Roads and Private Finance

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This paper describes the use of private finance to build roads, particularly under the "design, build, finance and operate" arrangements. It includes a short account of the beginnings of the Private Finance Initiative and refers to the main reports published since 1989 on the possible use of tolls to pay for such roads.

Fiona Poole
Business & Transport Section

House of Commons Library

Summary

The Private Finance Initiative (PFI) has been used in the transport sector for various projects such as the the Docklands Light Railway and the Heathrow rail link. Roads are being constructed through "Design, Build, Finance and Operate" (DBFO) arrangements, under which a single contractor finances and constructs road improvements already in the national road programme and then maintains and operates them for a 30 year period, receiving revenue from the Department of Transport as "shadow tolls" in proportion to the traffic carried.

Both the main political parties have endorsed the use of private finance in infrastructure projects despite criticism that it merely postpones public expenditure. The Labour Party identified flaws in the PFI, for example the tendering process is lengthy, bureaucratic and expensive. In addition it argued that exclusively private contracts take place in a policy vacuum. The Labour Government therefore seeks to improve on existing PFI structures to encourage partnerships with the private sector that promote integrated and environmentally sensitive transport.

Part III of the paper summarises the beginnings of the PFI since 1992 and the benefits and criticisms levelled at it. Since 1996 the PFI has also been available for local authorities.

Part IV looks at what has been done to encourage and facilitate the use of private finance to build roads since 1989. The Conservative Government was keen to see tolls introduced on British roads in order to reduce excessive traffic on some urban roads and as a way of encouraging more private finance into new road building, especially for motorways. It would also shift the emphasis away from a road users' fixed costs to the marginal cost. Trials are continuing on the technology. In the meantime DBFO roads are being built financed by shadow tolls.

The DBFO road projects already underway are listed in section V. The DBFO concept is relatively low key and rather more successful than some of the larger projects. A recent estimate by the Highways Agency and the PFI Panel concluded that the first eight road projects had achieved average savings of 15 per cent compared with what they would have cost under traditional public sector arrangements.

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Abbreviations

DBFO	Design, Build, Finance and Operate
PFI	Private Finance Initiative
PPP	Private Public Partnership
TPP	Transport Policies and Programmes

I Introduction

The past 30 years have seen the construction of motorways and the improvement of link roads on a major scale, but the increase in vehicles and the consequent congestion have led to a demand for new roads and an increasing need for maintenance. It is no longer acceptable to meet demands for road space from public money and new policies have therefore had to be developed to cope with this. This paper is concerned with the involvement of the private sector in the construction and maintenance of roads. It is concerned with charging users only in so far as tolls and shadow tolls are needed to pay the private investor.

Conventional wisdom has it that the provision of road services is a proper function of government, whether central or local. Private sector companies had been involved only by bidding for construction or repair contracts, although it is true that they have been involved in constructing minor roads in housing projects since the 1920s. The Conservative Government wanted to introduce private finance partly to increase the amount of money available for road building and partly because they took the view that the private sector could undertake these projects more efficiently than the public sector. The Labour Government is prepared to welcome the use of private sector money but is concerned that private sector schemes may be too self contained and not consistent with the overall strategy. The main difference between the two parties is over motorway tolls: Labour argue that selective pricing of one part of the network could intensify problems elsewhere.

In the 1980s there was increasing interest in the use of private finance to fund investment and in the autumn of 1992 a new policy, the Private Finance Initiative, was formally announced. This is intended to apply private sector skills and money to public projects. Proponents of the PFI argue that an injection of private finance and expertise into the public sector increases investment and efficiency in those projects that have traditionally been wholly dependent upon the public sector for finance and management. Such ventures need to achieve a genuine transfer of risk to the private sector operator and secure value for money in the use of public resources. Critics fear that they merely postpone public expenditure and enable the government to "buy now pay later". Schemes have been chiefly in the transport, health and information technology area, although others have covered education and prisons. The PFI applies to both central government and local authorities.

The PFI has been used in the transport sector for various projects such as the Channel Tunnel, the Docklands Light Railway and the Heathrow rail link. The river crossings at Dartford and across the Severn were designed, built and financed by the private sector and will be operated by them for the length of the concession. Meanwhile roads are being constructed through "Design, Build, Finance and Operate" (DBFO) arrangements, under which a single contractor finances and constructs road improvements already in the national road programme and then maintains and operates them for a 30 year period, receiving revenue from the Department of

Transport as "shadow tolls" in proportion to traffic carried. DBFO projects are one initiative under the PFI and to a large extent the DBFO concept came about because there was little apparent enthusiasm from the private sector for the initial idea of privately financed toll roads. So far DBFO contracts have only been awarded for motorway and trunk roads, but since the Autumn of 1996 they have also been available for local authority roads.

This paper is mainly concerned with the construction and maintenance of roads within the Private Finance Initiative. It discusses the PFI in general only so far as it is relevant to the use of private finance to build roads. A general account of the PFI and the arguments for and against it is given in the Library's Research Paper 95/115 *Investment*, updated by a Note available from the Economic Policy and Statistics Section of the Library.[1] The PFI and local authorities are discussed in the Library's Research Paper 97/80 *The PFI and the Local Government Contracts Bill 1997/98.*

The Labour Government has recently reviewed the use of private finance in capital projects and the PFI generally. The initiative is likely to continue in a not dissimilar but more streamlined form and will probably be referred to as the PPP or Public/Private Partnerships. This paper uses the phrase PFI when referring to anything prior to 1 May 1997 and the phrase PPP for projects after that date. The Government has also announced a Roads Review to determine the role which roads should play in an integrated transport policy and to establish a forward investment programme for the trunk road network in England.[2] A similar review has been announced for Scotland. Decisions on 12 major road projects, including the Birmingham northern relief road and the Salisbury bypass, will be made very soon but the remainder will be decided in the Spring 1998. The review does not affect road schemes already started or on which contracts have been awarded.

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1 *Private Finance Initiative*, updated February 1997, EPAS Note \pfi.mh
2 PQ HC Deb 19.6.97 c.278W

II The Labour Party's Views

While in Opposition, the Labour Party identified flaws in the PFI system. For example the tendering process is lengthy, bureaucratic and expensive and the case for allocating risk exclusively in the private sector is not always clear. In addition it argued that exclusively private contracts take place in a policy vacuum. A DBFO road consortium cannot be involved in a wider transport strategy. The consortium do not know what other schemes are being planned for the area and they have a vested interest in ensuring a high level of use. The Labour Party's views on the use of private finance and the PFI for road building were set out in their 1996 transport document and their business election manifesto.

Consensus for Change, the Labour Party's policy document on transport published in June 1996, had the following to say about road building and the use of private finance in road building:[3]

> The emphasis in future must be on better maintenance and management of existing roads, and especially on putting right the years of neglect of local roads and footpaths.
>
> In our policy statement on the environment - *In Trust for Tomorrow* -Labour has already given a commitment to review the national roads programme. Since we made that commitment the government has delayed work on many schemes. However, the uncertainty surrounding suspended schemes has resulted in continuing blight. By removing from the programme schemes unlikely to be built, Labour will immediately lift blight from many areas.
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> Road building must be limited to schemes that can make a real impact on safety and quality of life. In all cases, transport plans will not be driven by accommodating predicted traffic growth. This will require a completely different approach to design from the past 'predict and provide', which was based on catering unconditionally for the forecast level of traffic growth. The emphasis must now be on providing small-scale links for industry and local communities, while relieving and protecting environmentally sensitive areas.
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> Labour is opposed to building roads through sites of special scientific interest, and will therefore operate the strongest possible presumption against such construction. All proposals for new roads must be subject to a full environmental impact assessment, in consultation with the local community. This will include a complete appraisal of the impact on landscape, wildlife and habitats.
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> Where possible, control of trunk road development will be moved from the national to the local or regional level. This will encourage integrated thinking about road use. The new institutional framework will also bring trunk roads under the local transport planning system, meaning that there will be a far greater degree of local accountability and consultation on the plans for any new roads.
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> The government has recently begun to encourage the building of wholly privately funded roads under the Design Build Finance and Operate (DBFO) initiative. Far from contributing to a strategic transport plan, they have been conceived by the government as stand-alone projects with the primary object of cutting as much as possible from the public sector's capital expenditure on transport. There is a clear risk both

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[3] Labour Party *Consensus for Change: Labour's transport strategy for the 21st century*, June 1996

that their effectiveness as individual projects will be reduced and that they will not contribute fully to an efficient transport system as a whole. Labour welcomes a partnership approach with the private sector and believes that a more effective relationship can be built. Private-sector partners suffer uncertainty through being involved only with one local scheme, without input to broader transport and economic development plans for the area. The system results in roads which are more expensive for the taxpayer in the long term.

Labour will seek to improve on existing PFI structures to encourage partnerships with the private sector that promote integrated and environmentally sensitive transport. We will seek to negotiate with companies involved in DBFO schemes to find solutions that enable the private sector to be involved in creating integrated transport strategies.

The Labour Party's business manifesto, *Equipping Britain for the Future*, included the following comments about roads and about the PFI in general:[4]

Britain's roads are congested. Our public transport is neglected. A recent CBI report suggests congestion costs our economy £19 billion per year. We need more investment in our infrastructure. We will achieve it by the widespread use of partnerships between the public and private sectors.

Public/private partnership

In the future, public/private partnerships will play an increasing role in procuring public services and investment. The old argument as to whether public ownership was always best or whether privatisation was the only answer is behind us. The truth is there are some things that the private sector does best and others where the public sector is appropriate. And in many more cases a combination of both public and private sector is necessary.

A new Labour government will take a practical approach. We will seek partnerships which bring real economic benefits to all involved. We recognise the value that the private sector can so often bring to projects where there is scope to apply its expertise, disciplines and economies of scale.

Government's job is to set out clear priorities and establish a framework within which deals can be done, taking account of our commitment to work within announced departmental ceilings for the first two years of the government. We will establish a new public/private taskforce within the Treasury, reporting to a minister whose responsibility will be to set priorities and drive the process forward.

Our 12-point plan for partnership

1. PFI deals already signed, or accepted as operationally and financially viable, will proceed without delay.

2. Every potential partnership project will be subject to a more rigorous appraisal early in its life, so contractors, funders and operators do not squander time and resources on projects which are unlikely to work and the public sector avoids 'wish list' schemes.

3. We will draw up guidance on tendering for partnership projects, in consultation with the National Audit Office, the Audit Commission and the Accounts Commission for Scotland.

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4 Labour Party *Equipping Britain for the Future*, April 1997

4. Where possible, we will set a timetable for each project's tendering process to give potential private partners an indication of when a decision can be expected on a project.

5. We will urgently review the existing legislative framework, issue guidance and, where appropriate, enact new legislation to ensure that public bodies have the necessary legal power to enter into contracts.

6. We will ensure that the guidance on risk transfer and value for money, including templates, is kept up to date, in consultation with public and private sector interests.

7. In particular, we will seek to develop a clear and consistent policy on generic risks - for example, the approach to changes in government health and safety policy or the treatment of contaminated land.

8. We will encourage a wide range of partnership deals, including public/private joint ventures, such as Manchester's Metrolink tram system, and non-profit trusts, such as those providing old people's homes formerly run by local authorities.

9. The Private Finance Panel will be strengthened and given a specific remit to streamline procedures, develop standard forms of contract and cut red tape.

10. With the assistance of the Private Finance Panel and 4Ps - the partnership company set up by the Local Authority Association with support from the Department of the Environment - we will encourage the rapid dissemination of best practice throughout Whitehall and the regions.

11. We will require government, especially at local level, to involve small business in partnership deals where possible.

12. We will maintain prudent control on public sector revenue commitments to partnership deals and public sector liabilities in joint ventures, following consultation with the relevant public bodies.

Geoffrey Robinson, the Paymaster General, is responsible for the PFI overall and on 8 May 1997 he announced a series of changes including scrapping the requirement that all government schemes should be tested for PFI suitability.[5] He stressed that PFI projects should be prioritised, admitted they were a substitute for traditional capital spending and commissioned Malcolm Bates, chairman of Pearl Assurance, to prepare a review of the PFI and its institutions. This report was published on 23 June 1997 and all its suggestions were accepted by the Government. Its general conclusions were:[6]

PFI Works

When handled well, the PFI can work to the mutual advantage of users of public services, taxpayers and companies seeking new business opportunities. The Government should take an early opportunity to make a confirmatory announcement of its commitment to PFI as one method of conducting successful Public Private Partnerships. It should also reinforce its support for ongoing transactions that are both operationally necessary and financially viable. However, PFI procurement has been plagued by

[5] Treasury news release 8 May 1997 "Paymaster General announces kick start to PFI"
[6] Treasury news release 23 June 1997 "Robinson re-invigorates the PFI"

inefficiencies. The review recommends specific measures to reinvigorate and streamline the process. These are designed to speed up the flow of sound projects.

Clear division of responsibilities

2. There are too many institutional players on the public sector side. The structure must be simplified and responsibilities made entirely clear.

3. Everyone must know who is responsible for what. Government procurement is decentralised. Departments and Agencies must ultimately be accountable for their own procurement decisions. But PFI transactions require a level of commercial knowledge and experience of project management that is in short supply today. Moreover, it is scattered haphazardly throughout the public sector. The medium term answer is highly skilled departmental procurers pursuing their projects without central support and a small Treasury Unit as the guardian of policy principles and promoter of best practice. In the short-term however, there is an immediate need for strong central input to help Departments and Agencies ensure delivery of quality transactions that provide a sound basis for future business. This can be achieved without compromising traditional lines of accountability.

The process is new and inherently complex

4. PFI demands a transformation of roles and responsibilities in public and private sectors. Government bodies are moving from being owners and operators of assets into becoming intelligent purchasers of long term services. The private sector can no longer simply build things. Companies must also take a serious interest in operations. Transactions are being brought forward in a policy framework that mostly pre-dates PFI, so there will be a continuing need to wage war on obstacles, many of which are wholly unintentional. But some obvious barriers can be seen now and must be removed forthwith.

Retaining the benefit of acquired knowledge

5. The PFI process demands a skill-set new to the public sector, though experience is growing. Training needs must be identified precisely, then met, and individuals with real experience of successful PFI projects must be valued by the public sector and given every opportunity to make available their expertise for the benefit of further projects. Inward secondees who can download knowledge have a crucial role to play.

III The Private Finance Initiative

A. The Beginnings

The Conservative Government saw the PFI as one of a range of government policies designed to increase the involvement of the private sector in the provision of public services, or of services which were once publicly provided. Other policies with a similar aim were privatisation and contracting out. It differs from privatisation in that the public sector retains a substantial role in PFI projects, either as the main purchaser of the services provided or as an essential enabler of the project. It differs from contracting out in that the private sector is involved as a provider of the capital asset as well as a provider of services. The argument is that the public sector should be a procurer of services and a regulator rather than a direct provider. The private sector should concentrate on the provision of goods and services. The public sector should establish the framework of the policies and legislation in which the private sector operates, decide the range of services to be provided from public funds, and procure those services and manage the contracts.

The November 1992 Autumn Statement is usually considered to be the start of the Private Finance Initiative. Although central and local government had made progress in involving the private sector, it had mainly been in projects not involving a large capital component. The policy was announced by Norman Lamont, then Chancellor of the Exchequer, and involved looking for new opportunities where the greater part of the cost involved capital. He said:[7]

> I said in my Mansion house speech that I was examining ways to increase the scope for private financing of capital projects. Obviously, the interests of the taxpayer have to be protected, but I also want to ensure that sensible investment decisions are taken whenever the opportunity arises. I am now able to announce three significant developments.
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> In the past, the Government have been prepared to give the go-ahead to private projects only after comparing them with a similar project in the public sector. This has applied, whether or not there was any prospect of the project ever being carried out in the public sector. I have decided to scrap this rule. In future, any privately financed project which can be operated profitably will be allowed to proceed. This should be widely welcomed, particularly by the construction industry.
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> Secondly, the Government have too often in the past treated proposed projects as either wholly private or wholly public. In future, the Government will actively encourage joint ventures with the private sector, where these involve a sensible transfer of risk to the private sector. We may be prepared to consider such an approach, when the time arises, for projects such as the east-west crossrail, the central Scotland fastlink, the Birmingham western orbital road and perhaps also the channel tunnel rail link.

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7 HC Deb 12.11.92 c.998

> Thirdly, we will allow greater use of leasing where it offers good value for money. As long as it can be shown that the risk stays with the private sector, public organisations will be able to enter into operating lease agreements, with only the lease payments counting as expenditure and without their capital budgets being cut.

A Treasury Press Notice accompanying the 1992 Budget expanded on this:

> The Government will actively encourage the private sector to take the lead in joint ventures with the public sector provided the private sector's costs can be recovered by charging users directly. There will need to be a sensible sharing of risks and rewards between the public and private sectors. Joint ventures will be let by competition to ensure the best terms. The Government will specify its contribution in terms of money and risk. If it takes an equity stake, it will not be a controlling one. The Government is willing to consider debt and grant finance for such projects.
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> The Government will consider at the appropriate time the possibilities which these new approaches open up for big projects such as East-West CrossRail, the Western Orbital Road for Birmingham, the Central Scotland Fastlink and perhaps also the Channel Tunnel Rail Link. But the initiative will not be confined to large projects, or the transport sector.

The PFI sought to relax further the constraints on private finance involvement in public sector projects. Under the PFI, a private sector operator could design, build and operate a project in return for payment. Each PFI is different and carries different risks. The most appropriate means of financing also varies from case to case. The principle objective is a significant transfer of risk to the private sector and securing value for money for the taxpayer. Under the PFI there are three broad types of projects:

- Financially free standing projects where the private sector undertake the project on the basis that costs will be recovered entirely through charges for services to the final (and generally private sector) user. Public sector involvement is limited to enabling the project to go ahead. Examples are toll roads or bridges.

- Joint ventures to which both the public and private sectors contribute, but where the private sector has overall control. Often the public sector contribution is made to secure wider benefits that cannot be captured in commercial revenue, such as reduced road congestion. Examples of joint ventures include the Channel Tunnel rail link and the Croydon Tramlink.

- Services sold to the public sector by the private sector, where the cost of the project is met wholly or mainly by charges from the private sector provider to the public sector body which let the contract, for example the trains for the Northern line.

The PFI applies to both central government and local authorities.

The new policy had a limited impact in the early months and the new Chancellor, Kenneth Clarke, decided it needed further impetus. In the Autumn 1993 he announced the creation of a Private Finance Panel whose role was to encourage greater participation in the initiative by both public and private sectors, to stimulate new ideas, to identify new areas of public sector activity where the private sector could get involved, and to seek solutions to problems which might impede progress.

On 8 November 1994, the Chancellor told the CBI conference that "private sector finance would be the main source of growth" for public investment projects and that the Treasury would not approve any capital projects unless private finance options had been explored. He described the two principles of the PFI as follows:

- the private sector must genuinely assume risk without the guarantee by the taxpayer against loss;

- value for money must be demonstrated for any expenditure by the public sector.

He made it clear that he wanted to maximise the scope for and use of private finance, reserving public capital provision for those areas where private finance was considered inappropriate or could not be expected to provide value for money.

In the 1995 Budget, the Chancellor announced yet another relaunch of the PFI and a £9.4bn list of "priority" projects, a move perhaps designed to persuade the private sector that the Budget's ambitious targets for private investment (£14bn by 1999) were achievable. Michael Jack, then Financial Secretary, sought to allay widespread scepticism as to the ability of the government to proceed with PFI contracts and the readiness of the private sector to participate. He published a new PFI handbook, *Private Opportunity Public Benefit*, which drew together lessons that had been learnt from some of the key PFI projects, incorporated the guidance documents issued by the Treasury and provided practical assistance to public sector managers, potential private sector partners and professional advisers on the structure and management of PFI projects.[8] He pledged to eliminate "unnecessary bureaucracy" and to promote a more favourable climate for the initiative across Whitehall.[9] In November 1996 the Treasury published guidelines of standard contract terms, output specifications and EU procurement rules to help companies become involved in PFI projects.

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[8] HM Treasury/PFI Panel *Private Opportunity, Public Benefit: progressing the Private Finance Initiative*, November 1995

[9] HM Treasury press notice 29.11.95

B. Benefits and Criticisms

The Private Finance Initiative provides a mechanism through which the public sector can secure improved value for money in partnership with the private sector. However compared to the Conservative Government's ambitious targets for achieving private finance set out in its expenditure plans, there has been a lack of progress in bringing PFI schemes to fruition. Hence the proposals to streamline the system made to the new Labour Government by Malcolm Bates.

The PFI has been widely criticised by the private sector particularly over the length of the bidding process and the degree of risk allocation. The idea is that private companies take a large share of the risk on a contract and if all goes well, should collect a commensurate proportion of the rewards. However many construction companies, such as Costain and Tarmac, with weak balance sheets, cannot face such levels of risk.

The Treasury Committee looked at the Private Finance Initiative in 1996 and concluded:[10]

> 63. While we welcome the PFI in principle, we are concerned about a number of issues which cannot be resolved until PFI projects are more widespread and more developed. We expect to return to these issues from time to time in future years. First we would like the Government to publish aggregate figures of the proportion of PFI projects which are financed via charges to the user, such as road tolls, and those financed by leasing costs and charges on future public expenditure. Secondly, we ask the Treasury to review whether it remains appropriate that private finance options must always be explored or whether unsuitable projects could be identified and excluded much earlier in the process. Thirdly, we expect the Treasury to demonstrate with reference to particular examples and total figures, that higher financing costs have been more than offset by efficiency gains. Fourthly, when PFI projects are being financed and paid for, we look forward to seeing how transparent and full accounting will be maintained, now and after the introduction of resource accounting, including a clear statement of the future revenue commitments implicit in PFI projects, reflecting their impact on the public finances. Finally, we expect, when examining the economy in future years, to analyze whether there is any difference from a macro-economic perspective between funding large capital projects via the PSBR and PFI spending, underwritten by taxation. We recommend, in the furtherance of public and parliamentary accountability, that the Private Finance Panel produce an annual report which brings together details of projects undertaken by individual departments, as well as the number and details of projects where a public sector solution was finally preferred to a PFI project.

In a special survey on the PFI in 1995, the *Financial Times* summed up the criticisms as

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[10] Treasury Committee *The Private Finance Initiative*, Sixth Report 1995-96, HC 146

follows:[11]

> Critics of PFI - and they are everywhere - fall into two broad groups. They can be dubbed the 'it's too lax' and the 'its too tough' camps. The 'lax' camp, featuring public spending purists (although not the Treasury itself), claims the PFI offends against proper ideas of state financial management. It argues that the public sector's capital spending ought in principle to be funded internally, because the cost of capital is always cheaper thereby. And it is sceptical about the propriety of converting a traditional capital investment into 'operating' and 'leasing' payments spread over many years. Dark motives, notably a desire to evade existing public spending controls, are imputed.
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> The 'its too tough' camp takes an almost diametrically opposite stance. Including some of the leading private sector organisations - construction and leasing companies, solicitors, bankers, and corporate advisers - seeking to secure PFI work, it claims that the PFI is impossibly ambitious.
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> It is concerned, in particular, about the requirement that significant new risks should be assumed by the private sector as part of PFI contracts. Mr Chris Boobyer, director of large value leasing at Barclays Mercantile, says: 'This form of transaction will cost the public sector more because the financier or contractor will have to build safety margins into these deals to alleviate the risk.'
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> Ironically, the Treasury, which now champions the PFI, shared all three concerns until recently. Its so-called 'Ryrie rules' acted as a de facto obstacle to large PFI-type projects throughout the 1980s. This was due not so much to the rules themselves - which were designed to safeguard value-for-money and ensure that private money invested in public sector projects registered as 'public spending' - as to the way they were invoked by Treasury officials to discourage private finance schemes.
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> Treasury officials, sceptical by training, deny that they have undergone a Damascene conversion. Rather, they insist, the Treasury is now adjusting itself to the spirit of the Ryrie rules, which were never intended to preclude private finance where it genuinely offered the public sector better value than traditional procurement.
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> They hotly deny that PFI is stoking up a profligate investment binge, claiming that there is nothing secret about the future annual cost implications of individual PFI contracts. They also reject any ideological objections to non-state funding for capital spending, noting that existing outsourcing inevitably includes a leasing fee for assets employed, ranging from the incidental (the windows cleaner's ladder) to the integral (the rubbish collector's vehicles).
>
> The Treasury thus now believes it is a question of the value for money offered by PFI deals in particular cases. But it is insistent that such value will generally require the transfer of some new risk to the private sector.

Proponents of the PFI argue that an injection of private finance and expertise into the public sector will increase investment and efficiency in those projects that have traditionally been wholly dependent upon the public sector for finance and management. The main advantages

[11] *Financial Times Survey*, 10 November 1995 "The Private Finance Initiative"

claimed if a project is to be carried out under the PFI are:

- it provides an alternative source of funding at a time when there is considerable constraint on public expenditure;

- it brings private sector skills and expertise into the planning and execution of such projects;

- it can provide better value for money via, for example, greater economies of scale (eg the same building can be used for NHS and private services with shared facilities and equipment);

- it enables risk to be transferred to the private sector;

- close integration of service needs with design and construction;

- a clearer focus on the respective responsibilities of public and private sectors which more clearly reflects the strengths of each. The public sector can concentrate on what service should be provided, leaving the private sector to consider how it can best be done.

If a project is financed under the PFI, the capital expenditure would not normally score as public expenditure, although the charges levied by the private sector operator for the use of the building and services that are provided would. In the short term, the net effect of the PFI is expected to be more capital projects undertaken for a given level of public expenditure. Hence capital projects could be brought on-stream earlier. However, in terms of the provision of services to the public sector, this increased level of activity cannot continue indefinitely as the stream of payments to private sector providers would grow and would themselves increase the total of public spending.

The criticisms largely centre on:

- whether PFI investment is additional or substitutional;

- the scope for creative accounting. The most obvious effect on the public finances is to reduce spending now and replace it with future liabilities. A private contractor picks up the bill for the construction of, say, a new road, while the taxpayer guarantees it an income spread out over the lifetime of the asset.

  In a critical article on the PFI, the *Economist* magazine expressed concern about the scope for governments, of whatever colour, to use the PFI in order to disguise the underlying position of government's public finances.[12] The *Economist* commented that although it was plausible that a private operator could minimise future management costs, such advantages should be

> ...set against the potential which the PFI offers governments for creative accounting designed to disguise their spending commitments. In particular, the timing of spending can be obscured. If a project, such as a road, is publicly financed, the construction costs are counted as public spending as they occur; if it is privately financed, they are added to public spending years later, when the road is complete and the government starts to pay the contractor for it, perhaps through a 'shadow' toll pegged to how many cars use the road. And if a project, say a toll bridge, is financed by the operator levying a charge on users, its cost will never appear in the public-spending total. The temptation is obvious. Economic commentators watch public spending and borrowing closely, not only to judge the government's own finances but as indicators of how well it is managing the economy as a whole. The PFI can lower both these numbers, at least for a time. Even if successful in transferring risks to private investors and achieving efficiency gains, most PFI projects will simply be a form of 'buy now, pay later'. This will seem to reduce public spending in the early years. Because the obligation to pay for the service or facility provided by the private investor will not be counted as public borrowing (though it will be just as binding), the borrowing figure will be lowered too. This may allow the government to make tax cuts or spending increases which would otherwise have been viewed as risky or unacceptable. No wonder both main parties are so keen on the PFI. To 'prove' that the government is not using the PFI as an accounting scam, the Treasury constantly stresses that PFI projects involve genuine transfers of risk to private investors. Likewise, the Private Finance Panel publishes apparently detailed analyses of the efficiency gains achieved by recent projects. For example, a study of the bidding process for supplying a new computer system to process national insurance contributions suggests that private investors will shoulder much of the risks of the project and that overall costs will be reduced by about a third compared with a publicly financed alternative. Yet these attempts at explanation raise more questions than answers. For instance, private contractors appear to be willing to bear risks over which they have no control - in the case of the national insurance computer, the supplier will bear much of the risk of demand volumes being lower than expected because of, say, the impact of new social security legislation. This seems hard to swallow. Moreover, it is impossible to assess the financial impact of any risk transfer because contracts between the government and its suppliers are usually kept secret to protect commercial confidentiality.

- Value for Money. The Treasury is convinced that PFI projects will provide significant value for money gains.[13] However borrowing through the National Loans Fund, which comes with government guarantees and is backed by tax revenues and borrowing, is inevitably the cheapest way of raising funds. The cost of capital (including the risk premium) brought to the project by the private provider will inevitably be more costly over the life of the project than that which could be provided from public sector sources. The PFI option will provide better value for money only if it can achieve lower construction costs and more efficient maintenance in the long term than would be available to the public sector.

- an essential condition of the PFI is that risk is transferred to the private sector but the higher the perceived risk that is being transferred, the greater the required risk premium that will be required by the private sector.

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[12] *Economist* 28 October 1995 "Cooking the books"

[13] Op cit *Private Opportunity, Public Benefit*

- actual or shadow charges. Some form of prices will be necessary if the revenue or benefit of the project is to be generated from the user and not from tax revenues or public borrowing. The identification of a future stream of income and actual charges may not be too difficult to establish in some areas of the public sector, such as transport. Toll roads and bridges are obvious examples where the benefits of any new investment can be easily captured through a charging regime, which generates a stream of income and in turn services the funding and provides the appropriate profit signal. In other areas, however, it may be more difficult to calculate the shadow charge.

C. Local Government

Prior to the launch of the PFI, many local authorities had already established successful partnerships with the private sector. Nevertheless, following consultations carried out by the Department of the Environment and the Chancellor's Private Finance Panel, it came clear that changes in the framework of financial controls within which local authorities operated would be needed to assist the development of PFI schemes locally. During 1995 a number of new measures were implemented to remove obstacles and increase the flow of private investment including, for example, measures to facilitate the transfer of assets to companies and the movement of local authority companies into the private sector.

Further measures were announced in October 1995 and took effect on 1 April 1996, to encourage new forms of collaboration between local authorities and the private sector. The Conservative Government identified two main types of PFI project as being suitable for the local authority sector, DBFO and joint ventures:[14]

i. **those involving the purchase and use of capital intensive services by the public sector** -commonly referred to as Design Build Finance Operate ('DBFO') schemes - through which various responsibilities and risks relating to the procurement and operation of a capital asset are transferred to the private sector. Examples include schools and roads. At the heart of the DBFO approach is a change of focus away from the procurement of assets to the procurement of services associated with those assets. The level of payment by the public sector will be based on the performance of the private sector operator against agreed levels of service.

   Where sufficient risk transfer is achieved, the DBFO contract can be regarded as reflecting the purchase of access to and use of serviced assets by the public sector, rather than the procurement of a capital asset. Without this level of risk transfer, transactions are likely to be in substance financing arrangements which aim primarily to give a public body access to borrowed funds - for example finance leases and other arrangements deferring payment. These should continue to fall within public sector expenditure controls; and

ii **joint ventures between** the public and private sectors, which seek to increase capital investment to assist service delivery, or to encourage economic development and urban regeneration. Local authorities have an

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[14] DoE *The Private Finance Initiative and Local Authorities - An explanatory note*, February 1997, para 1.4

established track record in setting up this type of partnership with the private sector. Measures have been introduced under the PFI to encourage this further, in particular to give local authorities new scope for participation in private sector led joint venture companies. In addition, local authorities will now find it easier to upgrade facilities through private investment, to share facilities with the private sector, or to transfer them fully when this is the most effective course.

1.5 Whilst a variety of approaches are therefore available under the PFI, one of the most important effects of all of them is that, given sufficient risk transfer, **the capital investment undertaken by the private sector will not score against public sector capital spending limits.** Moreover, in many circumstances PFI projects will attract favourable revenue support. This gives positive incentives for authorities and private sector organisations to take forward projects under the PFI.

Despite reassurances from central Government that it was within local authorities' powers to enter into private/public partnership contracts, some private sector investors remained nervous that contracts could be found to be *ultra vires.* A court case, the *Allerdale* case raised fears that if an authority was found to have acted beyond its powers, contracts would be void and investors would lose their money. The *Local Government (Contracts) Bill 1997/98* now before Parliament ensures local authorities can enter into a wide range of partnership arrangements with private sector contractors for the provision of assets and services in connection with local authority functions.[15]

The local authority associations in England have established a private finance unit, called the 4Ps, to promote public/private partnerships and PFI. The unit is staffed with secondees from local authorities and the private sector, to act as a common resource for local government as a whole. It helps authorities develop new partnership initiatives, disseminate good practice and identify obstacles to further progress.

Local authorities have been eligible for PFI money since the Autumn of 1996 and can use it for new roads. Money for a new road would previously have been bid for through the annual Transport, Policies and Programmes (TPP) and in practice funds for large road schemes were unlikely to be forthcoming. Now local authorities can apply for Public Private Partnership (PPP) money from the Treasury. No local authority PPP schemes have yet been approved, or even submitted, but the Department of Transport is expecting considerable interest. Essex County Council is likely to be one of the first to apply as their scheme is nearly ready and has been in the pipeline for some time.

The local authority will have completed most of the planning process and have tendered for the work and received bids from contractors before it applies for PPP money. It would work up its business case with the help of consultants and the 4Ps and would probably use the Highways Agency's model contracts to help keep the legal costs down. It would then send the

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15 See Library Research Paper 97/80 *The PFI and the Local Government Contracts Bill 1997/98* for details

proposal to the Department of Transport and through them to the Treasury. Central government's concern is that the scheme passes the risk transfer test, that is that at least 20% of the risk is transferred to the private sector.

IV Roads and the PFI

A. The Beginning of Private Sector Involvement

1. The 1980s and the Ryrie Rules

By the beginning of the 1980s, interest in the use of private finance by public sector bodies was sufficiently strong to prompt a re-examination of government policy. The Treasury set up a committee under Sir William Ryrie, then Second Permanent Secretary to the Treasury, which reported in 1981. Its principal conclusions, known as the "Ryrie Rules", were that:

- Private finance could only be introduced where it offered gains in cost-effectiveness;
- Privately financed projects which were for public sector programmes had to be taken into account by the Government in its public expenditure planning.

These rules presupposed that certain projects, such as road building, should be undertaken by the public sector and that provision for public expenditure would be reduced by the amount of private funding obtained. The original intention of the Ryrie Rules was to establish criteria under which private finance could be introduced into the nationalised industries. The rules were revised in February 1988 to take account of the privatisation of many previously nationalised industries and the introduction of new forms of private sector involvement in public services through contracting-out, opting-out, mixed funding and partnership schemes.

The Ryrie Rules engendered a number of major projects, notably the new river crossings at Dartford and across the Severn, but they were regularly criticised for being too restrictive and giving public bodies no incentive to seek privately funded solutions. John Major, then Chief Secretary, formally retired the Ryrie Rules in May 1989 on the grounds they had outlived their usefulness. He gave an "explicit assurance" that he would not seek a reduction in the road programme on a scheme by scheme basis to offset privately financed projects, so encouraging "privately financed roads which offer value for money for the user and the taxpayer."[16] He made no mention of planning controls or how investors were to earn a satisfactory return.

[16] Private finance for roads. Speech by John Mayor, Chief Secretary to the Treasury, 5 May 1989. HM Treasury.

2. Private Finance and *New Roads by New Means* 1989

Shortly after John Major's speech, the Government published a consultation paper, *New Roads by New Means* in 1989 which proposed new procedures for authorising privately financed roads and the use of tolls to pay for them. The Government's objective was:[17]

> to harness the entrepreneurial, financial and management skills of the private sector to the provision of roads. Trunk road construction is done in the private sector. The Department employs no direct labour. The great majority of detailed planning, design, and supervision is done by private sector consultants. Now the aim is to extend the role of the private sector in the promotion, finance and operation of roads. Such roads, built, financed and operated using efficient and competitive methods, will add to and complement the existing and proposed public network.

The paper set out the government's proposals for encouraging the private sector to play a role in promoting and financing road schemes. The government intended that privately financed roads should be roads for which the Secretary of State was the highway authority and which he leased out to the private operator for a concessionary period at the end of which the facility returned to the State. This would allow the Secretary of State to exercise his powers of compulsory purchase under the *Highways Act*. Otherwise, the government sought genuine privately financed and owned schemes constructed and operated without government intervention or finance, or even government guarantees against risk. The Secretary of State would grant a concession or lease, enabling tolls to be charged for a period of time to be determined in each case. Tolls would only be regulated where there was a monopoly situation, as there was, for example, over most river crossings. Shadow tolls were effectively proscribed as unhelpful in achieving the necessary motivation of the contractor or road user. Road schemes would be let by competitive tendering.

Announcing the report in the House of Commons, Paul Channon, then Secretary of State for Transport, reiterated the Treasury's assurance that the cost of privately financed roads would not be subtracted from public sector provision on a scheme by scheme basis.[18] The Government also assured potential promoters that a comparison of a privately financed scheme with the public sector alternative would not be required unless the scheme concerned was already in the programme or enjoyed a high degree of monopoly. Legislation was proposed to make it easier for roads financed by contributions from developers to be built. In future the Transport Secretary would be able to authorise a scheme, subject to a public inquiry, and so avoid the necessity for a hybrid bill for each scheme.

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[17] *New Roads by New Means: A consultation paper on private finance for roads*, May 1989, Cm 698 para 2

[18] Statement by Paul Channon on roads provisions, HC Deb 22 May 1989 cc 422-4W.

The House of Commons Transport Committee considered the green paper on the private financing of road schemes in its study, *Roads for the Future*.[19] The Committee reported in February 1990 and summarised the advantages of private finance:

(a) The creation of innovative solutions to traffic problems.

(b) Use of competing bidders who are strongly motivated to reduce capital and operating costs. Promoters would be spending their own money and that of their shareholders and lenders. They would be bearing the risks of financial failure and so they would take care to ensure projects are completed within budget and to timetable.

(c) Private owners would have the incentive to maintain their roads properly and would take due account of maintenance in the initial design.

(d) The application of the "market test": roads would only be privately financed where the promoters believed the need was sufficient for the operating profits to provide an adequate return on the capital investment. Conversely, if the public wants more roads then it would be able to exercise its choice to have them, without the impediment of having to convince a planning bureaucracy constrained by national and local government.

(e) A pricing system would be introduced so that users of new roads would pay directly, through tolls, for the resources they consume. People would be able to pay for higher quality road service if they wished to do so. If not, they would still have the option of using the existing roads.

(f) Risks would be transferred from the public sector to the private sector.

The Transport Committee concluded that private finance might make "a welcome contribution but (would) not provide a solution to the fundamental problems".[20] It went on to consider particular obstacles such as exclusivity, additionality, tolls and shadow tolls and investment considerations.[21]

Private capital will only become involved in the development of transport infrastructure on a large scale if the financial returns are judged sufficient to cover the risks, and if a private developer is able to see clearly what the returns are likely to be. Indeed the construction industry's response to *New Roads by New Means* was rather negative. A survey by Industrial Market Research Ltd for Touche Ross identified the following major concerns:[22]

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[19] Transport Committee *Roads for the Future*, First Report 1989-90, 1 February 1990 HC 198 I-III.
[20] Ibid para 143
[21] Ibid paras 144-173
[22] Industrial Market Research Ltd *Private Sector Investment in Public Sector Infrastructure*, October 1989

- All the companies contacted were concerned about the high cost of putting forward innovative schemes coupled with the government's decision to put the resulting construction work out to competitive tender. This would seriously limit the number of schemes coming forward as companies ration their development expenditure.

- There were great doubts about the feasibility of depending upon tolls for income from private roads. Respondents felt that many users would prefer to suffer delays on free roads than pay tolls to use parallel albeit less congested private roads. It was felt that 'shadow tolls' would be more acceptable not only in terms of providing income but also to overcome the difficulties of having large numbers of toll points in so dense a populated country as the UK.

- Limits to the length of the concessions granted were also of a major concern. It was generally felt that longer concession periods would permit greater flexibility in initial and subsequent refinancing of the schemes. Constructors would be able to sell the concession and the buyer would have a reasonable period to recoup his investment.

The survey also found that companies saw little point in putting up private schemes when the new 1989 roads white paper, *Roads for Prosperity* proposed increased public funding for roads with a £12 billion public programme.[23] Many contractors questioned why they should take the increased risks and up front costs associated with private sector projects, when they could achieve proven levels of return and plenty of guaranteed work from planned government projects.

The Government's response to the comments received in the consultation period were set out in April 1990. Tolling had been accepted by most respondents without comment although opposition in principle had been expressed by some chambers of commerce, road user groups and local authorities. Most of these thought roads should be provided from existing taxation and others that tolling would mean inefficient use of road space. A number of respondents said they did not expect many schemes to be viable if costs were to be recouped from tolls alone and suggested joint financing or the use of shadow tolls.[24] Three measures were announced to reduce the uncertainty associated with major road schemes and to try to enhance the attraction of such projects to the private sector. The necessary legislation would include a more precise definition of "monopoly" roads requiring statutory control of toll levels. Tolls not controlled statutorily were to be brought within the scope of competition legislation in the hope that their level would be determined as far as possible by the free market. Access to a new road during the lifetime of a concession would be permitted only at the instigation of a promoter, with the agreement of the highway authority for safety and traffic reasons. This would give the promoter control over the development gain from the new road. And where a scheme which won a competition and was endorsed as being in the public interest,

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[23] *Roads for Prosperity*, May 1989 Cm 693.
[24] Department of Transport *Private Finance for Roads: the Government's response to consultation on "New Roads by New Means*", 9 April 1990

subsequently failed to gain approval after the public inquiry, the promoter would be entitled to compensation related to his abortive costs.

The consequent *New Roads and Street Works Act 1991* eliminated the need for separate legislation for each road scheme. More detail is given in the next section.

B. Road Tolls and *Paying for Better Motorways* 1993

Road tolls are a form of road pricing most suited to motorways and estuarial crossings. They are already in use on estuarial crossings in Great Britain such as the Dartford Tunnel and Bridge, the two Severn Bridges, the Humber and Forth Bridges and many others. Tolls are not seriously considered for urban roads but they have been considered for motorway use, not only to relieve congestion but also as a means of providing another source of finance for motorway development and an opportunity for involving the private sector in motorway construction. The power to charge tolls is provided for in individual statutes or it may now be conferred, for new roads, by Order under the *New Roads and Street Works Act 1991*. Most of the estuarial crossings are covered by their own legislation, either in the form of a Private Bill or a Hybrid Bill authorised by Parliament. The tolls for the Skye Bridge have been the only ones made by Order under the 1991 Act, in this case in conjunction with the *Roads (Scotland) Act 1984*.

Generally the public have a right to pass along the public highway "without let or hindrance." To overcome this the relevant authority for each tolled crossing was empowered by Act of Parliament to construct the crossing and subsequently to charge a toll. Tolled crossings were financed with the help of publicly funded loans and the income from the tolls was expected to meet annual running costs, maintenance and repair costs, interest charges and eventually to pay off the construction debt. The first major tolled estuarial crossing was the Mersey tunnel which opened in 1934 and the most recent the second Severn bridge which opened in 1996. All these, except the Skye bridge in Scotland, had a specific Act of Parliament.

It may be worth noting that as far back as 1984 the Transport Committee produced a report on Tolled Crossings[25] in which they recommended that toll charges on estuarial crossings should be abolished.

25 HC 250-I 1985/86

1. New Roads

The Conservative Government wished to encourage greater private sector involvement in the provision of roads and in 1989 it consulted on new procedures for authorising new roads and for paying for them by the imposition of tolls.[26] Procedures for authorising roads in the *Highways Act 1980* were designed for schemes constructed by the Secretary of State or local authorities and were not appropriate to tolled roads constructed by the private sector. In addition all tolls needed statutory authorization. Privately financed roads therefore had to be authorised individually by Act of Parliament, either by the Government promoting a hybrid Bill or the private promoter introducing a private Bill.

The *New Roads and Street Works Act 1991* eliminated the need for separate legislation for each scheme. For example the Dartford and Second Severn Bridges, built with private finance, had required individual hybrid Acts of Parliament. The legislation introduced new procedures to enable promoters to finance, build and operate **new** roads and to charge tolls. The fundamental concept was that of the concession agreement defined in section 1 of the Act. This is an agreement between the highway authority and a firm or consortium in the private sector under which the firm agrees to finance, design, build, operate and maintain (or some of these) a road in return for the right to charge tolls to the users of that road. That right is conferred by means of a toll order under section 6. Toll levels are controlled by statute where there is a monopoly of provision, such on an estuary crossing.

The first project to be provided under the 1991 Act was the Skye Bridge in Scotland, opened in 1995. In England the first project which could benefit from the new legislation is the Birmingham Northern Relief Road, currently under review.

2. Existing Roads

The *New Roads and Street Works Act 1991* does not provide for tolling **existing** roads. As a result, the use of private finance, remunerated by tolls, was ruled out for the large part of the motorway programme which involved widening or upgrading existing motorways. That in turn limited the potential for using the 1991 Act to provide entirely new privately financed roads as they inevitably face competition from an existing controlled network.

[26] Op cit *New Roads by New Means*

As a result of these concerns the Department of Transport published the discussion paper, *Paying for Better Motorways* in May 1993.[27] The Conservative Government argued that direct user charging, for which legislation would be needed, would:

- provide another source for improving the motorway network, to avoid the congestion that would otherwise come with economic growth;
- provide the key to increasing private sector investment in the operation and expansion of the motorway network;
- make more efficient use of the network, for example by offering price flexibility to spread peak time congestion;
- put the charges on those using motorways rather than the near 50% of road users who rarely or never use the network; and
- improve the competitive position of rail and other public transport where users are already charged directly.

The Conservative Government felt the availability of roads free of charges was the principal difficulty standing in the way of private new roads or the private operation of existing roads.

The Green Paper described three options for direct charging. The first was conventional tolling with toll plazas and booths of the sort found on estuarial crossings in this country and on motorways in a number of other countries. However it ruled out this option for existing motorways because of the land that would be required and the traffic delays which conventional tolling would itself cause. There was almost unanimous agreement with that decision.

The second option, suggested as a possible interim measure, was charging by means of a permit system of the sort currently used in Switzerland. The Conservative Government decided that the benefits of such permits would not be sufficient to justify the likely costs of introducing them as an interim measure and so did not pursue that option.

The third option discussed was fully electronic tolling, where vehicles using the motorway network would carry an electronic tag which would react to signals as the vehicles passed roadside beacons. Vehicles would not have to stop. The toll would be worked out automatically and would either be charged to the road user's account or deducted from a pre-paid smart card on the vehicle. It was clear from responses to the Green Paper that this was

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[27] Department of Transport *Paying for Better Motorways: Issues for Discussion*, May 1993 Cm 2200

widely seen as the best way of introducing motorway charging. The technology for electronic tolling on the scale necessary for the British motorway network needed further development. The electronic tolling systems currently operating or being tested in the United States and in Europe would not fully meet the requirements of the UK. In the light of the responses to the Green Paper, the Government decided to launch immediately a major programme of research, development and trials to identify the capabilities of existing technology and to draw up a specification for a motorway charging system. It was convinced that there was a great deal of work being undertaken internationally, and it would be feasible technologically to install motorway charging here within about five years.

A network-wide charging regime would have implications for the ways in which private finance could be involved. Revenue raised on a particular stretch of road under electronic charging would make it possible to let concessions under which the private sector was responsible for designing, building and financing improvements to specified sections of the network, and then for operating the improved section of road. Payments would be made to the concessionaire on the basis of the level of traffic using the road.

Responses to the 1993 green paper showed strong support from the construction industry and the City and in the 1993 Budget, the then Chancellor Kenneth Clarke announced the Government intended to introduce contracts under which the private sector would design, build, finance and operate roads and that electronic charging would be introduced when the technology was ready.[28]

The Transport Committee also considered the green paper *Paying for Better Motorways* and reported in July 1994.[29] It was specifically interested in the imposition of tolls rather than the broader issue of private finance. The committee was "unconvinced" by the arguments for the tolls and considered the motivation was not to cut congestion but to increase revenue. It suggested an increase in fuel duty would be cheaper and easier to collect.

The electronic tolling technology is proven, having worked satisfactorily in Germany and the Far East. Indeed, regular users of the M25 Dartford River Crossing have been able to use pre-paid tags combined with automatic vehicle identification since 1992. The result has been a significant improvement in vehicle throughflow compared with either manual or machine payment. However the areas where it is currently used have far less sophisticated road systems than does the United Kingdom. The Government therefore felt that the existing technology was not yet suitable for introduction here. In December 1994 the Secretary of State for Transport gave more detail about the electronic tolling system to be introduced on

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[28] HC Deb 30.11.93.

[29] Transport Committee *Charging for the Use of Motorways*, 5th report 1993-94, 20 July 1994 HC 376

Britain's motorways to help pay for improvements to the network.[30] Consultation on the relevant technology was undertaken.[31] Despite rumours that the plans were to be abandoned, it was announced in July 1995 that eight consortia would take part in a research project.[32] By May 1996 this had been reduced to two, Bosch and GEC Marconi, and trials of electronic motorway systems are underway at the Transport Research Laboratory. The companies which withdrew from the toll project said political uncertainty, the cost, and the prospect of delays had persuaded them to pull out. Indications are that accurate tolls can be successfully deducted electronically from vehicles travelling at high speed and in poor weather conditions.[33] In February 1997 John Watts, the Minister of State, confirmed that the Conservative Government's policy remained the same as in 1993 and that "subject to the availability of suitable technology" it would consider when and where to introduce tolling on motorways. This was unlikely, however, to be before 2003, five years later than previously indicated. Primary legislation would be needed for such a policy.

C. DBFO Roads and Shadow Tolls

The "Design, Build, Finance and Operate" (DBFO) arrangements can be defined as those under which a single contractor finances and constructs road improvements already in the national road programme and then maintains and operates them for an agreed period, envisaged to be 15 to 30 years, receiving revenue from the Department of Transport as "shadow tolls" in proportion to traffic carried.

In the 1992 Autumn statement, Norman Lamont, then Chancellor of the Exchequer, said that if the government decided to charge for inter-urban roads, private sector companies might be invited to bid for Departmental contracts under which they would design, build and operate roads. For this they would receive payments from the Department of Transport in relation to the use of the roads.[34] How this could be achieved was discussed in the green paper, *Paying for Better Motorways.*[35]

Apart from schemes promoted under the 1991 Act and those which attracted developer contributions, road schemes in Britain were publicly funded and usually procured by means of well tried contracts. Typically these involved separate contracts for the design, construction and maintenance of roads. Under these conventional procurement arrangements, the risks of design defects are assumed by the designer and, with a fixed price contract, the

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30 HC Deb 2.12.93 c 650W.

31 Department of Transport *Electronic Tolling for Motorways: an invitation to participate in technology trials* 23 February 1994

32 Department of Transport press notice 31 July 1995

33 *Local Transport Today* 27 February 1997 "Technology looks ready, but Government delays decision on motorway tolling"

34 HC Deb 12.11.92 c.996.

35 op cit annex D

contractor bears inflation risk. With a design and build contract, there is a stronger incentive to design so as to minimise construction costs. The idea was that DBFO contracts and franchises offered scope for transfer of considerably more risk to the private sector, such as:

i) Design risk - transfer to contractor of some 15% of the physical design work, and 100% of the responsibility for the full design.

ii) Construction risk - normally transferred in full to the contractor.

iii) Opening date risk - substantial risk with contractor.

iv) Traffic risk - transferred to contractor as far as possible.

v) Maintenance risk - responsibility for maintenance and defect repairs transferred to contractor, though discretionary and operational matters might have to be formally controlled by the highway authority.

vi) Operational risk - contractor would bear significant risk on any operations affecting traffic flows.

In his response to *Paying for Better Motorways,* Kenneth Clarke also indicated that the government would not necessarily wait until electronic tolling systems were ready before letting DBFO contracts and that it would be prepared to make payments in the form of shadow tolls to contractors, based on the use of the new or improved road. The Department of Transport would therefore have early discussions with the construction industry and others to identify potential DBFO candidates and centralised mechanisms which could provide for substantial and sensible risk transfer to the private sector.

Following the early discussions, the Department's developing thoughts on the content of a DBFO concession were sent to contractors and financiers for consultation.[36] The note listed for illustrative purposes some 20 schemes that could be considered for DBFO development The principles under which the initiative would operate were set out:

> The roads within the Department's DBFO concessions will remain roads for which the Secretary of State is the highway authority. The Department has made clear that it is not interested in off-balance sheet financing devices. The DBFO concessionaire will have to assume substantial risk. The Department will be buying a high quality road service, not just new road construction. DBFO concessions are intended to encourage the development of a road operating industry in this country with a view to increasing the scope for private sector involvement in road provision and operation. Accordingly the Department will want long-term commitment from the concessionaire and a structure for the concession in which payments will incorporate both incentives and penalties. This would encourage the concessionaire to provide a sustained high quality

[36] Department of Transport *Design, Build, Finance and Operate Concessions for Trunk Roads and Motorways - A preliminary note by the Department of Transport,* April 1994

> of service to road users in terms of availability of road space, quality of surface and safety. The Department will aim as far as possible to set output targets rather than demand particular construction methods or maintenance programmes. From the user viewpoint DBFO roads should be at least as good as conventionally funded roads, and preferably better if we can capture private sector managerial ingenuity. Concessionaire companies will therefore need to be both robust and committed to long term quality performance in this market.

Shadow tolls had originally been ruled out in the 1989 consultation paper, *New Roads by New Means.* Under these, operators of private roads would not charge tolls but would receive government payments pegged to traffic flows. One big uncertainty for private road operators in Britain was the public's willingness to pay tolls on roads running alongside an extensive free network. Shadow tolls would put all roads on equal terms. However in 1989 the Government's view was:[37]

> The Government is looking for genuine private sector ventures, with appropriate risks and rewards. There is no place for financial devices, disguised Government borrowing or guarantees. Shadow tolls, for example, where the Government makes payments to the private sector operator according to the number of vehicles using the road, are ruled out for this reason.

By August 1994, the Conservative Government had changed its mind and the first four DBFO roads to be paid for by shadow tolls were announced. The Government's espousal of shadow tolls, which the Treasury had previously opposed, reflected to some extent its disappointment with the lack of interest shown by the private sector in taking up the opportunities presented by the 1991 *New Road and Street Works Act* for privately constructed new roads financed by tolls.

Ministers came to see the version of the Design, Build, Finance and Operate (DBFO) initiative which is based on shadow tolls as offering greater scope for private sector involvement in the provision of road capacity, at least pending the introduction of direct tolls. Government witnesses to the Transport Committee's study on charging for motorways, including the then Financial Secretary to the Treasury, emphasised the interim nature of the proposals on the grounds that shadow tolls did not fulfil all the criteria for charging set out in the Green Paper. In particular, they were not visible to individual drivers and so could not influence their behaviour patterns based on a perception of the marginal cost of each journey.

The Committee hoped that the Government would adopt a pragmatic attitude towards shadow tolls and would not simply regard them as a stopgap measure to encourage private sector involvement pending the introduction of full electronic tolling. Shadow tolls have a number of attractions, chief amongst which are their negligible administrative costs, the fact that they

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[37] op cit para 3.

do not give rise to problems of diversion, and their ability to be applied to discrete stretches of road.

Under the DBFO schemes, a private developer is paid by the Government for the level of traffic that uses its road, but will pay a penalty when roads are out of service for repair. There is a ceiling for shadow toll payments beyond which the consortium is not paid for additional traffic. This removes the incentive to encourage unlimited traffic growth. The successful contractor installs counting machines which measure the cars and heavy goods vehicles using the road and then submit their claim to the Department of Transport. A "loop technology" is used in these cases which is considered to be about 95 per cent efficient. This is considered adequate for shadow tolling but would not be adequate for a system which charges each driver for his or her use of the road. The system then has to be 100 per cent accurate and totally reliable. As far as is known no other country operates a shadow toll system although some, such as Finland, are thinking of introducing it.

Individual projects are listed in the next section. The criticism is usually that little information is available about their effectiveness. A study conducted by the Highways Agency and the PFI Panel compared eight contracts worth £563 million with what they would have cost under traditional public sector arrangements and concluded that they achieved average savings of 15 per cent.[38] It recommended that even greater efficiencies could be achieved if private sector companies were to become involved more closely earlier in the design stage of roads.

[38] Highways Agency/Private Finance Panel *DBFO-Value in Roads: a case study on the first eight DBFO road contracts and their development* 1997

V Transport Projects

Table 5.5 of the Red Book 1997-98 sets out the estimated PFI capital spending over the three years to 1999/2000 for each government department.[39] The Department of Transport is estimated to be going to spend £1,040m in 1997-98, £1,330m in 1998-99 and £1,420m in 1999-2000, a total of £3,790m in the three years compared with a total for all departments of £10,410m. This figure does include expenditure on the Channel Tunnel rail link.

A. General

Private finance has been used to finance roads, railways, aviation and London Transport. The most successful projects have been those where there was no need for a lump sum cash injection from the public purse and where revenues are paid by the final consumer - the travelling public. Wrangles over the size of the public contribution to those deals where the private sector cannot do it alone have complicated negotiations.

The main transport projects financed or planned to be financed by the private sector include:

Queen Elizabeth II Bridge over the Thames at Dartford	[completed]
Second Severn Crossing	[completed]
Skye Bridge	[completed]
Birmingham Northern Relief Road	
Heathrow Express	[under construction]
Channel Tunnel Rail Link	
Ashford International passenger station	[completed]
West Coast Main Line	
Croydon Tramlink	[under construction]
Docklands Light Railway and Lewisham extension	[under construction]

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39 *Financial Statement and Budget Regulations 1997-98*, November 1996, HC 90

Midland Metro Light Rail	[under construction]
London Underground information technology services	
London Underground for Northern line underground trains	[contract let]
London Underground - power supply and distribution system	
London Underground - combined contract for ticketing and revenue collection service	
London Underground - laying of fibre optic cable	
Thameslink 2000	
Crossrail	
DBFO roads	
CAA Scottish air traffic control centre	

B. DBFO Road Schemes

In 1990 competitions were announced for the Birmingham Northern Relief Road and for a new privately funded road between Birmingham and Manchester. Views were also invited about the suitability of six other schemes for private finance although little has happened about most of the schemes. These were:[40]

- A new crossing of the River Tamar
- A new Mersey crossing serving Liverpool Airport
- A short link between the A1 and M1 at Scratchwood in North London
- A link between Chelmsford and the M25
- A new route parallel to the A127 from the M25 to Rayleigh in Essex
- A lower Thames crossing east of the M25

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[40] Private Finance Road Schemes: Information on proposed options; June 1990 - Department of Transport.

It was not until August 1994 that the first four schemes to be put to the private sector were announced. These are listed below with the estimated capital values of the projects are given in brackets.[41]

- A1-M1 motorway link, Leeds	18 miles	(£214m)
- A1 Alconbury to Peterborough improvement	13 miles	(£128m)
- A419/A417 Swindon to Gloucester	32 miles	(£49m)
- A69 Newcastle to Carlisle	52 miles	(£9.4m)

Invitations to tender were issued in January 1995. On 12 January 1996 Sir George Young announced that the first DBFO contract had been awarded. This was to Road Link, a consortium of six companies, to build the Haltwhistle Bypass and also to take direct responsibility for the management and operation of the A69 between Carlisle and Newcastle.[42] The second and third projects to be announced, to upgrade the A1 motorway from Alconbury to Peterborough and the A417/A419 Swindon and Gloucester bypasses, were awarded to the consortium RMG on 22 March 1996.[43] The contract for the A1-M1 link road was awarded to Yorkshire Link Ltd on 28 March 1996.[44]

A further four schemes were announced in February 1995 with tenders being invited in June.

- M40 Junction 1-15, including widening J1A to 3	76 miles	(£37.1m)
- A19/A168 Tyne Tunnel to Dishforth	73 miles	(£29.4m)
- A30/A35 Exeter and Bere Regis	63 miles	(£75.7m)
- A50/A562 Stoke to Derby link	35 miles	(£20.6m)

In May 1996 Connect was awarded the A50/A562 Stoke-Derby link[45] and in July 1996 it was awarded the contract for the A30/A35 Exeter to Bere Regis road.[46] UK Highways was awarded the contract for the 76 miles of the M40 between Junctions 1 and 15 on 8 October

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41 Highways Agency & Private Finance Panel *DBFO - Value in Roads: a case study on the first eight DBFO road contracts and their development,* March 1997

42 Highways Agency press notice 12.1.96 "Sir George Young announces new era in road building"

43 Highways Agency press notice 22.3.96 "John Watts announces two further DBFo successes"

44 Highways Agency press notice 28.3.96 "John Watts announces award of the biggest ever DBFO contract"

45 Department of Transport press notice 21.5.96 "Derby road deal welcomed by John Watts"

46 Department of Transport press notice 25.7.96 "Dorset and Devon road deal welcomed by John Watts"

1996[47] and the A19 Dishforth to Tyne Tunnel contract was awarded to Autolink on 15 October 1996.[48]

The following figures were given by the Highways Agency for the annual cost for the next five years of these eight DBFO contracts:[49]

> *Letter from Lawrie Haynes to Mrs Gwyneth Dunwoody, dated 16 October 1996:*
>
> The Secretary of State for Transport has asked me to reply to your recent question about the cost of contracts currently let for road building under the design, build, finance and operate system.
>
> The following figures illustrate the estimated range of annual cost (over a 5 year period), based on the Highways Agency's forecast of traffic volume for the 8 DBFO contracts awarded so far. These figures which are cash price estimates will be influenced by the usage of the DBFO road and the performance of the DBFO Company. The figures below do not include additional but relatively minor future lump sum payments covering for the example archaeological works, which because of their uncertain nature are extremely difficult to estimate.
>
> 1996/97: £21m
> 1997/98: £68m
> 1998/99: £82m
> 1999/00: £163m
> 2000/01: £189m

Following the Budget statement on 28 November 1995, Sir George Young, the Secretary of State for Transport announced a new review of the roads programme which cut it by £4 billion and scrapped 777 schemes. He also announced a further extension of the DBFO roads programme, valued at £500m. Five projects were included in the programme, three of which were announced on 15 May 1996 and for which the tendering process is under way:[50]

-	A6/A43 South Midlands Network	155 miles	(£116m)
-	A65 (M6) Cumbria to Bradford	65 miles	(£104m)
-	A21/A27 Weald and Downland	72 miles	(£142m)

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47 Department of Transport press notice 8.10.96 "John Watts welcomes DBFO contract for M40"
48 Department of Transport press notice 15.10.96 "Latest DBFO road deal announced for the north-east"
49 PQ HC Deb 16.10.96 c.969W
50 Department of Transport press notice 15.5.96

The decision to proceed with the two DBFO projects in London was announced in December 1996.[51] This A13 project had been announced in November 1995 and the A40 DBFO in August 1996.

-	A13 Thames Gateway	23 miles	(£146m)
-	A40 West London Approach	15 miles	(£75m)

The A36/A303 Wessex link (124 miles, £105m) has still not been announced although it was included in the November 1995 statement, as it includes the Salisbury by-pass which is still waiting a decision by ministers.

The Scottish office has also announced a DBFO scheme:

-	A74/M6 upgrade	6 miles	(£42.3m)

51 Department of Transport press notice 10.12.96

VI Further Reading

New Roads by New Means: A consultation paper on private finance for roads May 1989 Cm 698

Roads for Prosperity: May 1989 - Cm 693

David Starkie: *The Private Financing of Road Infrastructure.* January 1990 Transport Studies Unit, Oxford University.

Transport Committee *Roads for the Future* First Report 1989-90 1 February 1990 - HC 198 I-III

Private Finance for Roads. Government response to consultation on "New Roads by New Means" 9 April 1990 - Department of Transport.

Private Finance Road Schemes: Information on Proposed Options Department of Transport June 1990 - Dep 6141

Touche Ross *Private Sector Investment in Transport Infrastructure* 1991

Ernst & Young *Project Finance in the 1990s: private financing of public infrastructure projects*, 1993

Paying for Better Motorways: Issues for Discussion: May 1993 - Cm 2200

Labour Finance and Industry Group *Financing Infrastructure Investment: Promoting a partnership between public and private finance* February 1994

OECD *New Ways of Managing Infrastructure Provision* Public Chapter 6 "Private funding for roads in the United Kingdom" by John Moore Management Occasional papers 1994 no 6

HM Treasury: Private Finance - competition and the private finance initiative, March 1994

Design, Build, Finance and Operate Concessions for Trunk roads and Motorways A preliminary note by the Department of Transport, April 1994

Transport Committee *Charging for the Use of Motorways* Fifth report 1993-94 21 July 1994 HC 376

Department of Transport *Building Tomorrow's Transport Network*, 1994

Local Transport Today 3 August 1995 "DBFO contracts"

Investment House of Commons Library Research Paper 95/113, 20 November 1995,

Financial Times 10.11.95 "Private Finance Initiative: critical year ahead for UK government scheme"

HM Treasury *Private Opportunity, Private Benefit: progressing the PFI* November 1995

Labour Research February 1996 "Public pays for transport farce"

Treasury Committee *The Private Finance Initiative* Sixth report 1995-96 1 April 1996 HC 146

Treasury Committee *The Private Finance Initiative: the Government's response to the sixth report* Fourth special report 1995-96 24 June 1996 HC 513

Debate on transport infrastructure: private provision HL Deb 12.6.96 cc 1775-1805

Debate on the private finance initiative HC Deb 26.6.96 cc 282-304

Highways Agency & Private Finance Panel *DBFO - Value in Roads: a case study on the first eight DBFO road contracts and their development,* March 1997

Gabriel Roth *Roads in a Market Economy* 1996 chapter 7 "Private provision of public roads" (includes practice in other countries)

CBI *Winning Ways* July 1996

Labour Retort March/April 1997 "Road Scandal"

Private Finance Panel Executive's Monthly Report

Recent Library Research Papers include:

97/48	Training and Enterprise Councils	07.05.97
97/49	General election results, 1 May 1997 (revised edition)	30.05.97
97/50	The Burden of Taxation	09.05.97
97/51	NATO Enlargement	08.05.97
97/52	Parliamentary Pay and Allowances: The Current Rates	14.05.97
97/53	The Commons committee stage of 'constitutional' bills	20.05.97
97/54	The IGC: the story so far	14.05.97
97/55	The IGC: Bibliography	14.05.97
97/56	The Location of New Households	13.05.97
97/57	Algeria	14.05.97
97/58	Unemployment by Constituency - April 1997	14.05.97
97/59	Albania	14.05.97
97/60	Wales and Devolution	19.05.97
97/61	The Referendum (Scotland and Wales) Bill 1997-98	20.05.97
97/62	Housing Benefit and Council Tax Benefit (General) Amendment Regulations 1997 [SI 1997/852]	15.05.97
97/63	*E. coli* Foodborne Disease	15.05.97
97/64	Aspects of Parliamentary Reform	21.05.97
97/65	Lead in Drinking Water	21.05.97
97/66	The Development Assistance Budget:plans and outturns	23.05.97
97/67	The New Statistical Regions	22.05.97
97/68	The European Convention on Human Rights	27.05.97
97/69	The Code of Practice on Access to Official Information	03.06.97
97/70	Education (Schools) Bill [Bill 4 of Session 1997/98]	29.05.97
97/71	The Privatised Railway	30.05.97
97/72	The Railway Passenger Companies	30.05.97
97/73	Economic Indicators	02.06.97
97/74	The Local Government Finance (Supplementary Credit Approvals) Bill 1997/98	03.06.97
97/75	The IGC - The Draft Amsterdam Treaty	04.06.97
97/76	Inflation: the Value of the Pound 1750-1996	06.06.97
97/77	Prohibiting Handguns: the Firearms (Amendment) Bill [Bill 3 of 1997-98]	09.06.97
97/78	Public Expenditure in Scotland & Wales	09.06.97
97/79	Unemployment by Constituency - May 1997	11.06.97
97/80	The PFI and the Local Government (Contracts) Bill	20.06.97
97/81	The USA Food & Drug Administration	24.06.97
97/82	The local elections of 1 May 1997	27.06.97
97/83	The Amsterdam Treaty	25.06.97