PUBLIC SERVICES: THE RATIONALE FOR GOVERNMENT INTERVENTION

Summary

− markets usually work well, ensuring an efficient allocation of resources between different consumption and investment activities;

− however, there are many circumstances in which market forces, left to themselves, will fail to maximise economic and social welfare and, as a consequence, there will be a case for Government intervention;

− there are efficiency, equity and ethical arguments for Government intervention, though since Government intervention has costs as well as benefits none of them is a sufficient reason for intervention;

− the efficiency arguments for Government intervention include: the existence of public goods, externalities, imperfect competition and imperfect information;

− the efficiency arguments for Government intervention most relevant to public services such as health and education are externalities, imperfect competition and imperfect information;

− imperfect information is particularly important not only because it may contribute to imperfect competition, but because it may undermine the efficient functioning of insurance and capital markets on which efficient provision of health care and education depend. As a consequence, health insurance may not be available at any price, for example, for high cost medical conditions of uncertain likelihood;

− there are a range of equity arguments for Government intervention including vertical and horizontal equity; social inclusion and intergenerational equity.

− cash benefits are to be preferred to benefits in kind as a means of redistributing income unless there are merit good, political economy or access arguments for using benefits in kind;

− ethical considerations may also lead to Government intervention. For ideological reasons (beyond the scope of this note), some people may be averse to market provision of health care or to the involvement of profit-making providers. Others may not wish to see markets operating (however economically efficient) in for example human blood, human organs or human embryos.

Introduction

1. Politics has clearly played (and continues to play) a key role in determining the respective roles and sizes of the public, private and voluntary sectors. But, in recent decades (particularly following the failure and collapse of the former planned economies of Eastern Europe and the former Soviet Union), there has been a presumption that markets are generally:
the most efficient mechanism for allocating resources between different activities (both consumption and investment); and

the most effective mechanism for creating and increasing national income.

2. There is, nonetheless, a substantial and well-established body of theory and evidence which suggests:

− there will be many circumstances in which market forces, left to themselves, will fail to maximise economic and social welfare; and, as a consequence,

− there will be a case for Government intervention.

3. The following sections of this note therefore:

− discuss in general terms the main arguments for Government intervention in the operation of markets, including whether they are a necessary or sufficient condition for Government intervention; and

− set out the more specific and detailed arguments for Government intervention, focusing particularly on those that are or may be relevant to Government intervention in the provision of services such as health and education.
General arguments for Government intervention

4. In general terms, there are three main arguments for Government intervention:

- **efficiency arguments** i.e. there are *market failures* which result in inefficiencies in the allocation of resources. These inefficiencies mean the mix of goods and services produced across the economy as a whole diverges from the mix that would best meet consumers’ preferences (as expressed by their willingness and ability to pay) in the absence of any market failures;

- **equity arguments**, including distributional considerations of various kinds (see below);

- **ethical arguments** i.e. there may be *boundaries* to the role to be played by markets irrespective of the efficiency of markets in allocating resources.

5. None of these arguments is, however, a sufficient case for Government intervention. Government like the market is imperfect and so may be characterised by Government failures. Government intervention and its associated financing also generally have costs as well as benefits. So, in any particular case, it is important to weigh up the cost and benefits of both intervening and not intervening in deciding whether or not Government intervention is desirable.

Efficiency arguments for Government intervention

6. There are a number of reasons why markets may fail to deliver economically efficient outcomes.

(i) **public goods**

7. In some cases there may be a total absence of market arrangements for providing certain goods and services. In particular, markets are likely to be missing for “public goods” which, in their purest form, have a number of distinguishing economic characteristics:

- the impossibility (or very high cost) of excluding people who do not pay;

- non-rivalness in consumption i.e. one’s person’s consumption of the good or service in question does not diminish the ability of other’s to consume it;

- following from the non-rivalness in consumption, a marginal cost of producing an additional unit of the good or service of zero (or close to zero) which means market providers have no incentive to supply the good or service concerned (given economically efficient prices will be based on marginal costs in competitive markets).
8. Examples of public goods in this strict economic sense include: national defence; many police services; public and environmental health; and scientific and other knowledge. In some cases, the public good problem can be overcome by establishing appropriate property rights e.g. intellectual property right protection enables private producers to capture sufficient returns from investment in scientific and other knowledge to supply goods and services which consumers would otherwise be denied.

9. None of the major public services with which this note is concerned – i.e. health care and education - is a public good in the strict economic sense since (e.g.) those who do not pay could be excluded and there is clearly rivalness in their consumption.

(ii) externalities

10. Markets will only work efficiently if producers and consumers bear the full costs of their production and consumption decisions and are fully rewarded for the benefits arising from their production and consumption decisions.

11. If producers and consumers impose costs on others for which they don’t pay (external costs), the result will be excessive production and consumption of the goods and services concerned. The classic example of this is a firm that pollutes the atmosphere as a consequence of its production methods but does not compensate those affected by the pollution.

12. On the other hand, if producers and consumers generate benefits for which they are not rewarded (external benefits), the result will be a shortfall in the production and consumption of the goods and services concerned. For example, a farmer that maintains hedgerows may enhance the beauty of the area for both visitors and non-visitors alike. But, in the absence of some reward, the farmer may under-invest in activities generating such wider environmental benefits.

13. In principle, externalities (whether costs or benefits) could be addressed by the appropriate definition of property rights. In practice, the transaction costs of defining and enforcing appropriate property rights may make this untenable. Instead, the existence of externalities is used to justify taxes on activities that generate external costs and subsidies to activities that generate external benefits.

14. The externality argument is often used to make the case for subsidies to public services, such as education and health. However, the strength of the argument may not be as strong as it might first seem:

- in the case of education, the wider economy and society clearly benefits from having a literate and numerate population in terms of productivity at work and social inclusion. But the evidence suggests that the higher the level of education, the higher the private returns and the lower wider external benefits;

- similarly, in the case of health. Preventative and primary care that stops the spread of infectious diseases clearly has benefits to the wider community
as well as the private individual but the benefits of other forms of health care may be largely private.

(iii) imperfect competition

15. Markets will not deliver economically efficient outcomes in the absence of effective competition. Where markets are imperfectly competitive, the output of goods and services will be lower and the prices of goods and services higher than they would be in competitive markets. Imperfect competition may also weaken incentives for innovation affecting the future supply of new goods and services.

16. In principle, markets for health care and education ought to be highly competitive. There are large numbers of both suppliers (GPs, hospitals, schools etc) and consumers. But, in practice, market entry may be restricted by professional regulation and, in some cases, by the high capital costs of start-up. Competitive markets also depend on consumers being able to make informed choices between different suppliers as well as the absence of monopolistic market structures. The capacity of consumers to make such informed choices may however be severely constrained in markets such as health care. Imperfect information may also provide other rationales for Government intervention in public services, such as health care and education, as the following sections will explain.

(iv) imperfect information

17. Imperfect information can affect the efficient functioning of markets such as health care and education both directly and indirectly.

18. The direct effect arises from the deficiencies in the information available to consumers. Markets generally work best:

- the better informed are consumers;
- the lower the cost of obtaining information;
- the easier it is for consumers to understand the available information; and
- the lower the costs of choosing wrongly.

19. Most goods and services arguably meet these criteria or can do so with modest Government interventions to regulate information flows. Health care is seen as a significant exception because:

- individuals are generally ignorant about the types of treatment available, the appropriateness of different treatments for their condition, the likelihood of success of different treatments etc etc;
- the information is technically complex and not easy to obtain at low cost;
- if an individual’s condition is acute, there may not be time to shop around;
consumers lack in any case the information to weigh up one doctor’s advice against another’s; and

the costs of mistaken choice can be high.

20. The asymmetry of information between the patient and the medical profession weakens the competitiveness of the market and, *prima facie*, creates a case for Government intervention.

21. Imperfect information may affect the efficient functioning of educational markets less severely. In contrast to health, the market might develop good sources of cheap information about schools to help parents make informed choices e.g. school league tables, good schools guides etc. However, the extent of imperfect information about educational opportunities and about the qualities of different schools may vary between socio-economic groups. Thus, parents with little education may have less information about the benefits of education than better educated parents.

(v) *failures in insurance markets*

22. The *indirect effect* of imperfect information arises from its impact on markets allied to markets for health care and education. An individual’s health care expenditure over his/her lifetime is unpredictable but may involve substantial outlays. In the absence of Government intervention, the ability to finance these outlays will depend crucially on the efficient functioning of insurance markets. But, for various reasons, largely arising from imperfect information, *insurance markets* may fail to function efficiently.

23. By contrast to health care, education expenditure is much more predictable. But the sums involved over a lifetime may be large and, in the absence of Government intervention, the ability to fund these outlays may depend crucially on the efficient functioning of *capital markets* and their willingness to lend to individuals against their human capital (i.e. future income streams).

24. The efficient functioning of insurance markets depends on a number of conditions being met:

- the probability of the insured event occurring for any individual must be independent of that for anyone else;

- the relevant probability must be known or estimable. Insurance addresses risk but cannot cope with certainty or uncertainty; and

- there needs to be a symmetry of information between the supplier of insurance and the consumer.

25. These conditions are unlikely fully to be met in the case of health insurance for a number of reasons:

- communicable diseases, such as AIDS, are not independent insurable events;
− conditions which it is known will occur cannot be insured because the risk cannot be pooled. Advances in genetic screening which increase certainty may in future reduce the range of medical conditions for which health care insurance can be obtained. Similarly conditions which are highly uncertain (perhaps because they may take place many years in the future) may be uninsurable because the risk and thus the premium cannot be calculated. Health insurance does not in general cope well with high cost medical conditions of uncertain likelihood. Indeed there may not exist a market for health insurance in such conditions;

− there are in practice various asymmetries in the information available to suppliers of insurance and consumers. These asymmetries give rise to two problems:
  − *adverse selection*: consumers who know they are a greater risk are more likely to take out insurance than consumers who know they are a lower risk. If suppliers of insurance cannot differentiate higher risk from lower risk customers, the average costs of premiums will rise and low risk customers will find they cannot get cover at a price commensurate with their risk.
  − *moral hazard*: if consumers and their medical advisers know their medical costs will be covered by insurance, they may exercise less economy in consuming health care causing the general level of health insurance premiums to rise above economically efficient levels (despite co-insurance and other incentive mechanisms insurers might use to contain costs). Since there is an asymmetry of information between the medical practitioners and the suppliers of insurance, this market failure is not easy to correct.

26. Alongside externalities, these failings in insurance markets, induced by imperfect information, provide a rationale for Government intervention to fund (though not necessarily provide) health care on efficiency grounds.

**(vi) capital market failures**

27. The efficient functioning of capital markets, like insurance markets, depends on good information. Lenders need good information about expected returns to education for different individuals if they are to lend to finance an individual’s education, given the variability of returns. Since this information is lacking, individuals cannot in general borrow to pay for their education against their future earnings.

28. The consequence of this capital market failure, induced by imperfect information, will be under-investment in education. Alongside externalities, it provides a rationale for Government intervention to fund (though not necessarily provide) education through a mix of grants and loans on efficiency grounds.
(vii) myopia

29. Because of externalities, imperfect information, risk, uncertainty and failures in key markets, such as capital markets, individuals and private organisations may have shorter time horizons and higher discount rates than society as a whole – particularly in relation to actions affecting future generations. This may justify interventions in (e.g.) markets for education because of their importance for future generations.

**Equity arguments for Government intervention**

30. Economic efficiency arguments are not the only, or often the main, reason for Government intervention. Equity considerations are also important, though to what extent involves a political judgement.

31. Equity arguments for intervention take a number of forms:

   - **vertical equity** i.e. the redistribution of income from richer individuals and families to poorer individuals and families;
   
   - **horizontal equity** i.e. individuals and families with similar needs should be treated similarly e.g. in terms of access services such as health care and education;
   
   - **social inclusion**. This is closely linked to vertical and horizontal equity but implies everyone should have access to income, opportunities and services, which allow them to fully participate in the life of the society in which they live;
   
   - **intergenerational equity** i.e. balancing the needs of current and future future generations;
   
   - **the interdependency of economic efficiency and equity**. For clarity of exposition, this note has clearly distinguished between efficiency and equity arguments for intervention. In practice, the two may not be independent. Problems of poverty, social exclusion and inequalities may undermine the efficient functioning of markets because of resulting social tensions, loss of trust, disaffection and apathy, which may manifest itself in an erosion of social capital.

32. Such equity arguments do not, however, necessarily constitute a case for direct Government intervention in markets for health care or education. If individuals and families are poor, the solution may be the redistribution of income through *cash benefits* rather than benefits in kind such as health care and education. Cash benefits allow individuals and families to spend their income in the way that they judge is in their best interest.

33. Arguments for redistribution through *benefits in kind* include:
– “merit good” arguments where society judges it can make better informed consumption decisions than individuals. Thus, parents cannot choose not to send their children to school. However, this does not imply public provision of schools since vouchers or other devices could be used to restrict the services on which redistributed income can be spent whilst leaving parents choice over the school to which they send their children;

– political economy arguments. These are closely linked to the merit good argument. Redistribution may be more acceptable to the better off if it leads to improvements in, say, the health care and education of the less well off as opposed to increased expenditure on alcohol and tobacco;

– improving access. Lack of income is not the only dimension of poverty. Individuals and families may face barriers to services such as health care and education because of imperfect information or for other reasons. Redistribution in kind – including the absence of charges at the point of consumption of the service - may be an effective means of overcoming such barriers, though is not inconsistent private and voluntary as well as public sector provision.

**Ethical arguments for Government intervention**

34. Ethical arguments for Government intervention arise where there are perceived to be boundaries to the role that markets should play. However economically efficient markets may be, there are some things that society may not wish to see bought and sold. For some people this may be an ideological matter (beyond the scope of this note) in that they believe it is wrong as a matter of principle that key public services, like health care, should be bought and sold or that profit-making providers should be involved in their provision.

35. Others may take a narrower perspective preferring there not to exist markets in specific areas of, say, health care such as human blood, human organs and, in more recent years, human embryos.

Performance and Innovation Unit
August 2001