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COMPETITION IN PUBLIC MARKETS

Paper by Allan Fels and Darryl Biggar

-- Session V --

7-8 December 2017

This paper by Allan Fels AO (Professor, University of Melbourne, Monash & Oxford and former Chair of the Australian Competition and Consumer Commission) and Darryl Biggar (Special Economic Advisor of the Australian Competition and Consumer Commission and the Australian Energy Regulator) was submitted as background material for Session V at the 16th Global Forum on Competition on 7-8 December 2017.

The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

More documentation related to this discussion can be found at www.oecd.org/competition/globalforum/public-markets-competition.htm

Please contact Ms. Lynn Robertson if you have any questions regarding this document

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Choice, Competition and Markets: Education, Health Care, and Public Services

-- Paper by Darryl Biggar[1] and Allan Fels[2] --

This background note has been prepared by Dr Darryl Biggar and Professor Allan Fels for discussion at the Meeting of the Global Forum on Competition on 7 December 2017.

1. Introduction

1. Across the OECD there is widespread acceptance that, in most sectors of the economy, open competitive markets deliver broadly desirable economic outcomes. Over the last twenty years most OECD countries have engaged in pro-competitive reforms designed to improve competition across a wide range of sectors.

2. But a few sectors have remained largely untouched by pro-competitive reforms, including education, health care, and many other public services. Despite widespread recognition of the benefits of competition in general, in these sectors competition is often neglected or, in some cases, actively suppressed. For many consumers of these services the government is the sole feasible supplier.

3. At the same time, the quality and efficiency of such services is of primary importance. Access to quality education and healthcare are essential inputs into leading a productive, fulfilling, and satisfying life. OECD governments spend large amounts of money providing education and health care. These sectors account for around 13% of GDP and around 18% of public expenditure in OECD countries, so value for money is also of critical importance.[3] As the scope for further policy improvements diminished, governments are showing increasing interest in reform in education and health care. In Australia a recent report by the Productivity Commission notes:

> *"Health and education are expanding their share of the Australian economy. Moreover, they are directly under the control of governments. Delivering them much*

[1] Darryl Biggar is the Special Economic Advisor (Regulatory) of the Australian Competition and Consumer Commission and the Australian Energy Regulator. The views expressed in this paper are the views of the authors and do not reflect the views of the ACCC or the AER.

[2] Prof Allan Fels is Professor of Government and the Australia New Zealand School of Government and former Chairman of the Australian Competition and Consumer Commission. The authors would like to thank David Cullen (Principal Economist at the National Disability Insurance Agency) for contributing the section on the operation of the National Disability Insurance Scheme (NDIS). The authors would also like to thank Chris Pike, Nicholas Barr, and Vicki Wilkinson of the Australian Treasury for providing helpful comments.

[3] Education: (primary and secondary, excluding tertiary) 8.0 per cent of public spending and 3.7 per cent of GDP; Health (total public and private) around 9.5 per cent of central government spending and around 9.0 per cent of GDP, source: OECD.

more efficiently, and with a serious focus on what improves outcomes for the users of these services, will deliver bigger benefits than even traditional industry reform."[4]

4. Many OECD countries share these concerns that these sectors are not meeting consumer's needs, and are not sufficiently responsive to changing customer desires.

5. Is there scope for greater reliance on choice and competition in these sectors to drive efficiency, innovation, and customer responsiveness? To what extent can we harness the forces of competition to improve performance in these sectors? Is there something about these sectors which limits the extent to which we can rely on competition to achieve desirable outcomes? Competition authorities across the OECD have a strong track record in advocating for pro-competitive reform in many other sectors. To what extent do those same principles apply here?

6. This paper explores the extent to which we can rely on competitive forces to drive desirable outcomes in government-subsidised services: education, health care, and other public services. This paper seeks to identify the underlying public policy issues which determine when reliance on competition may be feasible, and when it will not. What sorts of reforms should we consider in these sectors and what issues are likely to emerge?

7. As we will see, although education, health care, and other public services differ from each other in important ways, the presence of significant government subsidies gives rise to a common set of issues. Conventional competitive markets give rise to high-powered incentives on providers to deliver services efficiently and to meet customers' needs. In contrast, in government-subsidised markets, while it is sometimes possible to develop such high powered incentives through "fixed-price" contractual arrangements, problems can arise of cream-skimming (described further below), and, in some cases, shading of service quality. As we will see, switching to low-powered incentives can reduce the significance of these problems, but is likely to be incompatible with choice and competition. The tension between these trade-offs lies at the heart of issues of competition in all heavily-subsidised services.[5]

8. There are several points worth emphasising at the outset:

- First, these are sensitive sectors which are often ideological touchstones. The intention of this paper is not to blindly advocate for privatisation, deregulation, or the implementation of market-driven outcomes in these sectors. Echoing the words of the Australian Harper Review, we wish to stress that the approach in this paper:

  "should not be seen as bolstering simplistic arguments for privatisation or contracting out of public services, nor giving comfort to a philosophy of 'private good, public bad'".[6]

  Rather, the intention of this study is to carefully understand the rationale for government intervention and the scope for choice and competition in these sectors, so as to discern the extent to which choice and competition can play a role in improving overall outcomes. The intention here is not to undermine or question legitimate public policy objectives, but to determine the extent to which choice and

[4] PC (2017), page 8.

[5] Including services which are funded by third-parties, such as services funded by private health insurance.

[6] Australian Government (2015), page 224.

competition can improve outcomes consistent with those objectives. While choice and competition will be appropriate for some services (such as the purchase of a pair of shoes) it may be less desirable where, for example, the costs of making a bad choice are severe and the costs of becoming informed are substantial.[7]

- Second, this project focuses on the scope for choice by individual end-consumers between alternative services (that is, "competition in the market"). There are other forms of competition, such as competitive tendering by the government for the right to provide a service ("competition for the market"). Competitive tendering or "contracting out" is an important tool for strengthening incentives for efficiency and performance, and should form part of the overall toolkit for public sector governance. Competitive tendering has been well studied by various parts of the OECD, including the Competition Committee[8], and will not be the focus of this paper.
- Third, the questions tackled here form part of the broader question of how to improve the quality, effectiveness, efficiency, and responsiveness of public services. Choice and competition is potentially only one mechanism to ensure the effectiveness and efficiency of public services. There are other mechanisms, such as through improved public sector governance mechanisms, enhanced customer consultation and engagement, and improved democratic accountability mechanisms. These mechanisms are complementary to the policies discussed in this paper and should form part of the overall public policy toolkit; again, however, for reasons of scope they will not be considered further here.
- Finally, there is a large literature on the role of competition and choice in public services. It will not be possible to comprehensively survey this literature in this paper. This paper only seeks to set out some key principles and ideas. These ideas, or their application in specific sectors, could be the subject of further detailed enquiries. We merely seek to identify core issues so that we can make the first step of this process of exploration in the right direction. Amongst other things, we will not spend much time on the competition law enforcement issues which arise in these sectors. As policy steps are taken to enhance choice and competition, competition law enforcement issues naturally arise. These are discussed briefly in section 5.

9. This paper has been prepared to promote discussion at a meeting of the OECD's Global Forum on Competition. The Global Forum on Competition brings together competition officials from over 100 authorities and organisations around the world, including both developed and developing countries. The examples and case studies set out in this paper draw primarily on OECD country experiences; however we consider that the issues discussed here and the lessons learned may also be relevant to developing countries as they seek to get the best value from their public services and to improve the overall education and health outcomes for their citizens.[9]

[7] These caveats were suggested to us in an email from Nicholas Barr.

[8] See, for example, OECD Competition Committee Roundtable on Competition and the use of tenders and actions (2015), and the OECD Public Management division publication Contracting out Government Services, January 1998.

[9] As an illustration, the Asian Development Bank (ADB) is carrying out a technical assistance project in China on "Enhancing Competition in Public Service Delivery". The World Bank has recently completed a major review of the health system in China, which is forecast to expand from 5.6 per cent of GDP in 2014 to over 9 per cent in 2035. Policies to maintain or enhance competition may assist in ensuring value for money.

10. This paper is organised as follows. There are four main sections. The next section looks at the economic theory of choice and competition in the presence of government subsidies. This section introduces some common principles which are applied in the subsequent sections. The next three sections discuss the application of these principles to education, health care, and other public services in turn.

2. Background Theory

11. Before considering the issues involved in promoting competition in education, health care, and other public services, it is useful to review some relevant economic theory. We hope that the reader will persevere with this material before perhaps understanding its application in the sections which follow.

12. Education, health care, and other public services differ from one another in many fundamental characteristics. But, for our purposes, they have one important characteristic in common: the government[10] plays a central role as a major *funder* of the services. Almost all of the key issues that arise when seeking to promote competition in these services can be traced back to this central characteristic.

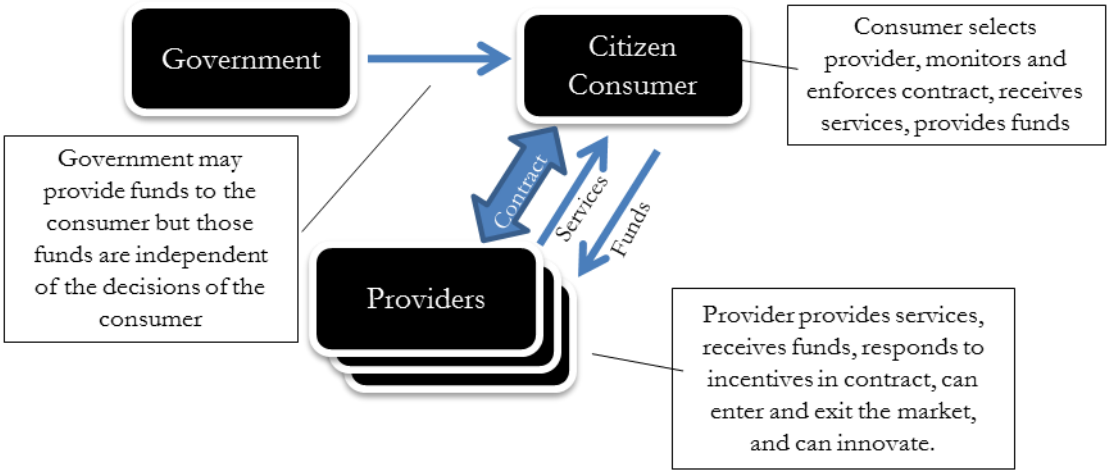
13. To understand the central impact of government subsidies, let's consider first a conventional economic market without any external subsidies. This is illustrated in Figure 1 below. In a conventional economic market, the consumer/citizen chooses from a range of alternative suppliers. The consumer may enter into a contractual arrangement with the supplier. The supplier provides services under the terms and conditions of that contract. The consumer is likely involved in monitoring and enforcing the contract for services, and is responsible for the payment of any funds in exchange.

14. As illustrated in Figure 1, in such a market the government may still choose to be a major provider of funds (which we can loosely call subsidies) provided the funds provided to an individual customer are independent of the consumption decisions of the customer. As we will see later, direct provision of funds in this way is one of the many ways that governments subsidise end-consumers (particularly for income-support-type payments), and is compatible with conventional types of competition.[11]

[10] Here, for the absence of doubt, we include all layers of government – federal, state, regional, and municipal.

[11] In practice, as we will see, even though governments provide some funds through direct transfers (these tend to be income support payments), in many cases governments will limit the range of goods and services which can be purchased with specified funds (see, for example, the discussion of the NDIS in Australia in Box 2). This remains compatible with conventional types of competition provided the subsidy funds can be used to purchase a reasonably-wide range of different services.

Figure 1. Contractual arrangements in a conventional competitive market



15. In this world, provided the market is relatively competitive, the contractual arrangements between the consumer and the service provider are usually relatively simple and short-lived. If the consumer is dissatisfied with the service, the consumer can, in principle, switch to another service provider at the end of the current contract.

16. Importantly, provided:

1. there are an adequate number of alternative suppliers;
2. the competing suppliers respond to financial incentives (e.g., they seek to maximise their economic profit)[12] and are able to enter the market and expand production when doing so increases their financial incentive;
3. the customer[13] has the information necessary to make an efficient choice; and
4. the customer is willing and able to make a choice of supplier that best meets his/her needs,
5. then it follows that the customer's choice of supplier gives rise to what are known as "high powered" incentives for efficiency and responsiveness on the part of the suppliers. The greater the effort the supplier directs at meeting the needs of the customers, the more customers it attracts and therefore the more revenue it receives. Since the incremental revenue from each additional sale typically exceeds the incremental cost, the supplier has a strong incentive to increase sales. Conversely, if the supplier reduces its effort at providing quality services relative to other service providers, it will lose customers, reducing its revenue, and its profit. This sensitivity of the profit of the service provider to the effort it directs at

[12] There are important questions about the incentives and objectives of for-profit, not-for-profit and government-owned firms. These issues are discussed a little further in section 3.2 below, but are mostly outside the scope of this paper. One interesting question is whether financial incentives crowd out other desirable altruistic, noble, or reputational objectives.

[13] In the case of education or for some health services the customer (i.e., the student or the patient) is not the person responsible for choosing and/or paying the service provider – instead this falls on the parent or guardian. In this case the parent or guardian must be informed and able and willing to make the best choice on behalf of the individual.

desirable outcomes (i.e., providing quality services that meet the needs of customers) is characteristic of high-powered incentives.

17. In this world, providers which do not attract sufficient customers to earn a normal return on investments will typically be forced to exit the market, either through bankruptcy or the market for corporate control. In this way, efficient, responsive, innovative firms thrive and expand in the market, whereas inefficient or unresponsive firms are forced to exit. Over time the average productivity and effectiveness of suppliers in the market improves.

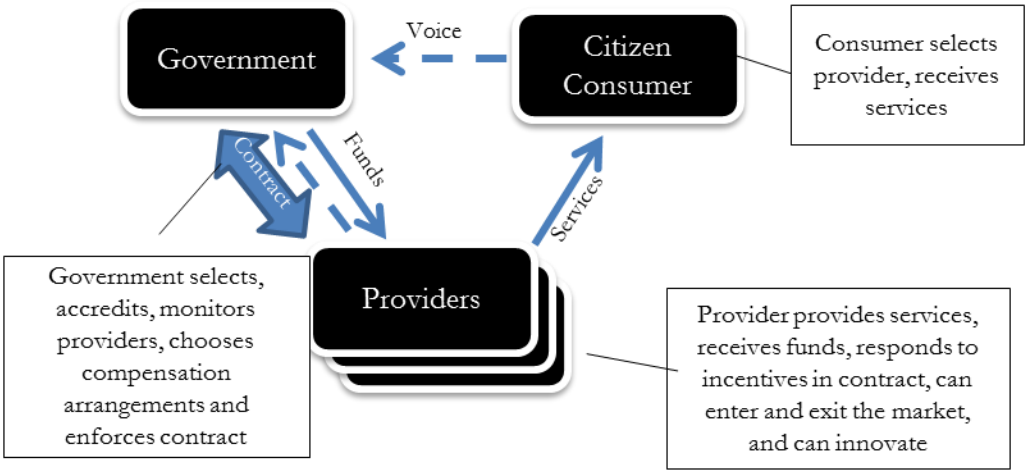
18. These desirable outcomes from competition can in principle be sustained as long as the end-customer can use any government subsidy or funding to purchase a range of different services. But it is far more common in practice for the government to tie the payment of a subsidy (such as a subsidy for health or education services) to the purchase and provision of a particular service.[14] We will focus on the case in which the government subsidy is quite large relative to the total cost of the service.[15] This is the typical case for most education and health services. However, we do not rule out the possibility that the consumer may still contribute a component of the total funds for each service (also known as a customer contribution or co-payment).

19. The diagram in Figure 2 below illustrates the case in which the government provides all of the funds for a particular service chosen and consumed by the end-customer. The government, as the provider of funds, is likely to require some accountability for the use of those funds. This is reflected in the diagram below in the form of a contractual relationship between the government and the service provider (in some cases the government will directly own the service provider, replacing this contract with a vertical integration relationship). That contract may set out requirements regarding the quality or the quantity of services to be delivered. There are likely to also be obligations on the service provider to the government, such as reporting obligations. The government may also be involved in selecting (licensing or accrediting) which providers may provide services or which may qualify for subsidies.

[14] Typically government funding is linked to services in the following sense: if I attend a government-funded school, the government may pay a certain amount to the school so that I may receive education at low or no cost. But if I do not attend a government-funded school I typically cannot take those funds and spend them on, say, health care.

[15] In the case where the government subsidy is relatively small, so the bulk of the funds are provided by the end-user, it may still be possible to provide a subsidy without undue distortion of the normal forces of competition. This is not the typical case for health and education.

Figure 2. Contractual arrangements in a government-subsidised market

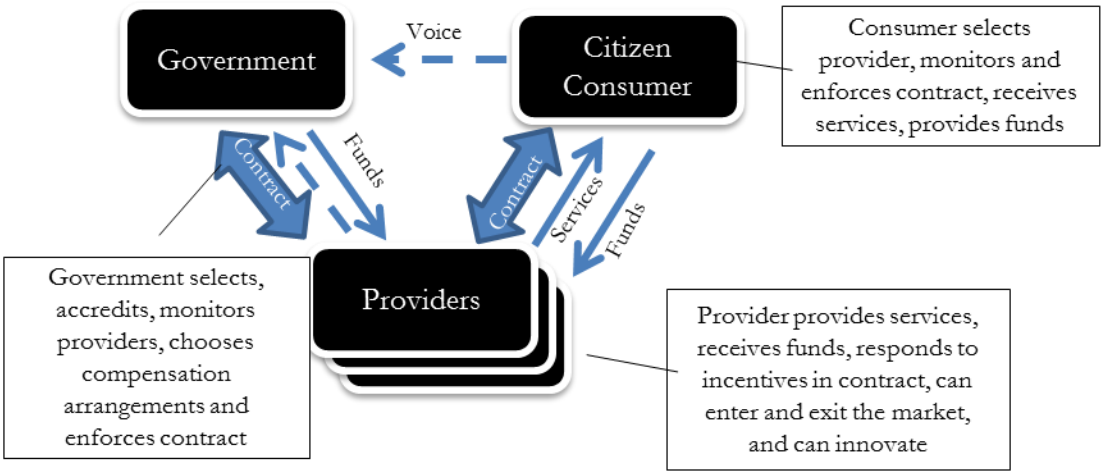


20. The role of the consumer and the government is now quite different. The consumer may select a service provider and will receive the corresponding services. In this case the consumer is not facing the full cost of the services provided and therefore (in the absence of further interventions) the consumer does not see the need to make trade-offs as to the quality of the services, or the volume of services consumed. The consumer has an incentive to select the service provider offering the greatest quality or quantity of services, regardless of the cost. The government, on the other hand, has strong incentives to become involved in regulating the flow of services, perhaps in selecting the range of service providers, in setting and enforcing maximum or minimum quality standards, and in designing, monitoring and enforcing contractual arrangements.

21. The range of alternative suppliers available to the consumer may be limited by the government. However, as long as there remain a range of alternative providers, the consumer may retain the option to switch provider. If the consumer is not happy with the services provided she may switch to another service provider. Alternatively, the consumer may seek to influence the government through either complaint procedures or through normal democratic accountability procedures – indicated on the diagram above as the dashed arrow labelled "voice".

22. Figure 2 illustrates the extreme case where the "funding" role of the end-consumer is completely separated from the "consuming" role. Figure 3 below illustrates the more general (and perhaps more typical) case in which *both* the government and the consumer contribute funds to the service provider. In this case both the government and the consumer have an incentive to enter into contractual arrangements setting out the obligations of the service provider; both the government and the consumer have an incentive to monitor and enforce those contractual arrangements.

Figure 3. Contractual arrangements in a competitive market with funds provided by both government and consumers



23. Importantly, in this case the incentives on the service provider for efficiency and innovation depend on the *total* funds received by the service provider – that is the funds provided by both the government *and* the customer. Those total funds could depend on factors such as the volume of services it provides, the quality of the services it provides, or the costs it incurs in providing those services.

24. It is possible to envisage a range of quite different contractual incentive arrangements on the service provider. We will consider two extreme cases:

- Where the service provider receives a **fixed fee** per service performed. As we will see this provides high-powered incentives on the service provider and is consistent with choice and competition, but has various associated problems.
- Where the service provider is compensated for the costs it incurs. We will refer to this as a **cost-reimbursement contract**. As we will see, this provides low-powered incentives on the service provider and is not compatible with choice and competition. Nevertheless, it is often chosen for the reasons set out below.

2.1. Fixed-fee reimbursement, competition, and the associated problems

25. One possible approach to the provision of government-subsidised services is to design the contractual arrangements on each service provider in such a way that the service provider receives a fixed fee, determined in advance, for each service provided. The fixed-fee-per-service contract can be combined with customer choice. Specifically, the fixed fee can be paid to the service provider chosen by the customer.

26. This model involving a combination of a fixed-fee (set in advance) and customer choice of provider mimics some of the elements of the competitive market discussed above. Specifically, provided the fixed-fee exceeds the incremental cost of providing service, the service provider retains strong incentives to attract additional customers. The service provider therefore retains an incentive to adapt and adjust its service offering and quality of service to better meet the needs of customers. Although an individual service provider facing a fixed fee would have an incentive to cut service quality, competition between service providers ensures that each has an incentive to offer a quality which

matches the desires of customers. The service provider also has an incentive to innovate and to be responsive to the changing needs of customers, in order to attract customers. At the same time the service provider has strong incentives to keep its costs down, to produce as efficiently as possible. These are all desirable outcomes.

27. However, at the same time, a high-powered incentive has certain potential problems. The most important problem is referred to as **cream-skimming**. Cream-skimming arises from an underlying problem of information asymmetry: In many cases, the cost of providing a service of a given quality varies widely from one customer to the next and, moreover, the service provider is often in a position to observe that cost more easily than the government who sets the fixed fee. Service providers therefore have another strong incentive – not just to provide quality and to reduce expenditure – but an incentive to identify and serve only the customers with the lowest cost to serve, while denying service to customers with a higher cost to serve.

28. These problems arise wherever the identifiable customer costs vary by more than the size of the fixed fee reimbursement. This is plausible in many circumstances. For example, let's suppose an individual has a heart attack. The cost of restoring that individual to a reasonable level of health depends on a wide range of factors including the age, overall state of health, co-morbidities (such as diabetes), previous history of heart conditions, and lifestyle. The variation in the cost of providing this health service from one individual to the next could be substantial. If a health provider is offered a flat fee for service, the provider will have a strong incentive to actively seek out lower-cost-to-serve customers will denying service to those with the highest cost-to-serve in each class.

29. Similar considerations apply to education. The cost of reaching a given level of education depends on factors such as whether the child is a native English speaker, the level of parental education, number of books in the home, lifestyle, and so on. Some children will require substantially more investment to achieve a given level of education than others.[16] An education provider offered a flat fee for service has an incentive to seek out the lowest-cost customers and deny service to those who are the higher costs in each class.

30. This problem of cream-skimming arises when the service provider is in a better position to identify higher-cost customers than the government. A service provider will typically have direct contact with the end-customer, putting it in a much better position to assess the likely cost of providing a service of a given level of quality than the government who is merely providing the funds. No matter how narrowly the funding classes are defined, as long as the service provider is able to prospectively identify higher-cost customers within each class, the problem of cream-skimming remains. The service provider retains a strong incentive to compete vigorously to identify and attract customers with a lower-than-average cost to serve and to identify and deny service to customers with a higher-than-average cost to serve. Allowing customers to choose their service provider does not help, and may aggravate this problem. Competition sharpens the incentive on service providers to identify and discriminate against higher-cost customers.

[16] The OECD observes that "… there is much evidence showing that students' background has an impact on their academic achievement, and this is the case across OECD countries. Figure 1.3 shows that students with low parental education, low socio-economic status, first or second generation immigrant background, as well as boys have higher risk of low performance". OECD (2012).

31. This problem of asymmetric information and discrimination may be addressed in a couple of different two ways. The most straightforward approach is to simply prohibit service providers from discriminating amongst customers. In fact, it is common for government-subsidised service providers to have a positive obligation to accept all customers. However, the incentive to discriminate remains strong and profit-maximising service providers are likely to find ways to discriminate in a range of subtle and not-so-subtle ways. Addressing these incentives is likely to result in a whack-a-mole problem, as service providers innovate to find new ways to select out low-cost customers, and decline service to high-cost customers.

32. The alternative approach is to reduce the size of the information asymmetry. This might be achieved by identifying key characteristics of the customers which affect their cost-to-serve, and assigning those customers into more and more tightly specified categories or groups. Ideally, the customers in each group would have a similar *ex ante* expected cost to serve. As we will see later, this is common practice in the health care sector, where setting different fees for different classes of customers has become a highly refined practice (some countries have identified many thousands of different customer/service fee classes).[17]

33. But, although this approach mitigates the problem, it does not eliminate it entirely. The only way the government can guarantee that all customers will be served is by raising the size of the fixed fee for each group to a level which reflects the *highest possible* cost for any consumer in the corresponding customer/service group. This means that the government will pay an amount which is above (and possibly substantially above) the average cost for providing service to this group of customers. The additional cost (above the average cost) which the government must pay to prevent cream-skimming is known as the **information rent**.

34. There is a second potential problem with high-powered fee-for-service contractual arrangements. In the case of all subsidised services, the final consumer does not pay the full cost of the services and therefore has an incentive to consume even when the private benefit falls short of the full social cost. A fixed-fee-for-service arrangement makes this problem worse. As long as the fee exceeds the marginal cost of the service provider, the service provider has an incentive to use whatever mechanisms it has at its disposal to induce additional sales, even when the ultimate benefit to the customer is marginal or even negative. We could express it like this: The end-consumer and the service provider have an incentive to collude to extract rent from the government. This is sometimes known as the problem of **over-servicing**. The problems that arose in the education sector in Australia from this problem are described in Box 1 below.

35. The problem of over-servicing can be addressed through contractual restrictions on which services qualify for a subsidy. However, these restrictions are sometimes difficult to enforce – in some cases, the government relies on the service provider to not just provide services but also to determine what services are required. This gives rise to a conflict of interest on the part of the service provider. The problem of over-servicing can also be mitigated by moving away from high-powered incentives. These issues are discussed further below.

[17] But even this can be very difficult for certain medical conditions. One study found that in the case of outpatient mental health services, the results "provide no reason to anticipate that … selected variables thought to be associated with prognosis will help predict the costs of most outpatient mental health care". Wood and Beardmore (1986).

36. There is a third potential problem with high-powered incentives which should be mentioned: In a few markets the allocation of services that arises in a competitive market may be in conflict with other government objectives.

37. As we have noted earlier, in most OECD countries the vast majority of goods and services are allocated to consumers using competitive markets. Consumers with greater resources are usually able to acquire more goods and services than consumers with fewer resources. For example, consumers with greater wealth are usually able to purchase more housing, entertainment, restaurant dining, or travel, for example. This tendency for richer consumers to purchase more goods and services than poorer consumers is mitigated somewhat by progressive taxation. But, on the whole this outcome is accepted – consumers with greater resources end up consuming more goods and services.

38. However, there are a few goods and services for which there is a belief that those goods and services should not be allocated according to the income or wealth of the end consumer. As we will see later, "equality of opportunity" is seen by some as a desirable characteristic of a society. Where equality of opportunity is seen as important, it follows that what we might call "opportunity-creating goods and services" should not be allocated according to the wealth of the consumer (or the consumer's parents). This applies particularly to goods and services which are most closely related to promoting the "life chances" or opportunity for advancement of the end-consumer.

39. As we will see below, the desire to promote equality of opportunity is one of the primary arguments for subsidising certain services in the first place. But subsidies alone do not ensure that the final allocation of these goods is independent of household wealth. Where there is choice and competition amongst subsidised providers, some providers of opportunity-creating goods may want to deliver a higher quantity and quality of service, and some consumers may be willing and able to pay for a higher quantity and quality of service, in exchange for a larger customer contribution of funds. Consumers who are prepared to pay more or "top up" the government contribution would purchase a higher quantity and quality of service. The government subsidy would ensure that all customers can, in principle, purchase some amount of these goods, but the overall allocation of the service could still be highly dependent on household wealth. The goal of equality of opportunity is undermined.

40. This is known as the problem of **topping up**. If service providers are allowed to set their own fees and charges, no matter how large are the government subsidies, opportunity-creating goods would be allocated according to household wealth. To the extent that the higher quantity and quality of such goods is associated with greater opportunity, we have violated the principle of equal opportunity. If equal opportunity is to be respected, the government must intervene to discourage or disallow topping up. As we will see later, such rules are common in systems which allow competition between schools for the provision of education services.

2.2. Cost-plus reimbursement, limits on competition, and the associated problems

41. An alternative to a fixed-fee-for-service approach is to arrange the subsidy contract on the service provider so that the service provider is compensated for its *actual costs* incurred in providing the required service. In this case we can say that the service provider faces a very *low-powered* incentive.

42. Under a cost-reimbursement contract the service provider has no particular incentive to attract new customers. At the same time, however, the service provider has no particular incentive to deny service to new customers (addressing the problem of cream-skimming). Similarly, the service provider has no particular incentive to be innovative or responsive to the needs of customers. At the same time, the service provider has no particular incentive to induce the customer to purchase additional services (mitigating the problem of over-servicing). Neither does the service provider have any particular incentive to improve service quality, or to cut service quality.

43. Is the cost-reimbursement approach compatible with competition? Importantly, almost none of the normal benefits of competition would arise. Under a cost-reimbursement approach the service provider has no particular incentive to attract customers, and no incentive to produce efficiently.

44. In short, a cost-reimbursement approach solves the problems associated with choice and competition under a fixed-fee approach, but at the expense of eliminating most of the benefits of competition.

45. There may still remain some benefits of allowing customer choice, even under a cost-reimbursement model. To the extent that there is a diversity of preferences amongst customers, it is more likely that this diversity of preferences can be met through a diversity of service providers.[18]

2.3. Summary: Choice and competition in the presence of subsidies

46. To summarise the conclusions we have reached so far: the incentives on each service provider, and the scope for competition, depend on the nature of the contract under which each service provider operates. One approach is to reward each service provider with a fixed fee per service provided. This approach is compatible with choice by customers and competition between service providers. The fixed-fee-per-service approach gives rise to high-powered incentives on service providers to be responsive, innovative, and efficient.

47. However, the fixed-fee-per-service approach also has several drawbacks. The service providers have a strong incentive to identify, and to compete vigorously for, customers who have the lowest cost-to-serve in each class, and to identify, and possibly reject, customers who have a high cost-to-serve (cream-skimming). In addition, the service provider likely has a strong incentive to induce the end-customer to consume even when the marginal benefit to the customer is low or negative (over-servicing). This is particularly a problem when the government relies on the service provider itself to decide what services the end-customer requires. Finally, some customers may have the willingness and the ability to purchase additional subsidised services. Where there is choice and competition between service providers, service providers are likely to recognise this demand and charge more to customers willing to purchase additional services (topping up). As a result, the overall allocation of these services will be partially dependent on income and wealth, which may conflict with government objectives to pursue equality of opportunity.

[18] This assumes, of course, that service diversity is more likely to be provided when there are a number of difference service providers.

48. An alternative approach is to compensate the service provider for the costs it incurs. This approach eliminates the incentive for selection of customers (cream-skimming) and eliminates the incentive to continue to provide costly services even when the marginal benefit is low (over-servicing). But, cost-reimbursement also eliminates the incentives on the service provider to produce efficiently, or to be innovative or responsive to the needs of customers.

49. In the presence of government subsidies there arise certain fundamental trade-offs. Fixed-fee contracts offer high-powered incentives for efficiency and responsiveness, but also give rise to some perverse incentives and also may require the government to over-compensate the service providers (that is, to leave substantial information rent). Low-powered cost-reimbursement contracts resolve the perverse incentives and eliminate the information rent, but at the expense of eliminating all of the potential incentives for efficiency and responsiveness. Real-world arrangements for the provision of these subsidised services must address these trade-offs.

50. In the sections which follow we explore the extent to which these issues can be addressed to enhance the scope for choice and competition in specific sectors.

51. This brief survey has not considered all of the possible funding arrangements on service providers. For example, as we will see later, another possible contract involves funding the service provider based on the number of customers, rather than the volume of service provided to each customer. In the health sector these are known as **capitation payments**. This approach provides strong incentives for the service provider to deliver the minimum quantity of services necessary to attract customers, and therefore maintains strong incentives for productive efficiency and to avoid over-servicing. Hybrid contracts are also possible, such as a contract which provides a fixed fee per service except where the provider's true costs fall outside some bounds.

52. Having set out some basic theory, let's now turn to apply these ideas to the education sector and the health sector.

3. Choice and competition in the education sector

53. All OECD governments are heavily involved in funding education services, especially in primary and secondary education.[19] In addition, in most OECD countries the government is not merely the primary funder of education, but the primary *provider* of education services. Furthermore, in many countries competition is not actively encouraged. In fact, in many cases, competition between government education providers is often deliberately and strictly limited, particularly by granting each education provider a limited geographic monopoly over the provision of education services to children within each school's zone.[20]

[19] As Milton Friedman observes: "Education is today largely paid for and almost entirely administered by governmental bodies or non-profit institutions. This situation has developed gradually and is now taken so much for granted that little explicit attention is any longer directed to the reasons for the special treatment of education even in countries that are predominantly free enterprise in organization and philosophy. The result has been an indiscriminate extension of governmental responsibility", Friedman (1955). OECD data shows that public spending on education varies between 2.5 and 5.0 per cent of GDP across OECD countries.

[20] School zones do not eliminate competition between schools entirely. Many parents are able to choose where they live on the basis of the local school. Such forms of school competition

54. Why? Is there something about the provision of education services which *requires* a restriction on competition? Is conventional in-the-market competition somehow in opposition to the objectives the government is trying to achieve?

55. We will look first at the underlying economic problem (or "market failure") which gives rise to a need for government intervention in the first place. As we will see, that underlying economic problem gives rise to a motivation for substantial government subsidies for the education sector. We will proceed by applying the concepts developed in the previous section to explore the scope for reliance on choice and competition in education.

3.1. Why are governments involved in education?

56. Why are governments so heavily involved in the provision of education services? In asking this question, we in no way intend to call into question the need for government action in the education sector. We merely seek to articulate that rationale so that any proposals for enhanced reliance on choice and competition can be carefully designed so as not to threaten the underlying objectives of government intervention in the first place.

57. We will focus in this paper on the "core" education sectors of primary, secondary and (to an extent) tertiary education[21]. To what extent can these services be provided in normal competitive markets?

58. Education is, of course, an investment in human capital. The decision as to the amount of education to purchase is similar to other investment decisions – how much consumption to forego in the short term in order to increase consumption in the long term. Investment in education is large relatively to lifetime income, and consumers may be short-termist or myopic in their perspective. Perhaps there might be a tendency for consumers, left to themselves, to under-invest in education. But this might argue for a government information campaign to promote the benefits of investment in education, or a government-imposed requirement to purchase a minimum number of years of education. Why do governments typically also heavily subsidise education services, and why do most governments directly provide these services themselves?

59. There are three common rationales offered for government involvement in education:

1. There are economic and political **spillover effects**:

- A tax dividend effect – if education results in higher income in the future individuals are not able to capture all of the benefits due to the effect of taxes. A government subsidy upfront may offset the distorting impact of taxes;[22]

may contribute to social segregation and may undermine equality of opportunity (if more desirable schools are located in areas which are more expensive to live).

[21] Much secondary, ancillary or discretionary forms of education are a normal consumer good delivered in relatively normal consumer markets. For example, many children take lessons in a musical instrument, or training in a sport, or tutoring outside of the regular classroom. Many older people take lessons in art, writing, computing, or history. There are a few issues of quality assurance and accreditation, but these issues are not obviously insurmountable, and there are typically a large number of competing providers for these services. We will put these "secondary" forms of education to one side.

[22] See Barr (2012), page 271. A related idea is that government subsidisation of education may increase employability, reducing the tax burden from payments to the unemployed.

- A productivity spillover – according to this theory, education increases the productivity of the individual, but also increases the productivity of individuals with whom that person interacts;[23]
- A democratic spillover - having an educated citizenry allows the population to understand and participate in public decision-making and democratic processes, which leads to better democratic outcomes overall. As Stiglitz (1986) observes: "A society in which everyone can read can function far more smoothly in which few can read". [24]

  Stiglitz (1986) expresses some scepticism about the magnitude of these spillover effects especially compared to the size of the benefit the individual receives from education:

"There is a large private return to being able to read, and even in the absence of government support, almost all individuals would learn this and other basic skills. Indeed, most individuals would go far beyond that. The question is: given the level of education that individuals would privately choose to undertake were there no government subsidy, would further increases in education generate any significant externalities? There is no agreement concerning the answer, but the case for government support based on these kinds of externalities seems, at best, unproved".[25]

2. **Capital market imperfections**. Although it is theoretically possible for citizens to borrow to invest in education against their future lifetime income, in practice (due to moral hazard and asymmetric information) such contracts are difficult to enforce. As Stiglitz (1986) notes: "Private lenders are not, for the most part, willing to lend to finance education, and hence those without funds of their own (or their parents') would be denied access to higher education without some assistance from the government".[26]

   Governments may have a comparative advantage in using the tax system to compel students to repay loans. But this is an argument for government provision of educational loans as opposed to subsidies. Many countries have a system of government-backed lending for education services, particularly for higher (tertiary) education[27]. But such systems typically operate alongside, instead of in place of, direct government funding and provision of primary and secondary education services.

[23] See Barr (2012), Box 11.2, page 271.

[24] Hayek (1960) similarly notes that: "In a country with democratic institutions, there is the further important consideration that democracy is not likely to work, except on the smallest local scale, with partly illiterate people". There are also links between education and fertility (lower levels of fertility is associated with higher levels of education) and links between education and mortality (especially infant mortality). There may also be links between education and mobility of the population, and links between education and flexibility of the workforce: "Individuals with lower education levels typically have higher unemployment risks, less stable jobs and more difficulties in facing the economy's demands for ever-increasing flexibility and to cope with technological transitions", OECD (2012).

[25] Stiglitz (1986), page 372.

[26] See also Barr (2012), page 277.

[27] For example, in Australia there is a Higher Education Loan Program (HELP) Similar programs operate in New Zealand.

3. The desire to promote **equality of opportunity**.

Stiglitz (1986) explains this last concept as follows:

"The primary justification for public support of education arises from concern about the distributional implications of the private financing of education. Richer individuals will want to spend more on the education of their young, just as they spend more on cars, homes, and clothes. There is a widespread belief that the life-chances of a child should not depend on the wealth of his parents or the happenstance of the community in which his parents live".[28]

The LSE economist, Nicholas Barr (2012) puts it like this:

"Equity is taken to imply that children A and B should have an equal opportunity … to acquire an education of equal quality and duration, irrespective of whether, for example, A comes from a middle-class family and B from a disadvantaged background. …. This definition of equity does not mean that individuals can necessarily obtain as much education as they want. However, it implies that, if individuals A and B have similar tastes and abilities, they should receive the same education, irrespective of factors that are regarded as irrelevant".[29]

60. There is some suggestion that promoting equality-of-opportunity may be more than a fairness or equity issue; it may also promote economic growth. The UK economic consultancy Oxera argues that the absence of social mobility results in foregone economic benefits due to under-exploitation of the human capital potential. Specifically Oxera notes:

"Social mobility is widely considered to be intrinsically good. Decoupling an individual's prospects from their social status or family background is a key pillar of fairness and social justice. While this perspective has filled philosophy textbooks and opinion columns, what is less well understood is the role that social mobility plays in boosting productivity and economic output. … Even a modest increase in the UK's social mobility – for example, raising social mobility to the average of Western European countries – could increase gross domestic product (in the long term) by around 2%, through better job matching. This is equivalent to GBP 39 bn per year in today's prices. Improving social mobility further – to the average across all European countries – could lead to an even more substantial increase of GBP 50 bn. This improvement is not instant; it takes time for policies that increase social mobility to translate into improved job matching. But once achieved, it is permanent".[30]

61. For the purposes of this paper we will assume that a primary motivation for government involvement in education is to promote a degree of equality of opportunity.[31]

[28] Stiglitz (1986), page 372.

[29] Barr (2012), page 268.

[30] Oxera (2017). Similarly, OECD (2012): "Underdeveloped human capital hampers productivity growth and limits the effective and full use of resources".

[31] OECD (2012), page 15 expresses it like this: "Equitable education systems are fair and inclusive and support their students to reach their learning potential without either formally or informally pre-setting barriers or lowering expectations. Equity as fairness implies that personal or socio-economic circumstances, such as gender, ethnic origin or family background are not obstacles to educational success. An equitable education system can redress the effect of broader social and

This motivation gives rise to government subsidisation of at least the core primary and secondary education services – to ensure that all citizens have access to a certain quantity and quality of education services regardless of their background or income.

3.2. Is competition between educational institutions even feasible?

62. In principle, if it were possible to harness the forces of competition in education without compromising the objectives above, education might be delivered like many other services, with a wide range of competing educational institutions meeting the needs of a wide range of students, and innovating to develop new educational techniques, making efficient use of new technology and other inputs, and responding to the changing desires of parents and the needs of the broader community, and doing so with the minimal claim on government resources. But to what extent is this vision in conflict with the objectives identified above? To what extent can we rely on choice and competition to deliver desirable outcomes in the education sector?

63. First let's address the question whether effective competition between education service providers is even feasible. To answer this question we will address the brief checklist mentioned earlier: Is there (i) scope for a number of competing service providers; (ii) which have both the willingness and ability to respond to financial incentives to improve performance?; and (iii) do customers (or their parents or guardians) have the information they need to make a choice between service provider; and (iv) the willingness and ability to make a choice in their own (or their children's) best interest?

64. In principle, an assessment of the scope for competition in education services requires a formal competition analysis – that is, an analysis of the product and geographic dimensions of the market, barriers to entry and exit, and other factors such as transparency of prices and quality, vertical integration, and barriers to customer choice. A full such analysis is beyond the scope of this paper. We merely make the following observations:

> *There do not appear to be inherent structural barriers to achieving effective competition between educational institutions in most large towns and cities. In particular, there do not seem to be overwhelming economies of scale or scope in the provision of traditional primary and secondary education within a reasonable geographic market. Most urban areas are able to sustain many traditional educational institutions within any given 5-10 kilometre radius.*[32] *But even this radius is too far to walk; if competition is to be effective consideration may need to be given to how students who make a choice of school will be able to travel to that school, perhaps by ensuring access to public transport.*

65. The range of sizes of different schools which we can observe in operation suggests that relatively small schools (with less than say, 200 students) are able to co-exist and compete with quite large schools (with more than, say, 1000 students). It appears, therefore, that, with the exception of relatively small towns, most urban areas

economic inequalities. In the context of learning, it allows individuals to take full advantage of education and training irrespective of their background".

[32] This may not apply to "specialist" schools, such as schools which focus on music, drama, or elite sports – for which the catchment area could be substantially larger.

should be able to sustain active competition in education services in most areas, even without students having to travel very long distances.[33]

66. In order to for choice and competition to be effective in improving overall outcomes, schools must have the incentive and ability to respond to market conditions, and to adapt and innovate in response to financial incentives. Historically, in countries where the education sector has been dominated by government providers, the scope for individual schools to exercise autonomy, independence and innovation has often been strictly limited. Government schools have historically not had either the incentive or the ability to respond to market conditions.

67. In other sectors, of course, private, for-profit firms typically have strong incentives to adapt and innovate where doing so will increase the overall stream of profits. We not see any particular reason why private for-profit firms would not have the same incentive in the education sector. Across the OECD, of the 12 per cent of students who are enrolled in private government-dependent schools, around 8 per cent are educated in for-profit schools.[34] This figure increases to over 50 per cent in the case of Sweden and in Turkey 7 out of 10 students in the private system attend for-profit private independent schools.[35]

68. But for-profit schools remain the minority and in many OECD countries do not exist at all. Across the OECD the majority of students enrolled in private government-dependent schools attend not-for-profit institutions – either religious not-for-profit schools or other non-religious, but not-for-profit schools. There may be good reasons why not-for-profit institutions survive and thrive in the public services. For example, where quality is difficult for customers to measure a commitment to a not-for-profit structure may provide an assurance and implicit commitment to customers that quality will not be cut ex post.

69. The effectiveness of both for-profit and not-for-profit structures depends on the quality of the governance and oversight. High-quality governance is typically easier to ensure in the case of a for-profit structure where the owners have a direct financial incentive in the performance. But some of these incentives for high-quality governance could, in principle, be reproduced where the members of the Board of the school have a direct personal interest in its success, such as parents who have children at the school.

70. A full discussion of the merits of for-profit and not-for-profit firm structures in the education sector is beyond the scope of this paper.[36] We merely note that, whatever structure is chosen, for competition to be effective education service providers must be willing and able to adapt and respond to market conditions, to meet the needs of customers, and to compete to attract students.

71. For choice and competition to be effective it is essential that schools not only have the incentive and ability to adapt. In addition, underperforming schools must be allowed – and indeed must be required – to exit the market. No matter how profitable and innovative their product offering, new entrants (i.e., entrepreneurial skills) will be

[33] Barr (2012) summarises: "There is no reason why schools in cities should not act competitively … But a rural school may have a local monopoly and, if run to maximize profits, would under provide". Barr (2012), page 278.

[34] OECD (2017), page 6.

[35] OECD (2017), page 6.

[36] See, for example, Besley and Malcomson (2016).

deterred from entering the market if incumbents are able to persistently earn a below-market cost of capital. Failing schools must be allowed to exit the market. There is a question how this applies to not-for-profit schools. Not-for-profit institutions (which are typically not subject to the threat of takeover) may be immune from the normal capital market disciplines. Amongst other things, not-for-profit institutions may be able to persistently earn below-market return on invested capital. This could in principle act as a barrier to entry. These questions remain to be explored.[37]

72. Of course, competition does not deliver desirable results unless the customers are willing and able to make choices in their own or their children's best interest. In our view, the majority of parents are willing and able to make an effective choice of schooling on behalf of their children. However, some parents do not have the capacity or the desire to do so and, in these cases, special support is required. In particular, parents with limited education or ability to make an effective choice may require special support in the choice of school for their children. Otherwise there is a risk that disadvantage may become entrenched from one generation to the next, undermining equal opportunity objectives.

73. There is likely to arise something of an information problem. Consumers are likely to have difficulty in observing the quality of the education provided – even for those consumers who have attended a particular school it can be hard to judge the relative quality of education (i.e., the counterfactual – how would the outcomes be different if I had attended a different school?). In any case, the quality of the education may be a personal or idiosyncratic experience (would the outcome be different if I attended the same school but was assigned different teachers, or met different classmates?). It can be even harder assessing the quality of education at a school without any direct personal experience.

74. The results obtained by students in standardised testing are relatively easily obtained. But such measures are only, at best, imperfect measures of the quality of education since such results depend in part on the *ex ante* or intrinsic ability of the students and not solely on the quality of the teaching. In the absence of good measures, parents may be tempted to measure quality on the basis of easily-observable factors such as the quality of a school's physical facilities which not necessarily related at all to the quality of education. Alternatively parents may make decisions on grounds such as where the other members of their child's friendship group are going. Barr (2012) notes:

> *"Knowledge of the nature of the product is certainly not perfect. Children (the immediate consumers) are not well-informed. In a market system decisions are therefore left to parents, at least for early education. But parents are likely at best to be only partially informed about such things as the quality of teaching … and the characteristics of the other children in the class".*[38]

75. This information asymmetry problem gives rise to the need for independent objective review, assessment and accreditation services. These services could perhaps be provided by the market or, alternatively could be provided by government. The OECD has been a major contributor to this work, carrying out a major study on the evaluation

[37] The issue of competition between for-profit and not-for-profit organizations is complex. See, for example, Hirth (1997) and Stenbacka and Tombak (2015).

[38] Barr (2012), page 276.

and assessment of school performance culminating in 2013, together with a number of country studies on evaluation and assessment frameworks in the education sector.[39]

76. In 2006, the British government concluded that for choice-based systems to be successful in raising educational standards for all, the following conditions were required:

- "Parents – particularly, parents of disadvantaged children – need to be provided with high quality information, guidance and advice about the options open to them;
- Help with the costs of making choices, such as covering the costs of transport to alternative schools, should be provided by those who need it; … and
- Above all, early effective action should be taken to tackle failing or poorly performing schools and increase the supply of good schools. Ultimately, the greatest safeguard against adverse effects on social inequalities and segregation is to make sure there are more good schools … Evidence … suggests that where schools face no financial implications from not attracting pupils there is only a limited behavioural response to choice".[40]

77. In summary, achieving effective competition between schools may require specific government action, such as the provision of comparator information on school quality, provision of transportation services for students so that they can travel to the school of their choice, and mechanisms to ensure that schools have the ability to respond to financial incentives, and action to ensure that underperforming schools are able to (and indeed required to) exit the market. Provided that these issues are addressed there do not seem to arise insurmountable barriers to competition between schools. But can this choice and competition be made compatible with government subsidies and the government objectives for education set out above?

3.3. Competition and subsidisation of education

78. In section 2 we observed that the scope for choice and competition depends on how the government subsidies are paid. One approach to subsidising education might be simply for the government to pay a fixed amount to each family with school-age children, and allow them to spend this money as they see fit (including on non-education goods and services). As we saw in the previous section, as long as the existence or the size of the subsidy is independent of the decisions of the consumer, the normal forces of competition can operate with little or no distortion. Some support services, such as disability support services are paid in this way.[41] Many governments make direct payments to support the income of low-income and vulnerable taxpayers. However there is a substantial risk that, given the choice, the parents of some children would choose to not spend the funds on

[39] See http://www.oecd.org/edu/school/oecdreviewonevaluationandassessmentframeworksforimprovingschooloutcomes.htm.

[40] UK Government (2006), page 5. Another condition was a prohibition on cream-skimming: "Schools should be prevented from 'cream skimming' … by putting in place funding regimes that reflect the higher costs of teaching some groups and by using regulation and statutory guidance to prevent unfair selection". This issue is discussed further below.

[41] For example, Birmingham City Council provides Direct Payments for disability and elderly support services. Under this approach end-users are allowed to choose how to spend their care and support budget allocated by the Council. This example does not fit the model perfectly since customers cannot retain any funds not spent on care services themselves.

education, but on some other services (such as alcohol). We will not consider this approach any further.

79. We will focus instead on mechanisms in which government education subsidies must be spent on education services. One approach, of course, is for the government to pay a fixed amount to a school selected by the student and his/her parents. In section 2 we saw that this fixed-fee-for-service approach can be compatible with competition and can lead to strong incentives for efficiency, innovation and responsiveness.

80. These ideas are, of course, not new. Following Friedman (1962), many countries have considered, trialled, or adopted **school voucher** schemes under which customers have a choice of school and the government educational subsidy is paid directly to the educational institution chosen by the end-user. There is quite a large literature assessing the effects and outcomes of these reforms.[42] These voucher schemes differ in:

- The amount of revenue that is implicit in the voucher – from some fraction of the total (per student) funding of a school to the full (per student) government contribution;
- Whether the revenue implicit in the voucher varies with characteristics of the student – in some schemes, students from particularly disadvantaged backgrounds, or with special needs are given a loading, weighting, or index on the basic voucher;
- The students that are eligible to make use of the vouchers – in some schemes, the vouchers are restricted to students who would normally attend disadvantaged schools;

81. School voucher schemes are an example of a fee-for-service subsidy payment. Provided the revenue associated with the voucher exceeds the marginal cost of taking an additional child the voucher scheme, coupled with choice, gives rise to a high-powered incentive on schools to attract students and therefore to achieve high levels of productivity, innovation and responsiveness to the needs of customers.

82. But, as we noted earlier, there are also problems with the fixed-fee-per-service model:

3.3.1. The topping-up problem

83. It is widely believed that access to education is a fundamental component of promoting equality of opportunity. It follows that education services should not be allocated on the basis of parental income or wealth. As noted earlier, Stiglitz (1998) comments that "the life-chances of a child should not depend on the wealth of his parents or the happenstance of the community in which his parents live".

84. However, where choice and competition between schools is permitted, it is highly likely that some schools will be in demand. These schools may choose to, or be forced to, limit enrolments. The natural mechanism to balance supply and demand in this context is to increase the price – in this case, the tuition fee. This implies charging an additional fee to the end-customer over-and-above the government subsidy. We referred to this earlier as "topping up". In fact, under a system of unrestricted competition between schools, many schools will seek to, or be forced to, ration entry through the price system. Some schools will be considerably more expensive than others. These may be the schools which provide the greatest life-opportunities.

[42] See, for example, OECD (2017) and Dynarski and Nichols (2017).

85. In this world, the outcome of competition is likely to be – at least to some extent – an allocation of places at the schools which offer the most opportunity to those with the greatest ability to pay. In fact, for schools which choose to limit enrolment, the supply curve is, in effect inelastic. An increase in the government subsidy would be expected to result in an equivalent dollar-for-dollar increase in the price for education. In the absence of further intervention, the provision of a government subsidy coupled with the right to choose the educational institution undermines the objective of equality of opportunity.

86. This problem is described by the OECD as follows:

> *"Critics argue that allowing publicly funded private schools to charge tuition fees gives these schools an unfair advantage over public schools and undermines the principle of free school choice. Like selective admissions, imposing substantial add-on feeds tends to skim the top students from the public sector and increase inequalities in education … Relatively little is known about whether there is a threshold of household contributions beyond which lower-income families will be deterred from choosing subsidised private schools. However, both simulations and empirical evidence confirm that public funding may fail to widen access to private schools unless it is accompanied by restrictions on tuition fees. If private schools invest public resources to improve their quality, rather than to broaden access, subsidies can exacerbate inequities across school sectors. This is one of the reasons why abolishing substantial add-on fees, along with offering targeted vouchers, can help reduce disparities in achievement between advantaged and disadvantaged students".*[43]

87. Many countries which have chosen to implement a voucher system for school choice (such as Chile or Sweden) have explicitly sought to prohibit "top up" funding. For example, following concerns about a lack of equity in Chile's education system, a major reform was carried out which prohibited charging of "topping up" fees:

> *"In order to address equity concerns, the regulations governing school choice were considerably strengthened in 2016. The Inclusion Law (Ley de Inclusíon) seeks to ensure that school choice is not contingent on families' ability to pay, student achievement or other potentially discriminatory factors. The law forbids the use of economic, social and academic criteria for admissions, eliminates shared funding (financiamento compartido, tuition fees and public subsidies for a single private school) and forbids public subsidised schools to make a profit".*[44]

88. But prohibitions on parental contributions are not always easy to enforce. Schools which are seeking to ration entry can request a range of supplementary inputs that parents are expected to provide. The simplest approach is to ask parents to make a "voluntary" contribution to the school. Parents can also be expected to volunteer their time to the school. Although not as obviously discriminatory, such rules can have a discriminatory effect where low-income families have less leisure time to devote to volunteering at the school and where well-educated parents can offer more highly-valued inputs (such as tutoring students). This problem arose in the case of New Zealand following the introduction of its own school choice program:

[43] OECD (2017), page 15.

[44] OECD (2017), page 22.

> *"Most schools expect parents to pay 'voluntary fees' to contribute towards the cost of running a school. Locally generated revenue is significant as a source of school revenue at secondary level (for urban schools). Obviously, parents who have less income can less afford these 'voluntary contributions', so schools with an intake of children from predominantly poor backgrounds receive significantly less funding from this source than those with children from better-off families. While it is illegal to discriminate against children whose parents do not wish to/cannot pay this voluntary contribution, when schools can choose their students it is likely to be a consideration in a principal's decision about whether or not to admit a student if they are poor".*[45]

89. If rationing through price is explicitly prohibited how are schools to balance supply and demand? One possible approach is to ration through waiting lists or through lottery. In our view, neither of these approaches is satisfactory. In some countries over-subscribed schools are allowed to ration through waiting list. However, in one study it was found that the children who attended the school were overwhelmingly born in the first half of the year since children could be entered on the waiting list as soon as they were born. It does not seem satisfactory to ration access to education by the happenstance of birthdate.[46]

90. Some countries with school voucher systems (such as Chile, mentioned above) explicitly prohibit rationing by schools which participate in the voucher program. Schools which participate in the voucher program are required to accept all applicants. This is a fairly drastic intervention, but in our view is not unreasonable. It is possible that some inputs to the provision of high-quality teaching (such as access to the best teachers) are in inelastic supply and therefore unable to be easily scaled. But overall, it appears that many aspects of education can be replicated and scaled up as needed. We speculate that many schools should be able to expand enrolment without undue dilution of quality. Concerns about sudden changes in student numbers could be mitigated by requiring that students indicate their intention to enrol in the school a few years in advance. For example, the requirement to accept all applicants could be limited to those applicants who indicate their intention two years in advance. With these modifications some of the problems of an open-access system can be mitigated.[47]

91. To summarise, if equality-of-opportunity goals are to be achieved, access to educational opportunities should not be allocated on the basis of parental income or wealth. Although we have no objection to some, modest level of school fees[48], the ability of schools to ration access by charging above a minimum threshold would be expected to result in allocation of educational opportunities on the basis of parental income and therefore must be restricted. This will likely require active enforcement. We do not support allowing rationing by queuing or by lottery. Instead, we prefer a mechanism in which all participating schools are required to accept all applicants (perhaps with some notice period, to mitigate problems from large swings in numbers).

[45] Le Grand (2007), page 90.

[46] What about rationing by lottery? This seems equally artificial. However, where an open-access policy is infeasible, could it be a second-best choice?

[47] We acknowledge that these mechanisms are not perfect. There are likely to be situations where this approach is less than perfect, such as in communities which are experiencing rapid growth or decline, or in the case of families which are highly transient.

[48] Here, by modest we envisage something like one-two weeks of average wages. However, where it is difficult to enforce a rather arbitrary limit it may be better to eliminate the fees entirely.

3.3.2. The cream-skimming problem

92. The other primary concern with encouraging school competition using vouchers is that of cream-skimming: The incentive for schools to identify and deny entry to high-cost-to-educate students.

93. As we noted earlier, potential students differ widely in how much it will cost for the school to achieve its desired objectives with that student. As long as the voucher is for a fixed fee, independent of the characteristics of the student, each school has a strong incentive to compete vigorously for students which can achieve their desired objectives at the lowest possible cost; and to actively resist taking students for which achieving the desired objectives will be very high cost.

94. But what are the objectives that each school wishes to achieve? In a world of school choice and competition, the objectives of each school presumably reflect the desires of customers. What do prospective customers (students or their parents) look for in a school?[49]

95. Where schools are assessed primarily on the basis of the academic performance of graduating students on standardised exams, the cheapest way for a school to achieve good outcomes is to select entering students with high innate ability. This results in quite strong competition for the very best students. Students of average ability may find the range of schools willing to accept them is limited, while students of low ability may find no opportunities at all. This system has a tendency to favour parents who have well prepared their children, perhaps through tutoring, at an early age. It therefore seems to conflict with the objective of equality of opportunity. Barr (2012):

> *"We know that (a) performance is determined largely by socio-economic background, and (b) schools in greater demand can attract more pupils and hence more funds. A school achieves (b) by maximising the examination results of its pupils; it does so most cheaply and easily be selecting students from higher socio-economic backgrounds. Just as medical insurers seek healthy clients, schools seek potentially high-achieving pupils".*[50]

96. This problem persists even if schools are assessed in other ways. For example, it could be argued that a better approach would be to assess schools on the basis of the *change* in the academic performance of students on standardised exams – that is, the difference in performance from the time when the students enter the school, to when they leave. Here the change in performance could be argued to be a measure of the "value added" of the school.[51]

97. But even when schools are assessed in this way, there remain very strong incentives on the part of the school to actively seek out students who have the greatest potential to increase their performance; and to actively resist enrolment by students whose performance cannot be easily improved. Some children will have a greater natural "teachability" than others; such children will be significantly less costly to improve their

[49] Barr (2012), page 268: "Since there is no single definition of a 'good' education, there is no unambiguous measure of output. We can measure test scores, but (a) such measures are imperfect even in their own terms, and (b) educational outputs are much broader than such technical benefits".

[50] Barr (2012), page 292.

[51] Here we will put to one side the complaint that standardised tests cannot measure all of the objectives of a well-rounded education.

performance than other students, who may require special attention, longer school hours, or one-on-one tutoring to achieve the same increase in performance level. Some children may also have behavioural problems that will require extra attention from the teachers or disrupt the learning of their peers. Under a system of choice and competition schools have a strong incentive to weed out such children. Again, the system of choice and competition works most in favour of those who have characteristics associated with being easy to teach; those who are more costly will face fewer schooling options or none at all. This may conflict with the objective of equality of opportunity.

98. Several countries have found that, following the introduction of school choice and competition, there was more "sorting" (or segregation, or stratification) in the school system, rather than an improvement in overall performance. Barr (2012) summarises the experience with school choice reform in New Zealand as follows:

> *"Until the late 1980s, New Zealand had a system of public finance of a centrally planned system where (other than moving house) parents had virtually no choice of school, and where local education boards gave schools virtually no management discretion. Radical reform in 1989 … gave parents some choice over their child's school and removed schools from the control of local education boards. In further reform in 1991, regulation of school admissions was largely abolished. … The result – cream skimming – was predictable. Segregation increased as schools tried to improve their competitive position by selecting students who were most likely to do well in examinations rather than by improving the quality of education they provided. As a result, diversity of school performance widened. In response, legislation in 2000 restored criteria for admissions policies. Children were given the right to a place at their local school, and where there was excess demand for places at a school, admissions had to give preferences to siblings and children of employees; beyond that, places had to be allocated by ballot".*[52]

99. The OECD summarises the evidence as follows:

> *"The international evidence suggests that schools that are selective in their admissions tend to attract students with greater ability and higher socio-economic status, regardless of the quality of the education the schools provided. Given that high-ability students are less costly to educate and their presence can make a school more attractive to parents, schools that can control their intake can wind up with a competitive advantage. Allowing private schools to select their students thus gives these schools an incentive to compete on the basis of exclusiveness rather than on their intrinsic quality. That, in turn, can undermine the positive effects of competition. The evidence also shows that selective admissions can be a source of greater inequality and stratification within a school system".*[53]

[52] Barr (2012), page 294.

[53] OECD (2017), page 15. The OECD goes on to emphasise that as well as selective admissions, competing schools may use selective expulsion policies to eliminate low-performing students (i.e., those that are more costly to bring up to a standard). An example from the UK was reported in the Guardian.

100. How can this problem of cream-skimming be addressed? One possible approach, drawing on the experience in the health sector, is to more carefully differentiate students into different groups, and to match the funding revenue to the likely cost of educating each student. As we will see below, this process has been developed into a fine art in the health sector, where patients may be classified into literally thousands of different "diagnostic reference groups" with different associated payments.

101. Many countries identify particular student groups, such as immigrant children, children from non-English-speaking backgrounds, or special-needs children, and provide extra resources to schools who accept these students. These extra resources might take the form of, say, extra teachers in order to reduce the student-teacher ratio. For example, in Chile a 2008 law (the *Ley de Subvención Escolar Preferencial*) provides additional funding to primary schools who enrol socio-economically disadvantaged students. The additional funding can increase the funds per student by 50 per cent. Schools participating in the program cannot select students by ability or socio-economic background and cannot charge additional fees. This program was expanded in 2011 to cover secondary schools. Around 85 per cent of eligible schools participate in this program.[54]

102. Ideally, systems of school vouchers should, by independent and careful measurement, identify the key characteristics of each child and establish the revenue associated with each voucher at a level which induces schools to actively compete to provide educational services to that child. However, this process is unlikely to be perfect. There may still remain some students which are of particularly high or uncertain cost, and which do not fit easily within any pre-existing revenue categories. Monitoring of the voucher scheme may help identify situations where such cases emerge, and develop new categories as required. As a backstop, however, it may also be necessary to rely on lower-powered cost-reimbursement contracts. We suggest that schools willing to take on such students could be compensated for their out-turn costs, subject to close monitoring and control over the expenditure decisions by the government.

103. Furthermore, there are likely to remain some regions (such as small remote towns) where conventional competition cannot be sustained. In these regions introducing school choice is neither feasible nor desirable. Instead the government may choose to contract for educational services, perhaps through a competitive tender. Coupled with careful monitoring and enforcement, a contract for educational services should be able to ensure a minimum quality of education even for children in remote areas where conventional competition is not feasible.

104. The experience to date with school vouchers has not yet been universally positive. A survey of four different school choice programs in the US by the Brookings Institute reports that recent careful studies show that students who participated in the school choice program to attend a private school experienced a decline in key test scores compared to their peers who did not attend private schools.[55] This difference is hard to explain. Perhaps the students who are moving to private schools are motivated by factors other than test scores. For example, perhaps those students (or their parents) are seeking to avoid violence, drugs, or bullying in their present school, or believe that attending a private school will lead to better long-term outcomes (such as college attendance or

[54] OECD (2013), page 8.

[55] Dynarski and Nichols (2017).

career prospects, perhaps due to better "old-boy" networks) regardless of test results. There is a strong need for further research.

105. We conclude this discussion with a couple of final comments. Nothing in this analysis has suggested that government must directly own and provide educational institutions. There may be transactions cost benefits from such arrangements (perhaps monitoring is easier when the government owns the school than when it must rely on arms-length contractual arrangements), but this takes us beyond the scope of this paper. The prevalence of direct government provision of education services is a feature of education which remains to be explained.

106. Finally, we note that introducing choice and competition in education may possibly conflict with certain other government objectives, such as social integration and cohesion. One of the possible benefits of education is that it is a mechanism for inculcating core national values or acculturation. Hayek (1960) observes that "the United States would not have become such an effective 'melting pot' and would probably have faced extremely difficult problems if it had not been for a deliberate policy of 'Americanization' through the public school system". The school system may also be a tool for building bridges across religious or socio-economic differences. Barr (2012) observes:

> *"Education can create cultural benefits in a variety of ways including greater tolerance of diverse views and increased civic engagement … A common experience (music, art, literature) may foster communication generally, both at the time and in the future. In addition, there may be neighbourhood effects: the mechanics of taking children to school, parent-teacher associations, and the like, bring people into contact and more foster shared attitudes locally".*[56]

107. Out preliminary view is that these concerns are not overwhelming. With careful attention to the issues identified above, choice and competition in education should not increase segregation along socio-economic lines. It remains possible that allowing choice and competition between schools may foster segregation on, say, religious or ethnic lines (particularly if members of each community have a preference to send their children to schools which promote their own religious or ethnic values). These effects could, perhaps, be mitigated by requirements on schools which participate in the government funding programs, such as a prohibition on religious teaching, or the requirement to follow a (basic) national curriculum.[57]

3.4. Enhancing choice and competition in the education sector

108. Where does this leave us? What is the scope for choice and competition in the education sector? Taking all of the above considerations into account, the following lessons emerge as guidance for the promotion of choice and competition in the education sector:

- For choice and competition to be effective at all, attention must be paid to the basic competition conditions. Action may need to be taken to actively encourage competition and efficient consumer decisions, including:

[56] Barr (2012), page 271.

[57] At the same time, one of the claimed benefits of school choice systems is an opportunity to 'reduce the risk of political indoctrination'. Barr (2012), page 290.

  - Ensuring that students can easily travel to alternative participating schools (perhaps through the provision of public transport).
  - Information about the quality of schools to help parents and students choose (as well as information on what to look for when choosing a school).
  - Further assistance in cases where parents are unwilling or unable to make a choice on behalf of the student.
- Schools should have sufficient autonomy to respond to competition
  - Schools should have ability to make decisions over staffing, philosophy, and mix of inputs.[58]
  - Any barriers to school entry or expansion should be removed.[59]
  - Schools which are not able to earn a normal return should be allowed to exit the market.
  - Whether or not schools should be allowed (or required) to be "for profit" remains unclear.
- Careful attention should be paid to school admission requirements and obligations on parents
  - Careful consideration should be paid to preventing participating schools from denying entry to prospective students – i.e., schools should be required to accept all applicants with a reasonable notice period.
  - Schools should be prohibited from charging more than a regulated limit for fees and charges.
- Careful attention should be paid to funding
  - As far as possible, the funding level for each student should reflect the expected cost for that student. This implies tailoring the fixed fee according to identifiable characteristics. As far as possible, each participating school should have a roughly equal incentive to compete to provide the education of each prospective student.
  - As a backstop, some schools could receive cost-based reimbursement for some, particularly high-cost or otherwise unusual students, to ensure that such students are not excluded. This would be expected to be accompanied by close monitoring by the government.
- As a backstop, governments will need to be closely involved in the procurement, monitoring and/or regulation of schools in areas where competition cannot be sustained.

109. In short: this discussion suggests that effective competition in education services possible, despite the presence of government subsidies and the need to pursue the basic government objectives identified above. However, perhaps unsurprisingly, specific and relatively strong controls on that competition are essential. Specifically, in our view, schools which receive government subsidies must not be allowed to compete on price, and probably should not be allowed to deny entry to any applicant. These are relatively severe interventions. In addition, the government must pay careful attention to differences

[58] As an example, in the UK, so-called "free schools" and "academies" are funded by the government but are not run by the local council. They can set their own pay and conditions for staff, change the length of school terms and the school day, and are not required to follow the national curriculum. Between 2010 and 2015 more than 400 free schools were opened in England, representing 230,000 student places.

[59] This includes, for example, a rule which prevents the opening of new competing schools in areas where the existing schools have surplus capacity.

in costs of educating different groups of students. Such differentiation may be tricky. Although we consider that this is not inevitable, there remains a risk that promoting competition between schools will enhance social segregation and undermine, rather than promote, social cohesion. We remain hopeful that these problems can be overcome.

110. At the same time there are large potential benefits. In our view there remains significant scope for school choice to significantly enhance the incentives on schools to provide educational services as efficiently as possible, and to innovate, to provide the variety of services that parents and students desire, and to respond to changing market demands. Although the flame of competition between schools must be tightly circumscribed, it is by no means extinguished entirely.

Box 1. The Australian Experience with VET FEE-HELP

In Australia, students undertaking tertiary education are able to apply for a government-supported loan scheme. Prior to 2012 this loan scheme was primarily taken up by students attending university. However, in 2012, in an initiative designed to increase the number of students graduating with vocational qualifications, the federal government reached an agreement with the states to extend the VET-FEE HELP program to all diploma and advanced diploma courses taken at an approved vocational education and training (VET) providers.

There was an immediate, substantial, and rapid increase in the number of full-time-equivalent students on VET-FEE HELP places. The number of such students doubled each year in the first few years of the new program, and the total number of VET providers more than doubled in the first three years. In part this was expected and partly reflects the success of the program.

However at the same time problems emerged. The way the government loan scheme was administered implied that students could enrol in a course without incurring any upfront fees. At the same time, the service providers were able to claim the fees from the loan program without showing that students actually attended classes or graduated with the relevant qualifications. As a result, providers had strong incentives to sign up students to collect the government fees, even if they knew that the students could never complete the course or repay the fees. This resulted in many abuses. Some students report not being told about the repayment obligations they were entering into. Some providers were allegedly selling courses to "disadvantaged people, targeting non-English speakers, unemployed people, single parents, young people with intellectual disability, and others dependent on social security" [60].. Some providers may have had little or no intention to actually provide the instruction promised.

The Australian competition authority (the ACCC) has commenced proceedings against five VET providers under the Australian consumer law. The ACCC alleges that these providers engaged in misleading and deceptive conduct. Estimates of the size of the fees paid range from $380 million to over $1 billion.

Does this experience shed light on the scope for competition in the education sector? The problems in this case arguably arose from a failure of the government to effectively regulate providers. The experience highlights the importance of ensuring that customers have the information and the ability to understand the obligations they are entering into, and to select between providers. In our view this experience does not undermine the fundamental case for enhancing choice and competition in the education sector.

[60] Warburton (2016), page 3.

4. Choice and competition in the health sector

111. Health expenditure accounts for a substantial share of government expenditure in OECD countries. To what extent might choice and competition improve the quality, effectiveness, responsiveness and efficiency of services in the health sector? This is the question to which we now turn.

112. As before, the first step will be to understand why governments are involved in the health sector in the first place. What is the economic problem or "market failure" which drives almost all OECD governments to heavily subsidise health care? In the second stage below we will explore the scope for competition in the health sector – both between health insurers and health service providers. In the third stage we will draw out some conclusions and possible directions for reform.

4.1. Why are governments involved in the health sector?

113. It is clear that health care markets suffer from a range of imperfections or market failures. For example, in the case of contagious diseases, there are clear externalities which justify some forms of government intervention, such as border screening, quarantine, or mandatory vaccination obligations. But externality arguments alone do not justify the extent of government involvement in health care which we observe.[61]

114. There are also substantial problems associated with asymmetric information in the health sector. In many cases it is very difficult for a layperson to understand the technical quality of a health service received, even after the service is provided. For this reason, governments routinely intervene to set minimum proficiency standards and to perform accreditation. The health sector has a highly-developed system of professional regulation. Again, however, these market failures do not justify government funding and direct provision of health care.

115. It is also true, of course, that health expenditures are both uncertain as to timing and potentially very large relative to household income. A single serious accident or illness could easily bankrupt an individual or place the individual under a heavy debt burden. In practice this problem is addressed through various forms of sharing of health risks, typically through the purchase of health insurance.

116. But do competitive health insurance markets deliver the services that customers desire? One argument for government intervention in the health sector arises from the problem of market incompleteness. Even with full information and perfect competition, the health insurance market cannot deliver all of the insurance that consumers as a whole, would desire. This can be explained as follows:

117. Most health insurance contracts are for a relatively short period of time (such as one year). Where there is effective competition between health insurers, the forces of competition tend to push the health insurance contract to be priced at the actuarially-fair price for the services provided to that specific individual during that period. In the absence of any other regulations which affect the pricing of health insurance, short-term

[61] There is possible also an argument based on the impact of taxes (as noted earlier). Due to the presence of income taxes, an individual who is unable to work due to illness faces a smaller individual loss than the social loss. This could be an argument for, for example, making health expenditures tax deductible.

health insurance contracts will tend to be priced at a level which reflects the expected health costs of the insured individual.

118. But this gives rise to a problem. Many health conditions involve an expectation of material on-going expenditure. A serious car accident, a genetic condition, or a serious chronic illness can materially increase an individual's expected future health-related expenditure for many years into the future. In a competitive short-term health insurance market, these higher expected costs will be reflected in higher future health insurance premiums. In a competitive market for short-term health insurance contracts, although an individual can purchase insurance against short-term unexpected health expenditure, it is not possible to purchase insurance against long-term health risks. The health insurance market is incomplete.

119. It might be possible to resolve this issue through the purchase of *long-term* health insurance contracts, under which the individual agrees to pay a steady on-going fee in exchange for the provision of health services as needed. But long-term contracts have their own well-known problems. It is not possible to write a long-term contract which can cover all possible future contingencies. Such contracts would, in principle, have to be quite long – such as 10 or 20 years or longer, and during the term of each contract the end-customer would be locked in to a single provider. But there is an even more serious problem. Some individuals are born with congenital health conditions which greatly increase their lifetime expected cost to the health system. Therefore, to eliminate this risk, the long-term insurance contract would need to be purchased *before* the individual comes into existence and would need to last the lifetime of the individual. Such contracts simply do not exist. Individuals cannot purchase insurance against all of the health risks they face.

120. Barr (2012) expresses this idea as follows:

> *"The probability of requiring treatment of a particular type is less than one for ailments like appendicitis or a broken leg. But the condition fails for chronic medical problems (e.g., diabetes) arising before a policy is taken out. Also … it will fail as developments in genetic testing, by improving knowledge of future health problems, create more and more uninsurable conditions. The libertarian solution is insurance starting before birth. More realistically, regulation is needed".*[62]

121. In our view, the primary motivation for government intervention in health care markets is to provide insurance against health risks where the competitive market would not provide such insurance.

122. Arguably, a second possible rationale for a government role in health care is the promotion of equal opportunity. Some medical conditions, especially in childhood, have the potential to curtail the life-chances or potential of the individual. If equality of opportunity is to be promoted, it follows that a minimum level of health care should be available to all citizens independent of income or resources.

123. Let's assume therefore, that the primary motivations for government intervention in health care are (a) to solve the problem of incomplete insurance markets; and (b) to ensure a minimum level of health care to promote equal opportunity. Can these objectives be pursued in a manner which is compatible with competition?

[62] Barr (2012), page 240.

4.2. Promoting competition between health insurers

124. In principle, if competition could be made compatible with the objectives set out above, competition between health insurers would deliver a range of valuable benefits.[63] Health insurers would have strong incentives to keep premiums to a minimum and to deliver a high quality of service and value for money. The insurers would have an incentive to ensure that cost-effective services were provided while services with low benefit-to-cost ratio were excluded. The insurers would also, in principle, have an incentive to focus on delivering services which patients care about and the quality level that customers desire, while neglecting those they do not.

125. But this competition must be made compatible with the objectives set out above. We have seen above that, in the absence of any government intervention, competition between health insurers for short-term contracts will push insurers to price the insurance according to the expected costs of the individual. Moreover, long-term health insurance contracts do not exist. As a result, consumers cannot purchase insurance against long-term, chronic, or genetic health risks. In order to correct this problem, government intervention must address either the incentive or the ability of insurers to vary health insurance premiums according to factors which are unique to the individual and over which the individual has no control, such as their genetic make-up.

126. One possible approach is to simply prohibit discrimination in premiums on factors specific to the individual.[64] But this creates strong incentive problems of its own. In particular, where differentiation of premiums is prohibited, insurers have an incentive to compete strongly for low-cost customers and to deny insurance to customers with above-average expected costs – this is the cream-skimming problem which we discussed in detail in section 2. This problem can, in principle, be partially mitigated by a rule which prohibits insurers from denying insurance to applicants. As we will see later, such rules are common in the health sector, but they are difficult to enforce. Insurers retain strong incentives to remove high-cost customers from their books. They also have the ability to make their services increasingly unattractive to such customers, perhaps by shading the quality. Proving such discrimination can be difficult.

127. An alternative approach is to introduce a system of transfers or subsidies which seek to offset the higher costs associated with taking high-cost customers and/or to reduce the rents associated with serving a low-cost customer.

128. Some governments intervene in the health system in exactly this way – through a system of payments or cross-subsidies between insurers (see the discussion of the situation in the Netherlands below). The objective here is to offset the differential costs of insuring different customers. In Australia, for example, a Risk Equalisation Trust has been established to re-distribute revenues between private health insurers offset differences in risk in the demographic profile of each insurer's population.[65]

[63] We are assuming here for the moment that – perhaps through the social welfare or social security system – all consumers are willing and able to purchase health insurance when it is available at a reasonable price. In other words we are putting aside the question of consumers who are too poor to purchase health insurance at all.

[64] In Australia, for example, "community rating" rules prohibit private health insurance companies from discriminating between customers on the basis of gender, race, or "any other characteristic of a person that is likely to result in increased need for hospital treatment or general treatment".

[65] See http://www.privatehealthcareaustralia.org.au/risk-equalisation-and-community-rating/

129. This is a fairly substantial intervention in the market. Barr (2012) summarises this conclusion as follows:

> *"intervention on the scale necessary to address the technical problems faced by actuarial insurance leads to a system which, though private, is de facto social insurance".*[66]

4.2.1. Fixed-price versus cost-reimbursement in health insurance subsidies

130. We know from the discussion in section 2 of this paper that how these side payments or subsidies are paid directly affects the incentives on the insurers and therefore the scope for competition. In that section we identified two approaches: A high-powered incentive contract based on a fixed-fee and a low-powered incentive contract based on cost reimbursement. These ideas have a direct application in this context.

131. Let's consider first the "fixed fee" approach. Specifically, let's assume that the government divides health consumers into a number of groups corresponding to their expected health care costs. The government could then assign a level of payment to each group; any insurer who insures a customer from the relevant group would receive the corresponding payment. If the payments are set appropriately, the end-consumers would face roughly the same health insurance premiums regardless of their health status.

132. In principle, this approach would reduce the incentive on the insurers to deny insurance to high-cost customers within each group. The more "granular" the definition of the customer groups or classes, the more closely the payment should correspond to the actual costs associated with that group, reducing the incentive for cream-skimming. Some incentive for cream-skimming may nonetheless remain. As noted above, this may partially be mitigated by a requirement to accept all customers.

133. It may be difficult to identify all of the factors in advance which affect the likely health care costs of a specific individual. For some, particularly exceptional or particularly high cost individuals, it may be preferable for the payment to be on a cost-reimbursement basis. As we noted earlier, this is a low-powered incentive approach, but it overcomes the incentive to identify and deny service to these customers.

4.2.2. Examples of competition between insurers

134. This discussion suggests that it may be possible to sustain competition between health insurers, while meeting the objectives set out above, by implementing a system of payments or subsidies between insurers.[67] This approach to competition between health insurers has been tried in practice. Barr (2012) provides two examples: The so-called "Stanford Plan" under which Stanford University offers health insurance to its employees and the system for competition between health insurers in the Netherlands. Both approaches have the following features:

[66] Barr (2012), page 256.

[67] Such systems will also have implications for the incentives of insurers. For example, if insurers are compensated according to the risk category of each customer, they have little incentive to engage in activities which might mitigate that risk, such as programs to quit smoking or to exercise. Such "public health" programs may need to be funded elsewhere.

- Although the purchase of health insurance is compulsory, employees (in the case of Stanford) or citizens (in the case of the Netherlands) have a choice of health insurer.
- Insurers which are members of the scheme must offer a core, minimum package of services, but can offer can offer policies with a higher level of services;
- Insurers are not permitted to charge different premiums according to the risk of an individual. Other than that there is no restriction on the premium that insurers can charge (that is, they may compete on price);
- Insurers are not permitted to turn down applicants; they must accept all applicants;
- Insurers which take on higher-cost customers are compensated (through a "redistributive pooling arrangement" in the case of the Stanford Plan, and through a public subsidy in the case of the Netherlands).

4.3. Promoting competition within a single-payer system

135. Most countries do not implement a system of transfers between insurers as set out above. Instead, in most countries there is a single health insurer which is almost always provided by the government, and usually funded out of tax revenue. The question becomes whether it is possible to sustain choice and competition between health care providers in a context in which the government is the primary funder of services.

136. The issues in establishing choice and competition in this context are essentially the same as those highlighted in section 2 of this paper, although there are some new issues. As before, the scope for choice and competition depends on the arrangements by which the funding payment is paid. For example, consider the case of competition between hospitals for specific hospital-provided services. If the funds for the service are paid in the form of a fixed fee-per-service, the customer (the patient) could in principle choose between competing hospital service providers. Provided certain conditions are satisfied this would give rise to strong incentives on the part of hospitals to provide these services efficiently, to maintain quality, and to provide services in a way that customers desire.

137. Many countries around the world fund health care in this way. In the US, the Medicare system switched to "prospective payments" in the 1990s, coupled with utilization reviews under which doctors had to justify to the payers that the treatment they were providing was suitable.[68] Many countries have adopted a system in which patients are classified into Diagnostic-Related Groups (DRGs), with different payments associated with each distinct DRG. OECD (2014) notes that the number of groups varies between 518 in the patient classification system used by Poland and 2297 in the French system of classification into "Group Homogène de Malade" (GHM, or homogeneous patient groups).

138. Problems still remain, however. Amongst other things, hospitals still maintain an incentive to try to take only the lowest cost patients within each DRG.[69] Preventing such cream-skimming is difficult:

[68] Le Grand (2007), page 100.

[69] "The fixed-price system may have induced 'cream-skimming', whereby hospitals tried to attract patients whose treatment costs they expected to be below the fixed price they were being offered, and to 'dump' patients whose costs they expected to be above that price". Le Grand (2007), page 102.

> *"Hospitals could also cream-skim in less overt ways. For instance, a hospital could locate in a more affluent area where on average the local population will be lower risk. A hospital could decide not to have an accident and emergency department, thereby excluding all emergency (and more expensive) admissions, an access route that is also more prevalent among lower socio-economic groups. The hospital could market its services at targeted populations of lower risk, and perhaps at more affluent patients. Or it could alter the case mix of its patients by providing only limited intensive care facilities".*[70]

139. As we have discussed earlier, this problem can be partially addressed by increasing the number of risk classes, so that there is relatively little variation between the highest-cost and lowest-cost patients within each risk class or DRG. But this comes at the cost of increased effort in identifying and classifying patients into DRGs.

140. Another possible solution is to adopt some of the features of a low-powered incentive contract:

> *"One possibility is to introduce some kind of stop-loss insurance scheme whereby hospitals faced with a patient whose treatment costs lie well outside the normal range get allocated extra resources once the cost has passed a certain threshold. These would have to be justified as catastrophic costs (not as the result of poor quality care). This has the advantage of removing the incentive to discriminate against high-cost patients, but carries with it the problem that the hospitals concerned have no incentive to economize on treatment costs once the threshold has been passed".*[71]

141. There is also the fundamental problem of how to classify patients into treatment groups. In most cases the government (as payer) has little or no direct contact with the patient and must rely on advice provided by medical experts. A medical expert or classifying physician must certify both which services are required and in which risk class or DRG a patient should be classified. This may give rise to a conflict of interest. A medical expert may have a financial interest in the provision of a certain service either directly (when the expert has a financial interest in the company providing the service) or indirectly (where the expert receives a benefit by referring customers to have a particular service provided). In addition, the classifying physician may have an interest in placing the patient in a class with a larger subsidy – known as "upcoding" or "DRG creep".

142. There may also be problems with the assessment of quality. In many cases patients are not able to assess the technical or medical quality of the service they have been provided. Competition between hospitals may therefore give rise to pressure for hospitals to shade on quality in order to reduce costs. Le Grand (2007) summarises these problems as follows:

> *"In areas where prices were not fixed, hospitals appeared to cut both prices and quality, relying upon the fact that users and purchases of health care find it difficult to properly assess quality and hence to observe quality reduction".*[72]

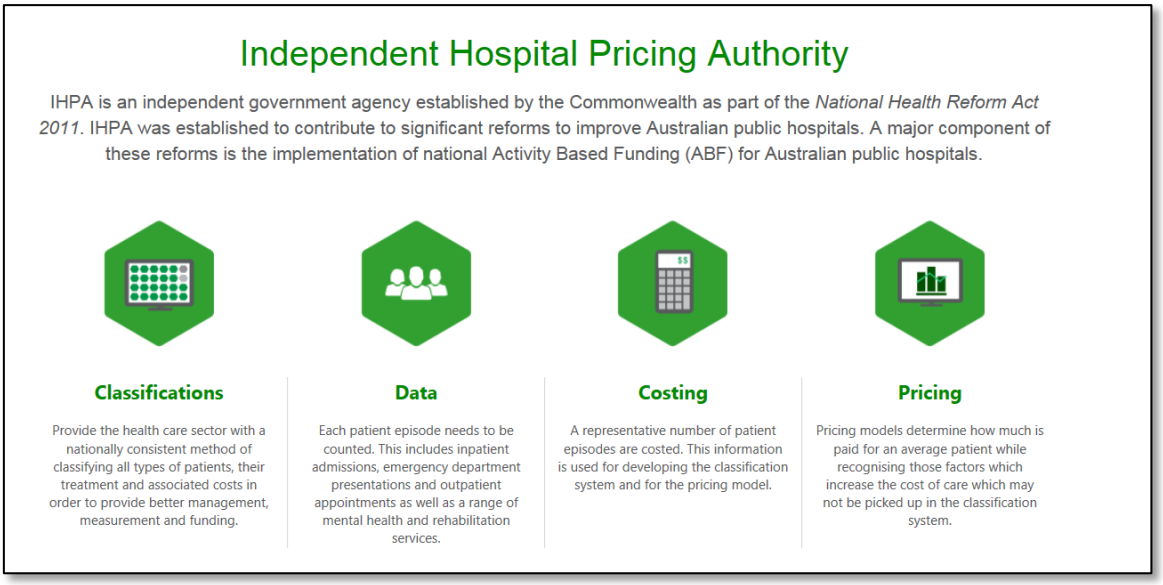
[70] Le Grand (2007), page 124.

[71] Le Grand (2007), page 124-125.

[72] Le Grand (2007), page 102.

143. Despite these problems there is increasing use around the world of "fixed fee" or "prospective payment" reimbursement for the purchase of many standardised hospital services. Le Grand observes that the NHS in the UK is in the process of adopting a fixed-price system: "so-called 'payment-by-results', which fixes the price or 'tariff' for each procedure".[73] Australia has recently adopted an "Activity Based Costing" framework. A new institution, the Independent Hospital Pricing Authority (IHPA) was established, amongst other things, to determine the fixed fee for key hospital services. The following is an extract from the website of the IHPA, showing its major functions in developing, pricing, and costing classifications:

Figure 4. The website of the Australian Independent Hospital Pricing Authority



4.3.1. Competition in primary care providers and capitation payments

144. As we have seen, the medical expert charged with classifying the patient into a diagnostic class and recommending specific service providers may face a conflict of interest. This conflict of interest is the most severe when the medical expert responsible for classifying the patient for the purpose of the subsidy is also providing the services himself or herself. This is typically the case for primary medical services, such as those provided by a GP. Under a system of fixed payments as discussed above, the government (as payer) would typically rely on the GP to both diagnose the patient, and to determine the appropriate DRG class which determines the size of the subsidy. This clearly gives rise to a conflict of interest; the GP has an incentive to both provide services which the customer does not necessarily require and to place the customer in a DRG with a larger subsidy payment.

145. One way around this problem is to make the payment to the GP independent of the actual services used by the customer. Suppose, for example, that the payment to the GP depends only on the *number* of customers registered with the GP (as opposed to the number of services provided). In this case the GP has a strong incentive to restrict or reduce the services it provides to its clients. In some cases the GP may also take responsibility for

[73] Le Grand (2007), page 121.

purchasing hospital services on behalf of the patient. Again, the GP would retain strong incentives to ensure that the hospital services purchased were medically justified, offered value for money and were provided efficiently. At the same time, of course, GP's might have an incentive to under-provide services, in order to keep as much of the government subsidy payment for themselves as possible. But this effect is offset by competition between GPs. Provided there is effective competition between GP service providers, they have an incentive to maintain overall quality in order to attract and retain customers. As long as customers have adequate information about the servicing practices of GPs they could in principle select GPs which deliver the best value for money overall.

146. Models of competition of this kind have been trialled. For example, reforms of the NHS in the UK began in 1991 split up the monolithic state health bureaucracy into separate 'purchasers' and 'providers':

> *"The providers, mostly hospitals, became semi-independent 'trusts', with freedom to price their services and to compete for customer from the purchasers. The purchasers were of two kinds. There were GP 'fundholders': family practices who not only provided primary care for the patients registered with the practice but also held a budget to purchase some forms of secondary care (mostly elective surgery) for them. And there were health authorities: geographically defined organizations who purchased all secondary-care services for those who lived in their area, except for those purchased by fundholders".*[74]

147. This system is, in effect, very similar to the concept of competition between insurers discussed in the previous section. The GP in this model plays the role of the insurer – purchasing health care services on behalf of the end-customer. As in the model of competition between insurers, competition between these fundholders or "GP insurers" should ensure overall quality of service.[75]

148. The payments to the GP in this model, which depend primarily on the number of clients of the GP, are known as **capitation payments**. From our analysis above we know that for this mechanism to work effectively these capitation payments must accurately reflect the expected cost of each patient, with a higher payment for customers with chronic or congenital health issues. Otherwise, as we have noted several times in this paper, GPs would have a strong incentive to engage in cream-skimming – actively seeking out low-cost patients while denying service to high-cost customers. Le Grand (2007):

> "As GPs currently receive the majority of their resources on the basis of capitation, there is a strong incentive for them to cream-skim low-risk patients who will consume fewer resources. The opportunity presents itself in a number of ways, including refusing to sign patients on or taking *patients off the list. There is no hard evidence of which we are aware that this occurs in practice, though there is much anecdote".*[76]

[74] Le Grand (2007), page 103.

[75] This model – with GP purchasing of services on behalf of patients – did not survive. In 1997 the Labour Government abolished GP Fundholding, replacing it with the concept of primary care groups which evolved in Primary Care Trusts. There was some further experimentation with Practice Based Commissions in the mid-2000s. Following further reforms in 2012, these have been replaced with Clinical Commission Groups. It is not clear that abolition of GP Fundholding was due to evidence of its failure as a policy.

[76] Le Grand (2007), page 121.

4.3.2. Ensuring competition between health service providers

149. Of course, for choice and competition to be effective in delivering desirable outcomes, customers must face real choice of health service provider. This is typically not a problem in larger urban areas in OECD countries, provided customers are willing and able to travel. Some problems may remain in remote or rural areas, where competition between hospitals is infeasible. In addition, special care may need to be taken to ensure that lower-income patients are able to travel to rival hospitals. Le Grand (2007):

> *"Lower car ownership and the consequent dependence on public transport among lower-income groups was a significant factor in lower utilization rates and higher rates of failing to attend appointments. So, both to promote equity and to help make competition real, an essential element of any policy aimed at encouraging choice is the provision of help with transport and travel costs".*[77]

150. Another problem is that there remain economies of scale in some hospital procedures. Hospitals need to do a minimum number of certain procedures per year to maintain high quality standards. Therefore, for safety reasons, less common procedures may only be provided at a handful of hospitals. In Australia, for example, only four centres across Australia provide lung transplant services (and only one centre provides pediatric lung transplants). Conventional in-the-market competition in the case of these rare or complex procedures may be inherently limited.[78]

151. In addition, choice and competition may simply not be possible where the patient does not have the time or the capacity to make a choice. This may arise in the provision of some emergency services. These may have to be funded through a separate mechanism.[79]

152. In addition, for competition to be effective in delivering efficient outcomes, entry and exit must be reasonably free. New hospitals must be able to enter the market. Studies of manufacturing have found that half of all the productivity gains in an industry can be attributed to the entry of new high-productivity firms. The same is no doubt true in health care. There must be scope for new and innovative health services to enter the market. At the same time underperforming hospitals must be able to exit the market. Hospitals will be unlikely to invest in new processes to deliver health services more efficiently if rival inefficient hospitals are able to simply match their lower prices.

153. Le Grand (2007) emphasises that the decision to close an underperforming hospital can be difficult and can be seen as a political decision. Nevertheless, "by protecting hospitals and other medical facilities from the consequences of losing patients, they blunt the incentives to improve, not only for the hospital itself but, via osmosis, throughout the system"[80]. Le Grand recommends the establishment of an independent hospital regulation commission whose task it is to identify and close loss-making hospitals.

154. Finally, and this goes without saying, for competition to remain effective the competition law must be vigorously enforced. This has many dimensions:

[77] Le Grand (2007), page 108.

[78] There remains some scope for the government to allocate these specialised services through a process of competitive tender.

[79] There may be scope to allocate these services to hospitals through competitive tendering.

[80] Le Grand (2007), page 114.

- Hospitals should be prevented from, amongst other things, merging with their rivals where doing so results in a material loss of competition to customers. Hospitals should also be prevented from tying up access to key inputs to deter entry.[81] Many OECD competition authorities have experience with control of hospital mergers.[82]
- Professional regulation should not be allowed to unduly restrict competition. Most professional health roles are subject to professional regulation – particularly regulations which restrict certain services to only be performed by a member of a profession, combined with rules which restrict entry to a profession to those who are suitable trained or qualified. However, it is often the case that the existing members of the profession have a key role in setting the training or qualification requirements. This creates a continual risk that the members of the profession will use this role to limit entry. This might involve, amongst other things, not recognising the qualifications of professionals trained in other states or countries. The Australian competition authority has, over the years, taken a number of enforcement actions in cases involving health professionals.[83]
- Public and private providers must compete on an equal footing. If private providers are to invest in entering and expanding in the market they must be able to compete on a level playing field with public providers. Competitive neutrality rules (in Australia) or rules against State Aid (in the EU) must be actively enforced.[84]

4.4. Summary: Choice and competition in the health sector

155. Where does this leave us? The analysis above suggests that there may be material scope for enhancing competition in the health sector. The following lessons emerge as guidance for the promotion of choice and competition in the health sector. This list is very similar in form to the list of lessons emerging for the education sector in section 3.4 above:

- There may be scope for competition between health insurers, provided the government can establish a detailed mechanism of payments or cross-subsidies between insurers to eliminate differences in the insurance premium due to differences in the health status of the customer.
  - This will likely require the establishment of a mechanism for pricing the likely health costs of individual.
  - Insurers should also be prevented from denying coverage to applicants.
  - Customers (patients) should have access to information about the quality and prices of the services offered by different insurers.
- Even where there is a single funder of health care, it may be possible to improve outcomes through enhancing choice and competition between health care providers. Action may need to be taken to actively encourage competition and efficient consumer decisions, including:

[81] See, for example, Gaynor (2012).

[82] See, for example, ACCC (2014), page 69.

[83] See, for example, ACCC (2014), page 68.

[84] There are also interesting and deep questions about competition and competitive neutrality in systems, such as Australia, which feature a mix of public and private hospitals competing for the provision of services to both public and private patients.

  - Ensuring that customers can travel to alternative providers (perhaps through the provision of public transport).
  - Ensuring that consumers have the information they require to make an effective choice of health care provider.
  - Further assistance in cases where patients are unwilling or unable to make a choice for themselves (such as the Patient Care Adviser which was trialled in the UK).
- Hospitals should have sufficient autonomy to respond to competition
  - Hospitals should have ability to make decisions over staffing, philosophy, and mix of inputs.
  - Any barriers to hospital entry or expansion should be removed.
  - Hospitals which are not able to earn a normal return should be allowed (and, indeed, required) to exit the market.
- Careful attention should be paid to funding
  - As far as possible, the funding level for each patient should reflect the expected cost for that patient. This implies tailoring the fixed fee according to identifiable characteristics. There has been substantial effort in developing DRGs in many countries (and GHMs in France) to achieve this aim. As far as possible, each hospital should have a roughly equal incentive to compete to provide a given service for each prospective student.
  - As a backstop, some hospitals could receive cost-based reimbursement for some, particularly high-cost or otherwise unusual patients. This would be expected to be accompanied by close monitoring by the government.
- Governments will need to be closely involved in the procurement, monitoring and/or regulation of health providers in areas where competition cannot be sustained (or in the case of services for which competition cannot be sustained).

5. Competition and choice in other public services

156. This paper has focused on the education and health sectors. But OECD governments are typically heavily involved in the subsidisation of a wide array of other services on behalf of citizens, such as public housing, aged-care facilities, or disability support services. There may also be scope for choice and competition to improve outcomes for consumers in these sectors, without undermining the underlying government objectives. The Australian Harper Review observes:

> *"Despite the complexity of many human services markets, there is growing interest, both in Australia and overseas, in opportunities to make use of competition-based instruments to secure better outcomes for users of human services and better value for money. As the ACCC states: "There is scope for greater competition in human services, the potential benefits of which may include lower prices, greater efficiency in service provision, greater innovation and improved consumer choice".*[85]

[85] Australian Government (2015), page 320.

157. We acknowledge that the extent to which there is scope for increasing reliance on choice and competition will surely vary from sector to sector. There is almost certainly no "one-size fits all solution".[86] But, having noted these caveats, is there anything we can say in general about how we might go about increasing reliance on choice and competition in these sectors, without undermining the underlying government objectives?

158. In section 2 we noted that one way to enhance competition and choice in the provision of subsidised services is to simply pay the subsidy directly to the consumer, independent of the purchasing decisions of the end-customer. The customer retains the incentive to make efficient use of these funds, choosing between competing providers as in any other competitive market.

159. The same principle applies even if the government places some restriction on the use of the funds. For example, the government may make a payment to the customer contingent on the customer using those funds to purchase a particular class of services. As long as the class of services is not too restrictive, the customer retains a strong incentive to spend the funds efficiently and to choose service providers which provide the best value for money. This in turn creates strong incentives on the service providers to compete to meet the needs of customers and to deliver good value for money.

160. Many different levels of government in OECD countries are experimenting with giving the end-customer some control over services purchased within an overall budget or allowance. Footnote 41 mentions the actions of the Birmingham City Council. The Harper Review mentions other examples in Australia:

- "With the introduction of the National Disability Insurance Scheme (NDIS) … Funding for disability support will follow individual service users rather than service providers, allowing individuals to choose the providers from whom they wish to receive services. Individuals electing to receive direct payments for purchasing their support (subject to a risk assessment) will not be restricted to choosing providers registered with [the Government]". More information on the Australian NDIS is provided in Box 3 below.
- In Queensland the 'Your Life, Your Choice' disability support initiative "allows eligible Queenslanders to participate actively in planning and delivering their own disability support and services". Similarly the South Australian government has "commenced a transition towards individualised funding for clients, including self-management, in order to allow people with disability to have choice and control over their own support packages."
- "The Australian Government is providing consumer-directed Home Care Packages for older Australians who want to remain in their own home but need some assistance with transport, domestic chores or personal care. Under these packages, government provides funding to users who have the right to use their budget to purchase the services (within the scope of the program) they choose. Users enter into a contract with home care providers to deliver the services. An advocate can represent the user in this process, if desired."[87]

[86] Alford and O'Flynn (2012) highlight the waves of efforts of reform of public services and conclude: "It may be that there is a new public sector reform panacea waiting in the wings. But…we offer a different answer: there is no 'one best way'. Instead, the new world of public service delivery is one where there are different ways for different circumstances."

[87] Australian Government (2015), page 223.

- Even without providing a budget to end-customers which they can spend as they see fit, governments may be able to foster choice and competition in the provision of public services through the mechanisms discussed earlier in this paper. For example, rather than direct provision of public housing, the government could provide a direct payment to renters and allow them to choose between provide housing providers, to find the service which best meets their needs. Programs of this kind have been in operation in many OECD countries for many years.[88] The experience in the US is summarised in Box 2.

Box 2. The experience with rental vouchers in the US[89]

Since the 1970s, rental vouchers (originally called certificates) have been a mainstay of US federal housing policy. The housing voucher program supplements rent payments for approximately 2.2 million low-income families and individuals. Recipients choose a house or apartment available in the private market and contribute roughly 30 percent of their incomes toward rent, with the program paying the difference up to a locally defined "payment standard."

When families first receive a voucher, they are responsible for finding a house or apartment that meets the program's housing quality standards with a landlord who is willing to participate in the program. Once they find a qualified housing unit, families or individuals can begin receiving housing assistance.

Three-and-a-half decades of experience have shown that providing rental assistance directly to tenants is an extremely effective and efficient mechanism for addressing the housing needs of low-income families and individuals. The majority of households who receive a voucher are successful in finding a house or apartment for which they can receive assistance, and recipients generally live in better quality housing and pay more affordable rent than similar, unassisted households.

The value of vouchers, however, goes beyond their role in promoting housing affordability. In principle, vouchers give low-income families the ability to move to neighbourhoods of their choice. Housing mobility can benefit families by improving their access to safe and healthy environments and to educational and employment opportunities, potentially reducing poverty and contributing to a region's prosperity over the long term. New evidence from the decade-long Moving to Opportunity (MTO) demonstration shows that families who received vouchers and housing search assistance to move from distressed public housing developments to homes and apartments in low-poverty neighbourhoods enjoyed significantly better health and well-being than members of a control group. Moreover, those that were able to remain in lower poverty neighbourhoods for longer periods of time saw higher rates of employment, higher incomes, and better educational achievement. In addition to these family-level benefits, evidence suggests that an entire region is better off when fewer people live in neighbourhoods of concentrated poverty.

[88] For example, the Australian government provides "Rent Assistance" to recipients of other benefits (such as unemployment benefit). See https://www.humanservices.gov.au/individuals/enablers/how-much-rent-assistance-you-can-get

[89] The material in this section is taken from Katz and Turner (2013).

161. The Australian Harper Review concluded with the following recommendations:

162. "User choice in human services, as in other areas, can provide benefits to users and promote diversity and innovation in service delivery. The UK has a 'presumption of choice' operating across most public services, and has adopted high-level choice principles. The Panel considers that, in a federation such as Australia, it would be useful for all governments to agree on common principles to guide the implementation of user choice in human services.

163. The Panel's view is that the Australian Government and state and territory governments should agree on choice principles and that user choice should continue to be implemented in Australian human services markets, beginning with markets where choice is most easily established.

164. In putting user choice at the heart of service delivery, governments should:

- recognise that users are best placed to make choices about the human services they need and design service delivery, wherever possible, to be responsive to those choices; …
- ensure that users have access to relevant information to help them exercise their choices, including, where appropriate, feedback from previous users of services;
- in sectors where choice may be difficult, make intermediaries or purchase advisors available to help users make decisions, with policies designed to align the incentives of purchase advisors with the best interests of users;
- ensure that a default option is available for users unable or unwilling to exercise choice;
- lower financial and non-financial switching costs to enable switching wherever possible — for example, users should not 'lose their place in the queue' if they switch providers, or need to undergo further eligibility assessment; and
- offer disadvantaged groups greater assistance in navigating the choices they face through, for example, accessible communications channels that suit their needs."[90]

[90] Australian Government (2015), page 239.

Box 3. The National Disability Insurance Scheme in Australia[91]

The market for disability goods and services in Australia is undergoing significant reform with the phased creation, commencing on 1 July 2013, of the National Disability Insurance Scheme ("the Scheme"), which is jointly funded by the Australian Federal government and the governments of the eight States and Territories from general taxation.

Over the six years from 2013 and 2019, a fundamental transformation is occurring in the ways in which Australians with qualifying disabilities purchase, and are funded to purchase, the goods and services that they need to mitigate or alleviate the activity limitations and participation restrictions that arise as a result of their qualifying impairments. The historical system of budget-capped, program-based, primarily State/Territory government funded, managed and (often) delivered schemes will be replaced by a national no-fault insurance based approach. When fully rolled out, the Scheme will be supporting about 460,000 people or about two per cent of the Australian population, and its annual expenditure will account for about one per cent of Australia's GDP.

The Scheme provides funding to eligible individuals ("participants") so that they can purchase, in the open market, the disability related goods and services ("supports") that they need. It is administered by an independent government agency, which has responsibility for determining whether or not an individual is eligible for assistance, and the level of that assistance – the participant's personalised budget. The average personalised budget in 2016-17 was AUD 52,400 – which represents 95 per cent of GDP per capita. About 9 per cent of participants receive a personalised budget worth more than AUD 100,000. On average, the value of a participant's personalised budget is significantly greater than their personal income (2.5 times). These relativities may have implications for the participant's ability to act as informed purchasers in the new market. This is especially so when their historical experience is more related to budget-scarcity and a culture of gratefully accepting the program-based services on offer rather than crafting an individualised service bundle for themselves, and, in some cases, cognitive and education deficits.

One of the principal objects of the Scheme is that participants have choice and control over how, and with which providers, they spend their available budgets. If the Agency agrees that the participant has the requisite capacity, then the participant can self-manage their budget, in which case they pay providers directly for the services that they receive and are reimbursed by the Agency from their budget. Participants who are not self-managing can choose to appoint (and pay for) a plan manager. In this case, the plan manager pays the providers who deliver services to the participants (with the participant retaining choice of service provider) and is reimbursed by the Agency from the participant's budget. All other participants have their budgets managed by the Agency. In this case, the participant's providers are paid directly by the Agency from the participant's budget, while the participant still chooses their providers and the supports that they purchase.

Competition issues arising from the transitional arrangements

As noted above, when fully rolled out, total funding for the Scheme will account for about one per cent of Australia's GDP. This represents a doubling, in real terms, in expenditure on the provision of disability goods and services across the Australian economy over six years. This rapid expansion will have significant effects, in the short term, on the operation of the market for disability goods and services. General Equilibrium modelling of the Australian economy indicates that about 20 per cent of all employment growth in the economy as a whole over the next five years will need to occur in the disability sector if the proposed expansion in services is to be achieved. As a consequence,

[91] The material in this section was provided by David Cullen, Principal Economist of the National Disability Insurance Agency (NDIA). The views expressed here are personal views and do not necessarily reflect the views of the NDIA.

wages and prices in the sector are expected to grow significantly faster than in the economy as a whole over that period as the industry struggles to attract and retain the required workforce. Thus, the introduction of the Scheme itself imposes an economic shock of the sector of which regulators need to be cognisant.

Over the longer term, the introduction of the Scheme should reduce barriers to entry to the disability service sector. Supply will no longer be limited to those organisations funded and procured directly by government, or to services which governments deliver directly. Moreover, smaller and more innovative providers should be able to enter the market through direct engagement with the consumers of disability goods and services. At the same time providers should be able to achieve greater economies of scale by operating as a single entity across Australia. In sum, there should be a stronger market for the provision of supports, as there are a significantly larger number of purchasers, accessing a wider range of providers.

In the immediate term, however, the picture is a little different. Large or monopoly providers of services in the historical arrangements (sometimes government operated services) were the first movers into the new market. They often transferred in with an established and often loyal client base, where the budget constraints of the previous arrangements tended to induce a sense of gratitude amongst those people with disabilities who did manage to secure funding and services. At the same time, these providers were not well prepared for the new arrangements. They were often accustomed to block, or even deficit or cost plus, funding and had inefficient workforce and management practices. They were unaccustomed to innovating and often had no history of tailoring services to clients. Conversely, new and more innovative providers faced difficulties in attracting a sufficient client base in order to establish competing businesses.

In this situation of constrained supply, the significant increase in available funding meant that there was a considerable risk of rent seeking from existing providers. A set of price caps were therefore established. These price caps have, however, operated to further stifle innovation within the market. This is because the nature of price caps requires that the products to which those caps apply be well defined. Thus the Agency has produced a price cap catalogue of all of the services on which participants can spend their personalised budget. This in turn requires participants to make their purchasing decisions at a micro level (and at the level of inputs rather than desired outcomes). That is, participants purchase from their providers a mix of strictly defined unit services (for example, a number of hours of assistance with activities of daily living at different times and on different days of the week – all price capped separately) rather than a bundle of services or an outcome.

On the demand side, more people will be eligible to receive assistance with the costs of the disability goods and services that they need and the total demand for these goods and services will increase. The demand side implications of the introduction of the Scheme will not, however, be limited to an increase in aggregate demand. Consumers will also have greater control over the funds that are expended to purchase disability goods and services, which will increase the efficiency of the expenditure, by better matching expenditure to the goods and services most valued by consumers. Because a wider range of supports will be available to participants, they will be more likely to be able to access the supports that will be most useful to them, rather than being restricted in their choice to the supports determined by traditional programs. Moreover, person-centred plans should more efficiently allocate resources as they should be better aligned with the participant's utility valuation.

In general, subsidiarity does lead to improved efficiency, and individualised budgets are the ultimate form of localisation. However, the competitive nature of the market also depends on the extent to which consumers can make informed choices. At a minimum, prior to choosing a provider, potential consumers must be able to compare many providers at low cost and observe the price and quality of care. On the positive side, unlike acute medical care, the demand for disability care is often not time sensitive.

6. Conclusion

165. Choice and competition give rise to powerful incentives to produce goods and services that consumers desire as efficiently as possible, while continuing to innovate to meet changing customer needs over time. Public services such as health and education form a large component of household and government budgets. It is desirable to ensure that these services are provided as efficiently as possible.

166. But in many countries these services are not provided under conditions of competition. In many countries the government is the sole provider of many key public services. Despite the best intentions of governments to provide these services as effectively as possible, consumers often find that these services are inefficient or not meeting their needs. Perhaps the forces of competition can be harnessed to drive better outcomes in these markets? The Australian competition authority (the ACCC) observes:

> *"While noting the policy issues around equity, welfare and access, facilitating greater competition in the human services would likely have the same benefits as competition brings to any other sector. The potential benefits include lower prices, greater efficiency in service provision, greater innovation and improved customer choice".*[92]

167. This paper is a brief review of the problems associated with promoting choice and competition in education, health and other public services. We find that there are common themes which emerge. Specifically, there are fundamental government objectives which drive government intervention in these sectors. These government objectives drive governments to be directly involved as a funder of these services. But the manner in which those funds are paid has strong implications for the ability to rely on choice and competition.

168. We have seen that government subsidies can be made compatible with choice and competition, but doing so requires that governments set the size of the subsidy to each customer class equal to a "fixed fee" which is determined in advance. This will almost certainly require some form of administrative pricing mechanism. Important questions arise about how large the customer classes or groups should be – the smaller they are the more effort that must be expended in defining the classes and in setting prices; the larger they are the greater the risk of cream-skimming, and the problems of large information rent, or incentives to deny service to high-cost members of each group. These problems arise in both education and health care.

169. In the case of the education sector, we concluded that, with a targeted subsidy (also known as an education "voucher"), competition between schools is possible and could deliver a range of desirable outcomes, including innovation, efficiency and responsiveness. However, the size of the subsidy must reflect the cost of educating students which may vary with factors such as socio-economic status and family background. In addition, if we are to preserve equality-of-opportunity objectives schools must be prevented from "topping up" (charging supplementary fees); we proposed that schools participating in the school choice program not be allowed to deny applicants who meet basic requirements at all.

170. In the case of the health sector, government intervention is necessary to offset problems of incomplete insurance markets. This intervention must offset the higher cost of insuring individuals with chronic or congenital health conditions. Again, in principle,

[92] ACCC (2014), page 67.

this can be achieved by dividing customers into groups and setting a fixed fee payment/subsidy for each group. A system of competition between health insurers, combined with government subsidies for high-cost customers, has been implemented in the Netherlands.

171. Even where there is a single health insurer and therefore a single funder of the health system it may still be possible to enhance choice and competition for many health services. Again, the process would require the establishment of a fixed fee for each service. This would almost certainly require the establishment of an administrative pricing mechanism, such as the Independent Hospital Pricing Authority in Australia. Incentives for cream-skimming are likely to remain but can be minimised where the customer groups are defined very narrowly, so that there is little variation between the highest-cost and lowest-cost patient in each group.

172. Such mechanisms may not be appropriate for all services. However they offer promise to increase the performance of the health system in a wide range of fairly standardised services. Alternative mechanisms, such as cost-reimbursement, coupled with government monitoring can fill in the remaining gaps – such as services to complex cases, or services which are only performed infrequently and which, for safety and quality reasons, tend to be clustered at a small number of centres.

173. Of course, in all cases competition is only effective at delivering better outcomes where customers have a real choice. Attention may need to be given to increasing competition between schools and hospitals by removing barriers to entry and exit and through active enforcement of the competition law.

174. We hope this paper can be a useful basis for discussion and as a starting point for countries considering advocating for enhanced reliance on choice and competition in public services.

References

ACCC, (2014), "Reinvigorating Australia's Competition Policy", ACCC Submission to the Competition Policy Review, 25 June 2014.

Australian Government, (2015), *Competition Policy Review: Final Report*, March 2015.

Alford, John and Janine O'Flynn, (2012), *Rethinking Public Service Delivery*, Palgrave MacMillan.

Barr, Nicholas, (2012), *The Economics of the Welfare State*, 5th edition, Oxford University Press.

Besley, Timothy and James M. Malcomson, (2016), "Choice and Competition in Public Service Provision", 16 August 2016.

Dynarski, M. and A. Nichols, (2017), "More findings about school vouchers and test scores, and they are still negative", *Evidence Speaks Reports*, 2(18), 13 July 2017.

Friedman, Milton, (1955), "The Role of Government in Education", from *Economics and the Public Interest*, ed. Robert A. Solo, 1955.

Friedman, Milton, (1962), *Capitalism and Freedom*, University of Chicago Press.

Gaynor, Martin, (2012), "Reform, Competition and Policy in Hospital Markets", in OECD (2012).

Hirth, Richard A., (1997), "Competition between for-Profit and Nonprofit Health Care Providers: Can it help achieve social goals?", *Medical Care Research and Review*, 54(4), 1997.

Katz, Bruce and Margery Austin Turner, (2013), "Streamline Administration of the Housing Choice Voucher Program", Brookings Institute, January 2013.

Le Grand, Julian, (2007), *The Other Invisible Hand: Delivering Public Services Through Choice and Competition*, Princeton University Press.

OECD, (2012), *Competition in Hospital Services*, June 2012.

OECD, (2012), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*, 2012.

OECD, (2013), *Education Policy Outlook: Chile*, November 2013.

OECD, (2017), *School Choice and School Vouchers: An OECD Perspective*, OECD, 2017.

Oxera, (2017), "Agenda: Hidden Talent: The Economic Benefits of Social Mobility", July 2017. The research is published in The Sutton Trust (2017), "About us: Social Mobility".

Productivity Commission (Australia), (2017), "Shifting the Dial: 5 Year Productivity Review", Inquiry Report No. 84, 3 August 2017.

Stenbacka, Rune and Mihkel Tombak, (2015), "Competition between For-Profit and Nonprofit Health Care Suppliers and Quality", 21 August 2015.

Stiglitz, Joseph E., (1988), *Economics of the Public Sector*, 2nd edition, Norton & Company Inc, New York, 1988.

UK Government (Department of Education and Skills and Prime Minister's Strategy Unit), (2006), *School Reform: A Survey of Recent International Experience*, June 2006.

Von Hayek, Friedrich A., (1960), *The Constitution of Liberty*, University of Chicago Press, 1960

Warburton, Mark, (2016), "The VET FEE-HELP debacle: Helping its victims and lessons for administration", December 2016.

Wood, William D., and David F. Beardmore, (1986), "Prospective payment for outpatient mental health services: Evaluation of diagnosis-related groups", *Community Mental Health Journal*, 22(4), December 1986, 286-291.