

## 1: Decoding efficiency

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### Your money spent on you

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Through a combination of income tax, GST and various other taxes and duties, the Federal, State and Local Governments take a percentage of every Australian's income. (The average household pays about a quarter of its income in taxes.<sup>19</sup>) With this money these governments:

- » teach 65% of our children – and substantially co-fund the other 35%<sup>20</sup>
- » co-fund nearly all Australian university students
- » provide 67% of hospital beds – and co-fund the private beds<sup>21</sup>
- » co-fund medical services and medications
- » regulate to ensure the safety and/or reliability of:
  - food and beverages
  - medicines
  - buildings
  - road, rail, water and air transport
  - workplaces
  - the finance sector
- » provide and police the justice system and the system of property rights
- » undertake diplomatic and national security tasks, such as pursuing our interests in foreign relations, ensuring security through border controls and providing national defence
- » provide infrastructure, such as the vast majority of roads
- » supply essential community services, such as protecting vulnerable children, assisting those with disabilities and providing help when bushfires, floods, or other emergencies occur
- » give financial assistance to those in need, for example, age and carers pensions
- » run trusted information sources, such as the Bureau of Meteorology and the ABC
- » run a myriad of other services that, directly or indirectly, affect every Australian everyday

Politicians make the major decisions on how the money is to be spent, but the big jobs of collecting the money and providing the services are done by the public sector; that is, public servants (teachers, police, health workers and their support staff, the defence force, case work officers, policy officers and many more) and the employees of government owned corporations like the ABC, the CSIRO, and water and energy providers.

So this is your money being spent on you. Every Australian, therefore, has the right to know that the money is not being wasted; that it is being spent as efficiently as reasonably possible.

## Getting 'efficiency' wrong

Politicians and other public figures who comment on public sector efficiency are well aware of the need for an efficient public sector, and parliamentary and public discussions feature strong opinions on the topic, as the introductory quotes to this chapter illustrate. Unfortunately, the word 'efficiency' is often misunderstood or misused, leading to decisions that cause waste. In our day-to-day lives, all of us have experienced similar 'false economies', decisions intended to save time or money that end up costing more than they save, buying a cheap car part that has to be replaced more frequently or taking a cheap flight with many more stopovers. In public services the two most common kinds of false economies are: inappropriate cuts or savings and inappropriate privatisation or outsourcing.

***Inappropriate cuts or savings:*** Often debates on efficiency focus on reductions in resources. These cuts are usually either staff cuts, such as promises to reduce the number of public servants by a certain amount, or general budget cuts, such as the 'efficiency dividend' which requires most Federal Government departments to spend 1.25% less to meet the same responsibilities each year (in many recent years the percentage has been larger and the 2014-15 budget has increased it to 2.5%<sup>22</sup>). Cuts to the funding of an existing service or decisions not to fund a planned service are often referred to as 'efficiencies' or 'savings' when they are announced. However, cutting spending on activities that deliver more benefits than they cost, or failing to invest in projects that should be undertaken, can make government less efficient, not more. How this works is discussed below.

***Inappropriate privatisation or outsourcing:*** A range of different terms have been used to describe these actions and there is no 'correct' definition, but it is important to be clear on the meanings of the terms as used in this report.<sup>23</sup> Here 'privatisation' refers to the government selling a physical asset or an organisation and 'outsourcing' refers to paying a corporation or other organisation to undertake a service that was previously provided directly by the government. There are important differences between privatisation and outsourcing, but they are grouped together here because the same misunderstanding of efficiency is often used to justify their inappropriate use. Again, the way misunderstandings of efficiency lead to waste is discussed below.

## Getting efficiency right

Note the use of the word 'inappropriate' in the descriptions above. To be clear, this is not an argument that outsourcing, privatisation, cutting spending or finding savings in the public sector are necessarily bad public policy. What is argued is that these measures can sometimes be detrimental to efficiency (and so a waste of taxpayer resources) and that a clear understanding of efficiency is necessary to avoid such problems.

In some cases cuts to government operations are the right decision, and in other cases they are the wrong decision. This statement might seem so obvious as to be not worth making, but too often the word 'efficiency' is used as though it means the same thing as 'cuts'. This falsely implies that cuts are always the right decision.

Similarly, in some cases the outsourcing or privatisation of government operations is the right decision, and in other cases it is the wrong decision. Again, this statement might seem obvious,

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but there is a widespread belief that the private sector is always more efficient than the public sector. This falsely implies that privatisation or outsourcing is always the right decision.

These two misunderstandings of efficiency not only bias some towards cuts and privatisation, they can also cause those who support the public provision of a service to argue against efficiency or argue it is not important. Rejecting efficiency offhand is just as significant a mistake as pursuing a biased perception of efficiency. Efficiency is a critical tool in achieving any aim, but only if the full meaning of efficiency is used.

### Three kinds of efficiency

The field of economics has developed a thorough understanding of the concept of efficiency. Unfortunately, this knowledge is generally expressed in the jargon of the field and has not tended to inform the public debate on efficiency of the public sector. This is a shame because the concepts are readily expressible in plain English.

One kind of efficiency is doing the work you are doing with the fewest possible resources, getting ‘more for less’ or ‘value for money’. This means producing each item and delivering each service with the least expenditure of time, money, materials, etc. Taking a quicker route to work, shopping at a supermarket that is cheaper and just as close, and printing documents double-sided, are all examples of increased *technical efficiency*.

Another kind of efficiency is about doing the right work, by allocating resources to produce and provide items and services of the highest total value. Value is often thought of as the amount of money someone is willing to pay, but this is not always reliable for all circumstances. Also important is best meeting needs in a wide range of circumstances, whether or not payment is involved. A print-out of a document that is read and used by many people can be more valuable than a print-out that is read by only a few, or no-one at all. Buying more nutritious and flavoursome foods gives more value than buying unhealthy and unappetising food. Using paper on printing the most useful documents and getting the best food for the weekly budget are examples of increased *allocative efficiency*.

A third kind of efficiency involves ensuring future needs are met and finding new ways to fill them. This includes ensuring that new technologies, new ways of operating and new ways of thinking are able to be used. Saving time and petrol by working from home, or using electronic paper instead of printing, can be examples of increasing *dynamic efficiency*. This kind of efficiency is in many ways the least understood. While technical and allocative efficiency are well-grounded in economic definitions, dynamic efficiency is a more fluid concept.

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To illustrate the differences with a public sector example:

- » **Technical efficiency:** Building a road using the best mix of labour and capital. Using picks and shovels when machinery can do a lower-cost job is technically inefficient.
- » **Allocative efficiency:** Building a road where it is most needed. Even if a road is built with the optimal labour-capital mix and no waste, if it is in the wrong place, or if a more heavily trafficked road is neglected, that is inefficient in an allocative sense. Those resources could have been used elsewhere with better outcomes.
- » **Dynamic efficiency:** Attending to transport needs as opportunities or needs change over time. That may mean taking on new modes, such as high-speed rail.

All three kinds of efficiency are important. But often the pursuit of one can get in the way of achieving the others. This is particularly important in complex and continuously changing areas, which is very often the case in public services. A simplistic approach to efficiency often fails to recognise that resources are necessarily devoted not only to produce current outputs, but also to make sure these generate the most value to citizens (for example, by tailoring them to different needs in different locations or to different groups), and also to make sure that the outputs change and improve over time as new technologies and needs emerge.

The blind pursuit of technical efficiency is quite often disastrous for companies if they do not recognise these issues in their own investment plans, because competitors soon destroy them as their products or methods become outdated. An example was Kodak continuing to release new film cameras that may have been technically more efficient, but failing to invest in dynamic efficiency by developing digital cameras. It is equally disastrous, and sometimes more so, if public services are not run with the same eye to all three types of efficiency. How damaging is it to overall efficiency if our defence equipment is the wrong type for changing needs, if our schools are using the wrong models of education, or if our payments system is using outdated technology? Misunderstandings of these three kinds of efficiencies and their interactions lead to the two errors listed above.

## Inappropriate cuts and misunderstanding efficiency

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Most of the discussions of public sector efficiency are concerned with technical efficiency. Phrases such as ‘doing more with less’ show this, since doing more work with fewer resources is an improvement in technical efficiency. Unfortunately, beyond this rhetoric there is often a misuse of the word ‘efficiency’. This misuse occurs because the proposed plans focus on the resources being used, while not sufficiently considering the outputs being produced, the value in different settings of the outcomes being sought or the possibility of developing future capacities that are just as important to invest in as existing outputs.

This means that promises are made that there will be cuts to the public sector, but that the services provided will not be affected. The cuts are usually measured in detail and get strong media attention, but the services are not so well-measured. Decreases in the quality or accessibility of the services are not as noticeable. Opportunities lost in the future are also unrecognised or undervalued, until we get there and wonder why our performance has slipped behind that of other countries, or why critical needs were not anticipated and met.

A large part of the reason for the focus on inputs is that they are relatively easy to measure. They can be expressed as dollars in a budget. Outcomes in the provision of public services are generally less easily measured. This is the case because, unlike many other markets in which a straightforward measure of profit can be applied, their value is based on a range of different factors, many of which are difficult to price directly. Public services often cannot be regarded as a simple discrete ‘product’ because their objectives are usually complex. For example, an aim of promoting local economic growth is complex because growth can be measured in a number of ways, each emphasising different values such as employment, wages, consumption, or investment. Other common public service aims, such as greater equality of income and wealth or the provision of public goods (like the justice system or the security provided by the military), are equally difficult to value. A recent Productivity Commission report on access to justice provides one example of such difficulties in its discussion of government-funded legal assistance and the problems of assessing its effects.<sup>24</sup> There is clear evidence of the benefits of legal assistance – some international research finds governments can save over eight times the cost of legal assistance

through avoided downstream use of other public services – but precise quantification of impacts is very difficult. With many public services the value is there, but we cannot readily measure it in a way that directly compares with input costs.

The resulting lack of attention to outputs means that the reduction in services may be greater than the cuts to the resources, meaning that cuts have led to reduced technical efficiency. For example, technical inefficiency can be created by cutting staff while expecting the same services to be provided. Doing so will usually place a greater burden on the remaining staff. If this makes the work less attractive there may be difficulty in hiring sufficiently skilled staff and salaries may have to increase. There may also be increased turn-over and more resources ultimately devoted to training new staff whom have a lower level of skill and experience than the staff they have replaced. At the same time, the productivity of some staff might drop due to lowered morale and motivation, and possibly even stress-related illnesses. An immediate saving from an inappropriate staff cut can be gradually (or in some cases rapidly) exceeded by the costs of increased salaries and training time, as well as the lowered productivity from reduced experience and motivation. This would be clearly seen if done by companies producing standard goods and services, but often cannot be so readily seen in the reduced quality of many public services.

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Lack of attention to outputs can also result in important areas being neglected, while resources are put towards lower priority issues. If local roads in marginal electorates receive funding and a major highway is neglected, there may be more road accidents than if the highway upgrade were funded. This is a failure of allocative efficiency in that the more important work is being ignored. It also has a negative effect on technical efficiency because the costs on the health and disability budget of road accidents will be greater; this is in addition to the costs borne by accident victims and their carers.

In some cases there may be a simple failure to allocate resources to important areas. One of the key roles of public services is to respond to emergencies. It looks more efficient when, in quiet times, capacity is cut in emergency services, health services, security services, or infrastructure services. This type of apparent efficiency has tragic consequences when problems arise, systems fail and responses are inadequate, and is a clear example of where the public sector must maintain reserve capacity that the private sector would find unprofitable.

Inappropriate cuts and savings can also significantly damage dynamic efficiency. The most obvious cases of reduction in dynamic efficiency are cuts to research and education. For example, from the early 1950s to the late 1970s Australia increased its investment in agricultural research, but increases since that time have been much smaller. There is evidence that this plateau in research funding has had a significant effect on agricultural productivity growth, which has decreased from 2.2% per year to 0.4%.<sup>25</sup> Failing to invest in research means new techniques and technologies are not created. Insufficient investment in education means a reduced capacity to implement and adapt to new discoveries. Other examples of cuts or savings damaging dynamic efficiency include the loss of skills from staff cuts; this is discussed in Box 3.2 below.

Inappropriate cuts and savings can reduce efficiency due to a failure to acknowledge that efficiency involves results as well as resources (outputs as well as inputs). In a wide range of fields, we see the first things cut by blind efficiency measures can have serious consequences for technical, allocative and dynamic efficiency. The following case study provides a good example of a situation where cuts to public funds would cost more than they would save. It is interesting to note that many of those who would bear the costs might not know that they are benefiting from public funds.

### **BOX 1.1: Removing public transport subsidies can be a waste of time – for car commuters**

Governments often ensure the availability of low-cost public transport by providing subsidies that reduce the prices of tickets. Whether the actual vehicles are run by the government or a private company, low-cost public transport is a public service ultimately resulting from government funds. It is not generally appreciated that substantial benefits accrue from these subsidised services; benefits not just to the public transport users, but to the wider community, and especially to those who commute by car. This example looks at some of the benefits from Sydney's trains.

In looking at the benefits of Sydney's rail public transport the intention is not to make the argument that the current fare and subsidy levels are necessarily ideal. There is a great deal of sensible discussion on issues such as cost recovery rates, fare increases, car use charges and levels of investment in transport infrastructure. The example given here simply demonstrates that there can be substantial economic benefits from low-cost public transport supported by subsidies.

The subsidies to public transport go towards both a general reduction in ticket prices and further reductions on tickets for particular groups, such as school student passes and pensioner tickets. It is probably well understood that the further reductions for specific groups are provided for social justice and equity reasons. What may be less well-known is that the general reduction in prices relates strongly to the external benefits of public transport – the benefits to non-public transport users and the wider community obtained from the operation of public transport.

A large part of these benefits go to those who commute by car. The former Treasurer, Wayne Swan, observed in his final budget speech: "Traffic congestion costs commuters time with their families and is estimated to cost our economy up to \$20 billion a year by 2020 if not addressed."<sup>26</sup> A full bus takes around 30 cars off the road; a train removes its passengers from the road entirely. Both lead to less traffic congestion and a faster journey with reduced fuel use for those who commute by car. The reduced fuel use also results in significant reductions in emissions that benefit us all. While the logic of public transport reducing congestion and emissions is straightforward, it is more difficult to determine exactly how much benefit car users are deriving and by how much emissions are reduced. However, a report prepared for the Independent Pricing and Regulatory Tribunal (IPART) provides relevant information. This report was written to allow IPART to determine whether the correct level of subsidy was being given to CityRail.<sup>27</sup> In its effort to determine optimum subsidies the report used a traffic model to compare traffic congestion under current train use with hypothetical scenarios including having no CityRail trains.

This procedure assumes that public transport affects traffic congestion because commuters shift to other forms of travel if their current mode of travel is unavailable. This assumption is not uncontroversial. It can be argued that over the long-term people adapt to their situation by changing where they live and work to avoid heavily congested roads or to take advantage of relatively clear routes. However, the extent to which adaptation occurs may be limited and occur very slowly, and such adaptations that might occur involve their own costs and benefits. Very few people can change jobs or homes quickly, and many will not go to the effort involved.

“ the benefits of public transport are greater than the subsidies ”

By comparing current train use with a hypothetical situation of having no CityRail trains, the report calculated the annual benefit to car users from trains to be \$923 million. This benefit comes from reduced congestion, meaning that car commutes are faster; car drivers and their passengers save time (which was valued at \$13.51 an hour) and use less fuel for their journeys. Having fewer cars on the road also benefits the community generally by \$134 million a year through reducing carbon and other emissions. Around 1 million tonnes of carbon emissions are avoided annually (valued at \$25/tonne). Health costs from other emissions, estimated at \$109 million a year, are also avoided. These external benefits are in addition to the yearly benefits obtained by the rail commuters themselves, which were calculated to be either \$1,031 million or \$1,414 million a year, depending on modelling assumptions.

The yearly total of the rail commuter, congestion and emission benefits from CityRail comes to \$2,071 million or \$2,454 million. By comparison, the subsidies that help to ensure the availability of this low-cost public transport amount to \$1,364 million per year. The comparison is not entirely fair since it only accounts for these three benefits. There are less directly observable benefits that should also be taken into account:

- » Agglomeration, particularly for businesses in the CBD who benefit from being located in a cluster of other businesses and having a concentration of skilled workers<sup>28</sup>
- » Reduction in the significant stress effects of congestion<sup>29</sup>
- » Avoidance of higher costs generated by a lack of investment in public transport infrastructure, such as further road construction and associated land acquisitions

These aspects of the broader economic, social and environmental performance of the city should be taken into account. Even without them, however, the benefits of public transport are greater than the subsidies, which demonstrate how government subsidies of public transport can deliver important advantages.

## Inappropriate privatisation or outsourcing and misunderstanding efficiency

Outsourcing and privatisation schemes are frequently undertaken with the stated intention of increasing efficiency. Sometimes this is done after a careful and independent analysis that determines the private sector is likely to be more efficient at the particular task. At other times it is done simply on the basis of the mistaken belief that the private sector is always more efficient than the public sector. This belief is sometimes called ‘private sector primacy’.<sup>30</sup>

A common misconception is that private sector primacy is supported by economic findings that markets always drive efficiency. This is an incomplete understanding of the economics of markets when applied in the fields for which public services have been built. Abstract economic models predict that well-functioning competitive markets will match supply and demand so that goods and services are produced at the prices and quantities that will be purchased. The result provides maximum satisfaction of consumers’ needs within their constrained budgets and ensures least cost by producers. This means no effort is wasted on the production of items or the provision of services that people are not willing to pay for. Furthermore, where there are limits to what can be made or provided, effort goes towards those goods and services that have the highest value in terms of the amount that people are willing to pay.

The tough and invisible hand of the market, according to this model, ensures both allocative efficiency (markets provide only those things people want) and technical efficiency (high-cost producers go out of business). The model is limited, however, as the real world departs from the abstract model in many important ways. Sometimes the departures are minor, and the costs to bring about ideal outcomes would be greater than the cost of departures from the ideal. But in many cases the costs of 'market failure', to use the conventional economic term, are such that public intervention through government provision (e.g. roads), funding (e.g. health care) or regulation (e.g. the finance sector) is required. Markets have repeatedly been shown by economic analysis to fail to deliver efficiency in a range of circumstances. These are outlined below:

### **Non-competitive conditions**

Public services are provided mainly in areas where standard competitive market conditions do not apply. Unlike services delivered through competitive markets, public services possess some unique characteristics: distributional outcomes are particularly important (for example in the tax-transfer and welfare support systems); services are thought best to follow need rather than willingness or capacity to pay (like justice or disability services); minimum service levels are desired even if they are high cost (like services to rural and remote communities, or to Australians travelling abroad); and certain collective goods are delivered that cannot be produced in a market (like defence and immigration). Public services often involve elements of regulation, or overwhelming commitment to the public rather than private interest (like parliamentary services, the military and police). Such services are not best provided in a framework where the primary motivation is profit.

### **Single buyer**

In a public service outsourcing the government is often the only buyer, so this is not a genuine competitive market. The market power of the one buyer is often used to get very low prices from suppliers. This can be a benefit since the savings from these low prices allow more services to be provided to the community. However, this market power can be misused to drive prices so low that there are long-term costs. For example, many Australian charities and other not-for-profit bodies have been used to deliver low cost welfare services, but this has often been at the expense of program effectiveness or dynamic efficiency. Pricing is often too low to sustain adequate training, employ fully qualified staff, or to develop new service models. A range of service quality disasters have come to light over the years in areas like child care and nursing homes, requiring costly fixes, re-regulation and so on.

### **Alternative means of competing**

As mentioned above, markets can drive technical efficiency in that they involve competition. Being able to produce the same quality of outputs at lowest cost is one way of out-competing alternative providers. However, there are numerous other ways to appear to be competitive, such as reducing quality in ways that are hard for customers to detect, spending more on marketing, greater access to capital, or maintaining superior access to buyers. This means that outsourcing to create a market will only improve efficiency to the extent that attempting to produce the same quality outputs at a lower cost is the dominant form of competition in the new market. Because of the complexity of measuring public service outputs it can be difficult for even a well-informed government buyer to ensure that lower bids for public service contracts do not simply result in lower quality services, rather than efficiency.

### **Principal-agent problem**

This problem occurs when an individual or organisation (an agent) is carrying out work on behalf of someone else (the principal). Where the interests of the agent and the principal are not exactly aligned, problems can easily arise. Because the agent is doing the actual work they will frequently have more knowledge about how the work should best be done (called information asymmetry) and it can be difficult for the principal to oversee the work effectively. The result is a tendency to produce outputs that are suited to the needs of the agent rather than the principal. A well-designed incentive system can ensure that the interests of principal and agent are aligned. However, as mentioned above, the objectives in public services are often complex and difficult to quantify. This makes designing effective incentive systems extremely difficult, and means that outsourcing works only for simply specified services; otherwise contractors tend to focus their attention on generating impressive performance according to indicators that may not relate well to the principal's actual objectives.

### **De-skilling**

Public service agencies as designers of programs and purchasers of services begin to de-skill as they have diminishing roles and experience of the front-line, and this exacerbates the principal-agent problem. Procurement and recruitment skill problems emerge, and several have been reported in recent years. Difficulties arise with designing and implementing new services, particularly when policies are crafted without proper consideration of practical constraints or with inadequate knowledge of innovations in delivery that open up policy options.<sup>31</sup> Some departments have reached the point that they must turn to contractors even for the smallest tasks that ministers might give them. To a large extent, it is only because so many private contractors are former public servants that the necessary skill is available at all. As these public service trained workers start to age and retire there is a much thinner pool of replacements coming through, depending on how much capacity has been retained in the various areas of service.

### **Loss of economies of scale**

Many fields of public activity involve networks and scale efficiencies. These often are most efficiently delivered as single public systems. An example may be the much lower administrative cost per dollar disbursed by Medicare (a nation-wide health insurance scheme) relative to the multitude of higher cost private health insurance schemes. Other examples arise in road networks, statistical collections, meteorology services and many others.

The private sector is not inherently more efficient than the public sector in the delivery of public services.<sup>32</sup> Taking a full view of efficiency, there is no evidence that private schools are more efficient than public schools,<sup>33</sup> that private health and hospital services are more efficient than public health and hospital services,<sup>34</sup> or that private regulation and codes of practice work better or are better enforced than public regulation in many fields. In some situations privately provided

services may be more efficient, but in others they are less efficient. This means that decisions on whether or not to outsource or privatise need to be made only after independent, robust and comprehensive analysis of the likely impacts on efficiency and other key policy goals. Such analysis should try to identify all costs involved, including costs transferred to users of government services. The future must have as much weight as the present in the assessment. Making choices in this way is, of course, more difficult than a simple rule-based preference for a certain sector, but is likely to lead to better results. The following case study is a good example of where the presence of some of the above described factors (non-competitive conditions, alternative means of competing and loss of economies of scale) means the case for government involvement is clear.

“The private sector is not inherently more efficient than the public sector in the delivery of public services.”

### **BOX 1.2: A clear need for government leadership – the National Broadband Network (NBN)**

The private sector is not well-suited to leading the construction of big networks. The best way to build a national network, regardless of whether it is communication or transport, is through the leadership of a national government. That does not mean that there cannot be substantial private involvement. A great deal of the work of rolling out the NBN is being done by private contractors. But for a number of reasons, three of which are outlined here (uncertainty over the timing of economic returns, need for consistency in roll-out and avoiding duplicated networks), public sector leadership is vital to settling key objectives and standards of delivery.

The most significant problem for private sector leadership in constructing an NBN is the uncertainty of the timing of economic returns. The value of a network does not increase in a predictable fashion. The first private telephones were a novelty, but not very useful. A hundred phones across an entire country are unlikely to connect you to many people you know. Perhaps even a thousand phones will not be useful, but at some point the network is of enough value that everyone wants to be part of it and the way we communicate is changed forever. At that point the network becomes economic to run, but the timing of that point is impossible to predict. This is a high risk for private sector investors, who generally cannot bear this timing uncertainty.

Another problem is with consistency and reliability. It would be extremely difficult to find a private company big enough to take on the entire task of rolling out a NBN (and even if that were possible, it would create a monopoly and remove any possible benefits of private sector competition). If a network is built by a variety of organisations there will be differences in the kind of network installed and the way it is set up in different areas. This will constrain the way in which the network can be used. For example, an organisation may wish to invest in high quality video conferencing because of the savings that can be made by having employees telecommute. However, if it is uncertain that all employees will be able to use the system successfully from home, depending on where they live, then the investment will likely not be made. The consistency involves a number of factors, not just the speed, but aspects such as its ‘jitter’ (tendency to have slow periods and bursts of speed) and ‘latency’ (delay in transmission). Inconsistencies in these respects can make communication much less intelligible and cause data losses. A government-driven national roll-out with a guarantee of certain minimum standards gives a consistency that broadens the potential applications of the network.

Inconsistency and unreliability are of particular concern for rural communities, since it is in these smaller markets where reduced incentives for private investment make these problems more likely. These problems are a disincentive for businesses to operate in rural areas. If a level of consistency is guaranteed, not only do rural areas benefit, but arguably strain on capital cities is reduced.

A further problem is the likelihood that competing networks may be built alongside each other. An example of this is the needless duplication involved in having separate Optus and

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Telstra mobile phone tower networks. This leads to many areas having two towers when only one would be required for the number of mobile phones in the area, while other areas miss out. Not only is building duplicate networks a waste of resources, the costs of which are largely passed on to consumers through higher charges, but it can cause numerous other inefficiencies. For example, both Telstra and Optus offer ‘cable internet’ connections which operate through a hybrid fibre-coaxial cable (HFC) network. Because Telstra and Optus each have their own HFC network it is not possible to change providers remotely. Instead it involves a technician visiting the premises in order to run a second cable and install a second socket in the wall.

The case for Federal Government leadership in providing an NBN is so strong it has more-or-less been accepted by all major political parties. Most of the media debate on NBN policies during the 2013 Federal Election focused on whether there was a false economy in the Coalition’s NBN plan of rolling out fibre-optic cable to ‘nodes’ for most streets and connecting to the existing copper network from there, rather than connecting fibre directly to almost every house under Labor’s plan. Less commonly discussed is the Coalition’s acceptance that Australia should have an NBN and that the primary responsibility for providing it must lie with government.<sup>35</sup> This position has been maintained since the election.

Although the Coalition has said that it will remove the regulations that currently prevent competing networks from being built, there is as yet no estimate of the extent to which the private sector is likely to take up this opportunity. The Coalition is holding the position put by Abbott prior to the election: ‘let a competitive market deliver the speeds that people need at an affordable price with government improving infrastructure in the areas where market competition won’t deliver it.’<sup>36</sup> The National Commission of Audit report recommended that the NBN Co. only be privatised after roll-out was completed.<sup>37</sup> This means that across the spectrum of politics, regardless of beliefs about big or small government, there is broad agreement that leadership of the construction of Australia’s next significant network is best provided by government.

## Effectiveness and equity

There is another factor that applies to both of the errors discussed above (inappropriate cuts and inappropriate privatisations or outsourcing), and that is governments giving insufficient consideration to two concepts that are related to efficiency: effectiveness and equity. These two concepts reflect the expectation that the public sector serves the wider economy and society. Consideration of efficiency needs to take this into account.

A good definition of **effectiveness** is: the relationship between purpose and results. In other words, an action undertaken by the public service, or a public sector organisation, is effective if it achieves the objective that was intended.<sup>38</sup> This means if a health department implements a vaccination program to reduce the occurrence of a disease, the program is effective if it does reduce the number of infections.

In relation to public services, **equity** most commonly refers to both the equal treatment of equals (where there are similar levels of need and the service is equally accessible to all) and the unequal but fair treatment of unequals (where services account for the special needs of particular groups in the community).<sup>39</sup> Equity can involve equity of access, so all Australians are expected to have adequate access to services, and equity of outcome, whereby all Australians are expected to receive

similar outcomes resulting from service use. For example, a vaccination might be made freely available to all (equity of access), or may be made available free to certain vulnerable groups, such as children or those with an underlying medical condition, so that those groups are as safe from the effects of the disease as the general non-vulnerable population (equity of outcomes). For many Australians, equity also has other dimensions. These can be important for many policies, and include spatial equity (particularly for those in remote and rural areas), intergenerational equity and social dimensions such as gender equity.

To make clear the relationship of these concepts with efficiency, consider the hypothetical example of a new vaccine (either newly developed or newly introduced into a country or region). The vaccine might be most effective at reducing the number of infections if it is delivered to everyone at around the same time. However, it might cost more to provide it in a burst than it does to spread out the provision over a longer time period, because many nurses have to be trained to administer the vaccine rather than just few who can travel around administering the vaccine over time. Providing the vaccinations all at once means that the cost of each vaccination is higher and this might seem inefficient. But a cost cutting measure to train only a few nurses, and have them travel to different communities and administer the vaccine, would reduce the effectiveness of the program (and potentially the equity since remote communities might be disadvantaged by getting the vaccine late). Even though providing the service in a burst means more resources used per vaccine, this may still be efficient if the additional effectiveness and equity are worth the increased cost.

In practice, it can be very difficult to establish the connections between inputs and outcomes because they tend to be influenced by a range of factors and there is often delay between the outputs being provided and their effects starting to show. However, wherever possible the effects of cuts or outsourcing on the public service's broader role need to be assessed to ensure a narrow pursuit of efficiency does not damage effectiveness or equity.

The Federal Government's stimulus package in response to the Global Financial Crisis (GFC) provides a good example of why the public service's wider role needs to be taken into account when assessing its efficiency, as set out in Box 1.3.

**BOX 1.3: It's not just the size of your stimulus package, it's the way you use it**

Australia was one of only three advanced economies that avoided recession during the GFC, which has ensured the Federal Government's fiscal stimulus package has been widely acclaimed. 'One of the best designed Keynesian stimulus packages of any country' stated Joseph Stiglitz, former World Bank Chief Economist, Clinton administration economic advisor and recipient of the Nobel Memorial Prize in Economics. An open letter circulated in 2010 and signed by more than fifty professors and lecturers from Australia's leading universities praised the Federal Government's actions in stimulating the economy, avoiding a recession and preventing mass unemployment.<sup>40</sup> The IMF also commended the 'quick implementation of targeted and temporary fiscal stimulus'.<sup>41</sup> It was considered to be 'among the most effective in the OECD'.<sup>42</sup>

Joseph Stiglitz provides a cogent argument in support of the package and the efficiency with which relevant government agencies undertook delivery.

“two concepts that are related to efficiency: effectiveness and equity... reflect the expectation that the public sector serves the wider economy and society”



*If you hadn't spent the money, there would have been waste. The waste would have been the fact that the economy would have been weak, there would have been a gap between what the economy could have produced and what it actually produced – that's waste. You would have had high unemployment, you would have had capital assets not fully utilised – that's waste. So your choice was one form of waste versus another form of waste. And so it's a judgment of what is the way to minimise the waste. No perfection here. And what your government did was exactly right.<sup>43</sup>*

The calculations of the Commonwealth Treasury support Stiglitz's analysis. Estimates indicate that growth would have been negative for three consecutive quarters without fiscal stimulus. Originally the fiscal stimulus was forecast to increase GDP growth by two percentage points in 2009 and to detract around one percentage point from growth in 2010; the estimates have changed only slightly since then.<sup>44</sup> This suggests the effect of the stimulus package was to avoid the waste of our economy being \$7 billion smaller, from factors such as unemployment and capital asset underutilisation.<sup>45</sup>

It is interesting to note that although Australia's stimulus package was one of the largest as a percentage of GDP, a number of countries with large stimulus packages did not perform very well subsequently. The OECD has concluded that the effectiveness of the stimulus was due to both the size of the measures and the speed with which it was introduced. The targeting of the stimulus to households (particularly those on modest incomes) and to school buildings (which can be undertaken rapidly) also contributed to the speed of its effect.<sup>46</sup> Design was critical, and required sufficient public service capacity to plan, cost, establish and monitor large projects against very tight time-frames.

Additional explanations have been suggested for Australia's performance during the GFC. Some of these also point to the critical role of a high-quality public service, particularly in two respects:

- » Banking regulation - None of our major banks failed, and Australia was one of only two advanced G20 countries that did not need to make a government injection of funds to the banking system (though, as in many countries, the government did issue guarantees for bond issuance and deposits). OECD analysis shows that our regulations were not stricter, but they were well implemented. Our banking system 'benefited from years of rigid supervision by "better than world-class" financial regulators'.<sup>47</sup>
- » The Reserve Bank - Appropriate actions by the Reserve Bank, and supporting government monetary policy, helped to maintain the stability of the financial system during the GFC, and was no doubt a key factor (though indications are that the full effect of monetary policy is usually delayed and was muted by the nature of the financial shock).<sup>48</sup>

Other explanations for Australia's success have been offered that imply less of a role for government, such as population growth, structure of the economy and demand from our major trading partners, especially China. Indeed, China's demand is the main reason usually given as an alternative explanation for why we did so well. The economist Steve Keen has argued this cannot be the case: if our current economic position had been the result of China's strong economy (itself boosted by a substantial stimulus program) then export industries

would have experienced employment growth first, followed by the rest of the economy. The reality is the growth was driven by industries benefiting most from the stimulus.<sup>49</sup>

The likelihood is that all these factors played complementary roles, with the non-government aspects being fed by, and feeding into, the effectiveness of government actions. It should be kept in mind that the ‘non-government’ aspects may have involved a significant government role in the long-term, for example, immigration policy affecting population growth and international trading relations facilitated by diplomacy.

There are some who continue to dismiss the efficacy of the government’s action during the GFC, criticise waste in the stimulus package, and argue against its overall size. These are worthy topics of discussion to ensure further improvement. Nevertheless, evidence suggests the timely government intervention in a slowing global economy was a necessary condition for the avoidance of recession, preventing mass unemployment, and safeguarding an economy that remains one of the strongest in the developed world.

“evidence suggests the timely government intervention... was a necessary condition for the avoidance of recession”

## Conclusion

Given the scale and significance of the work that the public sector undertakes, its overall efficiency is clearly important. However, permitting mistaken notions of efficiency to drive policy will result in ‘efficiency reforms’ that actually increase waste. To avoid these mistakes, policies on public sector efficiency must:

- » Focus as much on results as on resources (outcomes as well as inputs) of public service programs; when cuts are announced, evidence should be provided that the same services can be maintained with fewer resources, or the likely reduction in services should be outlined at the same time
- » Ensure that short-term efficiency gains will not result in larger long-term efficiency losses
- » Conduct independent and thorough investigation into the advantages and disadvantages of in-house and outsourced service provision before any outsourcing decisions are made
- » Conduct independent and thorough investigation into the advantages and disadvantages of public and private ownership of public service organisations or infrastructure before any privatisation decisions are made
- » Consider society-wide costs, not just direct costs to government budgets, so that public service cuts do not impose costs on the population that are greater than the savings.

Our public sector suffers the plight of the anorexic. No matter how thin it gets there are voices saying it is too fat. The word ‘efficiency’ is often misused to mean ‘cuts’, and some cuts to public services can end up costing us much more than they save.

Our public services do a lot for us. They need to be efficient, effective and fair. This will not be achieved by endless cuts or by blind faith in market solutions. We need to consider results as much as resources, we need to think long-term, we need to consider carefully the benefits and disadvantages of outsourcing and privatisation, and we need to be aware of society-wide costs, not just direct costs to government budgets.

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