Financing and Managing Public Services: An Assessment

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Abstract

Public services can be, and are, delivered according to a variety of different arrangements. The public sector can finance and provide a service itself, or contract with the private sector to participate in provision, or its role may be limited to regulating a private provider. In this paper we examine the features determining the effectiveness of public-service delivery, including incentives for employees and teams within organizations providing public services, the structure of the organization and the competitive framework that it faces, and the role of the private sector. We assess the reform programme in the UK, which has involved substantial reorganization of public services and increasing involvement of the private sector. Reforms focus on the improvement of incentives; but while incentives are critical, the special characteristics of public services (and the people who provide them) must be recognized in the implementation of new structures and incentive schemes.

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I. INTRODUCTION

What are public services? It is easy to think of examples: in many countries, law enforcement, refuse collection, and primary education would be regarded as public services. Health services and transport may be included, too, but patterns of provision differ—public services are not necessarily financed and delivered by the public sector, although the public sector is likely to be involved in some way.

The rationale for public-sector involvement differs between different kinds of services, and influences the type of involvement required. In some important services the rationale comes mainly from the supply side—from the technology. Thus in transport and utilities, where there are networks and natural monopoly elements, the primary public role is to overcome market failure, notably prevention of abuse of market position. This can take the form of direct control of production and investment, although many countries have privatized these services in recent years. But even if assets are privately owned, and the service is financed by charging individual consumers for what they choose to consume, there is a need for some price and quality regulation.

For other services, the main rationale for intervention lies on the demand side. When it is not possible to charge consumers directly, as in the case of non-excludable public goods, such as law enforcement, defence, and public administration, the government finances the service, paying for it on behalf of all consumers. Usually the government also produces these services; at least in law enforcement and defence, its role is central. Most governments also finance education: although there are some public-good aspects, the primary concern is that individuals cannot, or will not, pay for education themselves. Since the government has an interest in the type and quality of education that it buys, there may be reasons for it also to participate in production—in owning and managing schools and employing teachers. Alternative arrangements are possible, however; for example, higher education may be purchased from private institutions with minimal regulation.

Similarly, although health care is substantially privately provided in many countries (but with regulation of providers to address pervasive information problems) the government is heavily involved on the demand side, purchasing health care directly on behalf of some or all of the population, or ensuring access through a social insurance scheme.

In health and education we can identify potentially serious market failures, but efficiency is not the only rationale for intervention: there are also merit-good and equity arguments. The standard interpretation of basic results in welfare economics—that equity objectives should be achieved by redistributing income and leaving consumption decisions to individuals, rather than intervening in particular markets—may not apply. In the case of merit goods, individuals may not make privately optimal decisions, perhaps owing to myopia or a lack of understanding of potential benefits;² this is the main justification for compulsory education. The equity arguments for direct intervention are based on Tobin's (1970) concept of *specific egalitarianism* a preference for equity with respect to the consumption of particular goods. To the extent that this means equality of access (rather than of outcome), it suggests the use of an educational voucher scheme, and equal social insurance cover for health care. But equality of purchasing power does not necessarily guarantee effective equality of access if, for example, some consumers are better informed than others.³ Thus equity, like merit goods, may justify public intervention in consumption decisions.

It is useful to distinguish between 'public services', 'public sector', and 'public organization', despite the difficulty of defining these terms precisely. We will define a *public service* as any service provided for large numbers of citizens, in which there is a potential significant market failure (broadly interpreted to include equity as well as efficiency) justifying government involvement—whether in production, finance, or regulation. The *public sector* comprises the economic activities controlled by the government, many of which are public services. A particular concern is that publicly controlled organizations, not subject to the discipline of the competitive market, may lack incentives to control costs or provide quality of service and respond to the needs of consumers. Hence, the role of the public sector has recently been the subject of debate: which activities *ought* to be carried out by public-sector organizations and what role does the private sector play in public -service delivery?

A major problem with any framework to deliver public services is that those delivering the service can have far better information than the government agency. This disparity allows them to pursue goals that may not fully coincide with society's objectives. The old fashioned 'model' of simply creating a public-sector agency that would be expected selflessly to pursue the required objective is no longer accepted without question. It is essential to understand how to design activities to elicit correct information from 'agents' responsible for delivery, and to put in place structures so that the incentives facing the agents coincide with society's objectives. Of course, this is far from easy.

The study of *public organization* examines the appropriate structures for delivery of public services. It should be able to answer the following types of question. What motivates employees and how can we design activities to maximize their effort and commitment? When do we want high-powered employee incentives and when is it more important to focus on the ethos? How do we allocate funding to organizations when the government is the primary purchaser? Should we create competitive pressures on the organizations? If so, when should we do this literally through private market pressures and when through benchmarking exercises with funding attached? Should the government purchase services or physical assets? When is it useful to have for-profit and when not-for-profit models? The answers will not be the same for all public services. This paper provides an assessment of where we are in the understanding of these issues and the implications for public-sector 'modernization' programmes. The UK is deeply involved in a modernization programme and so these questions are particularly timely in this context. Hence, this assessment tends to draw more heavily on UK evidence. The *Review* contains important contributions directed at all the above questions.

The structure of the paper is as follows. In section II we look at what determines the boundary between the public and private sector, and show how the boundary has shifted recently in the UK. Section III addresses the question of how public services can be produced efficiently, focusing on the creation of appropriate incentives and organizational structures. In section IV we examine the increasing involvement of the private sector in public services, through privatization and public—private partnerships.

II. THE BOUNDARY OF THE PUBLIC SECTOR

The boundary between the public and private sectors has always been difficult to define. For example, the UK National Health Service (NHS) is usually regarded as an entirely public provider of health care, yet, throughout its history, primary health care has been provided by general practitioners (GPs), who are self-employed sub-contractors to the NHS, owning the assets, often including the premises, of their practices.

To illustrate the complexity of issues of ownership and control in public-service production, consider a government, G, that wants education to be provided for a group of consumers. Education is produced using two inputs: a school (the building), and teachers. P is a private company. In principle, any of the following arrangements is possible.

- **A.** G owns the school, employs the teachers, and produces education.
- **B.** P owns the school, but rents it to G. G employs the teachers and produces education.
- **C.** G owns the school, but rents it to P. P employs the teachers, produces education, and sells it to G.
- **D.** P owns the school, employs the teachers, produces education, and sells it to G.
- **E.** P owns the school, employs the teachers, produces education, and sells directly to the consumer.

Arrangement **A** is clearly public-sector delivery. Similarly, **E** is private-sector delivery (although the government may still play a significant role in setting standards, and P could be a non-profit firm). **D** is private production with the government having no role except as purchaser of services supplied by the private sector. **B** and **C** are harder to define. In **B**, the government employs the resources, physical and human. The government has the right to control these resources, and to decide how they should be deployed to produce education, subject to the contractual nature of the lease on the building. Although it does not own the physical asset, it could have residual control rights for the period over which the school is rented. In this sense we can think of education as being *publicly produced*. However, when contracts are incomplete, ownership typically exerts a powerful influence on the outcome.⁴ Similar arguments apply to **C**. Education is *privately produced* but again this will depend on the nature of the lease contract.

Note that, although the 'public versus private' debate is usually framed in terms of *ownership*, it is not the ownership of the physical asset itself that determines whether production is deemed public or private; it is who has the right to control it that matters. For this reason, the contractual structure is important. In fact, if complete contracts were easy to write then the arrangements above would operate very similarly if the producer of education (G or P) were to rent the school building from a third party. Furthermore, there is no substantive distinction between human and physical capital in this respect. The owners of human capital are the workers themselves, and the producer rents their human capital for a period.

All the above arrangements can be observed in modern public-service production in the UK. For schools and hospitals, **A** is the traditional, and still the most common, arrangement, and **E** is the next most common form; **B** corresponds to a PFI (private finance initiative) contract, where a private firm agrees to build a school or hospital and rent it to the public sector. An arrangement similar to **C** has recently been adopted for a small number of failing schools: a private company enters into a contract to manage the school, but the buildings remain the property of the local education authority. **D** is observed in higher education, and where the public sector contracts with private hospitals to provide surgical operations. In primary health care, arrangements **C** and **D** are both observed: some GPs own their own premises; others work in health centres owned by the NHS. The prison service uses all of the arrangements **A**, **C**, and **D**: while the majority of prisons operate according to model **A**, some are now privately owned and managed; others are still publicly owned, but management is contracted to a private-sector company.

(i) Incomplete Contracts and the Public-Private Boundary

In a world where it is possible for the government and agents to specify all contingencies and to contract fully and costlessly on all outcomes, then whether things are provided within the private or public sector (for example, according to any of the arrangements A-E above) should not be a significant issue, provided that the government faces the same information barriers with its own employees as with private-sector agencies. In practice, contracts are not perfect in this way and this has an impact on efficiency. There are many activities that are not precisely contractible for all sorts of reasons—they may be difficult to define legally, or the potential outcomes may be too numerous to categorize. This makes it difficult for a party to retain flexibility in decision making while at the same time credibly pre-committing, say, to do X instead of Y in some situations where it is known that, when the time comes, the turn of events may be such that he or she would prefer to do Y instead of X. If it is possible to specify X and Y in a contract, then it may be possible to contract to do X rather than Y all of the time, but that may be hopelessly inefficient if there are some circumstances when X is clearly the wrong thing to do. In this case, the agreement will be renegotiated and the nature of the control rights will matter. If X and Y are too hard to write into a contract, then even this type of commitment will not be possible. Because contracts cannot cover all eventualities, the best possible outcome is usually unachievable. Then institutional structure matters since different institutional forms will deliver different outcomes (see, for example, Williamson, 1975; Grossman and Hart, 1986).

In a world without complete contracts, ownership affects the manner in which the service is delivered (Hart et al., 1997). In general, government owners will have different incentives from private-sector owners. Changes in the way an asset is used that are not specified contractuallyfollowing from an innovation, say-will require approval and cooperation of the owner. If assets are privately owned, then the owner will favour innovations that reduce cost, and any consequent negative impact on quality will only impinge on this decision to the extent that it is specified in a contract and the supplier can be penalized for failure to deliver. Where it is hard to contract on quality, a private-sector firm will deliver output at low cost but quality is likely to be compromised. In contrast, a public-sector owner can refuse to cooperate with any innovation outside the contract that damages quality. Thus, if quality is hard to specify in a contract, a public-sector owner who can block changes in the asset will be in a better position to balance the trade-off between cost reduction and quality. Note, however, that the (public - or private-sector) manager of a facility may not be able to implement a cost-saving innovation without the permission of the public-sector owner. The latter will be able to extract a share of the benefit of any cost innovation and this will reduce the incentive for managers of the facility to innovate. So we will find that quality will be protected but the incentive for cost-reducing innovation will be dulled if the asset is publicly owned.

So whether the public sector or private sector ought to own the asset and/or produce the service depends on the ability to contract and the relationship between cost reduction and quality. If cost reductions tend to go hand in hand with significant quality reductions and quality is hard to protect contractually, then public ownership may be beneficial. This is because the ability of the public sector to use its ownership to block changes will be important. In contrast, if cost reductions do limited damage to quality (either through the technical relationship between quality and cost or because quality can be somewhat protected in a contract), then private ownership may be optimal since the greater incentive to reduce costs will dominate.

Thus, since the welfare consequences of reductions of quality and the difficulty of tying it down in a contract will differ between public services, one would not expect any simple relationship between public services and the public sector. However, it is easy to over-emphasize the

importance of ownership. For example, the downside of a lapse in quality is enormous in aeroplane design and build, yet this activity sits comfortably in the private sector in most economies. The public sector has an important role to play in public-service delivery, but ownership is only one of a series of characteristics affecting the efficiency of provision.

(ii) Changes in the Boundary of the Public Sector since 1980

The second half of the twentieth century was a period of substantial growth in public expenditure and production in OECD countries.⁵ To the extent that the public sector finances and produces services, this is not surprising: according to Baumol's famous 'cost disease' argument (Baumol, 2001), since productivity generally grows more slowly in services than in the rest of the economy, employment and relative expenditure on services must rise even if 'real output' grows no faster than GDP. Nevertheless, concern about the apparently inexorable rise in costs has prompted many countries to cut expenditure in the last 15 or 20 years, and to undertake reforms that have shifted the boundary of the public sector.

The data in Table 1 show that, in several countries, there has been a significant fall in public-sector employment. Government consumption has fallen, but it appears that government production, as indicated by employment, has fallen more. At least in part, this reflects a movement away from the pure public-sector model, A, towards greater involvement of the private sector in production according to the variants B-E. The contraction of the public sector is most dramatic in the UK, where 9 per cent of total employment has apparently moved from public to private sector.

As we will see below, this figure should not be taken at face value. The shrinking of public employment in the UK is either larger than this if we include the privatization programme, or smaller if we do not. But without doubt, the UK public sector has changed dramatically, as a result of a series of radical reforms pursued by successive governments since 1979, and continued enthusiastically by the present government.

The OECD figures in Table 1 are for employees of central and local government; they do not include public non-financial corporations (PNFCs),⁶ and hence do not reflect the fall in public employment owing to privatization of nationalized industries, some of which we should regard as public services, while others—such as Rolls-Royce and British Steel—are clearly not. A second complication is that hospital workers were counted as employees of central government in 1985, but are now employed by NHS Trusts, which are classified as PNFCs. Table 2 clarifies the changes in UK employment. To summarize:

- as a percentage of total UK employment, total public-sector employment, including public corporations, fell by 10.75 percentage points between 1980 and 2001;
- of this change, 6.57 per cent can be attributed to public corporations excluding NHS Trusts, and results mainly from the privatization of nationalized industries;
- the remaining 4.18 per cent reflects changes in central and local government and the NHS.

We can see from Table 2 that, in relative terms, public-sector employment fell steadily over this period in all central and local government services, with the exception of the police service. Of course, the total work-force has increased over the same period; but the absolute number of public-sector jobs has fallen from 7.4m to 5.2m. Absolute numbers fell in all categories except

the police, where there was a substantial rise, and social services and health, where the number of jobs in 2001 was slightly higher than in 1980.

As public -sector employment has fallen, public services are increasingly produced by people working in the private sector. Table 3 shows the public share of total employment in three major industrial sectors. In all three, the shift from public to private employment is evident.

The public services included in the privatization programme are mainly transport services and utilities: capital-intensive services, which were previously publicly produced but mainly financed by charging consumers directly. In contrast, the fall in relative employment in central and local government and the NHS corresponds to services that in 1980 were *financed* mainly by the public sector, and for the most part continue to be so. In education, for example, the proportion of pupils educated in private schools has remained roughly constant at between 6 and 7 per cent. In other services there has been some growth in private expenditure: Burchardt (1997) finds that the public proportion of total expenditure on welfare services fell slightly between 1979/80 and 1995/6 (Table 4).

But, consistent with the evidence above for employment, Burchardt shows that the proportion of welfare services produced by the public sector fell much more, from 61 to 51 per cent, mostly owing to an increase in public purchasing of some services from the private sector (Table 5). In education, publicly purchased private provision occurs mainly in higher education, but the shift towards the private sector is partly accounted for by contracting out of peripheral services for schools, such as meals, cleaning, and transport, to private firms. The welfare sector experiencing the largest shift was personal social services, where local government now sub-contracts a high proportion of care of the disabled, sick, and elderly to private residential homes and carers.

In health, primary care and dental services are the main areas of publicly purchased private provision, but again the main explanation for the increase over the period is contracting out of services such as hospital catering, laundry, and cleaning.

There have been significant shifts in areas other than welfare: following the introduction in 1988 of compulsory competitive tendering for some local government services, 29 per cent of local authorities contracted out refuse collection (Szymanski, 1996). Private prisons, unheard of in the UK in the 1980s, now house more than 10 per cent of prisoners, and this proportion is likely to increase.

(iii) Labour Markets

As discussed in sub-section II(i), the question of whether the public or private sector should control the physical and human resources used to produce public services depends on what form of contract gives the controller (manager) optimal incentives with respect to cost and quality. But a shift towards private-sector control also means that, as documented above for the UK, many workers producing public services are employed by private firms rather than the government.

At an individual level it is not obvious that, say, a nurse working in a private hospital should have a different employment contract, or respond to a contract differently, from a nurse employed by the government (unless, perhaps, there is a difference in willingness to 'donate labour'—see section III below).

But in aggregate, the change from a situation in which the government is by far the dominant employer for some public-service occupations to one where there are several or many smaller

employers may have a significant impact on the labour markets for public-service workers. There is evidence that public-sector workers have earned a wage premium relative to those with the same qualifications in the private sector. Hundley (1991) finds for the USA that the premium is greatest in occupations where the public sector is the only employer; Disney and Gosling (1998) show that in the UK the premium has diminished over the period of falling public employment, and has all but disappeared for men and for those with no qualifications. The evidence is consistent with the existence of public-service-specific human capital: when skills are specific to a single service (and, hence, single public employer), workers are paid less than their productivity, but more than they could earn elsewhere. With increased competition from private employers entering to deliver the service, wages rise—to the same level in public and private sectors. In general, we would expect increased competition to drive up wages for public-service workers (and, hence, to increase costs). However, it is likely that the explanation for the falling UK premium differs between groups of workers, and may correspond to falling wages for low-skilled workers who lack bargaining power.

Public-sector employment contracts have traditionally been determined centrally, offering job security, wages rising with tenure, and generous pension schemes. Again, this is consistent with the existence of skills specific to public-service production. Increased competition (either from the private sector or within the public sector) for these skills will change the incentives to invest: for example, if the new Foundation Hospitals are given the freedom to determine pay and compete to employ nurses, individual hospitals will be less willing to bear training costs.

The government appears to have an advantage over the private sector in its ability to offer a credible long-term contract. A private firm may cease trading, or make employees redundant in response to shocks (such as the loss of a government contract). In addition to facilitating human-capital investment, long-term contracts are attractive to risk-averse workers and, if back-loaded, can provide effort incentives. On the other hand, institutionalized forms of contract and employment-protection laws preventing lay-offs except for redundancy might be seen as a constraint on the public sector as an employer. One interpretation of a policy to move employees into the private sector is that it exploits the incentives inherent in the insecurity of working for a private firm that will lose a government contract if it does not perform well. However, public sector job security has also decreased recently in the UK, as a result both of the shift in employment and of changing contracts. For example, the procedures now used to deal with failing schools require the teachers, in the last resort, to reapply for their jobs.

Research by the public-services union UNISON (2001), as part of its campaign against contracting-out, finds that the pay and conditions of 'new starters' in private firms carrying out local government contracts are worse in all dimensions than those of staff transferred from the public sector. The government has recently responded to concerns about the 'two-tier work-force' with a Code of Practice under which new starters must be offered no less favourable conditions than transferred staff. Nevertheless, it is hard to avoid the suspicion that, after the period of transition during which the contracts of transferred staff provide a benchmark, the welfare of low-paid workers will suffer as a result of the shift to private employment.

III. REFORMING THE PUBLIC SECTOR

In this section we consider the incentives facing public-service workers, and recent developments—in theory and practice—which focus on increasing the efficiency of public-service delivery by changing incentives. The emphasis here is on the nature of public-service

production; much of the following analysis is separate from the issues of public or private ownership and control addressed in the previous section.

(i) Incentives: The Principal-Agent Problem

At an abstract level it is useful to think of those working in an organization as the 'agents' of a 'principal' who is responsible for setting the goals of the organization. The 'problem' arises because, first, the agent's own objectives differ from the principal's and, second, the agent has more information than the principal about how far it is possible for the principal's goals to be met.

Suppose that the principal wishes to provide a service at low cost, but the agent dislikes the effort required to minimize costs. An agent who receives the same wage irrespective of costs has little incentive to reduce them. The principal could design an incentive scheme that rewards agents when costs are below average and penalizes them for high costs. But if costs are sometimes high owing to factors outside the agent's control, of which the principal is unaware, this may lead to a worse service (e.g. as effort is put into avoiding the penalty by cutting quality) and demoralize staff. A balance has to be struck. The incentive regime should encourage effort, but should not be so aggressive that agents (who are assumed to be risk-averse and, hence, to dislike wage variability) face high penalties when costs rise for reasons beyond their control.

The core problem as described here provides a series of insights. First, government agencies must recognize the limitations of high-powered incentive schemes. Second, a scheme that provides a balance between conflicting objectives inevitably creates a rent, or surplus, when costs can be reduced by increasing effort. This is sometimes called 'information rent'. A good scheme involves sharing of rents between principal and agent. Third, it is the extent of information asymmetry that determines the effectiveness of high-powered incentive schemes: when the principal cannot accurately perceive the cause of cost differences, the link between financial rewards and relative performance will have to be muted.

(ii) Principal-Agent Proble ms in Public Services

Several articles in this *Review* take the principal—agent problem as a starting point, but argue that there are features of public services that affect the design of incentive schemes, and limit the use of high-powered incentives. We provide a brief overview here.

Work in public-service delivery may involve several activities, some of which are harder to measure than others. In these circumstances a high-powered incentive scheme may be undesirable exactly because it encourages effort. Part of the gain in output will arise from diverting effort towards tasks that can be measured and away from those that cannot. For example, rewarding teachers for an easily measurable outcome, pupils' grades, will encourage them to focus on this at the expense of the broader aspects of education. Pascal Courty and Gerald Marschke present a model of this *multi-tasking* problem, which shows that lower-powered incentives are required in such circumstances. Furthermore, they argue that the model is relevant even when monetary rewards cannot be used. If the principal can monitor the total amount of effort exerted by the agent, but not the way that effort is allocated between tasks, performance measures can be used to communicate the principal's priorities to the agent.

Agents delivering public services may be answerable, financially or otherwise, to *multiple principals*. Doctors, for example, are responsible not only to the hospital that employs them but

also to professional bodies such as the General Medical Council. We can regard the patient as a principal, too: in the professional relationship with the patient the doctor has a duty to provide appropriate care. Again, high-powered incentive schemes can be damaging: competing principals will tend to protect their own objectives and seek to protect the agent from any downside that may arise from putting them ahead of other principals' objectives.

Finally, public-service production may be measurable only at a *team* level. For example, many employees—surgeons, anaesthetists, nurses—play an interlinked role in the treatment and recovery of a patient and it is difficult to identify the marginal input of each person. Simon Burgess and Marisa Ratto discuss the design of team rewards to reduce free-riding and promote effort and cooperation.

While multi-tasking, multiple principals, and team-based output structures give some justification for the view that high-powered incentives may not be appropriate in public -service delivery, such problems occur elsewhere. There appears to be no shortage of high-powered incentive rewards in merchant banking, yet it is not obvious that individual contributions to the profitability of a deal are any easier to identify than in the hospital setting. One should exercise caution before concluding that the above issues automatically justify radically different incentive structures between sectors.

Burgess and Metcalfe (1999) found that, correcting for type of job, establishment size, etc., public-sector establishments are less likely to have performance-related pay than their private counterparts. As Burgess and Ratto explain, the difference is for non-manual workers only, consistent with the view that skilled public-sector workers have multiple principals. But they argue that we should expect to see more use of (subjectively assessed) merit pay for non-manual workers in the public sector, and that its absence suggests inefficiency.

(iii) Motives and Missions

An important constraint on the role of incentive schemes may arise because people who choose to work in public-service delivery have different preferences from those who do not. Specifically, they may care about their input and the quality of the enterprise's output. It is common to think of this arising in two ways. One is the 'warm glow effect', where employees obtain benefit only if they give their own labour to the particular activity. The benefit may be determined by their input or the output they produce, but the central point is that they need to be involved if they are to derive any benefit. The other is the altruistic effect, where employees obtain benefit from the output whether or not they are individually responsible for it. In this case there is a potential free-rider problem that does not arise with the warm glow effect.

Employees in this situation may *donate labour* to the organization: that is, they give more labour than is required by their explicit or implicit contract or dictated by career concerns. However, their willingness to do so is sensitive to the organization structure: as we discuss in section IV, not-for-profit or public-sector organizations may be better able to extract donated labour than for-profit firms.

Tim Besley and Maitreesh Ghatak in this *Review* provide an analysis of public-service provision in which the intrinsic motivation of agents plays a central role. Organizations delivering public services are *mission oriented*. Delivery is effective when the goals of agents are well aligned with the principal's mission, and financial incentives are necessary only where there are mismatches. In this framework, services are provided by a variety of organizations with different missions,

and efficiency is achieved if both consumers and workers are able to match with their preferred organization.

(iv) Organizational Structure, Performance Measurement, and Competition

When a service is provided by a large and complex public-sector organization consisting of many individual agencies (such as schools and hospitals), how can good performance of these agencies be encouraged? This is not simply a question of incentives for individual employees, although many of the issues discussed above are relevant—we also need to consider the organizational structure. To illustrate, we look at the reforms in UK health care and education, which have focused on two ways of improving 'incentives' for agencies: increased use of performance measurement, and the introduction of limited forms of competition between agencies.

In the traditional form of organization for health and education, both of these features were absent. The allocation of resources to individual agencies was determined centrally, according to a formula-funding system based mainly on the number of consumers to be served (see the article by Peter Smith in this issue). The school or hospital accepted the given level of resources and provided services to a given population of consumers (who had little choice of provider). As Le Grand (2002) points out for health care, the interpretation of this structure as a hierarchical command-and-control system is misleading. A better characterization would be:

- politicians and civil servants allocated resources at the macro level, deciding, for example, staffing levels of schools and hospitals;
- micro-level decisions relied on professional expertise—medical professionals had almost complete clinical freedom to determine patient treatment, and headteachers and teachers determined educational methods and curriculum content.

In health care, the main impetus for reform in the 1980s was the perceived need to control costs. The existing structure provided almost no information about the relative costs and benefits of different treatments, and allocation was heavily influenced by historical precedent. Reform in education was motivated, at least in part, by the distrust in central government of those who were making decisions: local government with respect to resource allocation, and the teaching profession on educational priorities. Both systems were seen as unresponsive to consumers.

Reforms developed since the end of the 1980s⁸ changed the roles of all those involved.

- Individual agencies were given more responsibility for controlling costs and determining resource allocation. The reforms place more emphasis on financial management at the micro level, which may improve resource allocation if there is relevant information at this level. The 'Local Management of Schools' system delegates the management of the school's budget to the headteacher and governors, giving them autonomy in decisions that affect costs (including staffing). Under the 'purchaser–provider split' for secondary health care, 'Primary Care Trusts', acting as purchasers9 on behalf of patients, negotiate contracts for particular treatments with hospitals (providers). This means that hospitals have to be aware of the costs of different treatments, and can reallocate resources between them according to demand. The new Foundation Hospitals will have greater financial and management autonomy.
- The government, and the central organization, assumed a more influential role in determining health care and educational priorities and objectives. The National Curriculum, together with the requirement for all schools to participate in Standard Assessment Tests,

constrains the professional autonomy of teachers. In the NHS, greater influence from the centre on clinical decisions is achieved though target-setting (using measures such as hospital waiting lists and waiting times, and survival rates) and central decisions as to which treatments should be provided. ¹⁰

• Consumers were given more choice. Previously, children were expected to attend their local school; now 'open enrolment' allows parents to choose their preferred school, although limited capacity inevitably leads to rationing of places at popular schools. Patients are able to choose their GP, and switch more easily than before. They cannot choose the provider of secondary health care directly, but the Primary Care Trust to which their GP belongs does so on their behalf.

The underlying objective of these reforms seems to be to make service-providers more accountable, and more responsive, to two principals: the government, which pays for the services and wants to achieve its macro-level education and health-care objectives at least cost; and the consumers, who care about the quality of the services they personally receive. This requires information: the new organizational structures rely on the construction of explicit performance measures. These are essential for accountability; they can be used to construct incentives for service-providers; and they provide information for consumers exercising choice.

As Carol Propper and Deborah Wilson explain in their article in this issue, the incentives created are mainly implicit—relying on individuals' desire that their agency should provide a good service, perform well relative to other agencies, and attract consumers, rather than on financial rewards. They discuss the design of performance measures, and evaluate their use in the USA and the UK. They find that public agencies do respond to the incentives that such measures create, but that there is little evidence so far on whether services have improved as a result of their introduction.

A common element of the health and education reforms is the introduction of competition—the creation of a 'quasi-market' (Le Grand, 1991; Glennerster, 1991). For education there is effectively a voucher system, in that resources follow the child to the school chosen by its parents. The publication of school league tables is intended to facilitate parental choice, although they provide a limited and sometimes misleading comparison. There are obvious problems with this means of creating competitive pressure. Schools may value popularity, but owing to limited capacity the result is crowded classrooms. For the consumers, switching costs are high. There is a danger of inequity, with children whose parents are less well-informed, or less mobile, relegated to 'sink' schools, and an incentive for schools to 'cream skim' those pupils who are most likely to improve the school's performance. Furthermore, the use of particular performance measures tends to make schools more uniform—all focus on similar objectives—thus reducing choice. Bradley and Taylor (2002) find that the quasi-market reforms have improved the efficiency of secondary schools (measuring output by examination performance), but have increased social segregation.

In health care, the purchaser–provider split was intended to create an 'internal market' that would impose competitive pressure on hospitals, since purchasers would be able to switch to alternative providers. Evaluation of the internal market in the 1990s found that, in practice, strong ties of both doctors and patients to local hospitals made purchasers reluctant to switch, so that effective competition was limited (Le Grand *et al.*, 1998). Most seriously, Propper *et al.* (2000) found that higher competition was associated with lower quality as measured by death rates following heart attacks. More recent reforms have moved the emphasis away from competition towards cooperative relationships between purchasers and providers (Le Grand, 2002).

IV. THE ROLE OF THE PRIVATE SECTOR

As we saw in section II, there is now considerable experience in the UK of involving the private sector in public-service production, beginning in the 1980s with the privatization of nationalized industries and the contracting-out of peripheral activities in other services, and continuing in the 1990s with the PFI and, more recently, other forms of public-private partnership. In this section we evaluate the impact of these policies.

(i) Privatization and Regulation

Where (i) efficiency and innovation are central concerns and respond well to competitive pressures, (ii) quality and price can be relatively precisely regulated when necessary, and (iii) consumers are able to meet directly most of the cost of delivery, then regulated private-sector delivery is appropriate. It is debatable whether all the core activities that were privatized fulfilled these criteria, but the privatization programme was motivated, at least in part, by the belief that private ownership would increase efficiency, although political dogma and macro accounting convenience were also significant. The UK privatization programme transferred over £60 billion of assets from the public to the private sector between 1979 and 1997. With regard to public services, the main utilities—tele communications, gas, electricity, water, bus, and rail—were dispatched to the private sector and, with the exception of buses, specific regulatory agencies were set up to deal with the newly privatized entities.

Two important lessons from the UK privatization programme are, first, the impact on the privatized sectors (not all beneficial) has been far larger than most commentators expected and, second, the regulatory mechanisms have proved far more susceptible to the problem of information rent than anticipated. ¹² These are closely related since the lack of information that made the former a surprise also implies that information problems are likely to be significant.

Megginson and Netter (2001) provide the most comprehensive international survey of studies of privatization. They conclude, 'we know that privatization "works", in the sense that divested firms always become more efficient, more profitable, and financially healthier, and increase their capital investment sending'. The most extensive study for the UK, by Martin and Parker (1997), reports the most negative results: comparing the post-privatization and nationalization periods for 11 industries, they failed to identify any systematic improvement in performance. Although the profit rate had risen in eight of the industries, only six showed higher labour productivity growth, and total factor productivity growth had fallen in all but two cases. This negative conclusion is in contrast to Newbery (1997) who points out, however, that liberalization is critical in obtaining the full benefits of privatization: 'privatization is necessary but not sufficient'. A problem in such studies is that welfare effects on consumers are rarely examined. Benefits of efficiency frequently go to shareholders or can even appear in extremely high quality standards that may not reflect consumer preferences (EU water standards are frequently cited). We cannot conclude that private ownership unambiguously improves the welfare of consumers.

Privatization of public services cannot be assessed independently of the accompanying regulatory regimes, and regulation has not proved easy in the UK. Part of the problem is 'political' rather than economic. The stock markets, along with everyone else, failed to recognize the potential profitability of the companies. Even ignoring the specific gains to small shareholders, share prices at privatization typically did not reflect the potential for efficiency gains and information rent. If they had done so, regulators might have had greater flexibility. Instead, high returns for

shareholders made regulators anxious to claw back where possible, making entry harder. Generally, regulation has not proved as light-handed or short-lived as expected at the start of the privatization programme.

An obvious question is how far the privatization model can be pushed in the delivery of public services. The privatization of the UK railways is informative in this regard, having culminated in the first bankruptcy of a privatized utility. The structural separation of rail and station provision from train operation, in conjunction with the separation of regulatory oversight between regulators—the Office of Rail Regulation (itself containing separate regulators), the Strategic Rail Authority, and safety regulators—is generally thought to have caused difficulties. There have been many attempts to change and reform the structure. For example, in April 2001, the government recognized explicitly that it was necessary to clarify the different responsibilities of the regulator and the Strategic Rail Authority. Furthermore, the contracts between Railtrack and the train operators were extremely complex, forcing the regulator to set the target of achieving 'stronger, sounder, and simpler' contracts as a primary focus of the 1999 reform programme.

The inability of Railtrack to withstand a massive cost shock showed both the company and the regulatory regime to be inadequate. A major accident (the Hatfield derailment) was identified as having been caused by rail cracking and, under investigation, 6,000 similar sites were found in the network. The cost of correction and disruption to the network was enormous. Delays had been running at less than 2 minutes per 100 train kilometres up to the derailment, but jumped almost five-fold in the aftermath and are not expected to return to pre-crash levels until 2010. Despite all the regulatory reforms that had preceded Hatfield, another fundamental review followed. This was superseded by Railtrack going into liquidation when the government refused to enter into what it saw as an open-ended commitment to allow the company to meet its obligations. After a study of options, a new not-for-profit company, Network Rail, was formed to take over Railtrack's duties. The experience of Railtrack raises doubts over the role of the fully privatized model where the government itself plays a large role in the funding of the enterprise. To some extent the blurred incentives and responsibilities, both on the regulatory and the companies' side, were the result of the original privatization structure and have been much improved. but the proble m is deeper since, at the end of the day, it was the government that decided the future of the business and the returns to shareholders, not the independent regulatory body.

(ii) Public-Private Partnerships

The term *privatization* is generally used when ownership of assets is moved to the private sector and the funding for the activity comes predominantly directly from consumers. However, the government may also adopt a halfway house of *public-private partnership*: contracting with the private sector for the provision either of services to consumers, or of important inputs to the production of these services (models **B–D** in section II). Within this general model, the delivery mechanisms differ according to the form and length of contract and the extent that specific physical assets are tied to the project. The term *private finance initiative* (PFI) normally refers to cases where there is significant asset ownership by the private sector and, as a result, contracts are very long. The terms *contracting-out* or *franchising* are usually reserved for cases where there is less (if any) specific asset investment and, as a result, contracts are shorter (e.g. 3 or 5 years).

During the 1980s, the UK government began to encourage the use of contracting-out. From 1986, hospitals were required to 'market test' non-clinical services; they were also encouraged to buy surgical operations if these could be performed more cheaply by a private hospital, although this remains a low proportion of expenditure (Burchardt, 1997). *Compulsory competitive tendering* (CCT), requiring local government to invite private firms to tender for provision of services in

competition with in-house providers, was introduced in 1988, but abolished by the Labour government in 2000, on the grounds that quality was being sacrificed in pursuit of cost-cutting.¹³

Contracted-out services are mostly labour-intensive activities that can be carried out by workers whose skills are not specific to public services: increasingly this affects clerical, accounting, and IT workers in public administration, as well as cleaners and caterers in the health service and education. Over 3,000 staff, mostly from the Inland Revenue and the Treasury, transferred during the 1990s to EDS, a multi-national IT services company with extensive government contracts in many countries, including the UK.

The rationale for CCT and contracting-out is that they reduce costs by introducing *ex-ante* competition: that is, competition to become the monopoly provider of a service for a fixed period. Domberger and Jensen (1997) argue that it is most likely to be successful when physical assets are relatively unimportant and not specific to the contract, when quality is easily contractible (see section II(i)), and when there are enough potential providers to generate competition.

A study of the effect of CCT on refuse collection in the UK (Szymanski, 1996) showed substantial initial cost-savings, and no evidence of quality reduction, but some indication that cost-savings may not be sustained over the bnger term. A comparison (Home Office, 2000) of prison costs found that privately operated prisons were around 20 per cent cheaper (depending on the measure used) than publicly operated prisons in 1994/5, but that the difference has since fallen—to zero by some measures. However, when activities are contracted out there is usually a joint change. One is that delivery is conducted by the private not the public sector; the other is that there is competition for the contract. For refuse collection, Szymanski found that when contracts were awarded to the original 'in-house' providers of the service, cost-savings were lower; however, other studies (see Domberger and Jensen, 1997) find no significant difference in cost-savings between in-house and private winners of a tender. This seems to imply that it is external competition rather than ownership that is doing most of the work. Milne (1997), examining the impact of CCT in the NHS, found that while both competition and cost savings had been achieved in cleaning and laundry services, private contractors were reluctant to bid for catering contracts and cost savings were correspondingly low.

PFI projects usually have a major capital investment at the heart of the arrangement. The private-sector consortium designs, builds, finances, and operates the assets. The public sector purchases the service, which is then used as a public -sector input or provided to the public free of charge at the point of delivery. Examples include roads, where a private-sector company enters a long contract (25 years is common) with the government to build a road, and the government pays the company for each vehicle that uses it. The justification is that those building the asset have a stronger incentive to achieve cost-effective delivery over its lifetime than would be the case if the builder delivered the asset to the public sector (see Hart, 2003). The private sector takes on the risk of the asset. Many roads, hospitals, prisons, and schools are currently being delivered using this structure in the UK.

The award of a PFI contract is usually a two-stage process. Initially, the use of private-sector money is tested against the public-sector equivalent (the public-sector comparator). If private money is deemed cheaper, a competition ensues between private providers. The construction of the public-sector comparator is hotly disputed. For example, in the UK it is deemed that the public-sector estimates of expenditure are too low and so the cost is raised to correct for optimism bias. The relative cost of public- and private-sector finance has also long been an issue of debate and remains unresolved. In part, this is the result of lack of clarity as to the appropriate public-sector discount rate (see Grout, 2003), but this does not fully explain the disagreement.

The controversy is fuelled by suspicions that governments have an incentive to favour private money. PFI enables a government to update its infrastructure without having to borrow to fund the investment, although a similar long-term commitment is still present. Tim Jenkinson's analysis in this issue of the *Review* suggests that this is the main driver behind the UK government's passion for the scheme, and that private *finance*, when considered separately from private management, is typically more expensive—the political gains have an economic price. Recently, the government has confirmed its commitment to PFI, suggesting it will not only expand the use of the schemes in health, education, and housing, but will extend it to cover urban regeneration, waste-recycling, and sustainable energy projects. The UK model is being copied enthusiastically elsewhere in the world.

Evidence as to the effectiveness of such schemes is mixed. It appears to be most successful in construction. A recent National Audit Office (NAO) study found that only 22 per cent of PFI projects had exceeded projected cost, compared to its previous study in 1999, when 73 per cent of public building projects had done so. It found that 24 per cent of PFI projects were late, compared to 70 per cent of public projects. In contrast, the Audit Commission found in its study of the few early PFI schools that traditional provision delivered better schools. The Commission confirmed the potential of PFI in this context, but recommended that procurement processes had to improve to reap the benefit. Part of the argument for PFI is that the risk of failure to deliver is passed on to the private sector, but such benefits are hard to evaluate. For example, according to the NAO, the National Savings and Investments' deal with Siemens Business Services provided improved customer service, but proved far less profitable than expected for Siemens, who encountered many problems. The cost of this did not fall on to the taxpayer, but this is, in essence, a transfer and not a full saving to society—any more than the profitability for consortia, when they reschedule debts once core risks have passed, is a full loss to society. The government is trying to broaden the public –private comparison so that it is not purely driven by which is cheaper for the Treasury, but also brings quality, innovation, and so on into the picture.

Despite all the interest, PFI remains small in aggregate. In the period 1997-2000, PFI capital spending accounted for 9 per cent of total publicly sponsored gross capital spending and IPPR (2001) estimates that net public-sector debt in 2001/2 would have risen from 36.8 per cent of GDP to 37.9 per cent if PFI spending had been carried out by the public sector. As one would expect, there is a tendency for PFI projects of given type to improve over time; but, at the same time, PFI models are being used for broader categories of projects and so it is hard to obtain a clear picture of where it is working well and where there is much to learn σ the model is inappropriate. A concern for the future is that success requires healthy competition for projects, but there is a genuine fear that the pool of potential suppliers is falling, particularly for large projects. Part of the problem is the cost of a failed bid, something that happens less in the public sector. In public projects the procurement process tends to break down the project and use private contractors for specific elements. Of course, using private contractors for separate bits of the project provides scope for flexibility and ex-ante opportunism on the part of the public-sector client, providing the climate for cost overruns that have been such a feature of large UK public sector projects. There is a difficult balance between minimizing losses associated with a failed PFI bid against the need for a real competitive process where suppliers are keen to ensure that they win. This problem has yet to be resolved satisfactorily.

(iii) Not-for-profit

Not-for-profit (NFP) companies have long been involved in the provision of public services in the USA, particularly in health and education, but recently in the UK there has been a development

of NFPs for the delivery of public services. These companies are a new breed of NFPs in that, directly or indirectly, the government plays a major role in their financial position and dictates their activities (e.g. the Welsh Water utility (Glas), Railtrack's successor (Network Rail), and Foundation Hospitals).

The two key economic characteristics that NFPs typically possess are a non-distribution constraint (NDC) and a lack of owners. Hansmann (1996) defines NDC: 'the critical characteristic of a non-profit firm is that it is barred from distributing any profits it earns to persons who exercise control over the firm'. The second characteristic follows from the NDC: NFPs do not have owners in the traditional sense.

Much is made of the effect of NFPs on employee motivation. Theoretically, the central feature that distinguishes NFPs from for-profit companies (FPs) is the greater difficulty in expropriating surpluses away from the intended mission. The consequences for employees, donors, etc., can make NFPs the dominant form in certain circumstances. Note that, in a perfect world, NFP firms have no real advantages over FP firms since FPs can, in theory, replicate through contracts any commitments that NFP companies can make. In practice, as discussed in section II(i), contracts are not perfect and so different institutional forms deliver different outcomes. Owners of FPs receive the residual income after costs are met and this creates powerful incentives to reduce and control costs, possibly at the expense of quality if it is difficult to specify contractually. Compare this to a situation where employees are concerned about the quality of the institution's output and, hence, willing to 'donate' labour. An FP company will find it hard to pre-commit not to take advantage of this by hiring fewer employees than it would otherwise. In this situation an NFP works well since the NDC forces the NFP to invest its surplus within the business and, hence, donated labour, and other donations, improve output (see the article by John Bennett, Elisabetta Iossa, and Gabriella Legrenzi in this issue; Glaeser and Shleifer, 2001; François, 2003).

This theory can explain the success of NFPs in sectors where donations are critical, but a powerful purchaser (in the most general sense) may be able to extract the benefit of donated labour through a lower purchase price or financial support: the more donated labour in the organization, the less the purchaser needs to pay to ensure that quality remains at the required level. Employees will recognize that donated labour does not achieve the desired outcome and so the NFP will face the same problem as an FP firm (see Grout and Yong, 2003a). This is a major problem for the new breed of NFPs at the public-private interface, since it is not obvious how a regulator or government agency can pre-commit never to expropriate the benefits of employee commitment. Of course, this particular concern is not unique to NFPs, but applies to many public-sector activities. Indeed, one interpretation of recent conflict between the government and employees, such as teachers and health workers, is that the government is using its ability as primary purchaser to expropriate ex post the donated labour and sector-specific commitments that employees have made. This argument suggests that the benefits of NFP status may be less effective for delivery of services at the public-private interface since the government directly or indirectly plays a major role in the financial viability of the organization. Although Glas has improved its financial position, econometric analysis of the regulator Ofwat's measures of efficiency and service levels show no significant change as a result of the transition from FP to NFP (see Grout and Yong, 2003b). It is not clear that the NFP status of Network Rail should be a significant factor in its ability to deliver.

In this issue, Bennett, Iossa, and Legrenzi identify other difficulties with NFPs that will impinge on performance, notably soft budget constraints and general corporate governance issues. The general evidence on the effects of NFP is mixed (Glaeser, 2003). In the context of public -service delivery where the government and independent regulators play a major role, the benefits of a

move from FP to NFP are likely to be further muted. It is difficult to escape the view that the current favouring of NFP instead of FP status at the public–private interface is as much to do with political convenience in dealing with problems (notably Railtrack) as core economics. The movement in the other direction (from the public sector proper to NFP status) is less prone to the problems we have highlighted here and it is possible that Foundation Hospitals may be able to gain from the flexibility they will have, although it is essential that the reward mechanisms avoid the problem of *ex-post* government expropriation. In particular, the introduction of national scales for services may help to mitigate this problem.

V. CONCLUSION

In this paper we have considered the financing and delivery of public services. We have emphasized the distinction between public services and the public sector—while the public sector will be involved in some way in the provision of public services, there is no presumption that it must necessarily supply them. But to the extent that public services have characteristics that distinguish them from other goods and services, neither should we simply assume that the private sector would supply them more efficiently.

The question of what makes particular public services different is the starting point for an analysis of how they should be provided. As we have seen, choice of sector depends on the potential for contracting on quality, which differs between services. But this is only one of a series of features that are critical in the delivery of these services. Incentives for employees and teams within the organization, the competitive framework that the organization faces, and the form of the organization itself all have to be addressed.

There is some evidence that employees in the public sector are less likely to have explicit incentive contracts than those in equivalent jobs in the private sector. But this situation is changing rapidly; indeed, there is a danger it could move too far in the opposite direction. From the limited evidence available, it appears that both individuals and organizations that deliver public services respond to incentive structures. This is not in itself the problem; the difficulty is designing the appropriate scheme. Introducing competitive tendering has reduced costs for several services (often regardless of whether the service is delivered by the public or private sector), notably in refuse and laundry services. However, in other cases, competition has reduced quality in serious ways, even leading to increases in death rates. The message is that incentivization of the delivery of public services is important but delicate. Again, this relates to the nature of the services to be delivered and the team-based, multi-tasking nature of the work, but also it reflects the self-selection of workers into some of these jobs. Where employees care about the delivery of the service and there is donated labour, then organizational form may be as important as the incentive structures. For-profit structures and public-sector structures designed to replicate them may lead to falls in donated labour that offset benefits of incentivization if the latter is pushed too far. In many cases, team-based incentives may be more useful in the public sector, but these are harder to devise and are inevitably somewhat limited in the impact that they can have.

The evidence of privatizing public services is in many respects similar to the impact of incentivization in the public sector. The problem of getting incentive structures right for individuals and organizations in the public sector does not disappear; it is transformed into a problem of regulating a privatized firm. A prime issue in assessing the success of privatization is that one is assessing the regulatory regime that accompanies privatization. Thus, there is a distinction between the privatization of activities that need no specific regulation after

privatization and those where some form of sector-specific regulation is almost certain to be a permanent feature of delivery. Public services tend to fall into the latter category and this is why the evidence on the impact of privatization is more mixed for the latter group. There is also a learning curve as regulation has to bed in. How much further the model of privatization (by which we mean core services transferred to the private sector, where the finance comes predominantly directly from consumers and the state role is primarily regulatory) can be pushed is not obvious. Rail privatization in the UK has displayed the problems of regulating complex industries where safety is a prime issue. In this case, the government directly and indirectly retained some financial control and this muddies the regulatory and incentive structure companies face. Where the government remains the primary direct purchaser, the focus has moved to other models of private provision, notably the PFI model, in which the private sector designs, builds, finances, and operates, and the government buys the service but does not own the physical infrastructure. Whether private finance is cheaper remains a controversial question. There have been successes in reducing construction-cost overruns, but the learning curve elsewhere is slower. A recent NAO report found that PFI prisons include some of the best and some of the worst examples of service delivery. With experience, it should be possible to achieve a better-focused PFI sector. Whether it continues to expand may depend more on political economy than efficiency.

In summary, public services are different from other services, but not to such an extent that they should all be produced in the public sector within a minimum incentive framework—both the public and private sectors have roles to play. However, the motives of those involved in their delivery and the nature of the services make the incentivization process particularly complex and delicate, and so a public sector with incentive structures that are at least as high-powered as elsewhere in the economy is unrealistic and almost certainly sub-optimal. Getting the balance right for each service, whether through contracts with the private sector, employment contracts, or the structure of public organizations, is proving difficult and is currently hampered by a shortage of formal programme evaluation. We are learning rapidly, but there is still a long way to go.

¹ Even in the United States, the public sector accounted for 44 per cent of total expenditure on health care in 2000; in most other OECD countries the proportion is above 70 per cent.

²There is no general agreement on the exact definition of merit goods. We follow Ng (1983) in defining them as goods which individuals choose to consume too little for their own individual welfare. This divorces them from both externality and distributional considerations. An alternative approach is to include merit goods in the social welfare function directly, in addition to individual utility. But as Ng argues, it is difficult to justify the dependence of social welfare on something that has no effect on the utility of any individual.

³The 'inverse care law'—that those in greatest need are least likely to obtain health care—is well recognized even in the UK, where ability to pay is supposedly irrelevant: *The NHS Plan* (Secretary of State for Health, 2000) recognizes that access to care is nevertheless strongly related to socio-economic status.

⁴ Indeed, whether a PFI contract is deemed a public-sector investment commitment or not for accounting purposes depends on the nature of the contract between the government and the private-sector supplier of the building. In particular, **B** must display a transfer of risk to the private sector relative to **A**.

⁵Total government expenditure in OECD countries rose from an average of 28 per cent of GDP in 1960 to a peak of 43 per cent in 1993. Public expenditure on goods and services grew more slowly, from around 15 per cent to almost 18 per cent over the same period; public employment rose from 11.3 per cent to a peak of 15.4 per cent in the mid-1980s.

⁶ PNFCs are publicly owned and controlled (in that central or local government appoints the board of management), but have considerable feedom in decision-making. Examples are the BBC, and nationalized industries, such as the Royal Mail.

⁷ Note that this problem is not specific to the public sector—one suspects that it will be equally severe in private schools.

⁸The 1988 Educational Reform Act and the 1989 White Paper, Working for Patients, mark the first stages of reform.

⁹ Initially, the purchasers were health authorities and fund-holding GPs. After 1997 the Labour government gave the purchaser role to Primary Care Trusts, which are large geographical groups of GPs.

¹⁰For example, the recently established National Institute for Clinical Effectiveness assesses evidence on the cost-effectiveness of different treatments, and hence sets NHS guidelines.

¹¹However, those managing and working in successful agencies may obtain future career benefits when performance measures are published; Dewatripont *et al.* (1999) emphasize the importance of career concerns for provision of incentives in government agencies.

¹²By information rent we mean the ability of regulated companies to use their informational superiority over the regulator to profitable effect.

 13 CCT was replaced by the Best Value programme, under which the Audit Commission monitors local councils using 'Best Value Performance Indicators'.

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Table 1

	Government consumption as a proportion of GDP		Public employment as a proportion of total employment	
	1985	1999	1985	1999
Canada	21.8	18.9	20.2	17.5
France	23.7	23.3	20.5	21.3^{a}
Germany	20.1	19.1	15.5	12.3
Ireland	18.4	12.6	20.2	14.6°
Netherlands	25.0	22.9	15.1	12.2
Spain	15.6	17.4	13.8	15.2
ŪK	21.5	18.5	21.6	12.6
USA	20.8	17.7	14.8	14.6

Notes: a 1997; b 1998. Source: OECD (2001*a,b*).

Table 2 UK Public-sector Employment as a Proportion of Total Employment, 1980–2001

	1980	1985	1990	1995	2001	Change 001–1980
HM forces	1.24	1.24	1.05	0.84	0.69	-0.54
NHS	4.50	4.66	4.22	0.35	0.25	-4.24
Other central government	3.43	3.09	2.68	2.59	2.02	-1.41
Total central government	9.17	9.00	7.95	3.78	2.97	-6.20
Education Social services Construction Police Other local government Total local government Total government	5.75	5.45	4.95	4.34	4.58	-1.16
	1.33	1.43	1.44	1.50	1.28	-0.05
	0.58	0.48	0.39	0.30	0.19	-0.39
	0.69	0.71	0.69	0.76	0.73	0.03
	2.97	3.21	2.79	2.74	2.50	-0.47
	11.32	11.28	10.26	9.64	9.28	-2.04
	20.49	20.27	18.21	13.42	12.26	-8.23
Nationalized industries NHS Trusts Other PNFCs	6.96 0.85	4.31 0.46	2.330.38	1.26 3.96 0.39	0.78 4.06 0.46	-6.18 4.06 -0.39
Total PNFCs Total public sector	7.81	4.77	2.71	5.61	5.29	-2.51
	28.30	25.04	20.93	19.03	17.55	-10.75

Data source: Office for National Statistics (2002).

Table 3
Public Share of Employment by Sector

	Education	Health, social work, and other services	Production, construction, transport, and utilities
1980	93	80	22
1985	88	72	17
1990	77	65	11
1995	64	58	8
2001	63	55	6

Data source: Office for National Statistics (2002).

Table 4
Percentage of Total Expenditure on Welfare Services

	1979/80	1995/6
Financed by the public sector	72	69
Spent on publicly provided services	61	51

Source: Burchardt (1997).

Table 5
Percentage of Public Expenditure Spent on Privately Provided Services

	1979/80	1995/6
Education	29	36
Health	21	24
Personal social services	14	45

Source: Burchardt (1997).