

# THE AUSTRALIAN ECONOMY AND PERSONNEL ISSUES

## The Australian Economy - Recent Trends and Outlook

Jeromey Temple<sup>51</sup>  
&  
Peter McDonald  
The Australian National University

### Introduction

---

Previous chapters have examined recent and projected shifts in population (demography chapter 5), labour supply (workforce chapter 6) and population social composition (society chapter 7). Movements in these characteristics have important implications for the operation of the Department of Defence in coming decades. Of course, central to the financing and operation of Defence is the outlook for the Australian economy, and that of its strategic partners also. The purpose of this chapter is to draw upon recent analysis from the OECD (Organisation for Economic Development of Australia), the IMF (International Monetary Fund), The Reserve Bank of Australia (RBA) and the ABS (Australian Bureau of Statistics), to describe the short and medium term trends in key economic parameters.

This chapter firstly considers the outlook for economic growth and productivity, inflation and international trade for the Australian economy. The second section considers Australia's economic performance along key indicators in comparison to major economies, and then this analysis concludes with a note on the importance of the economic role of the elderly and the long term implications of population ageing.

---

51. Jeromey Temple is a Research Fellow, and Peter McDonald is Professor and Head of the Demography and Sociology Program at the Australian National University.

# Domestic Outlook

---

## Economic Growth and Productivity

### Short Run Economic Growth Outlook

An aggregate measure of economic growth is Gross Domestic Product (GDP), the total amount of goods and services produced in the economy in a given year. GDP as shown below (Figure 48), is expressed as GDP per capita and is expressed in 2004 dollars.

As shown in Figure 48, Australia has experienced uninterrupted growth in real<sup>52</sup> GDP per capita since about 1993. Between 1993 and 2005, real GDP per capita has increased by about 36 per cent, from \$31196 in 1993 to \$42437 in 2005. There are also important regional variations in economic growth over this period, as shown by variations in the net value of goods and services produced at the state level (see Table 48). As shown in Table 48, over the period 1992-93 to 2002-03, economic growth was strongest in the Northern Territory, Western Australia and Victoria.

**Table 48** Growth Rates in Real Gross State Domestic Income per Capita, Average Annual Rates 1992-93 to 2002-03.

	%
New South Wales	3.0
Victoria	3.1
Queensland	2.4
South Australia	2.7
Western Australia	3.3
Tasmania	2.0
Northern Territory	3.4
Australian Capital Territory	2.5
<b>Australia</b>	<b>2.8</b>

Source: ABS, 2004.

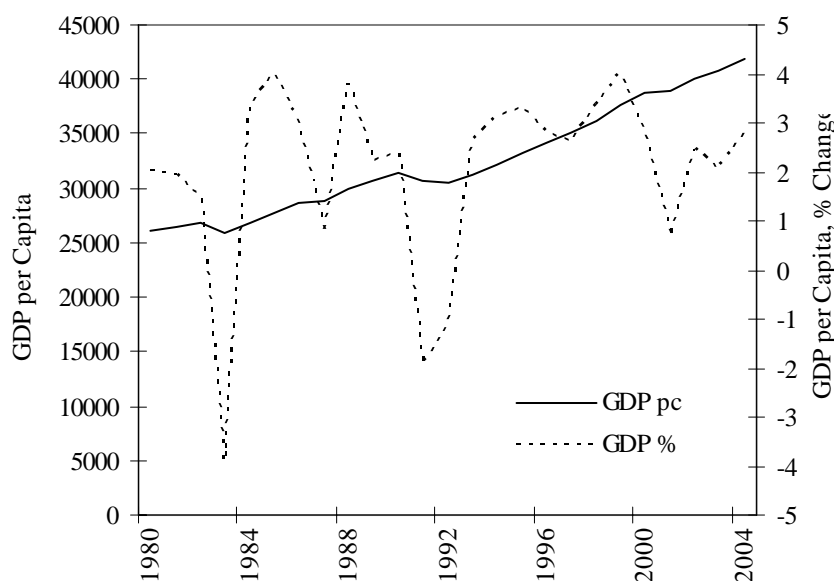
The OECD argues that Australia is continuing to benefit from reforms made during the 1980's and 1990's, which have resulted in a 'long term economic expansion accompanied by low inflation, high resilience to external and domestic shocks, and very healthy public finances' (OECD, 2005). Indeed, in historical terms, the length of this period of economic growth is unprecedented since the 1960's (MacFarlane, 2006).

---

52. GDP expressed in current prices.

This long period of growth has not been as affected by the East Asia financial crisis in the 1990s or the recent SARS outbreak, as has been the case with other OECD countries (OECD, 2005). Recent Australian GDP growth has been influenced by improving business investment, moderate growth in household consumption, and reduced pressure from modest falls in dwelling investment and net exports (RBA, 2006). Although GDP growth has stabilised over the past year or so, the RBA has noted that this is not necessarily a bad outcome, as continued growth would have increased inflation, placing pressure on monetary policy makers to lift interest rates (Stevens, 2006).

**Figure 48** Per Capita GDP Growth and Real Per Capita GDP, 1980-2004.



Note 1: Reference Year 2003-04.  
Source: ABS, 2005.

The OECD projects Australian GDP growth of around 3.6 per cent in 2006 (OECD, 2005:29). The Australian government projects real GDP to grow by about 3 per cent in 2006/07, 3.5 per cent in 2007/2008 and 3.25 per cent in 2008/09 (Australian Government, 2005). This is in line with IMF forecasts, which estimate per capita GDP growth of 2.9 per cent in 2006 and 3.2 per cent in 2007 (IMF, 2006:16).

In the short term, the Australian government has identified a number of risks and opportunities to growth (Australian Government, 2005). On the positive side, growth in business and dwelling investment has been stronger than previously expected, as is the economic growth of our major economic partners. Moreover, business investment is expected to remain strong with strong demand for commodities and the economy operating at high capacity. However, throughout 2006-07, domestic consumption may slow, as a consequence of rising oil prices and a drop off in housing prices. Moreover, with non-rural commodity exports weak in recent times, without a turn around, GDP growth may be lower than expected. The uncertainty surrounding future oil prices has been suggested as a further constraining factor upon consumption growth.

## Labour Market Productivity Outlook

The level of real GDP is influenced by changes in labour, capital and all other inputs to the production process, including productivity (ABS, 2004). Following the productivity surge of the 1990's labour market productivity has slowed recently (See Figure 49).

Numerous studies have argued that three key proximate determinates of the 1990's productivity surge were:

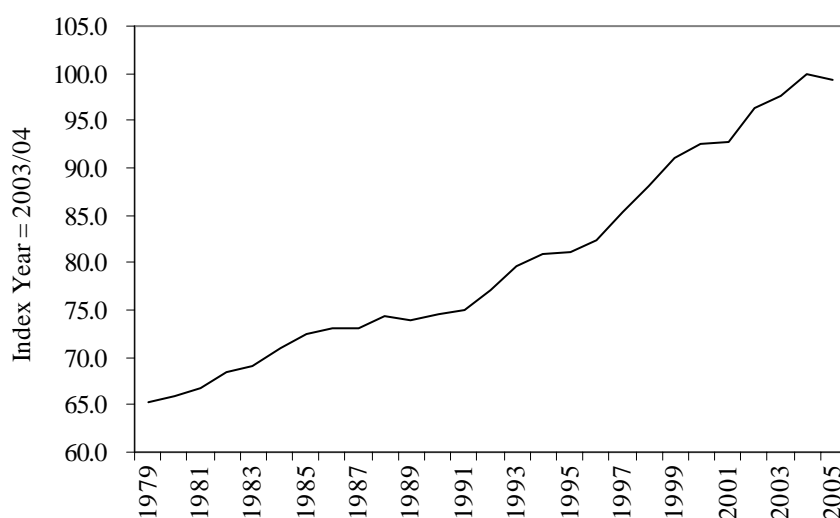
1. The impact of Information and Communication Technology (ICT),
2. Research and Development (R&D) which drives long run productivity, and
3. Further opening of domestic markets.

However, there is a great deal of disagreement as to the underlying causes. Treasury analysis shows that in the five years to 1998-99, market sector productivity (as measured by output produced per hour worked) grew at an annual average rate of 3.2 per cent. This growth was stronger than the performance in the previous 30 years. In comparison, the five years to 2003/04, productivity growth eased to 2.2 per cent. Treasury modelling has also shown that industries that have had a productivity slowdown included wholesale trade and construction, electricity, gas and water supply, communication services, mining, finance and insurance (Dolman, Lu and Rahman, 2006).

In the case of tightening capacity constraints and slowing productivity growth, a number of policy suggestions have been made, including: further investment in education and training, potential inroads through skilled migration and increasing labour market activity (Coster, 2006).

The head economist of the National Bank of Australia also notes "... it would appear fundamental that we attempt to protect and reinvigorate assets which will need to be leveraged going forward. While there are some overlaps, that also includes: improved incentives to work (tax and welfare), health, water and salination, climate change (costs and benefits) and additional incentives for industry research and development". Of crucial importance to the future reform agenda to boost productivity, these areas require an 'across government' approach encompassing Federal and State departments (Coster, 2006).

**Figure 49** Labour Market Productivity, Measured by GDP per Employee Hour Worked, 1979-2005.



Source: ABS, 2005.  
Note 1: Reference Year 2003-04.

On the international scene, Australian productivity levels remain well below several other OECD countries (OECD, 2005). One of the key recommendations offered by the OECD is that Australian policy makers must implement long term strategies to boost productivity, which will be a key determinant of the economy's ability to manage the consequences of population ageing.

Among these recommendations are:

---

---

Strengthening competitive pressures through unfinished components of the National Competition Policy (NCP). For example, further reforms to infrastructure services, agriculture marketing arrangements, liquor licensing, compulsory insurance schemes, the professions and occupations (for example: health and legal practitioners); and

Policies to strengthen labour market efficiency, including removing barriers to hiring and negotiation of wages, improved investment in education and training, and providing stronger incentives for labour market participation among older Australians. The OECD would also like the government to encourage employers to provide more intensive training and re-training schemes for workers before they reach their mid 50s.

---

---

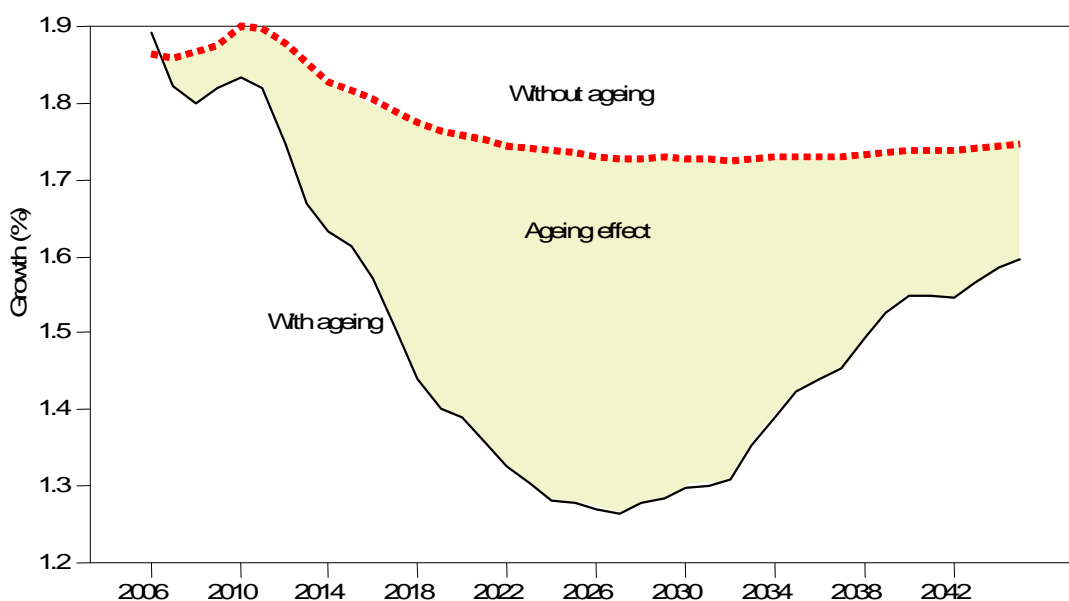
## Ageing Effects in the Medium to Long Term

There is no guarantee that economic performance will continue to be as impressive over the next 20 years as it has over the past 13, due in part to demographic change (OECD, 2005). In the medium to long run, population ageing can be expected to depress economic growth. As noted earlier in Chapter 5, the Intergenerational Report estimates an adjustment of 5 per cent of GDP may be required to offset the cost of ageing (Costello, 2002). However, others contend that this is an overestimate of the effect of ageing on productivity and subsequently economic growth (McDonald and Dowrick, 2002; Mitchell and Mosler, 2003; Doughney and King, 2006).

Since the release of the Intergenerational Report, the Productivity Commission has recently released update modelling of the effect of population ageing upon economic growth and labour productivity (Productivity Commission, 2004). Figure 50 displays Productivity Commission projections of the effect of population ageing on per capita GDP, assuming a productivity growth rate of 1.75 per cent per annum.

As shown in Figure 50, these projections show that without ageing, growth in GDP per capita levels off at about 1.75 per cent per annum after 2017. When including the effect of population ageing, GDP growth per capita falls to 1.3 per cent by 2026 and increases thereafter to about 1.6 per cent in 2042. The Productivity Commission cites that this is primarily due to ageing effects on the labour supply: that is, both lower participation and falling labour force productivity. Although this graph shows a significant drop in GDP per capita growth, it is important to recognise that GDP per capita in the future will be much larger than today. By 2044-45, the Productivity Commission estimates that real GDP per capita will increase two fold between 2003-04 and 2040-41.

**Figure 50** Ageing Effects and Per Capita GDP, 2005-06 to 2040-41.



Source: Productivity Commission, 2004: 5.3.

The projected GDP depends upon the level of productivity growth assumed in the calculation. Using the base GDP rate of 1.75 per cent per annum, real GDP per capita is projected to be \$71,040. With a 5 per cent reduction in productivity growth, real GDP by 2044 is projected to decrease to \$69,623. In contrast, if GDP growth were to follow the trends of the 1990's (around 2.05 per cent per annum) GDP per capita would approximate \$80,154 in 2044.

Of course, it is important to recognise that labour market productivity acts in tandem with labour market participation to sustain economic growth in the face of population ageing. With a sufficient rise in participation, independent of productivity increases, the fiscal gap due to ageing could be eliminated completely (Greun and Garbutt, 2004). For example, greater investment in education could generate the required productivity and participation increase.

OECD modelling has shown that a 10 per cent increase in the number of years of average education in a population, results in an increase of real GDP per capita of between 4 and 7 per cent (OECD, 2003).

Thus, the sustainability of economic growth into the future, as the Treasurer has constantly reiterated, is a function of the three P's: participation, productivity and population.

## Inflation Outlook

Since 1993, the Reserve Bank of Australia has held the goal of maintaining the Consumer Price Index (CPI) at between 2 and 3 per cent (MacFarlane, 2006). Since 1993, inflation has moved outside of these limits. For example, between late 2002 and early 2003 higher oil costs and higher food prices due to the drought drove inflation above 3 per cent (OECD, 2005). However, the longer-term average has certainly been for constrained inflation within the range of the RBA targets.

Although inflation has been constrained recently, there are a number of risks in the short term. For example (Stevens, 2006):

A tight labour market placing upward pressure on wages.

Rising commodity prices, particularly for oil and coal, rising business input costs.

The economy running at close to capacity utilisation, with small increases in demand having the ability to increase price inflation.

Given these conditions, the RBA forecast an increase in the CPI to close to, but under 3 per cent over the short term (Macfarlane, 2006; see Table 49). Recent results from the mid year economic outlook project that the CPI will remain at about 2.5 percentage points over the period 2006-07 to 2008-09 (Australian Government, 2005). Confirming this view, the OECD states “Inflation is likely to stay within the target band (2 to 3 per cent) in the face of high capacity utilisation and low unemployment, as wage gains remain moderate, productivity gains are solid, and the cooling of the housing market dampens private consumption demand” (OECD, 2005:27). Working in the opposite direction, the RBA notes the continued dis-inflationary pressure of manufactures and selected services (RBA, 2006).

**Table 49** Median Inflation Expectations.

	To Dec 2006	To Dec 2007
Market Economists	2.8	2.6
Union Officials	3.0	3.0

Source: RBA, 2006 p. 60.

# International Outlook and Trade

---

## Australian Economic Growth and Productivity in Perspective

Growth in the Australian economy in both the short and long run must be considered within the context of globalisation (Oster, 2006). This follows from the strong association between global and domestic economic growth (Macfarlane, 2006). Global GDP growth has averaged around 3.8 per cent between 1997 to 2005, compared with 3.4 per cent over the previous 20 years from 1976-1996 (Stevens, 2006). On a yearly basis, world GDP was well above average for 2005 and this is expected to continue into 2006, with RBA forecasts projected in the range of 4.5 per cent (RBA, 2006). The International Monetary Fund (IMF) projects that global GDP will rise by 4.9 per cent in 2006 and 4.7 per cent in 2007. Economic growth of Australia's major economic trading partners is projected to be 4.25 per cent in 2006 (Australian Government, 2005).

Overall, the global outlook, in the short term, is encouraging for Australia (Oster, 2006). The IMF point out the positives in recent global trends: increased global industrial production, a resilient services sector, high global trade growth, high consumer and business confidence and strengthening labour markets (IMF, 2006).

Running counter to these positives, the Reserve Bank has highlighted higher oil prices and the large size of the US current account deficit as placing downward pressure on world economic growth, although this has yet to be observed (Macfarlane, 2006). Indeed, in the recently released *IMF World Economic Outlook 2006*, they cite four key areas for ongoing concern in the global economy:

---

---

High and volatile oil prices;

Tightening in financial market conditions;

Rising global imbalances; and,

The potential economic impact of a worsening situation with the avian flu pandemic.

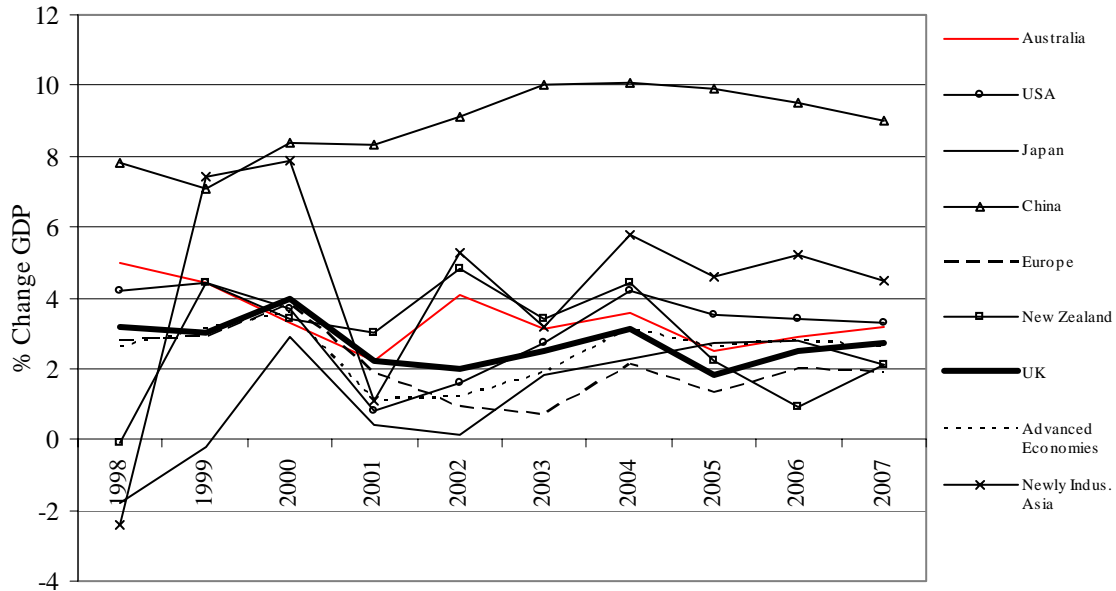
---

---

The final point highlights the great degree of uncertainty surrounding economic projections, as noted in the previous scan (Schindlmayr and Ong, 2001).

As shown below in Figure 51 and Table 50, the past and projected growth in GDP is quite positive for Australia relative to other countries. For example, between 1998 and 2007, the IMF project average annual growth of about 3.4 per cent in Australia, compared with 3.2 per cent in the US and 2 per cent in the Euro area.

**Figure 51** Annual Percentage Change in Real GDP, Selected Countries.



Source: IMF, 2006.

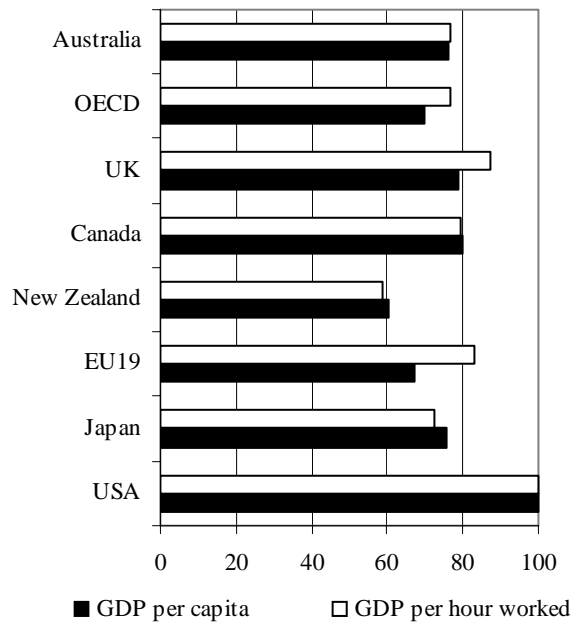
However, it is important to recognise the relative size (as opposed to growth) of GDP per capita between countries. As argued in the recent OECD report 'although Australia's per capita GDP relative to that of the United States improved by 6 percentage points from 1990 to 2002, to 76 per cent of the US per capita GDP, this only restored Australia's relative position held in the early 1970s and falls short of where it was in 1950' (OECD, 2005:30). The OECD argues that there is plenty of scope to increase Australia's level of growth with appropriate policies aimed at boosting productivity levels and participation. Indeed, Australia's productivity levels lag well behind the UK, the EU19 and Canada, among others (see Figure 52).

**Table 50** 10 Year Average Annual Percentage Change in Real GDP, Selected Countries.

	1988-1997	1998-2007
Australia	3.3	3.4
USA	3.0	3.2
Japan	2.9	1.3
China	9.9	8.9
Euro Area	n.a	2.0
New Zealand	2.1	2.8
UK	2.2	2.7
Advanced Economies	2.9	2.6
Newly Ind. Asia	7.2	4.2

Source: IMF, 2006.

**Figure 52** GDP Per Capita and GDP Per Hour Worked, Compared with the US = 100, 2004.



Source: OECD, 2005a.

Note 1: Comparison year is 2003-04 = 100.

## Population Ageing and the Economic Role of the Elderly

---

Combined with results from Chapter 6 (workforce), the above analysis has provided evidence that the ability of Australian policy makers to adapt the economy to long run population ageing, particularly through labour market participation and productivity, will be crucial to ensure future growth and prosperity.

In dealing with the big picture macro-economic implications of ageing, the government had previously proposed four solutions (Australian Government, 2004): First, do nothing now and raise taxes in the future to cover budget deficits; second, cut government expenditure by around 5 per cent of GDP; or third, we could run budget deficits and hence increase debt. Neither of these options are appealing. The fourth option (current policy) is to increase economic growth and the overall size of the economy, primarily through increasing labour market participation and productivity.

In the context of assuming a policy position of boosting economic activity to deal with population ageing, the economic role played by older Australians is crucial. Whereas earlier research on the economics of ageing focused upon the effect of population ageing on public expenditures, more recent research has adopted a broader definition of the economic activities of the elderly. For example, Jackson (1998) proposed that it is important to consider the economic role of the aged in both the formal and informal sectors of the economy. Such a formulation considers how older people allocate both time and money enabling a deeper understanding of the implications of population ageing for the economy. An important economic role played by the elderly is their participation in the formal labour market, as discussed in Chapter 6.

Another key economic role of the elderly is their allocation of time in the informal sector of the economy. A number of studies have examined the unpaid contributions of elderly Australians through voluntary work (Encel and Nelson, 1996; Merkes and Wells, 2003; Onyx and Warburton, 2003), grand parenting (Goodfellow and Laverty, 2003) and a range of other services (Ranzjin and Grbich, 2001). Many of these activities, although unpaid, mirror human services provided by Federal and State governments (Brandon and Temple, 2006). Indeed, several studies have sought to estimate the value of these services as a proportion of Australia's GDP (Ranzjin, Hardord, et al., 2002; de Vaus, Gray, et al., 2003).

The most recent study by David de Vaus and colleagues has estimated the value of unpaid work performed by those aged 55 and over as 74.5 billion dollars annually. The value provided by older Australians to the economy through unpaid work has led to calls for inclusion of unpaid work into national production figures to provide a more 'balanced' view of the economic implications of population ageing and the economic role of the elderly more generally (Swindell and Vassella, 1999). Indeed, the Productivity Commission notes that in the future, GDP growth may be higher than expected due to the positive effect of volunteering and unpaid work on economic activity (Productivity Commission, 2004).

An understanding of the economic role of the elderly must incorporate their role as consumer as well as producer. To date, the vast majority of Australian and international research examining the economic effects of population ageing has sought to examine the implications for public expenditures. A large body of this research has focused upon implications of population ageing for public expenditure on health care and public pensions across various countries. For example, the implications of population ageing on health expenditure have been examined in Japan (Ogura and Suzuki, 2001; Nakanishi and Nakayama, 2001), Canada (Denton, Gafni and Spencer, 2002), USA (Newhouse, 1992; Karatzas, 2000; Shoven, Topper and Wise, 1994) and Australia (Richardson and Robertson, 1999; Productivity Commission, 2005). Indeed, there is a growing body of research examining the effect of population ageing and demographic change more generally upon public spending and revenue in Australia (Kelley, 1988; EPAC, 1988; EPAC, 1994; Creedy and Taylor, 1993; Alvarado and Creedy, 1996; Creedy, 1999; Guest and McDonald, 2000; Castles, 2000; Guest and McDonald, 2003; Creedy, 2000; Productivity Commission, 2005).

Although some earlier research was quite alarmist in its approach to the economic effects of population ageing, more recent studies emphasise that population ageing brings with it planning issues, rather than problems (Creedy, 2000; McDonald and Kippen, 2002b; McDonald and Temple, 2003b). This review has included just a brief overview of the more recent literature in the field. For an in-depth review and analysis of the expenditure and revenue implications of ageing, the reader is directed to the Productivity Commission's recently released *Economic Implications of an Ageing Australia*.

In contrast to the vast array of research on elderly Australians' allocation of time to the informal and formal sectors of the economy, and allocation of public money to the elderly, there is a dearth of research on the aged people's allocation of private money to goods and services purchased in the market place. Some exceptions include Access Economics (2001), Temple (2005), Harding (1998), Harding and Robinson, (1999). The consumer behaviour of the elderly is clearly an important generator of economic activity, and the role played by older persons in the market place will only increase.

## Summary Points

---

The goal of this chapter has been to describe recent trends and projections of key economic parameters in the Australian economy. Moreover this chapter has sought to explain some of the trends in growth of our major trading partners and other countries.

The analysis has necessarily been restricted and the reader is directed to recent reports by the Productivity Commission (2005), the OECD (2005), the International Monetary Fund (2006) and the Australian Government (2005) to understand more detailed aspects of change in the Australian and world economy. Nonetheless, this chapter has offered a number of important findings about growth, inflation, trade and productivity in the Australian economy:

Australia has experienced uninterrupted economic growth since 1993.

Australian GDP per capita as a measure of economic activity is projected to continue growing in the short term, by about 3 per cent in 2006/07, 3.5 per cent in 2006/07 and 3.25 per cent in 2008/09.

In the short term, potential risks to growth include falling domestic consumption, rising oil prices and a drop off in housing demand.

In the longer term, without appropriate policy instruments, population ageing will place downward pressure on economic growth and productivity. Although economic growth over the past 13 years has been uninterrupted, reforms are required to boost labour market productivity and participation in the face of population ageing.

Risks to inflationary pressure include a tight labour market placing pressure on wages, raising commodity prices (particularly oil and coal) and the economy running at close to capacity utilisation.

There are risks posed from the eventual decline in Australia's terms of trade, which have been driven largely by high commodity prices. However, appropriate macro-economic tools are in place to ensure a softer landing than was the case in the 1970s.

With a policy aimed at increasing productivity and participation to deal with population ageing, the economic role played by older Australian's will take on an increasingly important role.

Overall, despite this largely positive story, risks both short and long term, remain on the horizon.

## Defence Implications

---

### *Ageing of the workforce.*

As the proportion of younger workers reduces, competition for young talent can be expected to increase across all industries, at the possible expense of the Defence workforce.

The ageing of the entire Defence workforce has occurred already and this trend will continue. The retirement of Baby Boomers is already occurring and over the next two decades will increase substantially. Certain areas of the Defence APS already have specific skilled workforce shortages and these are likely to worsen over the next few decades. Retaining older specialised and experienced Defence APS staff will become a priority. Equally the attraction, career development, mentoring and remuneration of junior APS staff will require significant resources and management to guarantee knowledge transfer.

### *Total Defence Workforce – economies of scale and approach.*

Total Defence workforce personnel costs will need to be managed carefully with remuneration, recruitment, educational, career/job management and professional development budgets under pressure to meet the strategies most likely to stabilise the highly competitive workforce situation.

The potential strategic advantage of the ADF workforce as its ex-military members' transition to civilian employment requires additional consideration. There could be considerable economic, workforce, organisational and personal benefits available by developing a total Defence workforce approach.

The possibility of utilising increased numbers of older 'part time' workers to enhance participation aspects will require considerable management effort and associated costs.

The cost of procuring and using new technologies to counter reduced workforce availability and enhance per worker productivity will also need to be considered<sup>53</sup>.

---

53. This section developed by Mr John Hearps, DSPPR.

