurred as an element of a larger package of policy measures and isolating specific impacts is far from easy. Commercially, privatisations of large concerns such as British Airways, British Airports Authority and the National Freight Consortium in the UK have generally proved very successful and most would agree that the moves have generated net social gains. Certainly pressures for renationalisation are minimal. More mixed have been the impacts of privatising bus companies – normally through management buyouts – in part one suspects because breaking up large undertakings to privatise on a unitary basis poses difficulties of exactly how large each unit should be.

In addition to efficiency considerations, there are also issues of equity which must be considered in the sale of public assets. Sale of shares or of an entire loss making concern is less of a problem in this respect although actually finding possible buyers may pose difficulties. Selling potentially highly profitable raises the issue of ensuring that the exchequer gets a reasonable price for the assets while at the same time avoiding the political embarrassment of under-subscription of shares or a lack of interest by a single buyer. This is a fine path to tread and has caused serious difficulties in privatisation programmes for which there is no easy answer.

Franchising of services has, as in the commercial sector, become more common in terms of public transport provision. At the micro scale public sector transport undertakings are increasingly franchising out many of their internal services (e.g. cleaning, catering, maintenance, etc.) which is very much in line with what has been occurring in most other sectors of industrialised countries. Economies of specialisation are, in other words, being more fully exploited. Increasingly, however, there is evidence that transport services are themselves being franchised out to private sector suppliers. These are frequently services which are provided for non-commercial reasons such as to meet social needs or to assist in achieving other, often land use planning objectives. They are also often services which were formerly offered on

a cross-subsidised basis by a public sector transport undertaking which after wider programmes of deregulation and privatisation ceases to find them financially attractive on a simple profitability basis. This, for example, happened after 1986 in the UK bus industry.

The conventional economic wisdom is that while franchising can lead to a tightening in the efficiency with which transport services are provided there is a danger that in the longer term the system becomes dominated by the incumbent suppliers who reap quasi-monopoly profits. This latter feature came about both because incumbents enjoy "economies of experience" which give them an informational advantage over potential rivals (Button, 1990) and because there are actual sunk costs involved in offering the service (specialised vehicles, driver training etc.) which incumbents have already incurred. The result of this is that over time a sort of reverse "J curve" emerges with regard to tenders for services. Initially the asking price to provide a service falls vis a vis the publicly provided situation but subsequently in successive rounds of bidding they begin to rise. This is, for example, very much the experience to-date with the franchising out of UK bus services (Meadowcroft, 1989). Whether the cost of the franchising system ultimately exceeds that of public provision is an empirical matter - the situation in the UK bus sector and also with regard to road maintenance is that it does not.

Land development agreements have grown in recent years especially in the UK and some parts of the USA. They involve the injection of private finance into the provision of public transport infrastructure as a *quid pro quo* for development rights. The private developers benefit from their construction activities and the public sector gains by enjoying enhanced infrastructure provision at no cost in terms of taxation or public borrowing.

The major problems with this type of arrangement tend to be partly institutional and partly economic. On the institutional side there is the danger that in reaching agreements with developers the authorities do not consider the full, and especially the environmental, implications of the transport investments. In some instances – such as in California (see Deakin, 1990) – full environmental impact assessments are required but this is by no means a universal practice. These types of difficulty are likely to be particularly acute at times when public sector budgets are tight and there are irresistible pressures from infrastructure expansion.

From an efficiency perspective, the use of development agreements almost inevitably involves the creation of new infrastructure which is then transferred to the public sector – this both affects the short term trade-offs between investment and maintenance outlays and also, in the longer term, leaves the public sector with commitments to maintain the new capacity. Additionally, it may well bias land use development patterns, encouraging developers to seek projects where there is scope for horse-trading with the public sector over infrastructure provision rather than seeking out schemes which in the long term would yield the highest return. Urban sprawl, for example, can result from development agreement policies.

Hire of public sector capacity by the private sector has always been common in the transport field – e.g. the most obvious case is that of private use of public roads but the practice extends also to the hire of publicly owned airport space and air traffic control by private airlines, etc. This practice has tended to be on the increase in recent years. In the UK, for instance, companies such as Foster Yeomans regularly hire space on the national rail network and in Germany, of the 233,000 wagons used by the Deutsche Bundesbahn in the late 1980s, 51,000 were privately owned.

Where the public sector has control of a monopoly infrastructure network, private hiring of this network by private companies is often viewed as helping to ensure its most efficient utilisation and, historically, many economists have long advocated that this principle should be further extended – e.g. see Mance (1940) on railway use. It also provides via the revenue generated, useful guidelines as to where infrastructure capacity should be expanded and investment concentrated. What it does not, however, is provide a direct link between this revenue stream and investment of the kind found in a purely private sector environment.

Competition from private suppliers in a deregulated market has grown in many areas. Rulings by such bodies as the European Commission's Competition Directorate in 1990 that private airlines must be permitted entry to the French domestic air market if Air France merged with UTA have strengthened this notion. It was certainly an issue at the forefront of transport policy making in the UK during the 1980s. In many ways the "deregulation" of markets formerly reserved for monopoly, state owned transport undertakings has much to recommend it both politically and economically. Politically, it means that the case for selling off "national assets" does not have to be made to a sometimes reluctant

electorate. Economically it allows new entry to stimulate the performance of the incumbent without the disruption costs involved in transition to a fully privatised market.

In practical terms, however, the "mixed economy" approach is not without problems. State-owned suppliers have the advantage of access to cheaper finance – since government borrowing is risk free, because of its powers of taxation, the relevant interest rate is lower than that confronting a private company – and the prospect of government support if their activities prove commercially untenable. The system, therefore, is almost inevitably biased in favour of public undertakings and is likely to lead, overall, to higher levels of X-inefficiency than would exist in an entirely free market situation. Nevertheless, the outcome is still likely to be economically more efficient than sole supply by a monopoly state undertaking.

## Privatising Transport Infrastructure: The Rail Case

While there have been considerable private involvements in the supply of most transport services with exceptions, such as Canada and Switzerland and most especially the United States, the railways have become state owned monopolies in most developed economies. Various forms of private sector involvement have been growing in recent years — such as the provision of sidings etc. in the UK and the injection of private capital in Japan — and there is interest in a number of countries in extending this further. The aim here is not so much to discuss the merits *per se* of further measures of privatisation but rather to look at the problems which can be encountered in making such a change. In this sense it may be seen as something of a case study although for a variety of reasons which are set out below privatising rail transport poses more problems than one might anticipate encountering with regard to either modes (Adamson et al., 1991).

There are a number of possible ways in which one might go about privatising a rail system. The various approaches have been of particular interest in the UK during the late 1980s and early 1990s as plans to privatise British Rail have been reviewed. The options which are receiving the most serious attention at the moment are:

Regional Boards. This essentially would mean a geographical division of services very much, for example, along the lines of the companies which existed in the UK during the inter-war period. Each would have

a spatial monopoly although inevitably there would need to be common carriage agreements for through traffic over some routes. In some instances these spatial monopolies may embrace a full range of rail services although, because of the nature of traffics, it is possible to envisage some of them being extremely specialised — e.g. catering to commuter traffic as in the South East of the UK.

In some instances such a structure would stimulate a degree of competition between companies — e.g. on longer routes where alternative services could compete — but in the main competition would come from other modes. It could be argued that the regional boards would offer scope for the exploitation of network economies (e.g. of the kind considered by Filippini and Maggi (1990) in the context of Swiss railways) but in practice these may prove rather limited. Certainly, drawing on the evidence of US rail mergers, which admittedly involve somewhat larger scales of activity and longer haul length than found in Europe, the main cost-saving benefits in railway operations come from end-on links rather than networking types of link (Harris and Winston, 1983).

A degree of synthetic competition may be possible with regard to the establishment of area rail companies if regulation by emulation were initiated. As with some other privatised sectors in the UK (such as water supply) regulations could be established which involved setting the performance of the most efficient rail company as a yard-stick against which the other must perform. While there are problems of measurement involved and questions of possible collusion between the various companies cannot be ignored this may offer one method of reducing if not entirely eliminating the major problems associated with area monopolies.

Track/Operations Division. In most transport sectors the ownership and management of the track is separated from the uses of the infrastructure. The economic wisdom is that there are economies of scale, and possibly of scope and density, to be gained from a planned, centrally coordinated network of tracks but that use of the network is best achieved through competitive processes or at least through use by a diverse range of operators. Rail in most countries tends to be the exception with both track and operations under a single authority. This is not a uniquely public sector phenomenon and even where there is private provision of railways – e.g. in the USA and with Canadian Pacific in Canada – track and operations are generally under unitary control. Exceptions to this can be cited, however, such as the Airport-

Express between Frankfurt, Cologne and Dusseldorf operated by Lufthansa and the way in which the Swedish freight rail system is operated.

Division of track from operations would permit new entrants into at least part of the railways' activities and could stimulate rather more innovative approaches to the transport services being offered. Within Europe, the European Commission has gone further and suggested that the main international rail network be separated from national ownership and be put under EC control with rival companies – both public and private – bidding for space on it (European Communities Commission, 1989).

While this type of division seems possible for other modes, the railway authorities tend to oppose it for their sector. The argument generally advanced is that timetabling is difficult on the railways and, unlike for example roads, there is very limited scope for overtaking. There are additional problems perceived in terms of charging for breakdowns and other disruptions and also devising formulae for the allocation of the costs which result to the various competing rail operating companies. Where this sort of division does exist – e.g. in parts of North America – it is argued that the lengths of haul involved mean that customers are less sensitive to delays and practical problems of the type outlined above are of considerably less significance than they would be in, say, the European context.

The validity of arguments in this type of debate is difficult to assess given the lack of any large scale experimentation in Europe and the general dominance of the public sector railway companies. Problems unquestionably exist in separating the fixed from the mobile capital but they may well be no less than those which exist for aviation where timetabling is equally complex and, given the constraints of air traffic control and air corridors, the scope for overtaking is also very limited. There is also an additional complexity in aviation which does not exist in rail transport, namely that once air borne, air services can only be delayed for a finite period given their technological natures and hence tail-backing due to delays is a very restrictive option. The incumbent railway interests have an obvious motivation in trying to make the difficulties of change seen as severe as possible.

Piecemeal Privatisation. The UK government in 1990 proposed that certain, self contained segments of British Rail could be privatised. In particular, certain rural services, some freight services and a number of

intercity services would fall into this category. While this may at first sight appear a rather pragmatic approach which conforms to the political ideology of the incumbent government in the UK this may ultimately prove a rather narrow view.

The prevailing wisdom is often that railways serve a network function and hence should be organised on a network basis. In fact there is ample evidence from countries such as Switzerland that private and public sector undertakings can function together. Further, there is no automatic reason to treat railways as a network. Transport networks may well be important but they may equally well be multimodal. With direct services the notion of networks is not relevant and each rail service can be supplied on a stand alone basis – e.g. the success of the French Paris-Lyon TGV service owes little to any network considerations. Privatisation of such services could be achieved very satisfactorily on a piecemeal basis.

Where "hubbing of services" is important the real issue becomes one of hubbing transport services rather than rail services. Rail, for example, has advantages over intermediate distance passenger trips with road transport often more efficient at the distributional/collection ends of a journey. Air passenger transport services the long haul market more effectively. (Similar differences exist with regard to freight transport.) Where efficient supply involves changes of vehicle at some point in the journey it is not axiomatic that the change involves continuation by the same mode.

For this reason one can quite easily see situations where major transport interchange points are served by a variety of modes – road, rail and air. Each feeder and outward service could be provided by a separate carrier or, if there are significant economies of scope, by a single multimodal carrier. The key point about this is that there is no advantage in privatising entire networks in this context – a rail link, for example, may most effectively be privatised as a unit and taken up by an airline or road transport undertaking. If one accepts this approach then piecemeal privatisation is logical and certainly, given the increasing efforts to link air, rail and road services at major hubs in Europe, the underlying assumptions are not outlandish. The difficulty is to move away from the notion of rail networks, road networks, etc. and to think in terms of transport networks which may prove a rather difficult conceptual jump for those brought up in the traditional modal dominated transport environment.

#### Conclusions

The importance of ownership, especially in terms of economic efficiency, has often been down-played in the past by microeconomists. Who owns assets and has rights of supply, especially when one is considering public sector participation, is now seen to be of some importance because of the differing abilities of groups to influence policymaking and to operate in the marketplace. There has certainly been evidence produced that public ownership tends to lead to higher costs in the provision of some transport services (e.g. transit services in the USA) and, from the experiences of privatisation to date, to patterns of service which would not be offered by private sector undertakings.

Privatisation should not, however, be seen as a panacea capable of solving all our transport problems. Private, market driven transport systems may perform more efficiently than nationally owned ones in most cases but there is still a need for regulation in many cases to control monopoly power where that could emerge. The difficulty with the private sector is that by nature suppliers seek to circumvent the forces of competition (be it actual or potential). The real long term practical issue is thus whether some form of regulated private supply is more efficient and desirable than state ownership—it is not a theoretical question of whether a perfectly competitive (or contestable) private transport industry is preferred to a centrally owned and planned transport industry. The answer is not an easy one but to-date it does seem that the recent phase of privatisation of transport that we have witnessed around the world has, on the whole, achieved many of the objectives which were set.

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Samenvatting

Privatisering in de transportsector

Dit artikel onderzoekt de recente trend naar privatisering binnen de transportsector, zowel wat de infrastructuurvoorziening als wat de eigenlijke vervoeroperaties betreft. Uiteindelijk betreft het een evolutie die de nationale grenzen overschrijdt.

De bedoeling is de privatiseringsgolf economisch te verklaren. Verder wordt stilgestaan bij de (beperkte) ervaring die we hebben over de prestaties van recent geprivatiseerde transportindustrieën. De auteur concentreert zich daarbij wel in eerste instantie op voorbeelden uit het Verenigd Koninkrijk.

Tenslotte wordt ingegaan op de vraag hoe de privatisering nu verder dient aangepakt te worden, waarbij vooral gedacht wordt aan mogelijkheden ter privatisering van wegen en spoorwegsystemen.

#### Guido Peersman \*

# De internationale verschillen in het aggregatief gezinsspaargedrag, 1971-1985: omvang, aard en verklaring

In dit artikel wordt aangetoond dat de gezinsspaarquotes van diverse OESO-landen uiteenlopend zijn qua omvang doch gelijkaardig qua conjunctureel verloop. Voorts wordt onderzocht, zowel theoretisch als empirisch, welke economische, demografische, quasi-demografische en institutionele variabelen in staat zijn, voor de periode 1971-1985, de geobserveerde internationale verschillen in de gezinsspaarquote te verklaren. Hierbij wordt duidelijk dat de gezinsinstabiliteit, gemeten door de echtscheidingsgraad, als een nieuwe en tevens belangrijke determinant van de aggregatieve gezinsspaarquote moet worden beschouwd.

### Inleiding

De spaarquote van de gezinnen geeft de verhouding weer tussen hun sparen en hun beschikbaar inkomen. Deze ratio heeft een groot macroeconomisch belang. Het beschikbaar gezinsinkomen in België bedraagt recentelijk meer dan 4.000 miljard BF: een daling van de gezinsspaarquote met 1 % betekent dus al snel een toename van de gezinsconsumptie of de binnenlandse vraag met ongeveer 40 miljard. Deze vraagstijging leidt voorts tot meer afzet voor de bedrijven, betere winstperspectieven, een sterkere investeringsneiging en een hogere economische groei. Deze spaaropvatting met een zeer kort tijdsperspectief pleit zo voor een afremming van het gezinssparen.

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