

## Beyond official productivity statistics

# Productivity is not a perfect measure for evaluating policy

- As highlighted in Chapter 2 and by the major economic departments advising the Australian Government, the official productivity estimates do not measure the wellbeing or living standards of the community. This section outlines the issue from a policy perspective and considers possible ways that the government can respond.
- 8.2 Productivity should be seen as a means to an end, rather than an end in itself. The ultimate objective of public policy is to promote community wellbeing and quality of life.
- 8.3 It is important to acknowledge that whilst productivity can contribute to community wellbeing; it is not the sole determinant. As the Productivity Commission notes, wellbeing has many dimensions that includes:
  - environmental capital (amenity, biodiversity and air quality);
  - social capital (social attachments, community involvement and safety);
    and
  - per capita income (consumption and saving, funding of social activities and funding of institutions, such as law and order).<sup>1</sup>
- 8.4 Productivity only directly contributes to improvements in wellbeing by increases in per capita income. This is important because increases in per capita income allow individuals to achieve a higher material standard of

living and for society, through taxation revenue, to fund a range of government services and support facilities. The Treasury noted that:

Productivity improvements will also be important in helping Australia adapt to the challenges of an ageing population and climate change.<sup>2</sup>

8.5 So whilst productivity improvements will play an important role in ensuring that Australia has the resources to maintain living standards and community wellbeing in the face of future (financial) challenges, it is important to note that the ultimate objective of government policy is community wellbeing and not productivity. The Department of Education, Employment and Workplace Relations remarked that:

There is an increasing movement of international economic thinkers pointing us to the importance of a wider measure of capacity as a measure of the aggregate capacity of an economy and the wellbeing of the society, rather than simply as a measure of outputs over inputs.<sup>3</sup>

## The non-productivity determinants of wellbeing

- When evaluating policies to improve productivity it is important to understand what impact the policies will have on all factors that affect community wellbeing.
- 8.7 Policies that improve productivity can help to achieve other government objectives and improve community wellbeing. It is possible that human capital policies to improve the skills of disadvantaged members of society, such as the unemployed could lead to improvements in productivity and increased job satisfaction for these individuals.
- 8.8 However, policies aimed at improving productivity can hinder the achievement of other government objectives and compromise community wellbeing.
- 8.9 It is possible for productivity improvements to come at the expense of other means of achieving economic growth. As highlighted by the Treasury and the Productivity Commission (PC) the sources of economic growth are productivity, participation and population.<sup>4</sup> It is possible that

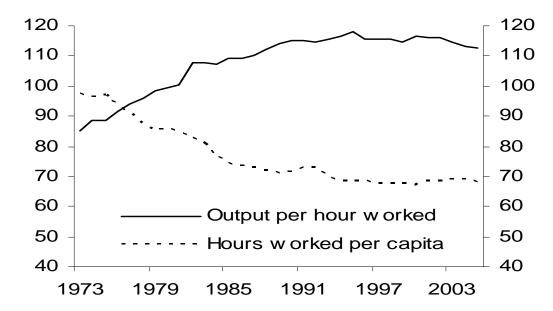
<sup>2</sup> The Treasury, Submission no. 10, p. 3.

<sup>3</sup> Mr R Griew, Department of Education, Employment and Workplace Relations, *Transcript*, 30 October 2009, p. 14.

The Treasury, *Intergenerational Report 2010*, p. xii and PC, *Economic Implications of an Ageing Australia*, March 2005, p. xviii.

some policies that increase productivity will lower either workforce participation or population growth. PC researchers found that France's productivity improvement, was accompanied by a significant reduction in labour utilisation, as shown in Figure 8.1.

Figure 8.1 Labour productivity and utilisation in France



Source Dolman, B, Parham, D, and Zheng, S, Can Australia Match US Productivity Performance? Productivity Commission Staff Working Paper, March 2007, p. 9.

8.10 Within Australia The Treasury highlighted the potential conflict between improving productivity and workforce participation:

Some people who are not currently in the labour force, if you brought them into the labour force, may be less productive than the current average worker. So, if you took a strict measure, you could say they may reduce labour productivity through reducing the average. That might be a nice technical point but it would be a pretty silly conclusion. Given that there are a range of disincentives for participation, removing those and improving overall workforce participation outcomes clearly enhances wellbeing overall.<sup>5</sup>

8.11 Productivity objectives can also conflict with other government objectives, such as minimising the risk borne by individuals. It is possible that government policies aimed at increasing productivity could actually

increase the risk borne by individuals. Dr Ken Henry, analysing the impact of structural reforms, noted that:

To put this (retrospectively) into our wellbeing framework, structural reforms have often involved increasing risk to some parts of the community in order to benefit Australian society in some aggregate sense.<sup>6</sup>

- 8.12 One specific policy example that impacts on productivity and the risk borne by individuals is occupational health and safety (OH&S) laws. To a certain extent, OH&S laws designed to protect the safety of workers can lower productivity, for example, the requirement to erect scaffolding around a roof on a construction site will increase the safety of construction workers, but will require more resources to complete the construction activity.
- 8.13 The PC, in its submission, identified reforms to State OH&S laws that prevent workers from bearing more risk as a potential policy area to improve productivity:

For example, innovation in occupational health and safety practices based on workers assuming responsibility for risks they are best placed to manage, is prevented by regulation in some jurisdictions.<sup>7</sup>

- 8.14 As the PC notes, this policy that could promote productivity is based on workers bearing the cost of extra risk. From a Government perspective it is important to evaluate whether the gains in productivity will outweigh the costs to workers from bearing greater risk.
- 8.15 Policies aimed at promoting productivity may also impact on the government's objectives in relation to the distribution of income and wealth. PC researchers outlined how the policies on working hours and minimum wages in some European countries had:

...excluded the low skilled from the work force.... These same policy and institutional factors also affected productivity outcomes. They shifted labour demand towards the relatively skilled... and shifted factor demands toward capital and away from labour.<sup>8</sup>

<sup>6</sup> Dr K Henry, *Fiscal policy: more than just a national budget*, Address to the 2009 Whitlam Institute Symposium, 30 November 2009, p. 24.

<sup>7</sup> PC, Submission no. 20, p. 44.

<sup>8</sup> Dolman, B, Parham, D, and Zheng, S, Can Australia Match US Productivity Performance? PC Staff Working Paper, March 2007, p. 10.

8.16 This highlights the fact that policies to promote productivity may reduce the incomes of the disadvantaged in society with a negative impact on the distribution of income and wealth.

#### Committee conclusion

- 8.17 The committee has found that productivity measures alone are not a good measure for evaluating public policy because productivity is not the sole determinant of community wellbeing and that policies aimed at improving productivity can have positive or negative impacts on the non-productivity determinants of community wellbeing.
- 8.18 The committee also notes that economic growth is not only stimulated by productivity growth; it may increase when productivity growth declines if income growth is strong, yet the growth is at a slower rate than the growth in inputs. The aim of public policy is to improve living standards, and productivity growth is one way of achieving this.

## The need for a policy evaluation framework

8.19 One possible response to evaluating policies aimed at improving productivity is to consider these policies in a cost benefit analysis framework. The evaluation criteria used within cost benefit analysis is the net social benefit to the community, thus providing a policy criterion consistent with improving community wellbeing. The Department of Finance and Deregulation Cost Benefit Analysis handbook states that:

Cost-benefit analysis is a procedure for comparing alternative courses of action by reference to the net social benefits that they produce for the community as a whole.<sup>9</sup>

8.20 The cost benefit approach has been adopted by Infrastructure Australia for assessing all infrastructure proposals<sup>10</sup>, which is particularly relevant because infrastructure projects have the potential to impact on productivity, as well as having other impacts. The Australian Government also mandates cost benefit analysis for regulatory proposals.<sup>11</sup>

<sup>9</sup> Australian Government, Handbook of Cost Benefit Analysis, January 2006, p. 2.

<sup>10</sup> The Treasury, *Submission no. 10*, p. 11.

<sup>11</sup> Australian Government, Best Practice Regulation Handbook, August 2007, p. 5.

8.21 The Australian Chamber of Commerce and Industry (ACCI) supported the use of cost benefit analysis:

Thus it is important that infrastructure investment decisions are made after thorough cost benefit analyses to examine the economic, environmental and social consequences, with the information available in public domain.<sup>12</sup>

8.22 ACCI also highlighted the importance of cost benefit analysis for assessing regulatory proposals<sup>13</sup> and the Master Builders of Australia also supported the use of cost benefit analysis.<sup>14</sup>

#### Committee conclusion

- 8.23 The potential for policies aimed at improving productivity to have a positive or negative impact on other government objectives highlights the need for a policy evaluation framework that will consider all of the impacts of a policy aimed at improving productivity.
- 8.24 In addition, the criteria to evaluate policies must be based on community wellbeing, and using productivity as the sole policy evaluation criteria is limited because it is only one determinant of community wellbeing.
- 8.25 One option for the Government is to mandate cost benefit analysis for all policies aimed at improving productivity. This would be consistent with the Government's approach to assessing infrastructure and regulatory proposals.
- 8.26 The committee believes extending the use of cost benefit analysis to public policy aimed at productivity improvements would ensure the optimum mix of productivity and wellbeing enhancing measures are employed.

#### **Recommendation 6**

8.27 The Australian Government mandates cost benefit analysis for all policies aimed at improving aggregate productivity growth.

<sup>12</sup> The Australian Chamber of Commerce and Industry (ACCI), Submission no. 7, p. 12.

<sup>13</sup> ACCI, Submission no. 7, p. 30.

<sup>14</sup> Master Builders Australia, *Submission no.* 17, p. 12.

#### **Government Service Provision**

8.28 The official productivity estimates do not cover all industries within the economy and it is important in considering Australia's future productivity challenge that attention be given to those industries for which productivity is not officially measured. As noted by the PC:

While estimates of output and hours worked are published for the whole economy, productivity is only well-measured in that part of the economy the ABS calls the 'market sector' - this is all the economy except health, education, defence, government administration, property and business services and personal and other services.<sup>15</sup>

- 8.29 Whilst many government services are not captured in the official productivity statistics, the quality and efficiency of these services can have a substantial impact on productivity. The impacts can be twofold;
  - government services as an input into the production processes of businesses covered in the market sector; and
  - the efficiency of government service provision itself as a form of productivity improvement.
- 8.30 Dr Ken Henry outlined the consequences of not measuring productivity for government services or measuring it only based on reference to inputs:

An immediate consequence of [using inputs to measure these services] is that productivity change for government-provided services is ignored, because outputs are taken to move at the same rhythm as inputs. It follows that if there is positive productivity growth in the public sector, our measures under-estimate growth.<sup>16</sup>

8.31 An indication of the size of government service provision is provided in the *Report on Government Services 2010*, which includes: education; policing; courts; corrective services; emergency, health and community services, and housing. These government services are valued at approximately \$132 billion or 13 per cent of GDP.<sup>17</sup>

<sup>15</sup> PC, Submission no. 20, p. 2.

<sup>16</sup> Dr K Henry, *Fiscal policy: more than just a national budget*, Address to the 2009 Whitlam Institute Symposium, 30 November 2009, p. 23.

<sup>17</sup> Steering Committee for the Review of Government Service Provision, *Report on Government Services* 2010, January 2010, p. 16.

- 8.32 An alternative measure of the size and contribution of government services is provided by the employees employed in the public service. The Australian Bureau of Statistics (ABS) estimates that 1.8 million people were employed in the public sector as of June 2009, or approximately 17 per cent of the employed Australian workforce. At the average wage for these staff, this equates to a total employee cost of \$108 billion each year for public service provision.
- 8.33 Based on the annual wages cost of government service provision, a two per cent improvement in labour productivity for government services could deliver a benefit of \$2.2 billion to the Australian community.<sup>20</sup>
- 8.34 Government service provision can also play an important role in promoting productivity as an input into the production processes of other businesses. The PC argued:

There is an imperative for the range of human services to be delivered more efficiently as well as more effectively. Services in the areas of education, health, childcare and aged care are all important to Australia's future productivity and the wellbeing of the community generally. Businesses are also subject to the processes involved in Government service provision that can impact on their productivity. <sup>21</sup>

- 8.35 Governments also impose regulations on business that incur a compliance cost that reduces their productivity. The PC has reported evidence that the compliance cost of regulations could be as high as 1.5 per cent of GDP.<sup>22</sup> The Government has identified regulation as a potential source of productivity improvement.<sup>23</sup>
- 8.36 With government service provision consisting of such a large proportion of economic output and of employed workers, there is scope for productivity improvements in this sector to have a substantial impact. The Treasury stated:

Australian Bureau of Statistics (ABS), *Employment and Earnings, Public Sector, Australia*, Cat. no. 6248.0, 2008-09

<sup>19</sup> ABS, Employment and Earnings, Public Sector, Australia, Cat. no. 6248.0, 2008-09.

<sup>20 \$2.2</sup> billion is 2 per cent of \$108 billion.

<sup>21</sup> PC, Submission no. 20, p. xvi.

Lattimore, R, Martin B, Madge, A, and Mills J, *Design Principles for Small Business Programs and Regulations*, PC Staff Research Paper, August 1998, p. 188.

<sup>23</sup> Hon Lindsay Tanner MP, Minister for Finance and Deregulation, *Better Regulation: Driving Productivity and Growth*, Address to Australian Business Foundation, 15 February 2010.

Improving productivity in the public sector and improving public sector efficiency may or may not show up in measured productivity, but it would clearly be an area where relatively little work has been done. I think that will be an important area of work, one way or another, into the future.<sup>24</sup>

#### Committee conclusion

- 8.37 The official market sector productivity estimates do not include government services, yet the quality and efficiency of government services can have a significant impact on aggregate productivity growth.
- 8.38 The public sector represents 17 per cent of the workforce and produces output the equivalent of 13 per cent of GDP. Therefore, in its own right the public sector is an important source of national productivity growth, although this impact will not be captured directly in the official productivity estimates.
- 8.39 Additionally, government services are an input into the production processes of businesses and the quality of these services can affect the productivity of these businesses, which will be captured in the official productivity estimates.

#### **Recommendation 7**

8.40 Given the size and importance of government service provision in its own right and as an input into the production processes of other businesses it is important that any national productivity agenda includes public sector service provision.

## The exclusion of the voluntary sector

- 8.41 Productivity measurement is based on economic principles and as a result only covers industries that sell products or services in a marketplace.
- 8.42 The economic output measure used for productivity estimates exclude voluntary or community work in which there is no product or service sold in a marketplace and for which the provider of the service does not receive wages in return for their efforts. The Treasury stated:

A broad limitation with productivity measures flows from the use of GDP in their calculation....GDP only counts market transactions which excludes a wide range of activities.<sup>25</sup>

- 8.43 The ABS estimates that approximately 5.2 million people did voluntary work during 2006.<sup>26</sup> In terms of the economic value of voluntary work, the ABS estimates that the value of voluntary work for 1999-00 was \$8.9 billion or 4.7 per cent of GDP.<sup>27</sup> This estimate is derived by valuing voluntary work assuming that it was undertaken in the formal economy in which workers were paid for their work.
- 8.44 In addition to the formal voluntary work undertaken within a not-for-profit organisation, there is informal voluntary work such as the unpaid caring work of an aged relative or a young child that is not included in the ABS measures of voluntary work. The ABS estimated in 2003 that there were 2.6 million carers and that 20 per cent of those were primary carers. The ABS found that primary carers had a lower workforce participation rate of 39 per cent compared to 68 per cent for non carers. <sup>29</sup>
- 8.45 In response to a question about unpaid work in the economy, particularly that done by women, Mr Brunker of the PC stated:

This is a very important issue and, as you are aware, there are some efforts being made to shed some light on it, for example, through the ABS's wellbeing measures that they conduct. Just looking at those sorts of publications, you can see why it does not get into the productivity numbers—it is so very difficult to measure...The way we aggregate things together is that we tend to use revealed valuations of these things to aggregate together to form GDP or the output for productivity. Those sorts of activities are very difficult to incorporate within productivity numbers.<sup>30</sup>

8.46 However, Mr Brunker went on to argue that productivity estimates:

...try to serve a particular purpose, and the particular purpose is about efficiency within business organisations. They were never really designed to give us an understanding of how well the

<sup>25</sup> The Treasury, Submission no. 10, p. 4.

<sup>26</sup> ABS, Australian Social Trends, 2008, Cat. no. 4102.0.

<sup>27</sup> ABS, Australian Social Trends, 2008, Cat. no. 4102.0.

ABS, Disability, Ageing and Carers, 2003, Cat. no. 4430.0.

<sup>29</sup> ABS, Disability, Ageing and Carers, 2003, Cat. no. 4430.0.

<sup>30</sup> Mr G Brunker, PC, Transcript, 23 October 2009, p. 16.

community in aggregate is going, although they are clearly a very important ingredient to that.<sup>31</sup>

- 8.47 Bearing this in mind, any growth of the voluntary sector could have an impact on the size of the formal economy and measured economic output. If individuals shift out of the formal economy (that is, work that contributes to measured economic output) to the voluntary sector in which their output is not measured then the impact will be a fall in workforce participation and measured economic output.
- 8.48 The impact on productivity of such a shift in labour resources over a short time horizon is not necessarily negative, as both economic output and inputs have fallen. Indeed if the workers who shift are average contributors to productivity then their shift from the measured economy to the voluntary sector will have an inconsequential impact on aggregate productivity growth.
- 8.49 Although there may be no direct impact on productivity of such a transfer to the voluntary sector, if a reduction in economic output reduces government revenue, then this could reduce the government's ability to invest in productivity enhancing reforms, which are outlined in Chapter 7.
- 8.50 It is also possible for the voluntary sector to provide a positive impact on productivity, through contributions to the formal business sector. As an example, Professor Quiggin argued that:

...it is important to look beyond the enterprise sector and consider the role of non-profit enterprises and 'amateurs' in areas such as open-sources software, new media and Web 2.0 technologies, which are an important source of new innovation.<sup>32</sup>

#### Committee conclusion

- 8.51 Voluntary work makes a valuable contribution to community wellbeing and if given a nominal economic value would represent a significant proportion of economic output.
- 8.52 To a certain extent any change in the amount of voluntary work can have an impact on economic activity. However, the significant impacts will be on workforce participation and economic output but the impact on measured productivity is unlikely to be significant.

<sup>31</sup> Mr G Brunker, PC, Transcript, 23 October 2009, p. 16.

<sup>32</sup> Professor J Quiggin, Submission no. 24, p. 3.

Mr Craig Thomson MP Chair 28 April 2010