

## Chapter 4: Ageing pressures and spending

### Overview

Ageing of the Australian population will contribute to substantial pressure on government spending over the next 40 years.

Total spending is projected to increase to 27.1 per cent of GDP in 2049–50, around 4¾ percentage points of GDP higher than its projected low point in 2015–16. In today's terms, that's the equivalent of adding around \$60 billion to spending.

Around two-thirds of the projected increase in spending to 2049–50 is expected to be on health, reflecting pressures from ageing, along with increasing demand for health services and funding of new technologies.

Growth in spending on age-related pensions and aged care also is significant both as a proportion of GDP and in real spending per person, reflecting population ageing.

In the absence of the Government's fiscal strategy, total spending would grow even further. By 2015–16, the full implementation of the fiscal strategy would deliver a projected structural improvement in the level of spending equivalent to around 1 percentage point of GDP.

The Government is working to improve long-term fiscal sustainability by addressing these pressures at the source. For example, the 2008–09 and 2009–10 Budgets included greater means-testing of the private health insurance rebate, an increase in the Age Pension age and reforms to certain family payments.

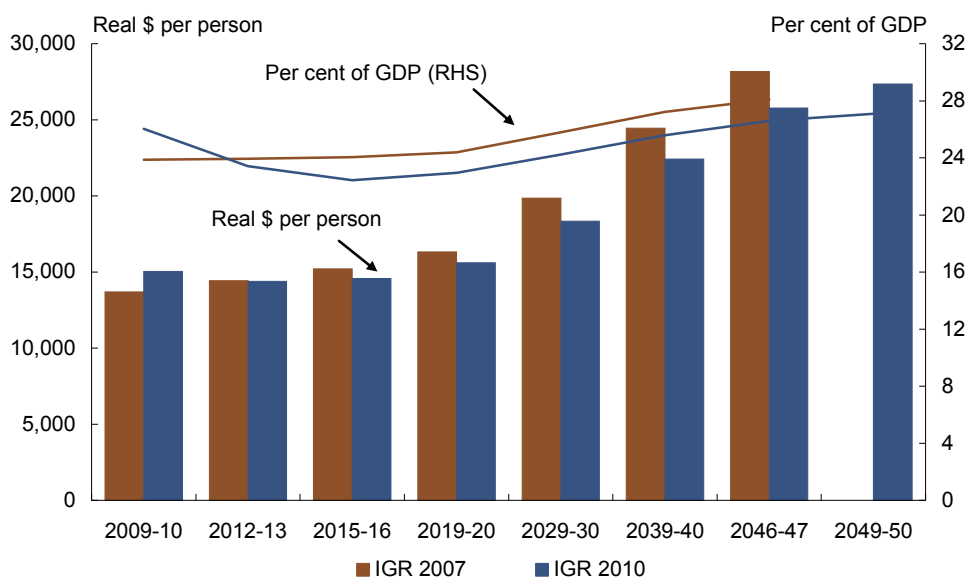
Policies to lift productivity and reduce barriers to participation also will help address the fiscal pressures of an ageing population by supporting higher economic growth over the longer term.

## 4.1 Projections of total spending

### 4.1.1 Spending pressure in demographically sensitive areas

IGR 2010 projects total spending<sup>1</sup> to increase gradually to 27.1 per cent of GDP by 2049–50, reflecting increased spending pressures in health, aged care and age-related pensions (Chart 4.1). This compares to its current level of 26.0 per cent of GDP in 2009–10, and a low-point of 22.4 per cent of GDP in 2015–16.

**Chart 4.1: Projections of total Australian government spending**



Source: Treasury projections.

The initial decline in spending is projected to occur for two reasons: first, the withdrawal of the Government’s fiscal stimulus; and secondly, the fiscal strategy of capping real spending growth to 2 per cent in years of above-trend economic growth until the budget returns to surplus.

This spending restraint is not only projected to return the budget to surplus in 2015–16, it also is expected to enhance long-term sustainability of the budget in the form of a structural improvement in the budget position and a downwards level-shift in total spending of around 1 percentage point of GDP.

1 Consistent with the methodology used in earlier IGRs (and international practice), total spending for the purposes of this chapter excludes interest payments. This methodology provides a clear picture of underlying spending pressures.

From 2015–16, spending as a proportion of GDP is projected to increase once more, reflecting underlying spending pressures in health, aged care and age-related pensions associated with an ageing population.

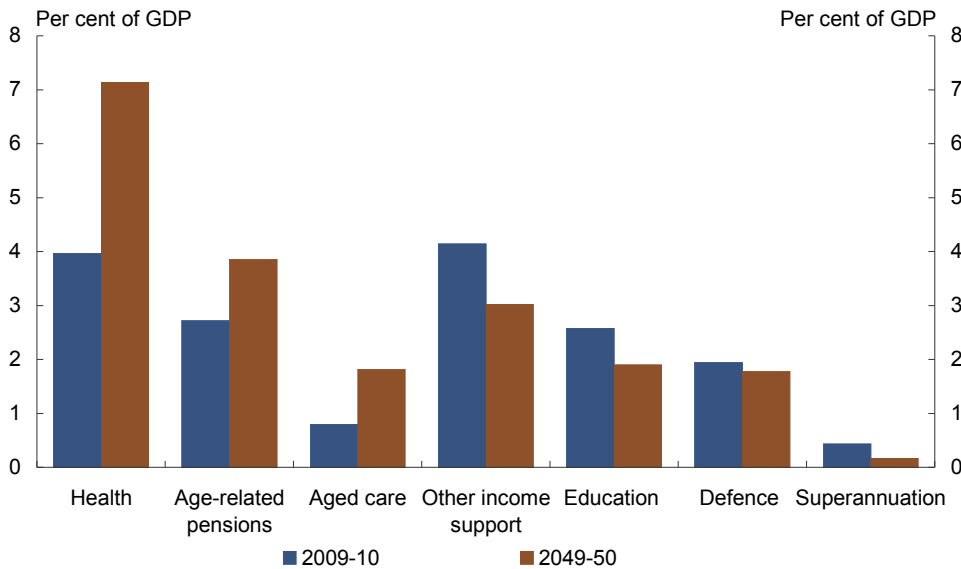
Total projected spending in IGR 2010 is lower than the projections in IGR 2007. The two key factors driving this outcome are the fiscal strategy and, to a lesser extent, the more gradual pace of ageing in IGR 2010 compared to IGR 2007. The latter leads to a slightly slower average rate of increase in real government spending per person of around 1.9 per cent a year from 2015–16 onwards, compared with an average of 2.0 per cent per annum in IGR 2007.

### 4.1.2 Compositional shifts in spending

Currently, more than a quarter of Australian government spending is directed to health, age-related pensions and aged care. Without action to curtail spending growth, Australian government spending on these functions is projected to increase significantly over the next 40 years, pushing the share of spending to almost half.

As a proportion of GDP, spending on health is projected to rise from 4.0 per cent to 7.1 per cent. Age-related pensions and aged care is projected to rise from 2.7 per cent and 0.8 per cent of GDP to 3.9 per cent and 1.8 per cent respectively in 2049–50 (Chart 4.2).

**Chart 4.2: Projections of Australian government spending by category (per cent of GDP)**



Source: Treasury projections.

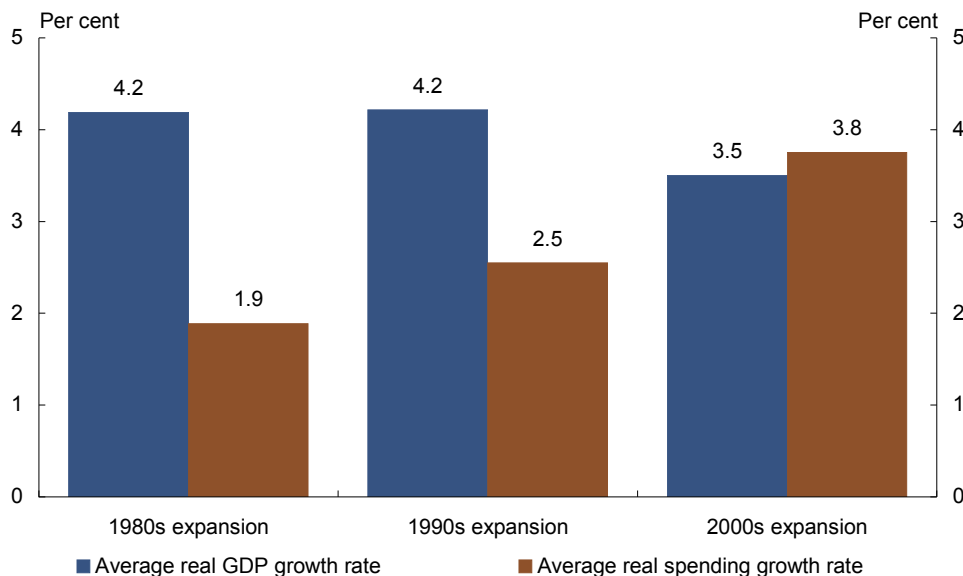
Currently, around a third of Government spending goes to income support payments (excluding aged-related pensions), education, defence and public sector defined benefit superannuation. The share of spending on these functions is projected to fall as a group to around one quarter.

Education spending is projected to grow gradually over the next 40 years, after the initial phase-down of the Government's stimulus through the Building the Education Revolution. Once the stimulus spending is complete, spending on education as a proportion of GDP is projected to rise from 1.7 per cent in 2012–13 to 1.9 per cent by 2049–50.

### 4.1.3 Structural spending trends

Projected high spending growth rates caused by the ageing of the population are building on a high structural spending base. Average real growth in government spending over the 2000s economic expansion was significantly faster than it was during the 1980s and 1990s expansions (Chart 4.3).

**Chart 4.3: Real GDP and spending growth during recent economic expansions**



Note: Expansions defined as uninterrupted periods of annual real economic growth exceeding 2 per cent. Based on this definition, the 1980s expansion was from 1983–84 to 1989–90, the 1990s expansion from 1992–93 to 1999–2000 and the 2000s expansion from 2001–02 to 2007–08. Real spending growth is calculated by deflating nominal spending with the Consumer Price Index.  
Source: ABS cat. no. 5206.0 and 2009–10 MYEFO.

The fiscal stimulus packages announced by the Government during 2008–09 will be completely phased out of the spending base during 2012–13. These packages did not lock-in a higher structural spending base. With the phasing out of the fiscal stimulus,

total spending is estimated to fall from 26.0 per cent of GDP in 2009–10 to 23.4 per cent of GDP in 2012–13.

Historical spending growth, and hence the size of the structural spending base, will make responding to the spending pressures of an ageing population more difficult. Early adjustments to the structural spending base now will limit the need for much larger adjustments to the ageing-sensitive spending categories of health, pensions and aged care in the long run.

The 2009–10 pension reforms, for example, incorporated a number of measures to increase long-term sustainability of the pension system. These included increased targeting of pension payments through changes to the income test, increasing the qualifying age of the Age Pension, and replacing the Pension Bonus Scheme with a new Work Bonus to increase workforce participation of older Australians.

The largest pressure on the budget is projected to come from health, reflecting ageing pressures, increasing demand for health services and the funding of new technologies. Pressure also is expected to come from increased spending on age-related pensions and non-age-related income support payments. Within other income support, spending on the Disability Support Pension and family payments are projected to bring the largest annual pressure on future budgets.

## 4.2 Health

### Key messages

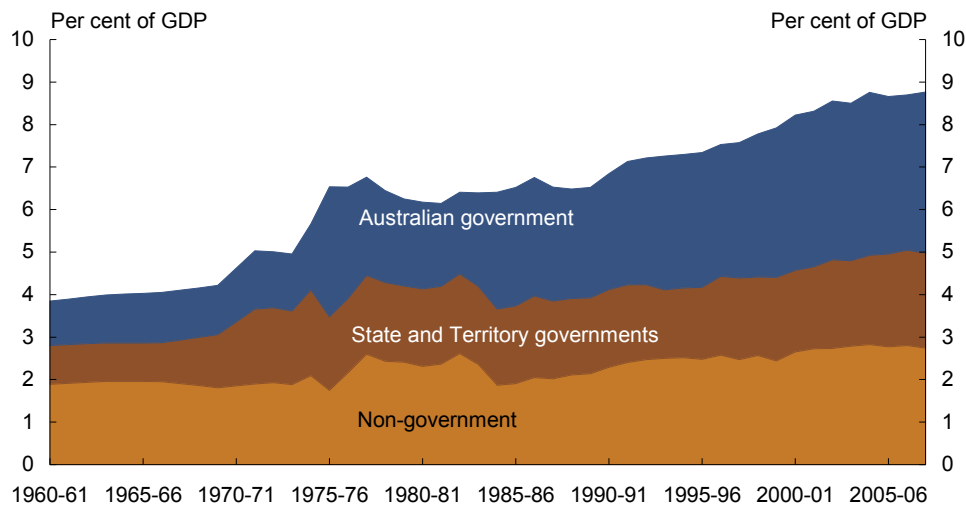
Health spending is projected to grow from 4.0 per cent of GDP in 2009–10 to 7.1 per cent of GDP in 2049–50. Population ageing will contribute to spending growth. In addition, based on past spending patterns, growth is projected to stem from increasing demand for health services and the funding of new technologies. Over the medium term, the combined effect is manifested in growth in all major categories of health spending: hospitals, medical benefits, pharmaceuticals and private health insurance.

Australia's health outcomes are achieved at a moderate cost, with total health spending as a share of GDP currently around the average for OECD countries.

Health care services are funded and provided by the public and private sectors. The Australian government provides over 40 per cent of the total health funding, and is the major source of public funds. State and territory and local governments fund around one quarter of the cost of health services, while non-government sources contribute around one third.

Since 1960, the fastest growing source of health care funding has been the Australian government. As a proportion of GDP, Australian government health funding increased from 1.0 per cent in 1960–61 to 3.8 per cent in 2007–08. State and Territory government funding increased from 0.9 per cent to 2.2 per cent of GDP over the same period and funding from non-government sources increased from 1.9 per cent to 2.7 per cent (Chart 4.4).

**Chart 4.4: Historical health spending**



Source: Australian Institute of Health and Welfare health spending database.

Major health programs funded by the Australian government include:

- the Medical Benefits Schedule, which forms the core of Medicare — \$14.1 billion in 2008–09; and
- the Pharmaceutical Benefits Scheme, under which the Government subsidises pharmaceuticals to provide patients with affordable access to medicines — \$7.7 billion in 2008–09.

In addition, the Australian government:

- makes a major contribution to the funding of health and hospital services provided by State governments — \$10.3 billion in 2008–09;
- provides a rebate to subsidise the cost of private health insurance — \$4.2 billion in 2008–09;
- provides health care services to veterans via White and Gold card arrangements — \$3.7 billion in 2008–09; and
- provides financial support in other areas, including medical research, public health, Indigenous health, health information management and access, health safety and quality, and medical workforce development and infrastructure — \$7.5 billion in 2008–09.

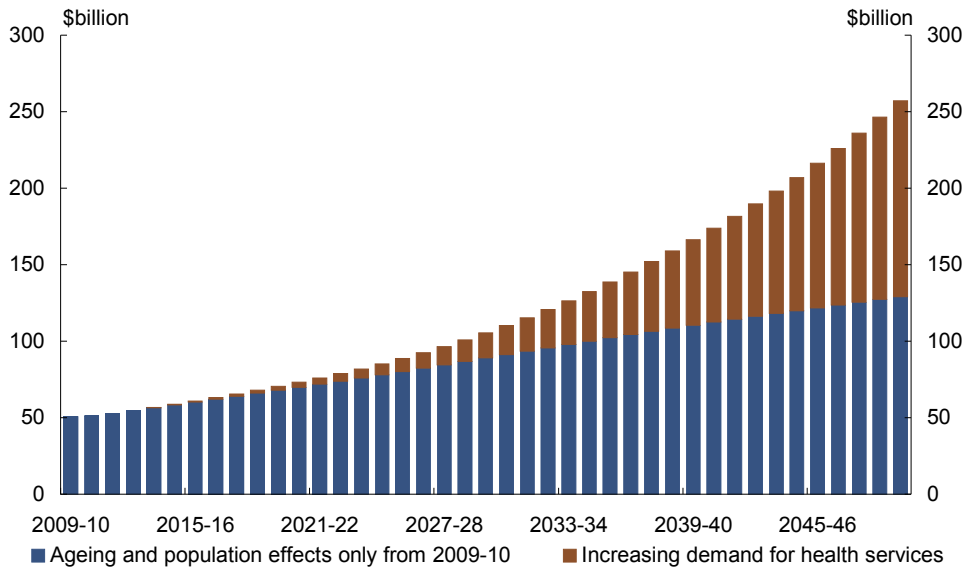
### 4.2.1 Key trends and drivers

As the population ages, more people will fall into the older age groups that are the most frequent users of the public health system. Combined with population growth, this will play an important role in increasing future health costs.

From 2009–10 to 2049–50, real health spending on those aged over 65 years is expected to increase around seven-fold. Over the same period, real health spending on those over 85 years is expected to increase around twelve-fold.

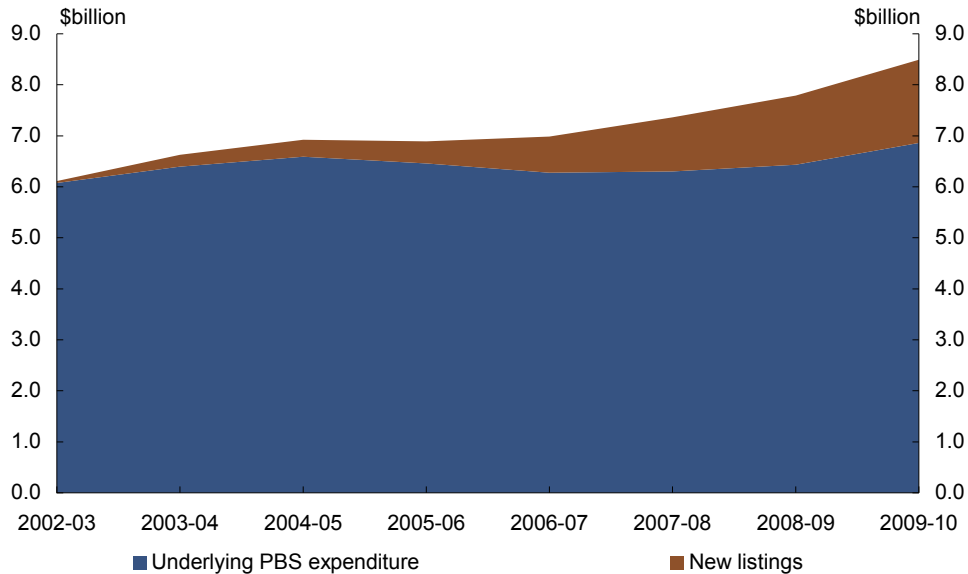
In addition to demographic pressures, demand for higher standards of care will place pressure on the Government to increase expenditure, as will rapid technological innovation (Charts 4.5 and 4.6).

**Chart 4.5: Total Australian government health expenditure with and without non-demographic growth (in 2009–10 dollars)**



Source: Treasury projections.

**Chart 4.6: New listings on the Pharmaceutical Benefits Scheme since the 2002–03 Budget (in 2009–10 dollars)**



Note: The figures for new listings do not take into account minor listings over the period. These are estimates of the net impact of the new listings.

Source: Department of Health and Ageing.

After fluctuating throughout the 1970s and 1980s, Australian government spending on health care has been on a steadily rising path since the early 1990s (Chart 4.4). A large part of the growth over this period was driven by non-demographic factors (Table 4.1). This includes increasing use of doctors, tests and pharmaceuticals, and decisions to subsidise the introduction of new technologies or list new drugs on the Pharmaceutical Benefits Scheme.

While not modelled explicitly, there may be interactions between demographic and non-demographic forces. For example, an older population may change community expectations concerning appropriate levels of care and encourage increased investment in health research and development.

The projections assume that these trends continue, with ageing and population growth contributing around 40 per cent of the projected increase in health spending over the next 40 years.

**Table 4.1: Real historical growth rates for Australian government health spending (per cent)**

	1984-85 to 2007-08	1997-98 to 2007-08
Non-demographic (population and age structure removed)	3.31	4.01
Population	1.30	1.33
Age structure	0.45	0.45
<b>Total</b>	<b>5.13</b>	<b>5.87</b>

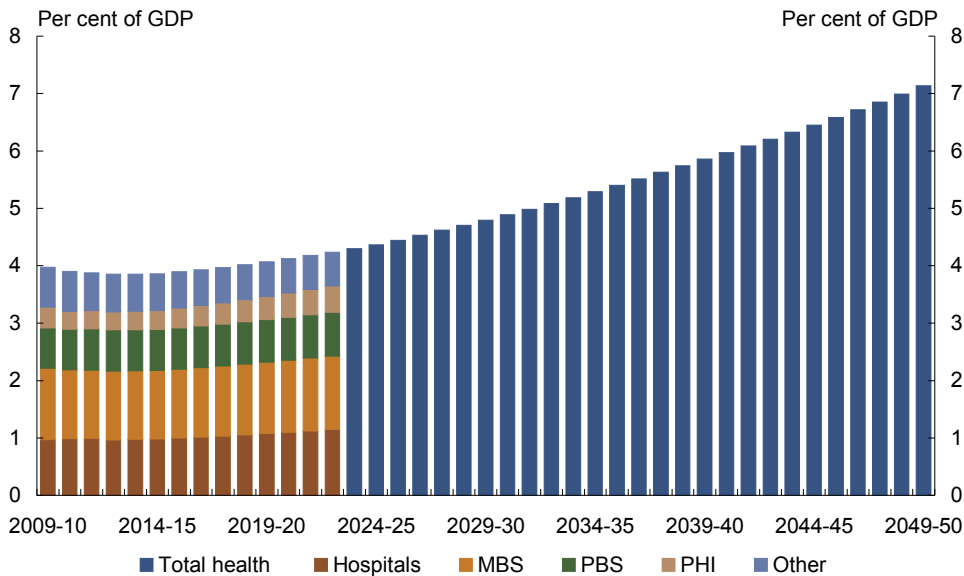
Note: Represents average annual growth using data from the start and end of the period. This is different from the calculation of growth rates for the projections, where growth rates are calculated from a fitted trend in the historical data to take account of the information in all data points.

Source: Treasury estimates based on data from the Australian Institute of Health and Welfare health spending database.

### 4.2.2 Projections

Australian government spending on health is projected to increase as a proportion of GDP from 4.0 per cent in 2009–10 to 7.1 per cent in 2049–50 (Charts 4.7 and 4.8). Health system components are projected individually over the medium term, out to 2022–23. From 2023–24 onwards, total health spending is projected using an aggregate model based on the more stable long-term trends in public health expenditure growth. Further details on the projection methodology are given in Appendix C.

**Chart 4.7: Projected Australian government health spending**



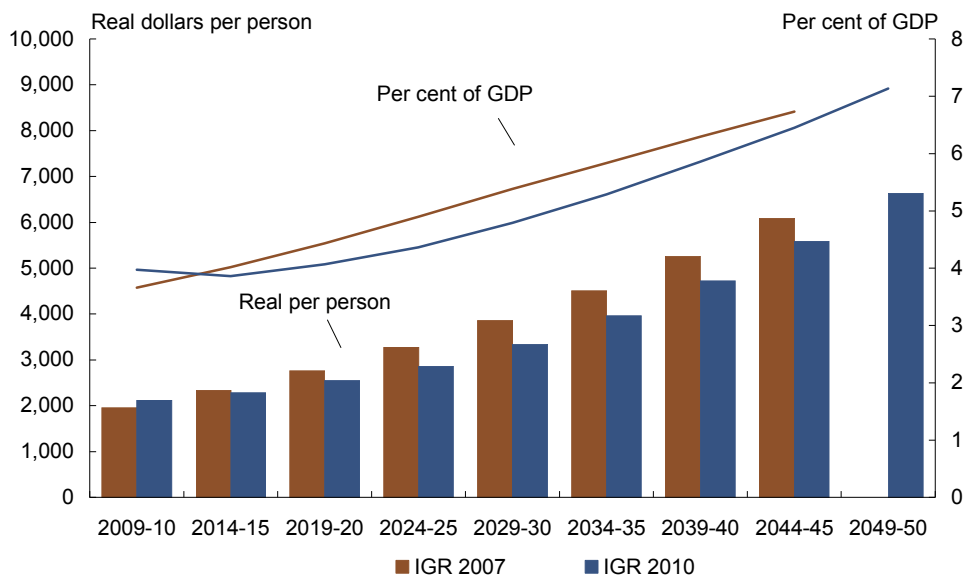
Source: Treasury projections.

- The private health insurance rebate is the fastest growing component of Australian government health expenditure, projected to grow from \$192 real per capita in 2012–13 to \$319 real per capita in 2022–23, an increase of

over 50 per cent in real spending per person. This is notwithstanding recent changes to the private health insurance rebate that, if enacted, are expected to deliver net savings of \$2.0 billion over five years.

- Hospital expenditure also is growing quickly, increasing from \$594 real per capita in 2012–13 to \$803 real per capita in 2022–23.
- Pharmaceutical spending remains a significant share of the health budget throughout the projection period, growing from \$443 real per capita in 2012–13 to \$534 real per capita in 2022–23.

**Chart 4.8: Projections of Australian government health spending**



Source: Treasury projections.

In light of these escalating health pressures, it will be important to ensure that the health system provides value for money. This requires a health system that responds well to innovation, funding cost-effective improvements to health care while being able to adjust spending levels in areas where better value for money could be obtained.

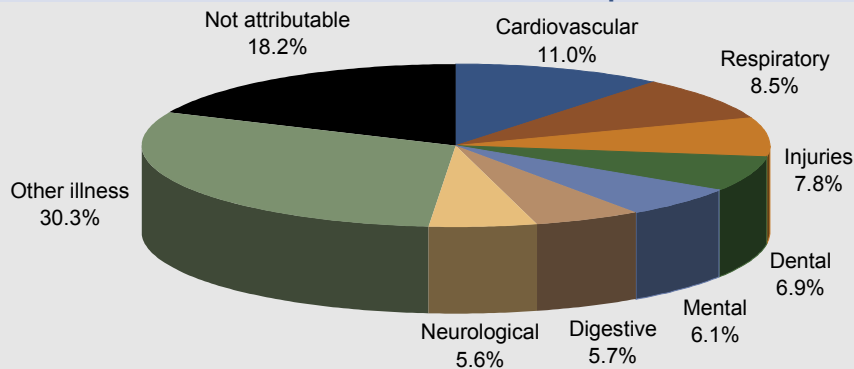
Reforms aimed at improving efficiency also could aid fiscal sustainability in the face of increasing demands on the health system. It will be important to encourage improvements in efficiency and quality, while being flexible enough to enable care to be provided by the most appropriate professionals in the most appropriate places.

**Box 4.1: Chronic disease and health expenditure**

Estimates of non-demographic growth in the IGR implicitly include the impact of changes in population health. While the IGR does not separately identify this effect, the Australian Institute of Health and Welfare (AIHW) has looked at both the distribution of health expenditure by disease, and how changing disease rates will affect future expenditure (AIHW 2008).

Expenditure on diabetes and neurological conditions is expected to grow most rapidly in the 30 years from 2002–03 to 2032–33 (AIHW 2009), although diabetes is coming off a low base (1.9 per cent of total expenditure in 2002–03). Costs from diabetes alone are projected to increase 436 per cent, from \$1.6 billion to \$8.6 billion. These trends are largely caused by the increasing numbers of overweight and obese people (for diabetes) and the ageing population (for both disease groups).

**Chart 4.9: Disease shares of total health expenditure in 2002–03**



Source: AIHW 2008.

These projections highlight an additional challenge for the health system. Not only must it respond to the fiscal pressures identified in the IGR, but it must also adapt to the changing health needs of the population.

In recent work for the National Health and Hospital Reform Commission, the AIHW estimated that real total health expenditure (private spending and spending by all governments) would increase by 189 per cent between 2002–03 and 2032–33. Constraining the growth in obesity would result in an increase of 186 per cent instead. In both cases, total health expenditure would be over 12 per cent of GDP in 2032–33.

## 4.3 Aged care

### Key messages

Spending on aged care is projected to grow from 0.8 per cent of GDP in 2009–10 to 1.8 per cent of GDP in 2049–50. Growth in spending on residential aged care is the main contributor to the increase, although spending on community care also is projected to rise significantly. Population ageing is the primary driver of aged care spending over the next 40 years, accounting for around two-thirds of the projected increase in real spending on aged care per person.

The Australian government provides funding for residential aged care and a range of community care services. Australian government aged care spending is estimated to be 0.8 per cent of GDP in 2009–10. State and Territory governments and individuals receiving care also contribute to total aged care spending, which is currently around 1.1 per cent of GDP.

The major aged care services funded by the Australian government are:

- residential services, classified as high care (formerly nursing home care) or low care services (formerly hostel care); and
- community care services, which include Home and Community Care program services, the Community Aged Care Package program, the Extended Aged Care at Home program and Veterans' Home Care.

### 4.3.1 Key trends and drivers

The dominant influence on future levels of Australian government aged care spending is the number of people over the age of 85, as this age group is the major user of formal aged care services. As mentioned in Chapter 1, the number of people aged 85 and over is expected to more than quadruple over the next 40 years, to 1.8 million people by 2050. This substantial increase will exert considerable pressure on aged care spending.

Other factors that can impact on future government aged care spending include:

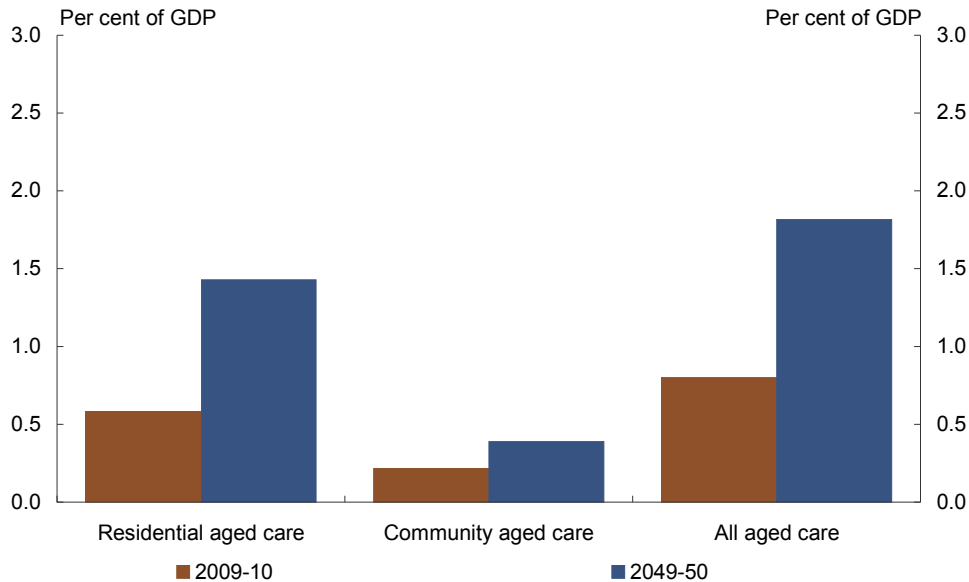
- changes in the average cost per person for a given type of care;
- future disability levels within the aged population;
- the mix between residential care and care in the community; and
- changes in Government policy, including changes to the number of aged care places and the proportions funded by government.

The projections of aged care spending are a function of the average real cost per person for a given type of care. This is assumed to rise at 1.6 per cent per annum, the rate of productivity growth. This is in line with historical non-demographic growth reflecting quality improvements, increasing frailty and wage pressures, counterbalanced by productivity improvements in the sector.

### 4.3.2 Projections

Australian government spending on aged care is projected to increase as a proportion of GDP from 0.8 per cent in 2009–10 to around 1.8 per cent in 2049–50 (Chart 4.10). This is caused mainly by projected increases in spending on residential aged care, reflecting very high rates of growth in the number of people aged 85 and over.

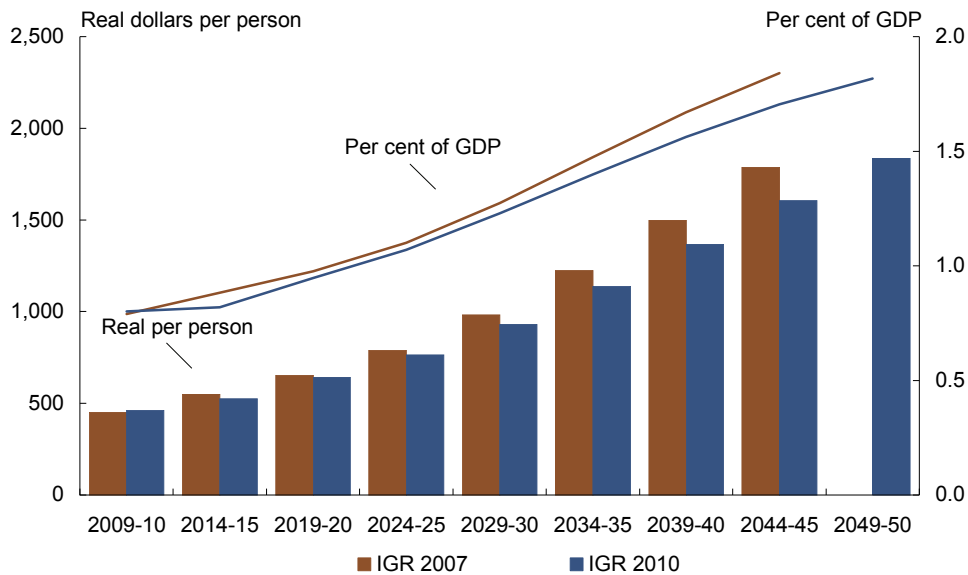
**Chart 4.10: Composition of Projected Australian government aged care spending**



Source: Treasury projections.

These projections are similar to those obtained by other recent studies of aged care in Australia and those of IGR 2007. Projections of real per person aged care spending in IGR 2010 are consistently lower than projected in IGR 2007 mainly because of the younger projected population in this IGR (Chart 4.11).

**Chart 4.11: Projections of Australian government aged care spending**



Source: Treasury projections.

## 4.4 Pensions and income support payments

### Key messages

Total spending on pensions and income support payments is projected to increase from 6.5 per cent of GDP in 2014–15 to 6.9 per cent of GDP in 2049–50, following an initial decline as the economy recovers. The growth is driven largely by projected increased spending on age-related pensions, reflecting the ageing population and indexation arrangements. Other income support payments, such as Disability Support Pension and family payments, are large scale programs and continue to make significant contributions to total aggregate spending.

The Australian government has a range of programs that provide payments to individuals who require support or supplementary assistance. These payments fall across three broad groups: assistance to the aged; assistance to those of workforce age; and assistance to families with children. A 2010 OECD Working Paper found that Australia performs well compared to other OECD countries in targeting low income support benefits to reduce the risk of poverty while maintaining incentives to return to the workforce.

### 4.4.1 Key trends and drivers

Australian government payments to individuals are sensitive to changes in population levels, age structure and the number of persons unemployed. They are also sensitive to changes in consumer prices or wages, depending on indexation arrangements.

The IGR 2010 projections include an increase in payments to individuals in the form of Carbon Pollution Reduction Scheme (CPRS) household assistance. This assistance will help households to adjust when the CPRS is introduced, increasing payments to individuals by 0.1 per cent of GDP in 2011–12, the first full year that CPRS household assistance is expected to be in operation. Appendix C sets out the methodology for projecting income support payments.

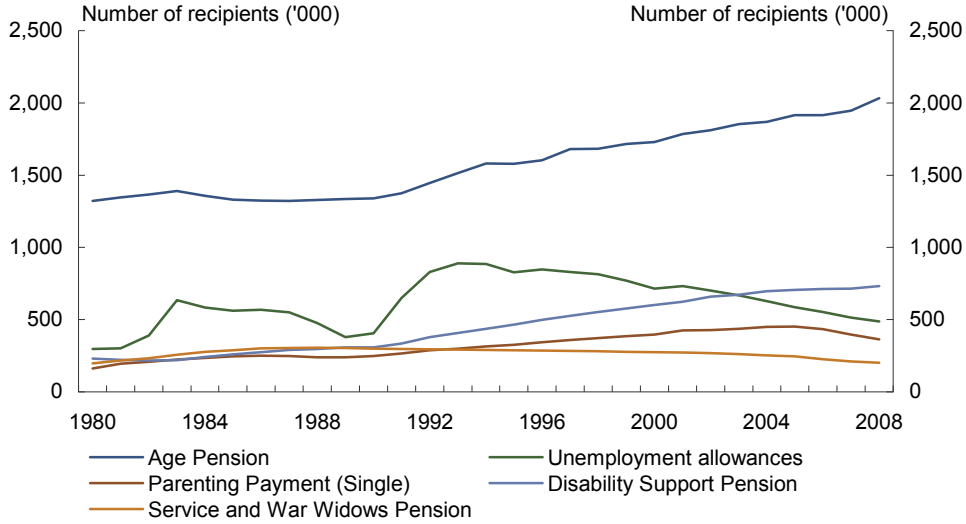
### 4.4.2 Assistance to the aged

Assistance to people older than usual workforce age includes the Age Pension and similar payments to veterans and war widows. These payments are estimated to be around 2.4 per cent of GDP in 2008–09. Following significant increases to these payment rates in September 2009, the payments are estimated to rise to about 2.7 per cent of GDP in 2009–10.

Between 1980 and 2008, the total number of age pensioners increased from 1.3 million to over 2.0 million (Chart 4.12). This mainly reflects growth in the eligible population, partly offset by an increase in the proportion of the population ineligible to receive a pension because of the means tests and the rising pension age for women. Recent reductions in asset prices for some growth assets and reduced interest rates and dividends have increased pensioner numbers. The number of service pensioners and war widow pensioners has been relatively stable.

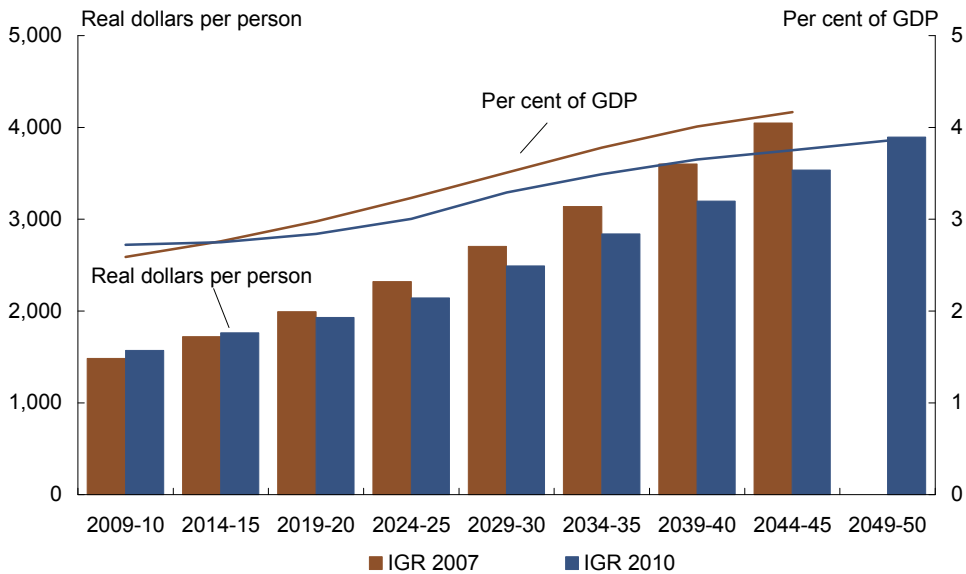
Age-related pension payments are projected to increase to 3.9 per cent of GDP in 2049–50 (Chart 4.13). The IGR 2010 projections are below the IGR 2007 projections of Age Pension spending from around 2016–17 onwards owing to a lower proportion of persons of Age Pension eligibility age in the population. This reflects a younger projected population and the increase in the eligibility age for the Age Pension that was announced in the 2009–10 Budget.

**Chart 4.12: Numbers of recipients of major payments to individuals, 1980 to 2008**



Source: Department of Families, Community Services and Indigenous Affairs, various years and Department of Family and Community Services Income Support Customers — a Statistical Overview, various years.

**Chart 4.13: Projections of Australian government spending on age-related pensions**



Source: Treasury projections.

Other factors affecting the projections of age-related pension spending include:

- The number of people of eligible age is projected to increase by around 150 per cent by 2049–50.
- A decline in the proportion of pensioners receiving a full Age Pension, because of the increased value of individuals' superannuation and other private assets and income.
- The proportion of people with a part Age Pension is projected to increase significantly while the proportion of the eligible age group not receiving any Age Pension is projected to rise slightly.

While the projected increase in spending on age-related pensions as a proportion of GDP is substantial, it is relatively low compared with most other OECD countries. Australia is comparatively well-placed in relation to Age Pension spending because the Pension is means-tested and targets poverty alleviation. By comparison, many OECD countries pay age pensions based on pre-retirement individual earnings, resulting in greater fiscal pressure as their populations age.

#### **4.4.3 Assistance to those of workforce age**

The main payments to people of workforce age are Disability Support Pension (DSP), Newstart Allowance, Parenting Payment Single, Parenting Payment Partnered, Carer Payment, Youth Allowance for unemployed youths, Youth Allowance (student) and Austudy. Projections of these payments were included in IGR 2007. Carer Allowance has also been projected for IGR 2010.

Payments for people of workforce age are estimated to be around 2.4 per cent of GDP in 2009–10 declining to 2.1 per cent of GDP in 2049–50. Except for Carer Allowance, these payments are means-tested and, in some cases, people on these payments are required to seek work or undertake training.

Major factors influencing the number of recipients of payments to people of workforce age include the economic cycle, population growth and the raising of the eligibility age for the Age Pension (which is expected to result in some people taking up or staying on a workforce-age payment instead).

#### **4.4.4 Assistance to families**

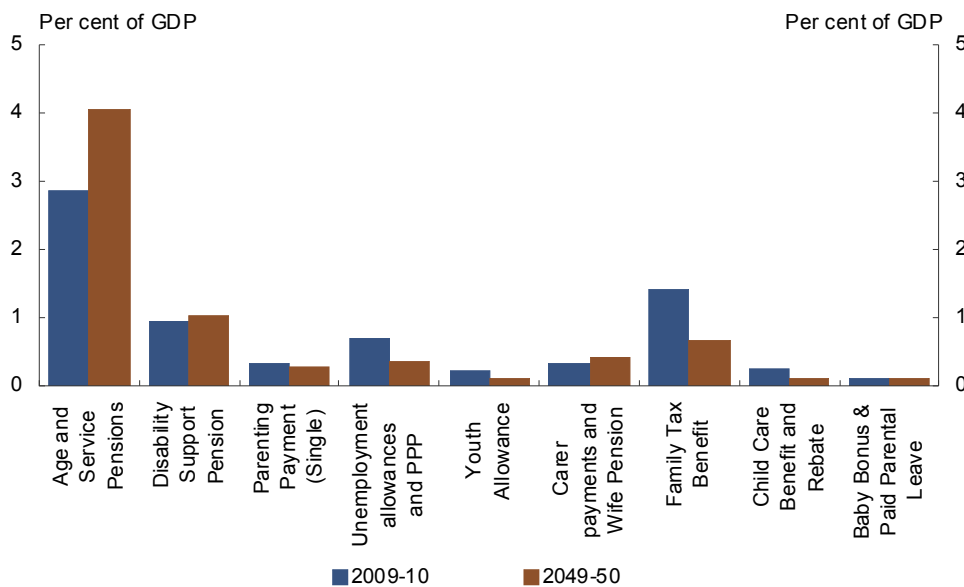
Family payments provide assistance to most families with children, with higher assistance provided to families with lower incomes. The payments modelled in this report include Family Tax Benefit Part A (FTBA), Family Tax Benefit Part B (FTBB), Child Care Benefit and the Baby Bonus, which were also modelled in IGR 2007. Paid Parental Leave and the Child Care Rebate are modelled for the first time in this IGR.

The key driver for projections of family assistance payments are the assumed number of children, female labour force participation and the number of births.

### 4.4.5 Projections of payments to individuals

Australian government payments to individuals are projected to fall initially as a share of GDP as the unemployment rate falls in line with the strengthening economy, but then gradually increase to 6.9 per cent of GDP in 2049–50. This reflects a projected increase in spending on age and service pensions to 3.9 per cent of GDP by 2049–50, partially offset by a decrease in other payments to individuals as a proportion of GDP (Chart 4.14).

**Chart 4.14: Composition of projected Australian government payments to individuals**

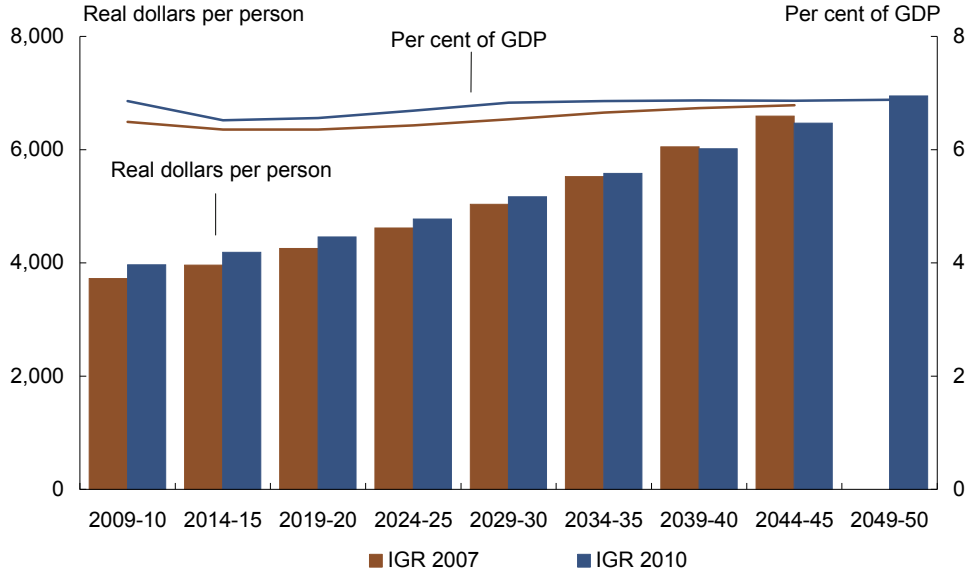


Note: PPP — Parenting Payment Partnered. Carer payments = Carer Allowance + Carer Payment  
 Source: Treasury projections.

The projected decrease in other payments to individuals reflects the relatively lower proportions of the population in the relevant age groups and the policy of indexing allowances and some components of family payments to consumer prices.

Spending on modelled income support payments is higher in IGR 2010 than in IGR 2007 as a proportion of GDP in all years reflecting the inclusion of payments not modelled in the previous IGR (Paid Parental Leave, the Child Care Rebate and Carer Allowance) (Chart 4.15). In real per capita terms, given the larger population projected in IGR 2010, spending is lower from the 2040s even including the additional payments.

**Chart 4.15: Projections of total Australian government income support payments**



Source: Treasury projections.

## 4.5 Education and training

### Key messages

Education spending is projected to increase from 1.7 per cent of GDP in 2012–13 to 1.9 per cent of GDP in 2049–50, reflecting the continuation of historical trends in schooling.

In 2009–10, Australian government spending on education is estimated at 2.6 per cent of GDP. Nearly two-thirds of this spending is on schools. This figure includes the capital expenditure in the Australian government’s economic stimulus plan. By the end of the forward estimates, the proportion is anticipated to be more in line with recent history with around 55 per cent of total education spending being on government and non-government schools.

The Australian government is the main provider of public funds for higher education, with around 28 per cent of education spending allocated to this sector in 2008–09. By the end of the forward estimates period this will have increased to around 31 per cent.

Both the Australian government and State and Territory governments provide funding for vocational education and training providers. For both schools and tertiary education the trend towards privately provided education is also continuing.

### 4.5.1 Key trends

Key factors influencing education projections are the number of young people and the proportion of these young people that participate in education.

- The proportion of the population aged 5 to 24 years has decreased from 37 per cent in 1970 to an estimated 26 per cent in 2010, although the actual numbers have risen from 4.6 million to an estimated 5.9 million. By 2050, the proportion of the population in the 5 to 24 year age group is projected to fall to 23 per cent, with the actual number of people in this age group projected to reach 8.2 million.
- School participation rates have been relatively stable since the mid-1990s after increasing from the mid-1980s.
- Participation rates for most age groups in higher education have been generally stable or falling slightly since around 2001.
- For vocational education and training, participation in apprenticeships rose for all males and younger females (15 to 17 years old), while for other forms of vocational education and training, participation rates for 15 to 17 year old males and females rose but rates for older people generally fell between 2003 and 2007.

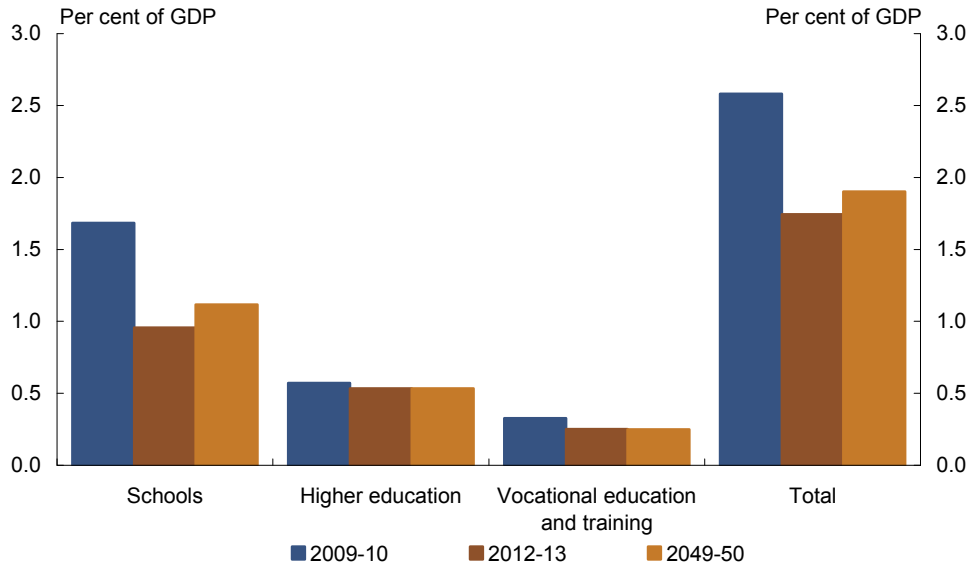
The Australian government is the principal government funder of non-government schools. This proportion has been increasing steadily at least since 1980 when it was 22 per cent, rising to 34 per cent by 2008. The higher proportion of students in non-government schools has the effect of increasing total costs to the Australian government. This trend is projected to continue.

Access to university is currently assisted through the income contingent loans scheme — the Higher Education Loans Program (HELP). In the 2009–10 Budget, the Government announced that the number of Commonwealth-supported places would be uncapped from 2012. This will allow universities to offer a place to any eligible student. As a result, the number of Australian students at university is expected to increase over time.

### 4.5.2 Projections

In real per person terms, total Australian government spending on education is projected to fall initially as the economic stimulus spending phases out but then gradually increase to 1.9 per cent of GDP in 2049–50 (Chart 4.16). The methodology is detailed in Appendix C.

**Chart 4.16: Composition of projected Australian government education spending**

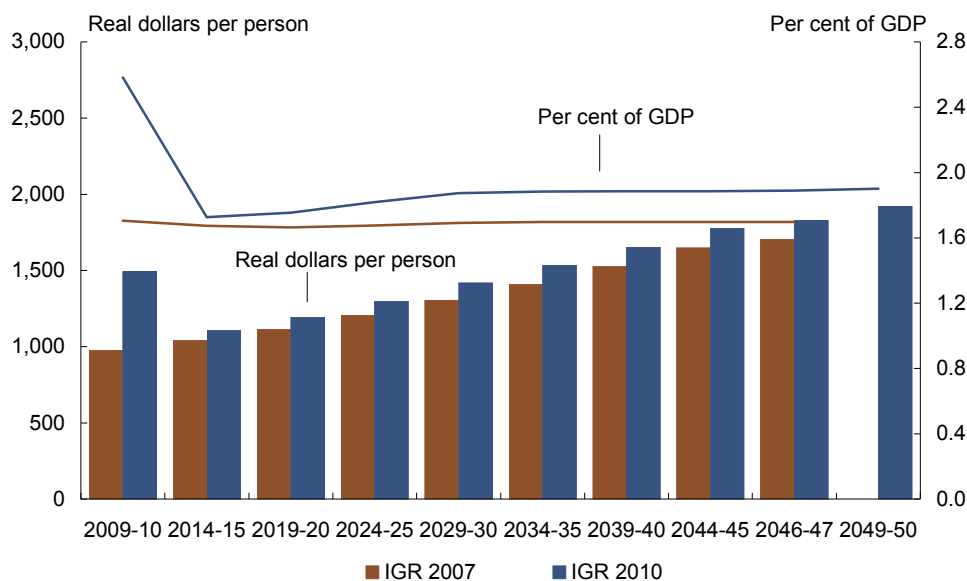


Source: Treasury projections.

Overall, education spending as a proportion of GDP is higher than in IGR 2007 (Chart 4.17). This trend reflects:

- the overall population being younger than previously projected;
- changes to participation rate projections in post-secondary school education reflecting the rise in educational attainment of Australians over time;
- the trend to a more highly skilled workforce;
- the introduction of uncapped university places from 2012 along with increases in per place funding;
- an increase in real per person education spending because of increased per place funding in schools since the last IGR, based on the National Education Agreement with the States and Territories; and
- the expansion of vocational education and training places through the Productivity Places Program.

**Chart 4.17: Projections of Australian government education spending**



Source: Treasury projections.

## 4.6 Government employee superannuation

### Key messages

Superannuation costs associated with the Government's public sector defined benefit schemes constitute a relatively small proportion of future government obligations. Spending on these schemes is projected to decline from 0.4 per cent of GDP in 2009–10 to 0.2 per cent of GDP in 2049–50.

The most significant of the Australian government's superannuation obligations, in terms of future spending, are the defined benefit schemes for civilian and military employees. These include the Commonwealth Superannuation Scheme (CSS), the Public Sector Superannuation Scheme (PSS), the Defence Force Retirement and Death Benefits Scheme (DFRDB) and the Military Superannuation and Benefits Scheme (MSBS). Defined benefit superannuation arrangements are also in place for federal politicians, judges and governors-general.

These arrangements affect future government spending because, historically, only a small proportion of the costs of superannuation benefits have been funded at the time employees accrue benefit entitlements — the unfunded superannuation liability as at 30 June 2009 was estimated at \$116 billion (or 9.6 per cent of GDP). The CSS, PSS, DFRDB and MSBS account for almost all of the Australian government's unfunded superannuation liability and the following projections relate to only these schemes.

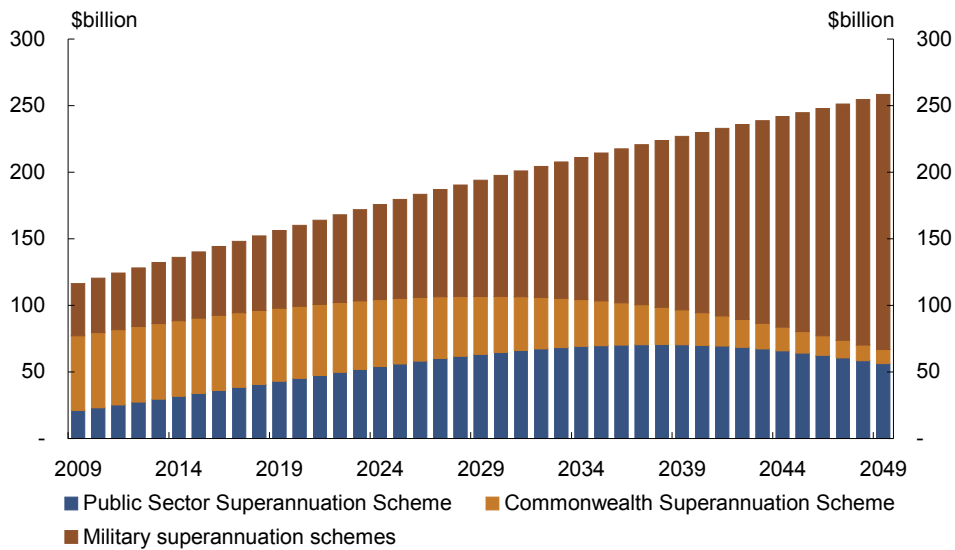
The Future Fund, which was established in 2006 to meet the Australian government’s accumulated unfunded superannuation liability, had assets valued at \$61 billion at 30 June 2009.

### 4.6.1 Key trends and projections

The CSS, the DFRDB and the PSS were closed to new members in 1990, 1991 and 2005 respectively. From 2005, the Australian government began funding the superannuation entitlements for new civilian employees as they accrued.

Despite the closure of these schemes, the unfunded superannuation liability is projected to grow in nominal terms largely because of growth in the military superannuation liability and further entitlements accruing to existing members of the closed civilian schemes (Chart 4.18). However, the liability is projected to grow more slowly than the economy over the next 40 years and consequently decline from around 9.6 per cent of GDP in 2009 to around 2.8 per cent of GDP by 2049.

**Chart 4.18: Projected defined benefit superannuation liabilities**



Note: Military superannuation schemes include the Military Superannuation and Benefits Scheme and the Defence Force Retirement and Death Benefits Scheme.

Source: Department of Finance and Deregulation, *PSS and CSS Long Term Cost Report 2008*, and Australian Government Actuary, *Military Superannuation and Benefits Scheme and Defence Force Retirement and Death Benefits Scheme* (MSBS and DFRDB), 2008.

## 4.7 Defence

### Key messages

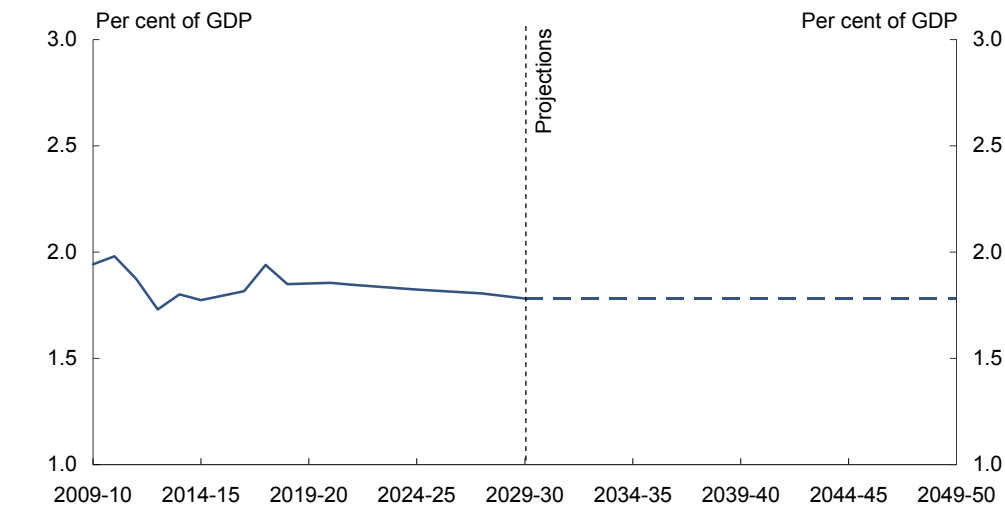
Defence funding is based on the 2009 Defence White Paper funding commitment to 2029–30 and held constant at the 2029–30 share of GDP of 1.8 per cent from 2030–31 to 2049–50.

The Government provides funding for the delivery of navy, army, air and intelligence capabilities, support for Australian military operations overseas and strategic policy advice for the defence of Australia and its national interests. Funding for defence (excluding operations) in 2009–10 is expected to be worth 1.9 per cent of GDP and around 7 per cent of total Government spending.

### 4.7.1 White Paper funding commitment and key trends

In May 2009, the Australian Government released *Defending Australia in the Asia Pacific Century: Force 2030* (the White Paper). The White Paper provides a long-term, real growth funding commitment from 2009–10 to 2029–30 which will provide defence with a certain, clearly-defined, long-term funding envelope within which resourcing decisions can be managed. As a consequence of the White Paper, defence funding (excluding military superannuation) is expected to be around 1.8 per cent of GDP in 2029–30 (Chart 4.19).

**Chart 4.19: Defence funding as a share of GDP**



Source: Treasury projections (excludes Defence operations).

The White Paper funding commitment and Chart 4.19 do not include funding for international operations (including funds provided in the 2009–10 Budget). Funding for future operations is not included as it is inherently difficult to anticipate future operational requirements through to 2049–50. This approach also is consistent with long-standing budget treatment.

Defence funding beyond 2029–30 will depend on a range of factors including the strategic environment. Beyond this time, defence funding is, therefore, assumed to be constant at the 2029–30 share of GDP of 1.8 per cent. This enables defence funding to reflect changes in national income without representing a significant change in policy. The methodology is detailed in Appendix C.

