OECD ECONOMIC SURVEYS

1999

SPECIAL FEATURES
Population ageing
Structural reform

AUSTRALIA

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1998-1999

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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

– to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
– to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
– to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

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BASIC STATISTICS OF AUSTRALIA

THE LAND

Area (1 000 sq. km)	7 682.3
Agricultural area, 1986-87, per cent of total	61
Urban population, 1991, per cent of total	85

Population of major cities, 1996 (1 000):	
Sydney	3 879
Melbourne	3 283
Brisbane	1 521
Perth	1 295
Adelaide	1 079

THE PEOPLE

Population, June 1997 (1 000)	18 532
Number of inhabitants per sq. km	2.4
Natural increase, 1997 (1 000)	129
Net migration, 1997 (1 000)	84

Civilian employment, 1997 (1 000)	8 363
of which: Agriculture	427
Industry [1]	1 870
Other activities	6 066

PARLIAMENT AND GOVERNMENT

Composition of Parliament following latest elections:

Party	Senate	House of Representatives
Australian Democrats	7	–
Australian Labor Party	29	49
Independent	1	5
Greens	2	–
Liberal Party of Australia	31	75
National Party of Australia	5	18
Country Liberal Party	1	1
Total	76	148

Present government: Liberal/National Party coalition
Next general elections for House of Representatives: March 1999

PRODUCTION

Gross domestic product, 1997 (A$ million)	529 408
Gross fixed capital formation, 1997 Percentage of GDP	21.3

GENERAL GOVERNMENT SECTOR, PER CENT OF GDP, 1997

Current disbursement	34.3
Current transfers	13.1
Current revenue	35.2
of which: Direct taxes	18.0

FOREIGN TRADE

Main exports, 1997, per cent of total:	
Food, beverages and tobacco	21.3
Raw materials	20.2
Fuels	17.7
Machinery and transport equipment	13.4
Other manufactured products	27.4

Main imports, 1997, per cent of total:	
Food, beverages and tobacco	4.5
Raw materials	1.9
Fuels	6.0
Machinery and transport equipment	46.4
Other manufactured products	41.2

THE CURRENCY

Monetary unit: Australian dollar

Currency unit per US dollar, average of daily figures:	
Year 1997	1.3473
October 1998	1.6207

1. Including mining, electricity, gas and water, and construction.

This Survey is based on the Secretariat's study prepared for the annual review of Australia by the Economic and Development Review Committee on 12 November 1998.

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After revisions in the light of discussions during the review, final approval of the Survey for publication was given by the Committee on 27 November 1998.

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The previous Survey of Australia was issued in December 1997.

Assessment and recommendations

Robust domestic demand and some redirection of exports...

The Australian economy enjoyed unusually strong growth of real domestic demand – 6 per cent – in the fiscal year 1997/98, the seventh year of the current upswing. Strong domestic demand reflected buoyant private consumption, booming housing demand and robust business investment in response to easier monetary conditions and generally high confidence of households and the business sector. This put the economy in an excellent position to cope with the adverse impact of the financial crisis in Asia on output and employment. The contractionary effect of the Asian meltdown on exports became visible towards the end of 1997. But in 1998, shipments of commodities and – to a lesser degree – exports of manufactures and some services were increasingly redirected to other destinations, notably the United States and Europe. This was helped by the depreciating exchange rate, which improved the competitiveness of exports and more than offset the effect of falling commodity prices on export revenues in Australian dollars. As a result, the volume of exports of goods and services increased by a solid 4¼ per cent in 1997/98, albeit well below the 10 per cent increase the year before.

... cushioned the effects of the Asian crisis on Australia

The relative resilience of exports, in combination with burgeoning domestic demand, led to an acceleration in GDP growth to 4 per cent in 1997/98, exceeding most estimates of potential output growth, which are in the range of 3¼ to 3½ per cent. This underpinned a pick-up in employment growth from the second half of 1997 onwards, especially for full-time employment. Since 1992/93, employment has increased by over 11 per cent. This has reduced the unemployment rate, but at around 8 per cent it remains too high.

Labour productivity of the non-farm business sector increased by a solid 3 per cent in 1997/98, markedly higher than the average rate of around 1¾ per cent over the 1990s; and this has kept unit labour costs in check. Helped by global disinflationary pressures, the underlying rate of inflation has been a little below the Reserve Bank's (RBA) objective of 2 to 3 per cent since June 1997, the best inflation performance in more than thirty years. Overall, the Australian economy has coped well with the Asian crisis so far, despite its bigger trade exposure to that region than most other OECD countries. However, the coincidence of decelerating exports and buoyant imports, induced by strong domestic demand, has led to a deterioration of the current external deficit, to an estimated 5½ per cent of GDP in 1998. This deterioration should not be seen as a cause of concern in the current economic environment, so long as it is progressively reversed in the coming years.

Economic growth is projected to slow, however, ...

Owing to an expected easing in the growth of consumption expenditures and the maturing of the house construction cycle, economic growth is projected to decline to around 2½ per cent in 1999 and 2000. This should reduce employment growth from an estimated 1¾ per cent this year to 1½ per cent over the next two years, leaving the unemployment rate at around current levels. With the latter remaining above its estimated structural rate, wage inflation may continue to fall somewhat. Nevertheless, underlying inflation is projected to pick up, from an estimated 1¾ per cent this year to a little over 3 per cent in 2000, due to the passing through of higher import prices (caused by the large depreciation of the exchange rate over the past year and a half) to consumer prices, a slowing in productivity growth from the very high rates recorded in the past two years and the intended introduction of a goods and services tax in July 2000; this is likely to have a substantial but temporary impact on inflation over the following several quarters. The current account deficit is projected to decline to about 5 per cent of GDP in 2000.

... with downside risks mainly stemming from the external environment

The major risks to these projections emanate from the international economy. Recovery in Asia could be delayed, notably owing to difficulties in resolving financial sector problems, and the emerging market crisis could intensify in Latin America, with knock-on effects on other markets, including the United States. These developments would cut growth in export volumes and further lower commodity prices. A substantial decline in stock markets in OECD countries could also weaken the international economy. In this context, the associated fall in the Australian stock market could well lead to a reduction in the growth of private consumption expenditure. There is also the risk of domestic spending plans being revised down in the event of further falls in business and consumer confidence.

In this context, monetary policy should remain supportive of economic growth in line with the Reserve Bank's inflation objective

The OECD Secretariat's inflation projections suggest that the current monetary policy stance, supportive of economic growth, is appropriate at the current juncture. The target cash rate was cut five times consecutively to 5 per cent during the year to July 1997 and has since remained at that level. In addition, the effective Australian dollar exchange rate depreciated by about 12 per cent since April 1997, thus accentuating the easing of monetary conditions. Furthermore, intensified competition between banks has induced a narrowing of interest rate margins and a decline in lending rates even in the absence of further cuts in official rates since mid-1997. Ten-year Treasury bond yields have continued their fall from their latest peak in late 1994, reflecting low actual and expected inflation and the global bond rally. At below 5 per cent for much of October 1998, they were at their lowest level since the early 1970s.

At the same time, fiscal policy should remain geared towards preserving the gains in budget consolidation...

With monetary conditions remaining supportive of growth, fiscal policy should be geared towards preserving the gains in budget consolidation of recent years. In particular, a rising structural budget surplus remains appropriate in view of the large current account deficit, so as to underpin confidence in Australian financial markets. Assuming trend growth from FY 1999/2000 onwards, the Commonwealth budget surplus is officially projected to rise from 0.2 per cent in FY 1997/98 to 1.5 per cent of GDP in FY 2001/02, despite the introduction of the tax package in July 2000. The package reduces the budget surplus by 0.7 per cent of GDP in FY 2000/01, offsetting the budget consolidation which would otherwise occur in that year. However, if growth is below the trend rate, as projected by the OECD Secretariat, the actual general government budget surplus may slip to around ½ per cent of GDP in calendar 2000, mainly reflecting developments in the Commonwealth budget. Allowing the automatic stabilisers to work in this way in a period of weaker growth would be appropriate as the fiscal deterioration would be reversed when the economy strengthens again. Provided that it is clear that the deterioration is cyclical, this should not undermine confidence in financial markets.

... the more so since population ageing will put pressure on government budgets, albeit less so than in most other OECD countries

The need for prudent fiscal policy is heightened by the fact that the ageing of the Australian population will increase transfers to the elderly from a smaller working population, placing pressure on government budgets in the medium term. Indeed, outlays on pensions, social security for early retirees and on health care can all be expected to rise as the ''baby boom'' generation moves into retirement. Pension expenditures are projected to increase by 1½ per cent of GDP by the middle of next century. This is much less, however, than in most other OECD countries as the tax-funded public pension (the ''age pension'') in Australia only covers the first pillar of retirement income arrangements and is means tested; and the compulsory funded retirement income scheme (*i.e.* superannuation) is steadily maturing, thereby reducing entitlements to the age pension. However, the rise in public pension outlays could prove larger than expected if a greater proportion of superannuation assets were dissipated early, increasing average age-pension entitlements (this behaviour is known locally as ''double dipping''). Social security expenditures for early retirees are also likely to rise when the ''baby boom'' generation moves through the 55-64 age group. Early retirement rates in Australia are a little higher than the OECD average, but have risen less during the 1990s than in many other countries. With respect to health care spending, although the direct effects of population ageing are not expected to be great in the next 30 years, these effects are likely to grow subsequently when growing numbers of "baby boomers" enter the ranks of the very elderly (aged 80 and over) and require long-term care (most of the costs of which are covered by means-tested government subsidies).

To cope with this, reforms are required to limit "double dipping" further and reduce rates of early retirement

The government has responded to the long-term threat to pension outlays from "double dipping" by progressively raising the preservation age (*i.e.* the age until which benefits must be preserved in a superannuation fund to qualify for concessional tax treatment) from 55 currently to age 60 by 2025. This process should be taken further, raising the preservation age to that required for access to the age pension (*i.e.* 65). Such an increase would eliminate the opportunity to dissipate superannuation benefits before reaching the age of eligibility for the age pension. Moreover, policy needs to remain attuned to the need to encourage people to use their superannuation benefits to generate sustainable retirement income streams, maximising self reliance. An important measure in this regard would be to limit the value of owner-occupied housing which is exempt from the means (assets) test. To reduce early retirement rates in the next few years, reforms aimed at improving labour market opportunities and discouraging premature take-up of social security benefits could make a valuable contribution.

... and address pressure on long-term care costs

The potential future budgetary costs of long-term care requires attention. Recent initiatives need to be evaluated to assess whether further reforms will be necessary. A possible further option to be considered is compulsory pre-funding of such care. This could be done through insurance (private or a hypothecated increase in the Medicare levy) or increased superannuation contributions (which would have to be preserved until long-term care was required or death of the beneficiary). But even though the direct effects of population ageing on health-care outlays might be manageable that way, health-care costs nevertheless could pose a serious long-term threat to government finances owing to high growth in real age-adjusted expenditure per person.

This is primarily occurring in care provided on a fee-for-service basis and reimbursed under Medicare and in the Pharmaceutical Benefits Scheme. Steps have been taken to reduce the scope of such fee-for-service arrangements under Medicare but this may need to be taken further if growth in outlays is to be durably contained.

In spite of difficulties in simplifying the award system...

The resilience of the economy to adverse external shocks could be strengthened further by making the labour market more adaptable to a rapidly changing economic environment. The award system, which continues to play an important role in Australian industrial relations, has long been identified as a major impediment to a more flexible labour market. The *Workplace Relations Act 1996* (WRA) – implemented in 1997 – is a more decisive shift away from awards towards enterprise bargaining than hitherto: it seeks to make the system of the around 3 200 awards less complex and prescriptive by confining awards to 20 ''allowable matters'' which provide a safety-net of *minimum* wages and work conditions as from 1 July 1998. *Actual* wages and employment conditions are, as far as possible, to be set at the enterprise or workplace level, either in formal agreements or informally. However, the adjustment of awards to the new legislation has turned out to be a slow process, so that the vast majority of the existing awards continue to address issues which are no longer ''allowable'' and thus have become non-enforceable since mid-1998. But even those few awards which have been aligned to the allowable matters appear to have remained lengthy, comprehensive and complex. Further limitation of the number of allowable matters to a smaller set of real core conditions of employment could reduce the complexity of awards and widen the scope for decentralised bargaining of wages and employment conditions.

... progress has been made in decentralising industrial relations...

The WRA also provides for easier access to non-union collective agreements and to formalised individual agreements between employer and employees (Australian Workplace Agreements). Latest statistics indicate that the WRA has indeed fostered the move towards decentralised bargaining, particularly in non-unionised workplaces. More importantly, comprehensive enterprise agreements – in the sense of providing a single reference document for all work practices, conditions and pay requirements and thus able to completely replace awards – are not common yet; they are estimated to cover only some 5 per cent of employees. For the majority of employees concerned by enterprise bargaining – about one-third of total employment – the outcomes remain "add-on agreements" to existing awards, that is, they have to be read in conjunction with awards. Hence, the growth in the incidence of enterprise agreements is not necessarily proportionate to their significance and is likely to underestimate the role awards continue to play as benchmarks around which wages and other employment conditions are negotiated. Notwithstanding these limitations, the achievement of workplace flexibility by leading firms has been greater than many expected and is accelerating as firms and workers learn in the new environment. This is helping to establish a competitive dynamic which is enhancing the effects of the reforms.

... but there is still unfinished business

The overall success of industrial relations reform depends, however, to a large extent, on the harmonisation of federal and State legislation which has not made much progress over the past twelve months or so. Hence, more efforts should be undertaken by the Commonwealth Government to find support for the operation of the WRA from comprehensive complementary legislation of the states. Another pending issue is to find the appropriate balance between protection of employees against unfair dismissals and incentives of firms to hire workers. Since there is a risk that high potential costs of dismissals under the current legislation have a negative impact on hiring, the government should seek ways to minimise legal costs and discourage unfounded claims while keeping the appeals process fair and simple.

Recent reforms encouraged productivity-enhancing measures at the waterfront...

Helped by recent industrial relations reforms, especially the restored effectiveness of the secondary boycott provisions, and after a bitter industrial conflict during the June quarter of 1998, the work organisation in the container stevedoring industry began to improve in the direction of higher container terminal efficiency. Reform was needed in that area as international benchmarking exercises suggest that, while stevedoring performance for many bulk commodities was good, Australia is under-performing in other areas of the waterfront, and particularly at container terminals. The effective handling of sea-borne cargo is critical to Australia's trade performance, with coastal shipping also being a significant mode of domestic transport. In April 1998, the Federal Government announced its seven benchmark objectives for waterfront reform which set specific performance targets for the stevedoring sector. The Government has also taken a direct role in assisting restructuring across the stevedoring industry by facilitating access to funding for the costs of redundancies and other activities in connection with reforms required to achieve the Government's benchmarks. By mid-1998, an agreement of one of the two major stevedores in the container stevedoring industry introduced new flexibility in work arrangements which imply substantially greater rights of managers than hitherto to allocate workers to particular tasks and jobs, and new rosters. This allowed removal of existing incentives for dock workers to maximise their earnings by arranging to work substantial amounts of high-paid overtime. As the agreement is likely to encourage similar reform in other maritime sectors – for example, the shipping industry, where the crew-to-berth ratio is high by international standards – its importance goes far beyond the industry level.

... although barriers to entry remain high in container stevedoring

Greater competition in the container stevedoring market would exert pressure on both management and employees to improve performance further and to make sure that a fair share of the resulting efficiency gains would be passed on to customers. With the length of wharf leases being identified as a major barrier to entry in that market, market entry could be facilitated through the provision of common user facilities, which are offered by several ports in New Zealand.

Another way of increasing competition on the waterfront would be to stimulate interport competition. Given the large distances between ports in Australia, this would require a reduction in the relatively high cost of land transport, in particular through reform of the markets for rail transport. To improve the services of the rail system, deferred maintenance should be undertaken over the next few years. Further progress is required on proposed reforms to simplify the access regime for interstate track, develop a common standard for rail regulation and privatise the National Rail Corporation.

The strengthened regulatory regime of the financial system...

Another area where significant changes occurred recently is financial supervision. A new organisational framework for financial sector regulation involving three objectives-based agencies whose responsibilities will extend across the financial system was put in place in July 1998. This framework, which replaces the existing institutions-based regulators includes a single prudential regulatory agency, the Australian Prudential Regulation Authority (APRA), which sets standards on prudential matters in relation to authorised deposit-taking institutions; the Australian Securities and Investments Commission (ASIC), which is responsible for the regulation of conduct and disclosure in financial markets as well as for consumer protection and market integrity in the areas of insurance, superannuation and aspects of banking; and the Reserve Bank, which remains the regulator of the payments system and retains responsibility for the overall stability of the financial system.

... will require the co-operation of the States

In a second stage of the reforms prudential and corporate regulatory responsibilities for building societies, credit unions and friendly societies are to be transferred from the states and territories to the Commonwealth. There is also to be a consolidated law for market conduct and disclosure in the financial system, which will be administered by ASIC. Implementation of these reforms, which requires the agreement of the states and territories, would further strengthen the regulatory regime, enabling it to respond flexibly to developments in the financial sector, including globalisation and technological change.

There is also scope for improving business and company regulation

As a follow-up of its examination of current regulations which affect business and investment activity in the context of the Corporate Law Economic Reform Program (CLERP), the Government introduced a Reform Bill into Parliament which seeks to remove unnecessary obstacles to take-overs, as well as legislatively implement key areas of CLERP such as fund-raising, directors' duties, corporate governance and accounting standards. The Bill lapsed with the calling of the Federal election, but is expected to be reintroduced shortly. In order to foster an active market for corporate control the Bill provides for a "mandatory bid" rule. Similar to legislation in the United Kingdom, the new rule would allow a bidder to exceed the statutory threshold of 20 per cent of total voting rights beyond which an unrestricted bid for all the remaining shares in that class must be made, provided that the announcement of a full, unconditional take-over bid immediately follows the acquisition that takes the bidder through the threshold. This would reward bidders willing to put up search costs by giving them the opportunity to secure control without an auction. More investment in research could be expected to result in more take-over bids. By applying the take-over provisions to listed managed investment schemes, members of these schemes will have the same rights to share in a control premium as shareholders, while responsible entities of these schemes will face the same competitive pressure to perform as company directors. The Government will also press ahead with the other reforms of corporate governance arrangements in the context of the CLERP in order to make corporate regulation less prescriptive and intrusive, thereby allowing businesses to concentrate more on their core goals.

Given the drawbacks of the tax system...

As in other OECD countries, the Australian tax system has evolved largely in an *ad hoc* way over several decades. Over time, this has led to an accumulation of problems which result in a growing deviation of the system from standard objectives such as revenue security, allocative efficiency, equity and simplicity. A particularly welfare detracting feature of the present tax system is the great variety of indirect taxes levied from many business inputs which distorts resource allocation. The problem is aggravated by the hidden cascading of wholesale sales taxes through the production process.

... the government proposes comprehensive reform...

It is therefore not surprising that tax reform is back on the Commonwealth Government's agenda, in spite of the immense political difficulties this implies. A comprehensive proposal was unveiled in this respect in August 1998. Its most significant element is the proposed replacement of the present Wholesale Sales Tax by a goods and services tax (GST), which is basically a value-added tax. A uniform tax rate of 10 per cent would apply to the consumption of most goods and services, including those which are imported. As an important feature, the new GST would remove distortions from the taxation of business inputs. States would receive all revenue from the new GST as compensation for the abrogation of the present Commonwealth General Financial Assistance Grants to States, conditional on the abolition of nine indirect taxes by the States, which have been identified as highly inefficient. As a result, the reform does not entail a significant increase in indirect taxation. However, given the expected strength of GST collections relative to the existing system of Commonwealth grants and narrowly based State indirect taxes, the reform would enhance the revenue security of the States over time. Concomitantly, reduced taxation of financial services by the States would help Australia to compete as a financial centre. Furthermore, personal income tax brackets would be lifted and most marginal income tax rates reduced, so that the marginal rates of some 80 per cent of taxpayers would be 30 per cent or less. The package also includes major reforms to the interface between the tax and social security systems, particularly for families, which should go some way towards alleviating the poverty trap problem and improving incentives to work.

... but unresolved issues remain

In addition, significant changes in the taxation of business income are proposed in the package. The final form of these proposals is expected to be known in mid-1999 following a public consultation process. The proposal to reduce the effective excise payable on diesel fuel used in heavy road and rail transport raises the question of how Australia intends to meet its Kyoto obligations in respect of CO_2 emissions (should the protocol be ratified). However, the role of environmental taxes in achieving these and other ecological objectives still has to be determined. Another outstanding tax issue concerns payroll tax. This tax, which is a state responsibility, distorts resource allocation and has a narrow base. A useful reform would be for states to agree to eliminate exemptions, harmonise the definition of the tax base, and compete only on the rate of the payroll tax.

To sum up

In summary, although Australia has greater trade exposure to the crisis-affected Asian region than most other OECD countries, it has proved impressively resilient to this external shock. Both robust domestic demand and the redirection of exports to other markets have helped in this regard. Over the past seven years, real GDP expanded at an annual rate of 3½ per cent while inflation was brought down and kept low; this makes the Australian economy's performance one of the best in the OECD area. Sound monetary and fiscal policies have, no doubt, contributed to this performance, combined with structural reform, which helped raise total factor productivity. Economic growth is projected to slow, however, with downside risks stemming from the external environment. Therefore, monetary policy should remain supportive of economic growth consistent with the inflation target while fiscal policy should remain geared towards continuing the gains in budget consolidation. While the proposed tax reforms involve some fiscal cost in the short term, they should contribute to a substantial improvement in economic performance and the longer-term security of the revenue base. Full and rapid implementation is vital to achieving these objectives. Economic efficiency would be further strengthened by the implementation of the first stage of financial system reforms in July 1998 in response to the Financial System Inquiry and the take-over provisions of the Corporations Law. The design of the pension system and high rates of home ownership make sure that the ageing of the population will lead to only modest increases in public pension outlays in the future relative to other OECD countries, although measures are needed to contain the rise in public health-care expenditures. Continued structural reform, in particular more progress in moving towards an industrial relations system focused on enterprise bargaining would underpin ongoing strong economic growth in Australia.

I. Recent trends and short-term prospects

The economy prior and after the financial crisis in Asia

The financial crisis in Asia became apparent in July 1997, just when the Australian economy had finished its sixth year of the current cyclical upswing. The twelve months prior to the crisis – fiscal year[1] (FY) 1996/97 – had seen a mild weakening of economic growth, concentrated in the second half of calendar year 1996, and mainly reflecting a negative swing in the real foreign balance in response to the earlier effective appreciation of the Australian dollar. Monetary policy had turned towards easing by mid-1996[2] when it became clear that underlying inflation was trending down within the Reserve Bank's target range of 2 to 3 per cent, allowing the economy to rebound in the course of 1997. Hence, the early stage of the Asian meltdown coincided with strong growth of domestic demand in Australia – at an annual rate of 8½ per cent (on a seasonally adjusted basis) in the second half of 1997 – coupled with low inflation; and these developments put the economy in a very good position to weather the effects of the crisis (Table 1). But with troubled Asian countries[3] accounting for about 16 per cent and total East Asia just over one half of Australia's merchandise exports,[4] the contraction of import demand in these markets implied a substantial external shock on Australian economic activity in the form of reduced demand for Australian exports and lower (US dollar) export prices. To the extent that this contractionary effect would not be offset by a redirection of exports to other markets, and that in consequence business and consumer confidence would be negatively affected, the crisis resulted in prospects for lower economic growth and a widening of the current external deficit. Although the crisis has entailed a significant depreciation of the exchange rate, as of mid to late 1998, it had not contributed to higher inflation, as global disinflation pressures helped to keep this effect small. How the Australian economy has coped so far with the Asian crisis is discussed in detail in the paragraphs below.

Domestic demand

Both private consumption and private fixed investment were main pillars of domestic demand in FY 1997/98 (Figure 1). Growth of *household consumption*

Table 1. **Demand and output**

Percentage changes, FY 1989/90 prices

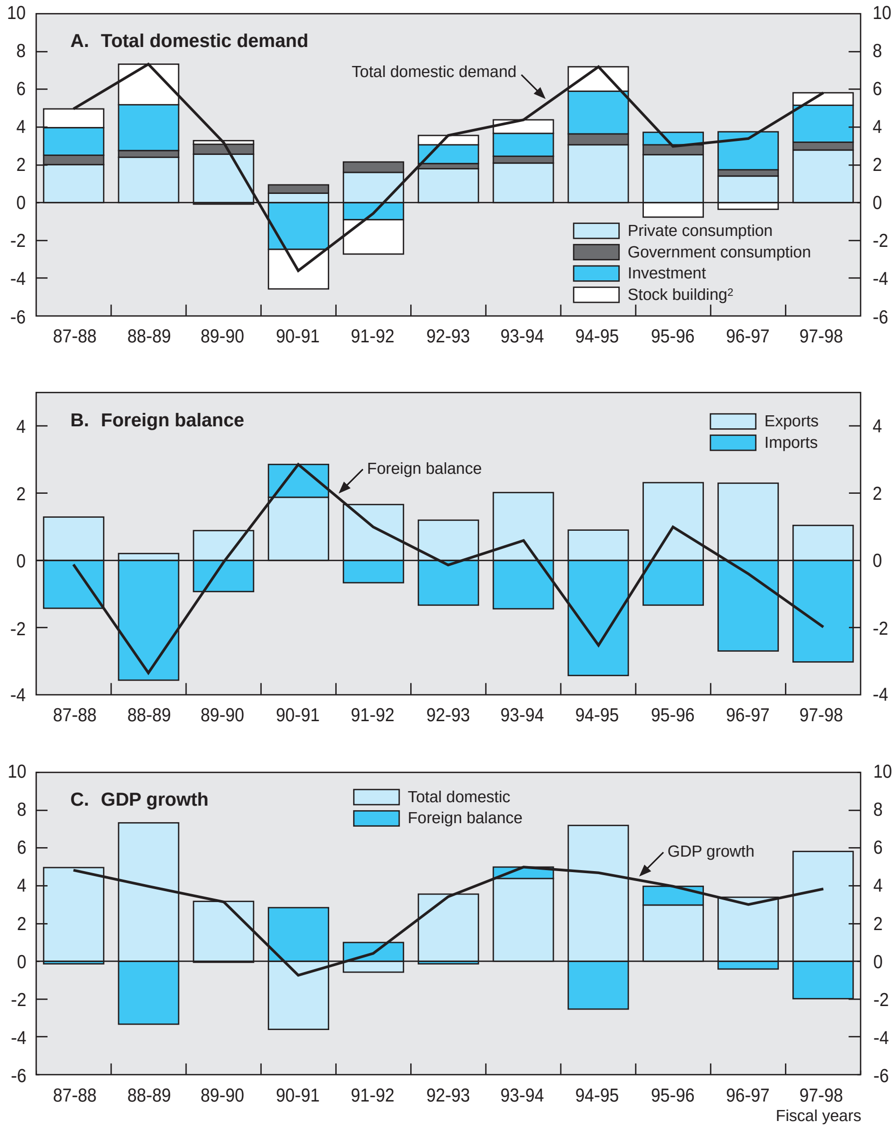
	From previous period				From previous period, seasonally-adjusted annual rate		
	Calendar years		Fiscal years[1]		1997		1998
	1996	1997	1996/97	1997/98	I	II	I
Consumption							
Private	3.1	3.4	2.4	4.6	2.6	6.2	3.6
Public	3.1	2.3	2.0	2.5	1.0	4.6	–0.3
Gross fixed investment	6.2	11.1	9.0	8.3	14.5	9.0	2.4
Government	0.9	3.4	6.6	–8.1	12.8	–20.5	2.2
Private	6.8	11.9	9.2	10.0	14.7	12.3	2.5
Dwellings[2]	–5.6	13.9	3.2	14.3	23.8	10.6	14.3
Other construction	19.3	5.1	19.8	11.5	–3.5	–7.0	77.7
Equipment	16.4	18.3	16.9	11.1	25.6	16.1	–7.7
Public enterprises	–7.2	–8.0	–16.3	–12.4	–18.9	41.4	–70.2
Final domestic demand	3.8	5.0	3.8	5.2	5.0	6.6	2.7
Change in stockbuilding[3]	–0.2	–1.7	–0.9	0.7	–4.0	1.7	3.4
Total domestic demand	3.6	3.2	2.9	5.9	0.9	8.5	6.2
Exports of goods and services	11.1	11.4	10.1	4.3	22.1	0.9	–2.9
Imports of goods and services	9.8	14.0	12.3	12.7	16.6	14.5	7.2
Change in foreign balance[3]	0.3	–0.5	–0.4	–2.0	1.2	–3.2	–2.5
GDP (expenditure-based)	3.9	2.7	2.5	3.9	2.1	5.1	3.6
Statistical discrepancy	–0.2	0.1	0.6	–0.1	0.0	–1.0	1.6
GDP (income-based)	3.7	2.8	3.0	3.8	2.1	4.1	5.2
Farm	19.5	–2.4	10.2	–2.5	8.2	–9.3	1.3
Non-farm	3.2	2.9	2.8	4.1	1.9	4.6	5.4
GDP (average measures)[4]	3.7	3.0	2.8	4.0	2.9	4.5	4.3

1. Fiscal years begin 1 July.
2. Including real estate transfer expenses.
3. As a per cent of GDP in the previous period.
4. Average of the expenditures, production and income measures of GDP.

Source: Australian Bureau of Statistics and OECD Secretariat.

(4½ per cent) was considerably faster than that of real disposable incomes and implied a fall in the household saving ratio to 2½ per cent in 1997/98 from nearly 5 per cent in the year before. This is a reflection of the optimistic assessment of consumers about their personal financial situation as expressed in consumer sentiment surveys, which is likely to have been stimulated by households' capital gains on equity. A major component of buoyant private consumption expenditure was the booming demand for motor vehicles: by mid-1998, new motor vehicle

Figure 1. **Contribution to GDP growth**[1]
As a percentage change of GDP in previous fiscal year



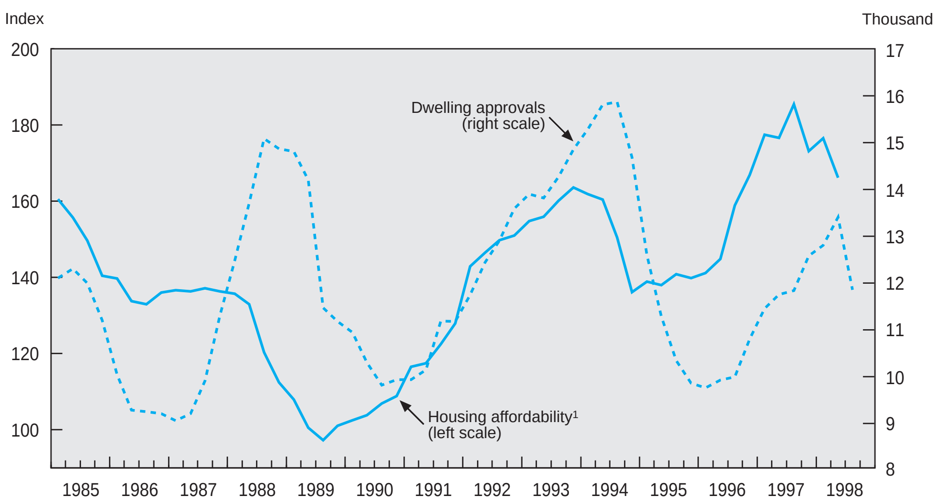
1. Income measure of GDP.
2. Including statistical discrepancy.

Source: Australian Bureau of Statistics, *National Account.*

registrations were 28 per cent higher than twelve months earlier, marking the biggest increase in history; registrations remained strong in the September quarter. Demand for motor vehicles was stimulated by tariff reductions and intense competition in that market which had caused prices to fall by around 10 per cent over the preceding two years. While signs of slackening private consumption demand emerged in early 1998, this was largely reversed in the June quarter. The earlier weakening was accompanied by some deterioration of consumer confidence as measured by the Melbourne Institute's Survey of Consumer Sentiment, reflecting consumers' growing concerns about the outlook for the economy and employment prospects. So far, however, the indicator of consumers' perceptions of their own financial situation has declined only by little, which has helped keep the overall consumer sentiment measure above its long-run average in the first three quarters of 1998.

Residential construction (in constant prices) continued to recover from its trough in 1996, and accelerated its growth in FY 1997/98, supported by historically high levels of "housing affordability[5]" (Figure 2). The high housing affordability index largely reflects the fall in housing loan interest rates to their lowest levels in nearly 30 years, which has more than compensated for the effect of decelerating real disposable incomes of households. Since late 1997, however, the index has

Figure 2. **Indicators of dwelling demand**

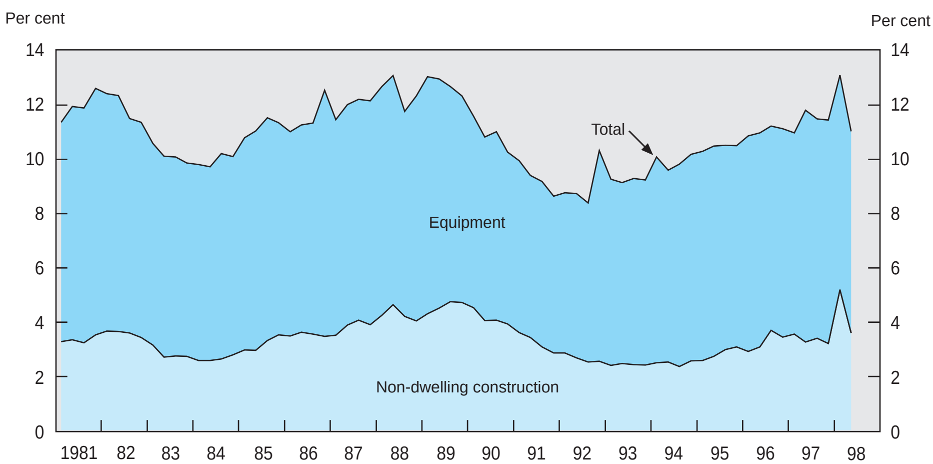


1. Commonwealth Bank-Housing Industry Association index.
Source: Australian Bureau of Statistics.

declined, which may herald the end of the extraordinary growth in residential investment. The number of dwelling commencements appears to lag somewhat behind comparable stages of previous housing cycles, probably reflecting the slowing population growth across key household-forming age cohorts. But this has not translated into weaker dwelling investment volumes due to higher average values per dwelling unit built, mirroring the bigger size and better quality per unit as well as strong growth in spending on alterations and additions. The number of dwelling approvals decreased during the three months to August 1998 but was still 8½ per cent above the level of a year earlier.

Business fixed investment continued to expand strongly in FY 1997/98 (about 11 per cent), boosted by both robust growth of machinery and equipment investment and business construction. However, the buoyancy in machinery and equipment investment was concentrated at the beginning of FY 1997/98. It slackened substantially in the first half of 1998, after six consecutive years of strong growth, which brought its share in GDP back to the high levels last experienced in 1988 (Figure 3). The decline may be a consequence of the Asian crisis as a sharp deterioration of business confidence was measured from late 1997. However, in large parts of the business sector, most notably in resource-based industries such as mining, investment projects are subject to long planning horizons and unlikely to be revised on the basis of short-term swings in business sentiment. As for

Figure 3. **Business fixed investment shares[1]**
As a share of GDP



1. Excluding investment of public enterprises.
Source: Australian Bureau of Statistics.

business construction, the striking rise in the first half of 1998 is partly due to the sale of a publicly-owned natural gas pipeline to the private sector, which has its counterpart in a steep decline in the investment of public enterprises. Abstracting from the effects of asset sales, private non-dwelling construction nevertheless rose by a solid 10.3 per cent (s.a.a.r.) in the first half of 1998.

Strong growth of sales outstripped *stockbuilding* throughout 1997[6] so that the aggregate inventory-to-sales ratio fell to below its long-term trend. Recent business surveys point to a desire of companies to re-build stocks; hence, the substantial and broadly-based surge in inventories in the March quarter of 1998 is likely to have primarily reflected a voluntary adjustment of stocks to sales rather than unintended stockbuilding. This view is corroborated in the continuation of inventory growth – although at a weaker rate – in the June quarter. With a small positive contribution of government consumption, growth of total domestic demand accelerated to nearly 6 per cent in FY 1997/98; in the course of the current business cycle this was exceeded (marginally) only in 1994/95.

Exports

During most of 1997, growth of *merchandise export volumes* was quite robust so that by year-end, they were 10¼ per cent higher than a year earlier. However, by late 1997, the impact of the Asian crisis became visible: all broad categories of merchandise exports (rural, resource based, manufactures) contracted in volume terms from the September to the December quarter. However, the decline in agricultural exports, which continued throughout the first half of 1998, mainly resulted from the sharp fall in farm production in the second half of 1997, down from the unusually high levels in 1996/97.

Exports of manufactures continued to decrease in the March quarter of 1998, but rebounded strongly in the following three months (+10.4 per cent, at annual rate, seasonally adjusted), helped by the very competitive exchange rate. Although volume data for exports by destinations are not available, current price figures suggest a steep fall in sales of manufactures to troubled Asian economies, which was offset by strong exports to the United States and Europe (Table 2). As was to be expected, the most successful diversion of sales away from crisis economies to other destinations occurred in the exports of raw materials. Altogether, in the first six months of 1998 total merchandise export volumes (adjusted for one-off factors) were up by 4.6 per cent on the corresponding period in 1997.

The steep decline in *services exports*, by an annual rate of nearly 20 per cent in the December quarter of 1997, confirmed expectations that Australia's services exports were particularly vulnerable to the Asian crisis. This is reflected particularly clearly in the steep fall in the number of Asian tourists in Australia (Table 3). Recent partial indicators, however, suggest that there has been some redirection of service exports to other destinations. For example, the tourism industry

Table 2. **Manufactured exports by destination**

Annual percentage change; values

	Average 1990-1995	Year to June quarter 1998
East Asia (including Japan)	20.6	–14.6
of which:		
Troubled Asia	22.8	–48.2
Korea	29.0	–52.7
Indonesia	15.0	–55.9
Thailand	23.6	–44.6
Malaysia	25.2	–47.2
Philippines	23.7	–24.5
Japan	10.1	0.1
Other east Asia	23.3	13.8
United States and Europe	10.4	20.5
New Zealand	16.4	0.0
Rest of the world	39.9	38.2
Total	**16.3**	**6.5**

Source: Reserve Bank of Australia.

Table 3. **Overseas arrivals by country**

Annual percentage change

	Average 1990-1995	Year to June quarter 1998
East Asia (including Japan)	18.4	–10.1
of which:		
Troubled Asia	32.3	–49.0
Korea	64.4	–78.6
Indonesia	31.5	–40.0
Thailand	32.7	–57.7
Malaysia	18.4	–21.0
Philippines	15.0	–11.0
Japan	10.3	0.5
Other east Asia	24.0	22.1
United States and Europe	5.5	12.2
New Zealand	5.2	14.5
Rest of the world	8.8	16.2
Total	**11.0**	**1.2**

Source: Reserve Bank of Australia.

reported rising arrivals from the United States, Europe and New Zealand. This outcome, by and large, has been brought about by a weakened Australian dollar. Hence, total services export volumes recovered during the first half of 1998 from their trough in late 1997 and by mid-1998, reached their level of twelve months earlier.

Foreign balance and GDP

In spite of its bigger exposure to troubled Asia than any other OECD country – except Japan and Korea, who are directly involved – the Australian economy has coped quite well with the crisis so far. Altogether, Australian exporters were clearly hit by the Asian crisis, but enjoyed gains in sales to other countries, so that real exports of goods and services grew on average by 4.3 per cent in 1997/98. At the same time, imports of goods and services remained strong,[7] boosted by buoyant domestic demand, notably for motor vehicles. In consequence, the real foreign balance deteriorated[8] markedly and detracted 1.9 percentage points from real GDP growth in 1997/98. But the vigorous expansion of total domestic demand more than offset the widening negative foreign balance so that real GDP[9] growth accelerated from 2.8 per cent in 1996/97 to 4 per cent in FY 1997/98. Growth of GDP exceeded that of potential output (estimated at about 3¼ to 3½ per cent) by a substantial margin.

Current external account

With the real foreign balance deteriorating but the terms of trade improving[10] on average by 2 per cent in 1997/98, the *merchandise trade balance* swung from a surplus of A$ 1.5 billion in 1996/97 (or a deficit of A$ 1.1 billion excluding one-off transactions such as the sale of Reserve Bank gold and a frigate to New Zealand) to a deficit of A$ 3.7 billion in 1997/98 (0.7 per cent of GDP). The *balance on services* also turned negative, largely reflecting the contracting demand from troubled Asia. The net payments on Australia's external liabilities (*net income deficit*) increased only by little in spite of the substantial exchange rate depreciation (Table 4). The reason for this somewhat surprising result is the change in the

Table 4. **Current account trends**

A$ billion

	1994	1995	1996	1997	1996 I	1996 II	1997 I	1997 II	1998 I
Trade balance	–4.4	–5.7	–0.8	2.4	–0.3	–0.6	2.2	0.1	–3.7
Exports	64.7	71.8	77.1	87.4	39.0	38.1	42.7	44.5	44.2
Imports	–69.1	–77.5	–77.9	–85.1	–39.3	–38.7	–40.5	–44.4	–47.9
Services, net	–18.7	–20.6	–19.3	–19.4	–9.8	–9.3	–9.3	–10.2	–10.2
Non-factor services, net	–1.6	–1.2	0.0	–0.1	–0.1	0.1	0.2	–0.3	–0.4
Investment income, net	–17.1	–19.4	–19.3	–19.3	–9.7	–9.4	–9.5	–9.9	–9.8
Current transfers, net	0.5	0.2	–0.1	0.0	0.0	–0.1	0.0	0.0	–0.1
Current balance	–23.6	–26.5	–20.0	–17.0	–10.2	–9.8	–7.0	–10.1	–13.8
As a percentage of GDP	–5.3	–5.6	–4.0	–3.2	–4.1	–3.8	–2.7	–3.8	–5.0

Source: Australian Bureau of Statistics.

structure and currency composition of external assets and liabilities over the past ten years or so, which brought Australia's net investment position denominated in foreign currency in broad balance. Hence the increase in debt-servicing costs in Australian dollars resulting from the currency depreciation is roughly offset by a corresponding rise in the return on foreign assets held by residents. This helped to contain the increase in the *current external deficit* to A$ 23.9 billion (4.4 per cent of GDP) in 1997/98.

The labour market

Following strong gains in 1994 and 1995, growth of total employment slowed down markedly in 1996 and 1997, largely reflecting the subdued pace of economic activity in 1996. In particular, full-time employment fell in the first half of 1997 (Table 5), while the simultaneous buoyancy of part-time employment

Table 5. **The labour market**

Seasonally adjusted

	1994	1995	1996	1997	1997 I	1997 II	1998 I	1998 Q3
Civilian labour force[1]	1.8	2.6	1.4	1.0	0.7	0.8	1.4	2.5
Males	1.1	1.9	1.2	0.8	0.4	1.1	1.0	2.1
Females	2.8	3.5	1.7	1.3	1.1	0.5	1.9	3.1
Employed persons[1]	3.1	4.0	1.3	1.0	0.7	1.3	2.2	2.1
Full-time	2.3	3.3	1.1	0.0	–0.8	1.0	2.0	2.8
Part-time	5.9	6.0	2.1	4.0	5.2	1.9	2.6	0.1
Unemployment rate[2]	9.8	8.5	8.6	8.6	8.7	8.5	8.1	8.2
Males	10.0	8.8	8.8	8.8	8.9	8.7	8.3	8.5
Females	9.4	8.1	8.3	8.3	8.5	8.1	7.9	7.8
Juniors looking for full-time work	34.6	33.1	30.8	31.1	30.8	31.4	32.4	32.1
Participation rate[2]	63.0	63.7	63.6	63.3	63.4	63.2	63.2	63.5
Males	73.6	74.0	73.7	73.2	73.2	73.1	72.9	73.1
Females	52.6	53.8	53.8	53.7	53.9	53.6	53.7	54.2
Overtime (hours)[2, 3, 5]	1.3	1.2	1.1	1.1	1.1	1.1	1.0	1.0
Average weekly hours worked[2, 4]								
Total	34.7	34.6	34.0	34.6	34.0	35.1	34.1	34.9
Full-time	40.9	40.9	40.3	41.1	40.4	41.8	40.5	41.6
Part-time	15.1	15.3	15.2	15.5	15.3	15.6	15.4	15.6
Job vacancies (thousands)[5]	57.5	57.3	60.8	64.5	60.4	68.7	74.4	73.0

1. Percentage change from previous year.
2. Levels.
3. All industries, per employee.
4. Not seasonally adjusted.
5. Quarterly data based on mid-month of quarter.

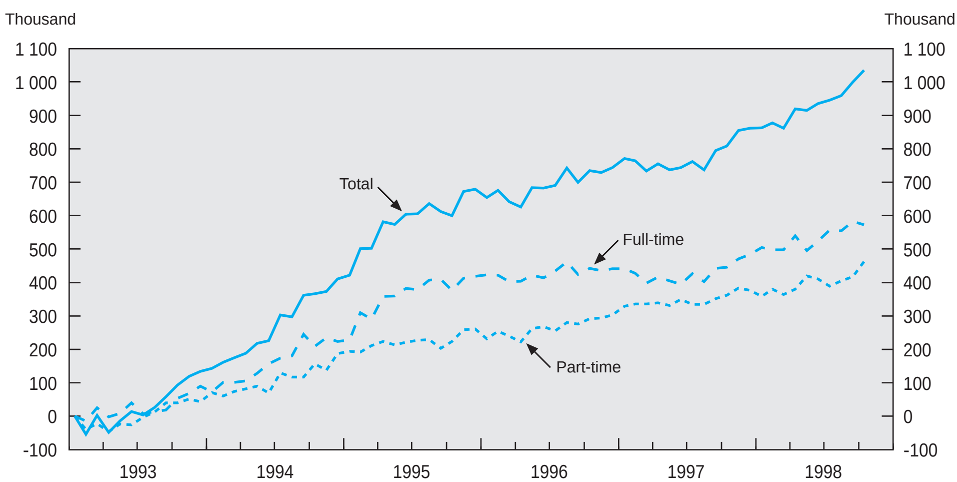
Source: Australian Bureau of Statistics.

reflected a shift in the composition of production away from the secondary sector, where full-time employment dominates, to services, where the proportion of part-time jobs is higher. Full-time employment recovered from the second half of 1997 on and accelerated its growth in the first three quarters of 1998, responding with a typical lag to the pick-up of domestic demand in the second half of 1997 (Figure 4). With the average number of hours worked growing by only little more than 1 per cent, hourly labour productivity of the non-farm sector increased by a solid 3 per cent in 1997/98, markedly above its trend of around 1¾ per cent over the 1990s.

In 1997/98, employment growth remained strongest in a number of private-sector services industries, while public administrations and utilities continued to cut jobs. Manufacturing employment remained weak, but the creation of full-time jobs was boosted by the vigorous growth in housing construction. Declines in employment, albeit small so far, were recorded in the accommodation and recreation industries in the first half of 1998.

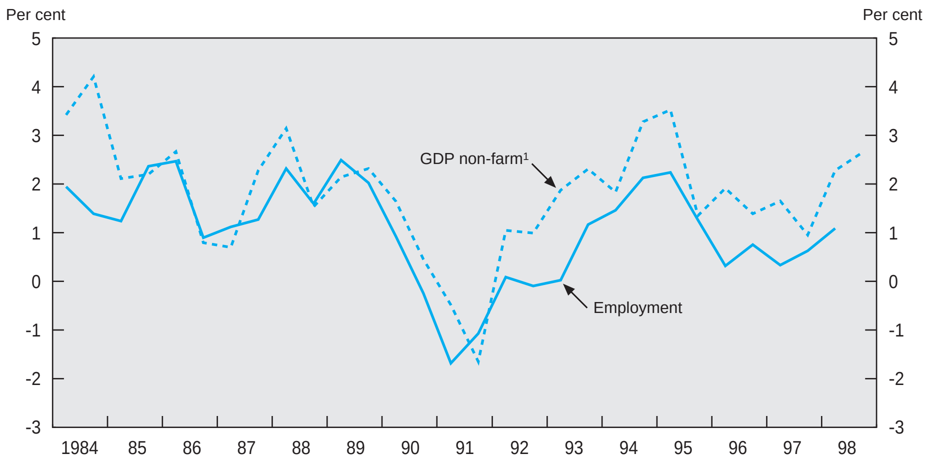
With employment observed to lag on average by around one semester behind economic activity (Figure 5), the solid economic expansion in the first half of 1998 should impact positively on the labour market through the end of the year. This view finds support in the surge in various job vacancy indicators; for example the ABS vacancy series posted a twelve-monthly growth of 28 per cent to

Figure 4. **Patterns of employment**
Changes since January 1993



Source: Australian Bureau of Statistics.

Figure 5. **Output and employment**
Seasonally adjusted rates from previous half-year



1. Brought forward by one semester.
Source: Australian Bureau of Statistics, *National Accounts* and OECD Secretariat.

May 1998; it declined, however, in the three months to August 1998, albeit from a high level. The ANZ job advertisement series rose by 3.5 per cent (seasonally-adjusted) in September, to be 16 per cent higher than a year earlier and at the highest level since March 1990. The recorded fall in overtime worked per week during the first half of 1998 is not in contradiction to a positive employment outlook, as it is largely the result of the expansion of enterprise bargaining; this has led to the absorption of regular overtime into standard working hours under the terms of many enterprise agreements. Average weekly overtime hours picked up again in the September quarter of 1998.

Although the growth in the labour force also picked up during the first half of 1998, in accordance with the cyclical behaviour of labour force participation observed in previous expansion periods, the recent gains in employment induced a long-awaited decrease in the rate of unemployment. It fell to 8.1 per cent of the labour force in the first half of 1998, after hovering around the 8½ to 8¾ range for about three years. But at 8.1 per cent of the labour force in the September quarter of 1998 (on a seasonally-adjusted basis), the actual unemployment rate still remains significantly above the estimated non-accelerating inflation rate of unemployment (NAIRU), which most researchers put in the 6½ to 7½ per cent range for the mid-1990s.

Price and wage inflation

In spite of the relatively small and narrowing gap between actual and estimated potential output, the economy has continued to operate in a climate of very low inflation (Table 6). The Treasury measure of underlying inflation[11] dropped to 1.7 per cent by mid-1997, after having been for three consecutive quarters in the lower half of the Reserve Bank's medium-term target range of 2 to 3 per cent. Since mid 1997, underlying inflation has stayed at around 1½ per cent, seemingly unaffected by the depreciation of the effective exchange rate since April 1997. However, seasonally-adjusted quarterly data reveal some small edging up of underlying inflation during the first half of calendar year 1998, indicating the petering out of the earlier disinflationary impact from declining import prices.

Twelve-monthly (headline) consumer price inflation even turned negative from September 1997 to March 1998, dragged down by mortgage interest rate reductions,[12] a falling imported-goods component of the consumer price index (CPI) and special factors such as rebates for health insurance. Prices of imported consumption goods at the retail level fell (mildly) over the twelve months to June 1998, in spite of the depreciating effective exchange rate. This was the combined result of three factors: *first*, the inflationary impact of the depreciation of the Australian dollar since April 1997 on import prices at the wholesale level is typically passed on to final retail prices only after a long lag; *second*, falling oil prices in world markets; *third*, a generally tough international competitive environment, highlighted, for example, in sharp declines in the prices of motor vehicles imported from Asia, which induced cuts in car prices in the domestic market across the board. But with mortgage interest rates bottoming out, the fall in import prices coming to a halt and the price-damping effects of one-off factors disappearing, twelve-monthly headline inflation turned mildly positive in June 1998 (+0.7 per cent). Import prices at the wholesale level have increased by around 10 per cent over the four quarters to June 1998. Using a rough rule of thumb derived from earlier episodes of exchange rate depreciation, this should add about 1 percentage point to consumer price inflation over the next one to two years.

Indicators of inflation expectations declined further during most of FY 1997/98, but lagged behind the falling actual inflation measures (see Panel B of Figure 6 below). This may indicate that the public does not consider the very low recent rates of inflation as persistent. The Melbourne Institute's survey measure of consumer price inflation expected by the general public remained substantially higher than actual inflation measures: it bottomed out at about 3 per cent in late 1997, but rose to around 3½ per cent during the first half of 1998. Probably reflecting concern about the inflationary consequences of the steep fall of the Australian dollar *vis-à-vis* the US dollar, this measure has proved very volatile in recent months, occasionally jumping to an annual rate of 4½ per cent. The

Table 6. **Costs and prices**

Percentage change from corresponding period of previous year

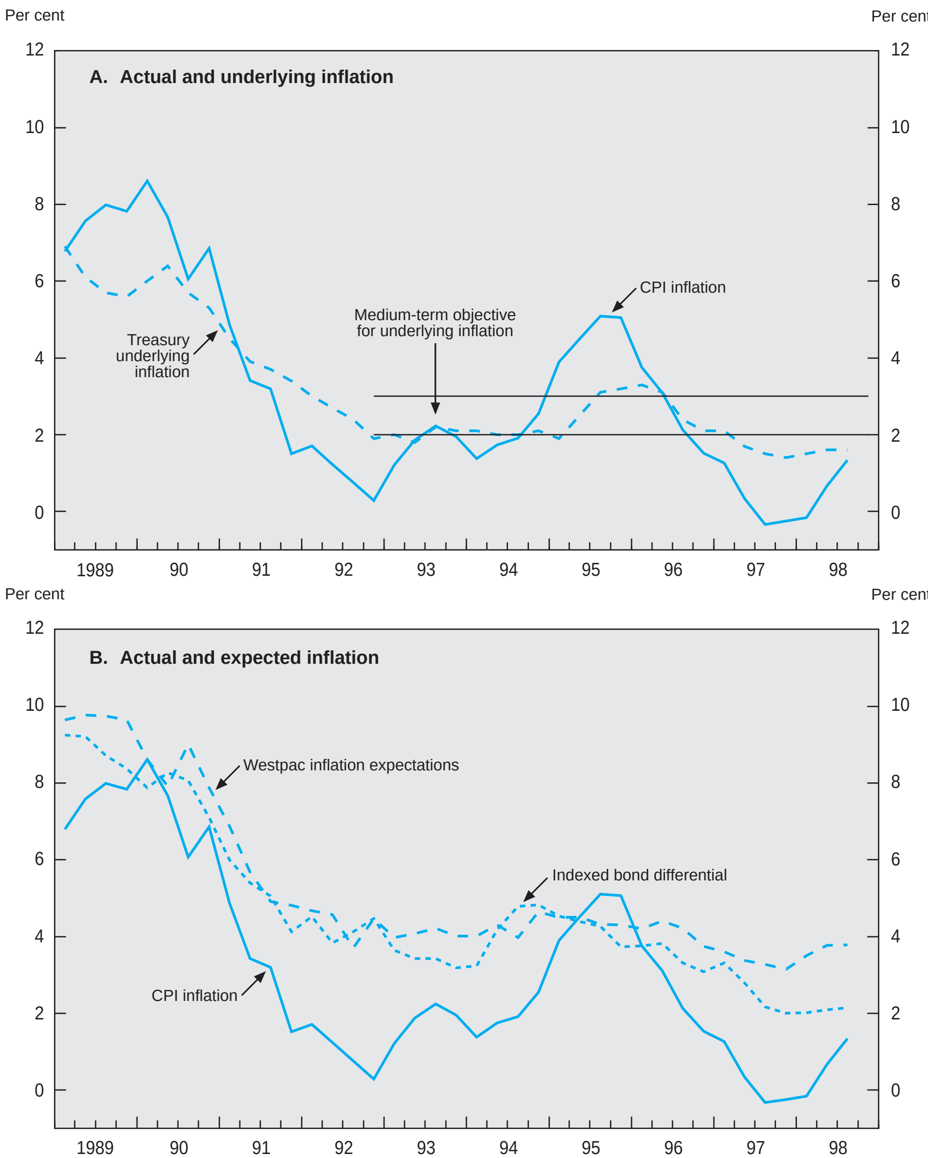
	1994	1995	1996	1997	1996/97	1997/98	1997 Q3	1997 Q4	1998 Q1	1998 Q2
							From same period of previous year			
National accounts deflators[1]										
Private consumption	1.0	2.3	2.0	1.3	1.6	1.1	1.1	1.2	0.9	1.1
Total demand, domestic	0.9	1.6	1.1	0.9	0.7	0.8	1.9	1.8	0.3	0.7
GDP	1.1	2.5	2.1	2.0	1.8	1.6	1.9	2.1	1.0	1.2
Exports of goods and services	–4.0	6.3	–3.0	0.3	–3.5	3.7	1.4	4.7	3.1	5.4
Imports of goods and services	–5.3	1.5	–7.9	–4.7	–8.6	1.6	–3.8	0.7	2.1	7.4
Non-farm GDP	0.5	2.4	2.5	2.2	2.3	1.6	1.9	2.0	1.1	1.3
Consumer price index	1.9	4.6	2.6	0.3	1.3	0.0	0.3	0.2	0.2	0.7
Underlying inflation	2.0	2.7	2.7	1.7	2.0	1.5	1.5	1.4	1.5	1.6
							From previous period, annualised			
Average weekly earnings										
All employees	3.0	2.7	3.0	3.1	3.0	3.2	4.3	6.4	0.1	1.9
Ordinary time, full-time work (AWOTE)	3.4	4.8	3.9	4.0	3.9	4.1	7.9	1.4	5.7	2.5
Private sector	3.5	5.9	3.9	3.5	3.1	4.0	8.1	2.1	5.3	3.0
Public sector	3.8	3.2	4.9	6.1	6.9	4.8	5.5	1.0	7.8	1.7
Nominal non-farm unit labour costs[1]	–0.7	3.2	3.0	3.1	3.3	1.8	7.5	2.9	–3.9	–1.5
Award rates of pay, full-time adults (hours)[2]	1.4	1.7	1.8							

1. Seasonally-adjusted series derived by the Treasury.
2. This series has been discontinued as of end-June 1997.

Source: Australian Bureau of Statistics, Reserve Bank of Australia and OECD Secretariat.

Figure 6. **The achievements of monetary policy**

Percentage change over four quarters



Source: Reserve Bank of Australia; University of Melbourne, Institute of Applied Economic and Social Research; OECD, *Main Economic Indicators.*

National Australia Bank (NAB) survey measure of the business community's inflation expectations and the inflation expectations implicit in the differential between non-indexed and indexed bond yields are significantly lower; latest observations of both measures suggest expected inflation of about 2 per cent.

The average weekly ordinary-time earnings of adults working full-time (AWOTE) grew by 4.1 per cent in 1997/98, with some deceleration to below 4 per cent (annualised rate) in the second half of the fiscal year. This is broadly in line with latest statistics of negotiated wage increases in enterprise agreements, which had peaked at 6 per cent in the private sector by mid-1996 and declined to 4 per cent in the June quarter of 1998. As in recent years, wage statistics suggest a divergent movement between private and public sector, with growth in public sector AWOTE again somewhat stronger (4¾ per cent in 1997/98), although this reflects in part a compositional change in the public-sector workforce. By measuring a fixed basket of employee jobs from a representative sample of employers, the newly developed wage cost index (WCI) of hourly wages seeks to avoid such compositional effects as well as distortions of the wage measure from changes in average hours worked per week. Although only four quarterly observations of the new WCI are available so far, they point to an annualised wage increase of 3 per cent.

In its Safety-Net Review of April 1998, the Australian Industrial Relations Commission determined increases in award wages for the year ahead for employees not covered by enterprise agreements. The Commission granted a three-tiered increase in award wages between A$ 10 and A$ 14 a week, depending on income, with the largest one benefiting those on the lowest award of pay. It is estimated that about 60 per cent of those employees concerned, will receive the full extra A$ 14, which will imply wage increases between 2½ and 4 per cent for these workers. In aggregate terms, the higher award wages may add ½ percentage point to the annual growth in AWOTE. In sum, given the favourable development of labour productivity, wage increases of the order of 4 per cent seem consistent with low price inflation. This assessment is supported by estimates of non-farm unit labour cost, which increased by 1.8 per cent in 1997/98, but declined by 1.7 per cent (annualised rate) in the first half of calendar year 1998.

The outlook to 2000

Overview of the present economic situation

Overall, the Australian economy has remained buoyant in the face of the Asian crisis. Growth in domestic demand has been strong and the decline in growth in export volumes has been attenuated by switching exports (especially primary resources) to more buoyant markets, notably the United States and

Europe. Commodity prices (expressed in US dollars) have fallen sharply but the Australian dollar has followed them down, shifting much of the loss of national income from the commodity sector to the economy as a whole. The associated increases in import prices have not yet flowed through to retail prices.

Current economic indicators generally point to continuing steady growth in coming months but also suggest that there are significant downside risks. Retail sales remain buoyant (they are growing at an annual trend rate of 4½ per cent) and motor vehicle registrations remain at near record levels. A one-off factor contributing to these trends is the demutualisation of the Australian Mutual Provident Fund (AMP) – the largest Australian insurance company – which is likely to continue to boost consumption expenditure over coming months. Consumer confidence (Melbourne Institute Survey), on the other hand, has weakened significantly since the beginning of the year, although it remains above long-term averages. Consumers appear to be becoming more concerned about the outlook for the economy but not about their own financial prospects. Building approvals for private sector houses fell in July for the third month in a row, raising the possibility that the housing cycle may be reaching a peak. Even so, a sharp downturn is unlikely as housing affordability is high and the housing market seems broadly to be in equilibrium.

The outlook for business investment appears to be strengthening. The June quarter capital expenditure (CAPEX) survey shows that expectations for FY 1998/99 have risen since the previous survey and points to solid growth in business investment in the coming year, especially in non-dwelling construction. Following a sharp fall in various measures of business confidence through to mid-1998, there are some recent indications that confidence has stabilised or improved a little. These survey results suggest that businesses, like consumers, have become more pessimistic about the outlook for the economy as a whole than about their own prospects. Inventories increased strongly in the first half of 1998, but this appears to have been a correction to the rundown to historically low levels in relation to sales in 1997. Job vacancy series are at high levels, suggesting that further solid employment growth is in prospect.

Current projections and underlying assumptions[13]

Short-term official interest rates are assumed to fall by 0.5 per cent in the first half of 1999, but to rise by the same amount in the course of 2000. Fiscal policy settings are based on those outlined in the 1998-99 Commonwealth budget, the 1998 National Fiscal Outlook and updated in the Pre-election Economic and Fiscal Outlook (see Chapter II below). The general government underlying surplus is projected by the OECD Secretariat to rise from ¼ per cent of GDP in 1997 to ¾ per cent of GDP in 1999, but to fall to ½ per cent of GDP in the following year owing to the introduction of the tax package. The other main assumptions underlying the projections are that:

– prices (expressed in SDRs) for Australia's non-oil commodity exports stabilise in the second half of 1998 and remain unchanged in the first half of 1999, but subsequently rise broadly in line with manufactured export prices (+1.7 per cent in 2000);
– prices (expressed in US dollars) for computers, which comprise 20 per cent of Australia's imports by volume, continue to decline by 20 per cent per year;
– the average price of internationally traded oil is US$13 in the second half of 1998, rises to US$14 one year later and subsequently rises in line with manufactured export prices;
– reflecting the above, the terms of trade decline in 1998 but subsequently rise;
– growth in Australia's export markets for manufactures falls sharply in 1998, to –4 per cent, but recovers to 6½ per cent in 1999 and 7 per cent in 2000;
– nominal exchange rates remain unchanged from their levels of 27 October, implying that, on average, the effective exchange rate (US dollar rate) depreciates by 8 per cent (16 per cent) in 1998 and 6 per cent (2 per cent) in 1999.

On these assumptions, output growth is projected to ease from 3½ per cent in 1998 to around 2½ per cent in 1999 and 2000 (Table 7). This reflects in particular a slowing in the growth of consumption expenditures once the one-off boost from the AMP demutualisation passes and as higher import prices flow through to retail prices, reducing real disposable incomes. Growth in residential investment is projected to fall to –3 per cent by 2000 as the dwelling cycle moves over its peak. Non-residential construction is also projected to slow, reflecting the completion of projects related to the Olympics in 2000.

Export volume growth is estimated to slow sharply in 1998 but is projected to recover strongly in subsequent years. The slowdown is attributable to the contraction in Australia's export markets, notably in Asia, and to the dropping out of the one-off transactions which boosted export volumes in the previous year. The subsequent recovery reflects a rebound in Australia's export markets and improved competitiveness following the large depreciation of the Australian dollar in the past year. Import volumes are projected to grow more slowly in 1999, in line with the weakening outlook for domestic demand. As a result, the external current account deficit is estimated to increase to 5½ per cent of GDP in 1998 but to fall to 5 per cent of GDP in 2000.

The slowdown in activity underpins a decline in employment growth, from an estimated 1¾ per cent in 1998 to about 1½ per cent in each of the next

Table 7. Short-term prospects

Percentage changes

	Percentage share of GDP in 1995 at current prices	1997	1998	1999	2000
A. Demand and output at constant 1998/90 prices					
Consumption					
Private	62.3	3.4	4.1	3.0	3.3
Public	17.0	2.3	2.5	4.6	2.3
Gross fixed investment	20.9	11.1	3.8	2.5	2.3
of which:					
Government	2.0	3.4	–3.7	3.0	1.0
Private	18.9	11.9	4.5	2.5	2.4
Dwellings[1]	6.1	13.9	11.0	4.0	–3.0
Other construction	2.9	5.1	19.7	–13.5	1.5
Equipment	7.6	18.3	0.7	3.0	7.0
Public enterprises	2.3	–8.0	–25.9	38.9	0.3
Final domestic demand	100.2	5.0	3.8	3.1	2.9
Change in stockbuilding[2]	0.8	–1.7	1.6	–0.4	0.3
Total domestic demand	101.0	3.2	5.5	2.7	3.2
Exports of goods and services	19.5	11.4	–0.9	5.5	5.6
Imports of goods and services	20.7	14.0	7.5	5.5	7.2
Change in foreign balance[2]	–1.2	–0.5	–2.1	–0.1	–0.5
Statistical discrepancy[2]	0.1	0.1	0.3	–0.2	0.0
GDP (I)[3]	100.0	2.8	3.6	2.4	2.7
GDP (A)[4]		3.0	3.5	2.5	2.7
B. Other items					
Private consumption deflator		1.3	1.9	2.6	3.3
Employment (LFS definition)		1.0	1.7	1.3	1.4
Unemployment rate (per cent)		8.6	8.2	8.1	8.0
General government financial balance[5]		0.2	0.5	0.8	0.5
Current balance (A$ billion)		–17.0	–30.7	–30.9	–31.3
Current balance[5]		–3.2	–5.5	–5.3	–5.1

1. Including real estate transfer expenses.
2. Contribution to growth.
3. Income measures. Includes statistical discrepancy.
4. Average of the expenditure, production and income.
5. Per cent of GDP.

Source: OECD Secretariat.

two years, leaving the unemployment rate at around current levels. With unemployment remaining above its estimated structural rate, wage increases are projected to slow to around 3½ per cent in 2000. Consumer price inflation is nevertheless projected to rise to a little over 3 per cent in 2000, reflecting the pass through of higher import prices, slowing productivity growth from the very high rates recorded in the past two years and the introduction of GST in July 2000; the tax package is assumed to add some 2 percentage points to inflation in the year after its introduction.

There are major risks surrounding these projections which relate to the international economy. Recovery in Asia could be delayed owing to difficulties in resolving financial sector problems. The emerging markets crisis could also intensify, further discouraging investment in the region and seriously undermining the economic outlook in Latin American countries. This would have knock-on effects on other markets, including the United States, and could set off a chain of currency depreciations in both Latin America and Asia. Such developments would cut growth in export volumes and further lower commodity prices. In case of renewed turbulence in international financial markets, the Australian economy could also be weakened by additional declines in stock prices, which would reduce growth in consumption expenditure. There is also the risk of domestic spending plans being revised down in the event of further falls in business and consumer confidence.

II. Macroeconomic policies

Australia's key macroeconomic policies are set in a medium-term framework. The operational objective of the Reserve Bank (RBA) is to keep the rate of inflation[14] on average at around 2 to 3 per cent over the course of the cycle while fostering sustainable growth in output and employment. Fiscal policy aims at a balanced budget,[15] also on average over the economic cycle. Over the past twelve months macroeconomic policy objectives have been met to a high degree: the Commonwealth' finances moved to a small surplus, accompanied by solid growth in output and employment; and the fall in the underlying rate of inflation to slightly below its lower target bound is consistent with the RBA's flexible approach to monetary policy which tolerates temporary deviations of target variables from their medium-term objective. At the present juncture, the main challenge of economic policy is to preserve the achieved stability of the price level and of government finances while restricting the negative impact of the Asian crisis on the domestic economy to an unavoidable minimum.

Monetary management

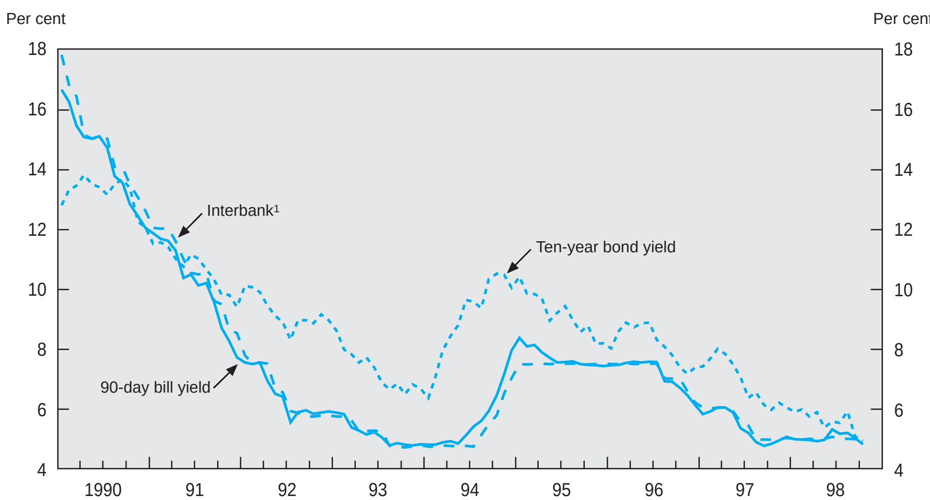
Interest rate developments

By the middle of 1996 RBA projections pointed to an imminent return of the underlying inflation rate to within the Reserve Bank's target range (Figure 6, Panel A). Given emerging signs of slowing economic growth it was possible to ease monetary policy to support economic activity without jeopardising achievement of the inflation target. The change in policy stance was also encouraged by the continuing downward drift in measures of inflation expectations (Figure 6, Panel B). In consequence, the RBA cut the *target cash rate*[16] – the key policy interest rate – in five consecutive steps by a cumulative 2.5 percentage points to 5 per cent from July 1996 to July 1997. The last cut occurred shortly after Thailand was forced to abandon the baht's peg with the US dollar, which marked the beginning of the Asian crisis. Since then, the RBA has left the target cash rate unchanged.

The five cuts in the cash rate until July 1997 induced interest rates of all maturities and those charged by financial intermediaries on business and housing loans to decline. *Interest rates for three-month bank bills* responded particularly quickly to the cash rate changes. Since the middle of 1997, they have fluctuated both above and below 5 per cent according to revisions of expectations about possible changes in, monetary policy. In the middle months of 1998, the 90-day bill yield traded somewhat above the cash rate target as the exchange rate came under downward pressure. On the rebound in the exchange rate in recent months, and with the US monetary policy having been eased, short-term interest rates in Australia moved somewhat below 5 per cent. By end October, the yield on 90-day bills was about 4.75 per cent. (Figure 7).

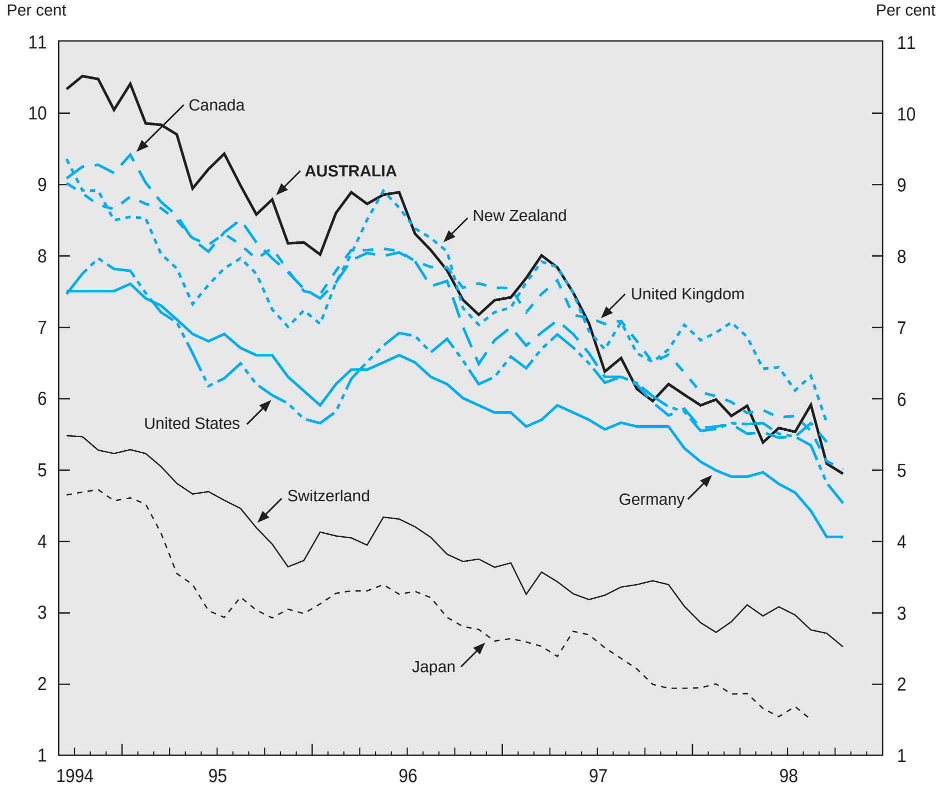
Long-term bond rates also fell, reflecting low actual and expected inflation and the global bond rally. Ten-year Treasury bonds which peaked at 10½ per cent in October/November 1994 and stood at 7 per cent by mid-1997, fell below 5 per cent in October 1998, the lowest level since 1965. Figure 8 shows that since the peak in late 1994, Australian long-term bond rates fell by more than elsewhere, which reduced the spread between Australian bonds and other OECD countries' securities. For example, the Australia-United States ten-year bond differential was at around 300 basis points in mid-1995 but has declined since and even became

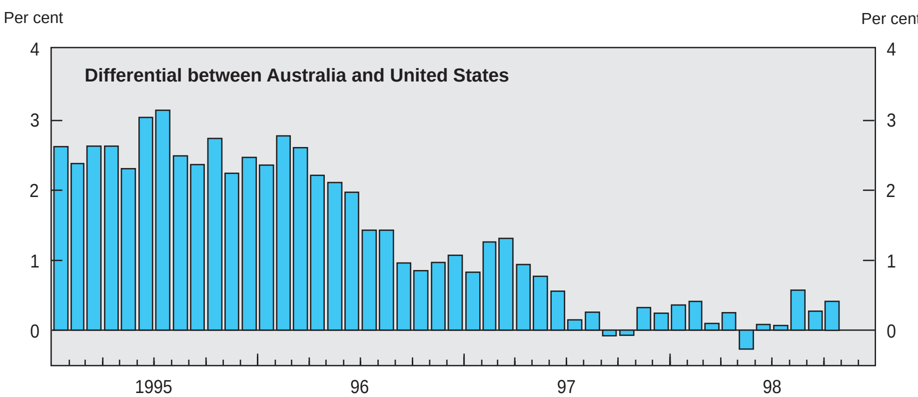
Figure 7. **Nominal interest rates**



1. Cash market, 11 a.m. call rate.
Source: Reserve Bank of Australia.

Figure 8. **International comparison of long-term interest rates**
Ten-year bond yield





Source: OECD, *Main Economic Indicators.*

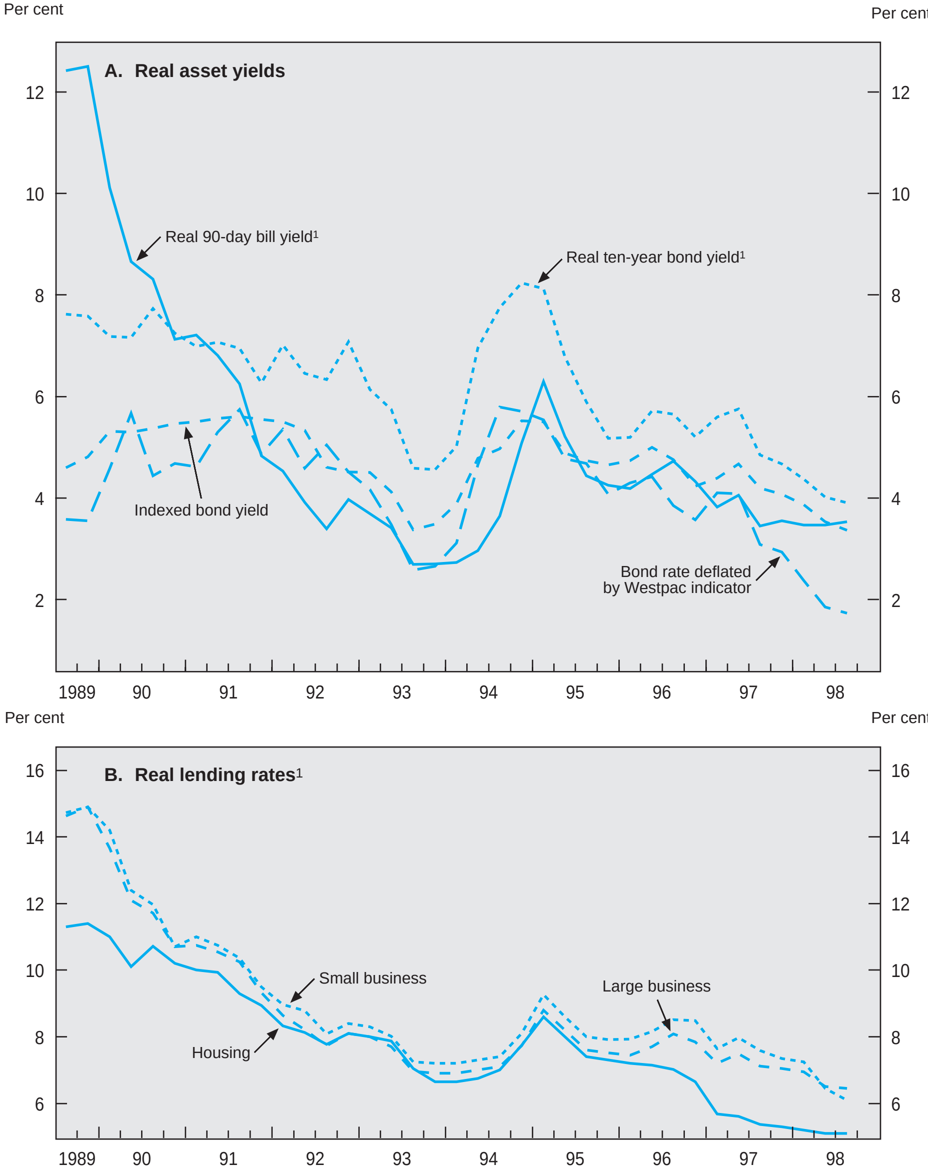
negative on some recent occasions. The spread has averaged 22 basis points over the past twelve months, which suggests that capital markets are confident not only that Australian inflation will remain low, in accordance with other measures of inflation expectations, but also that the Asian crisis has not fed through into any country risk premium.

As was to be expected, the decline in interest rates in money and capital markets saw lending rates of financial intermediaries fall. This has been reinforced by a widespread compression of interest margins of financial intermediaries[17] as a result of heightened competition, so that in many cases, interest rates faced by borrowers are now the lowest available since the 1960s. Since mid-1996, banks' variable rates for housing financing have fallen by 3.8 percentage points, 1.3 percentage points more than the reduction in the cash rate. In addition, many banks continue to offer basic or no-frills products at a rate of around 6.2 per cent, slightly below rates offered by mortgage managers. The continuing strength of competition in this market is reflected in the fact that many banks have reduced ''honeymoon'' rates by 50 basis points to around 5.5 per cent. Some mortgage managers have now also begun to offer these products. Competition spread more widely in 1998, in particular in the areas of *small business finance*. The introduction of new loan products, such as variable-rate residentially secured overdrafts and term loans, has contributed to a fall in the total interest cost of variable-rate small business loans by 3.5 percentage points since the beginning of the monetary easing in mid-1996; over the past year or so, the margin of this rate above the cash rate has fallen by a full percentage point. In the September quarter of 1998, the interest rates on variable-rate term loans and overdrafts secured by residential property stood at 6.9 and 7.2 per cent respectively, the lowest interest rates on widely available small business loans since the mid-1960s. The indicator rate for unsecured overdraft and term loans was 7.7 per cent.[18]

Banks have also been aggressive in the *personal lending market*. While variable interest rates on bank's instalment loans have not changed, those on residentially secured lines of credit – the fastest growing sector of this market – have fallen by 40 basis points, to around 7.0 per cent since the start of the year. This interest rate is much lower than that for traditional instalment loans, which average 9.4 per cent if security is offered and 12.4 per cent if the loan is unsecured. Interest rates on *fixed-rate* housing and business loans have also continued their downward trend, although the volatility in capital markets, globally and domestically, interrupted this trend in mid-1998. By October, interest rates on both fixed-rate and housing and small business loans had fallen to 6.5 per cent; levels lower than they were at the previous cyclical low in late 1993.

A review of indicators of *real interest rates* confirms the notion of supportive monetary conditions at present. On the basis of contemporaneous rates of

Figure 9. **Real interest rates**



1. Nominal rates less the treasury underlying rate inflation.

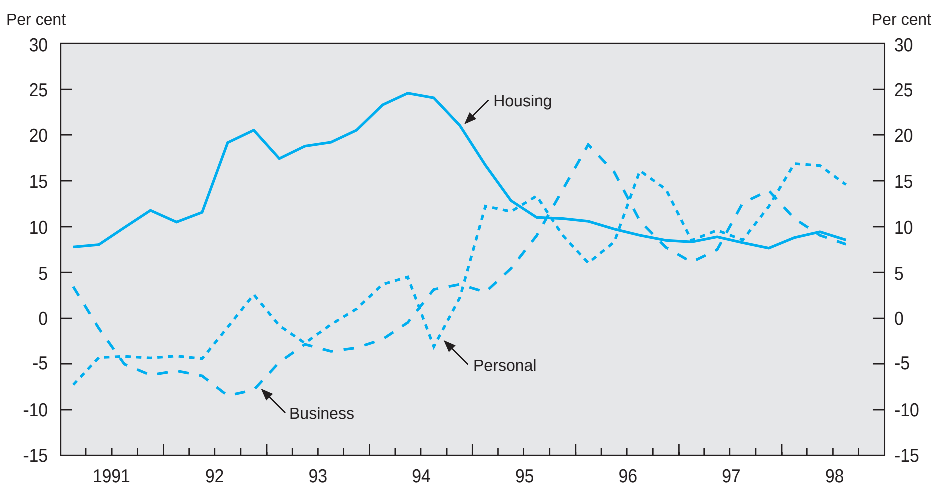
Source: Reserve bank of Australia; University of Melbourne, Institute of Applied Economic and Social Research; OECD, *Main Economic Indicators*.

underlying inflation as the proxy for expected inflation, both real asset yields and real lending rates have decreased since the middle of 1996 (Figure 9). While real yields of some asset categories still remain above their troughs of 1993, key real lending rates are currently below their previous cyclical troughs.

Financial intermediation

Low nominal and real cost of borrowing were consistent with robust growth of financial intermediaries' credit to the private non-financial sector, although the rate of credit expansion has slowed a little during the first half of 1998 – to an annual rate of 10 per cent – compared with the second half of 1997 (12½ per cent). The slowdown is primarily due to the decelerating demand for business loans (Figure 10), which is consistent with the weakening of equipment investment in the first half of 1998 and may reflect the adjustment of the businesses to the Asian crisis. Housing credit outstanding grew by an annual rate of 12 per cent in the first six months of 1998, continuing the expansion seen during 1997. Although indicating solid growth, trends in housing credit may seem at odds with the extraordinary momentum of dwelling investment in 1997-98. However, the statistics reflect the net effect of new lending and loan repayment: it appears that falling interest rates have induced households to pay off existing loans more

Figure 10. **Credit to the private sector**
Six month-ended seasonal adjusted annualised rate



Source: Reserve Bank of Australia.

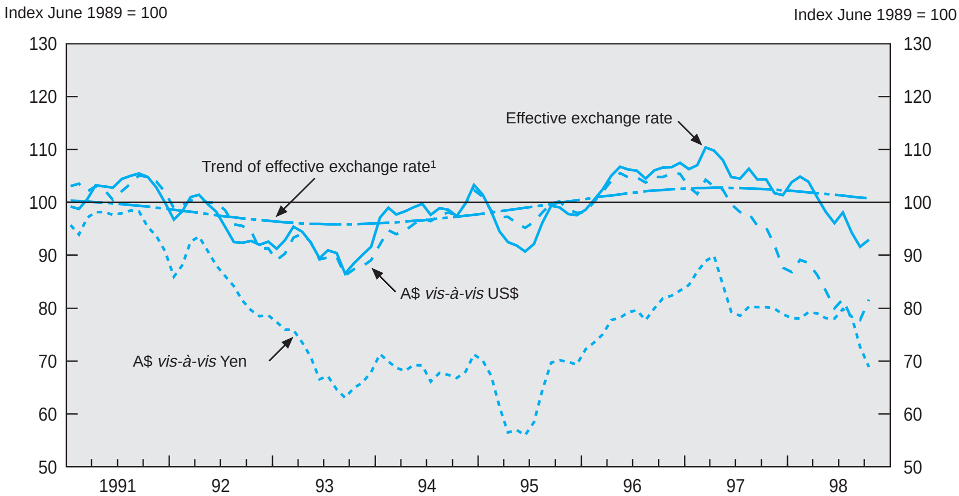
quickly rather than reducing their loan payments. This offsets part of the impact of the strong increase in new lending commitments to owner-occupiers on the total volume of housing loans outstanding. The relatively high level of lending rates on personal loans obviously have not prevented solid growth of household spending, in particular for motor vehicles, which is reflected in a strong rise in personal loans. Strong personal borrowing may also reflect the financing needs arising from households' subscription to the Telstra (telecommunications) share offer.

In spite of strong growth in aggregate credit, the rate of growth of monetary assets held by the public declined significantly. Both M3 and the stock of broad money[19] had increased by rates of around 10 per cent during 1996/97 but decelerated to around 6 per cent in the course of fiscal year 1997/98, though with some acceleration over the first half of 1998. With slow growth of deposits relative to credit demand, the expansion of credit by financial intermediaries was funded in part by increased bond issues and reduced holdings of government securities. There is no evidence of a credit crunch developing in Australia associated with the general international trend towards increased risk aversion in financial markets. While there is some evidence of widening interest spreads on lesser quality securities, this is occurring on a smaller scale than in the United States. Nor is there any sign of banks' ability to lend being affected by loan losses in emerging markets. The exposure of Australian banks to emerging markets in relation to assets is quite small, and bank profitability remains high.

Exchange rate behaviour

In addition to changes in interest rates, financial market conditions were heavily influenced by exchange rate movements, in particular since the beginning of the Asian crisis. However, the trend appreciation of the (trade-weighted) effective exchange rate of the Australian dollar since the second half of 1993 came to an end already in April 1997 (Figure 11). The general strengthening of the US dollar against major currencies accounts for much of the initial downturn in the Australian dollar's effective exchange rate, which was accentuated by the gradual disappearance of the once sizeable differential of Australian capital market interest rates over US bond rates. From July 1997 on, the effective Australian dollar exchange rate became negatively affected by the economic crisis in Asia in spite of the Australian dollar's appreciation against the currencies of the countries involved. Australia's strong trade links with the troubled region and the expected adverse effect of the crisis on world commodity prices are probably major factors which induced international investors to reduce their Australian dollar holdings. In consequence, the Australian dollar lost about one-quarter of its value against the US dollar from its previous peak in late 1996 until the second half of 1998. In standard trade-weighted terms,[20] however, the Australian dollar depreciated by a relatively small 8½ per cent since its peak in early 1997.

Figure 11. **Exchange rates**

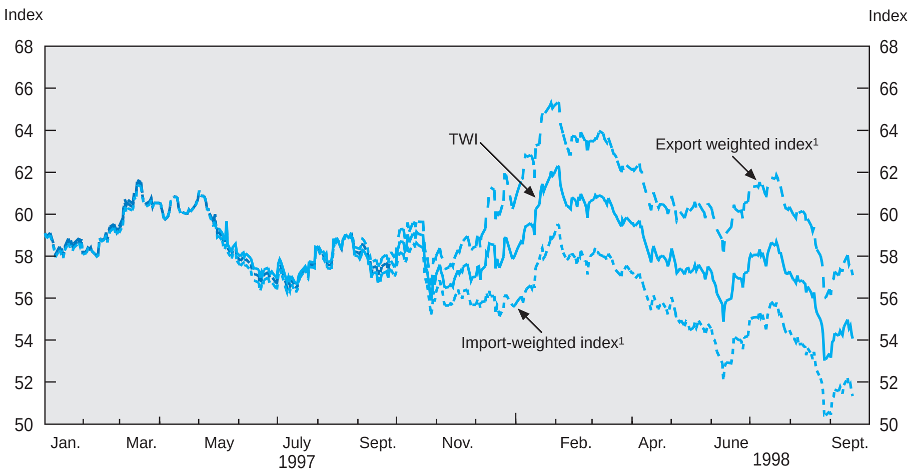


1. Low-frequency component of a Hodrick-Prescott filter (param. = 25 000).
Source: OECD, *Main Economic Indicators.*

Under times of divergent bilateral exchange rate movements, the conventional trade-weighted effective exchange rate may not be a good indicator of Australia's price competitiveness. This was the case in late 1997 (Figure 12), where the index combined a sharp appreciation against currencies of Asian economies to which Australia primarily exports and a substantial depreciation against currencies of countries (United States and the European Union) from which Australia mainly imports. For domestic exporters, a third country exchange rate (multilateral index) is a more appropriate measure of competitiveness. Such an exchange rate places high weights on countries with similar export compositions to Australia (*e.g.* United States, Canada and Brazil). Over the period in question, such an index implied a reasonable gain in competitiveness, relative to that implied by the TWI, for Australian exporters. In respect of import competing industries, an exchange rate index based on import shares tends to better reflect the gain in price competitiveness from the depreciation against major currencies. This index has indicated that domestic producers have received a relatively significant boost to their competitive position since late 1997.

If the analysis of monetary conditions focuses more on economic activity than on direct effects on domestic prices, it is more appropriate to adjust the effective exchange rate for differential movements in prices and labour costs.

Figure 12. **The impact of alternative weights on exchange rate indices**



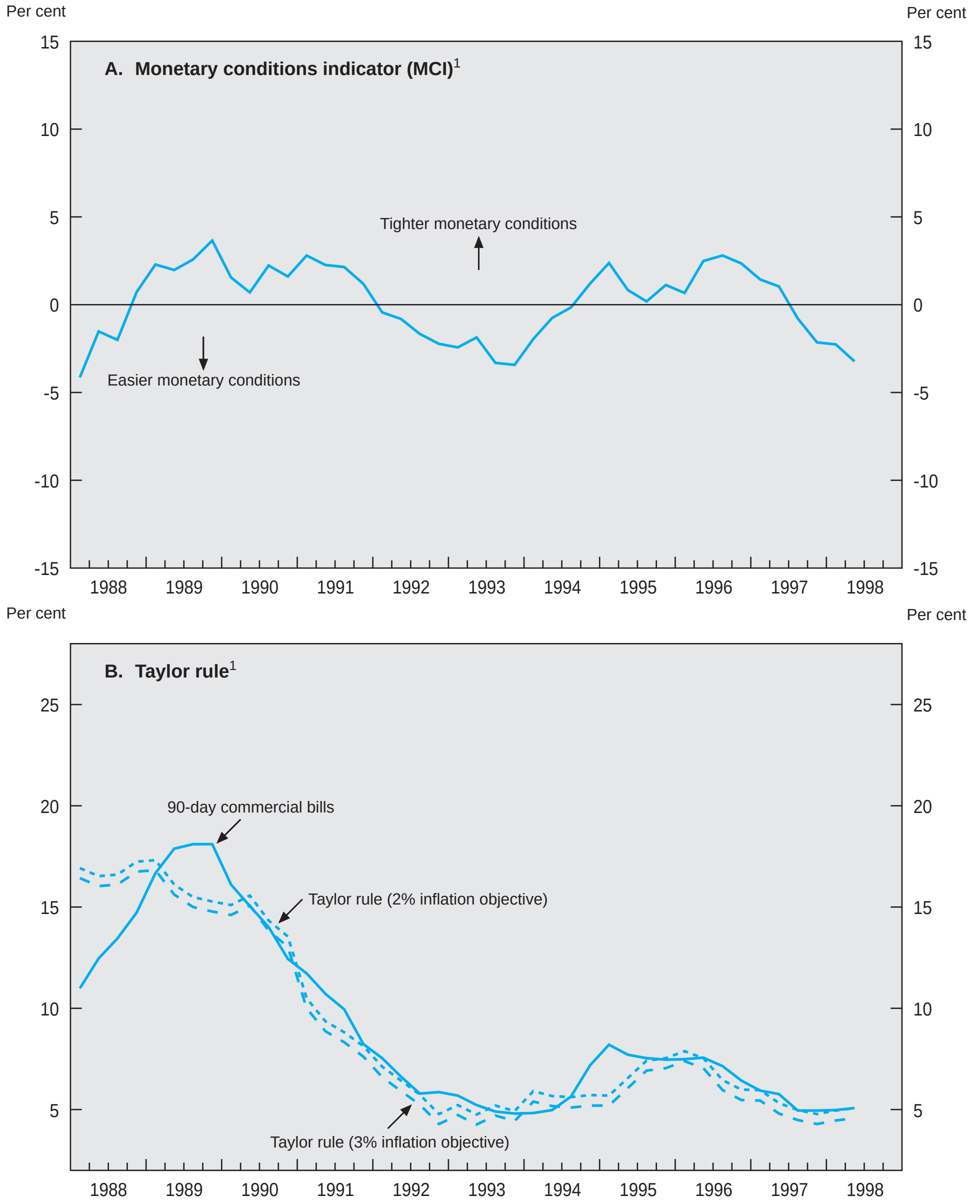
1. Indexed to TWI on 2 January 1997.
Source: Reserve Bank of Australia.

Such adjusted measures of real effective exchange rates also fell substantially since their peaks in early 1997. For example, in the third quarter of 1998, the real exchange rate expressed as relative consumer prices in common currency was about 15 per cent below its high in early 1997. Likewise, the relative unit labour cost-based measure of the Australian dollar's real effective exchange rate is estimated to have decreased by around 10 per cent from its peak of 1997 until the September quarter of 1998.

Overall monetary conditions

The easing of overall monetary conditions since mid-1996 can be illustrated by a summary Monetary Conditions Index (MCI).[21] The MCI shown in Panel A of Figure 13 combines movements of the real 90-day bill yield (using the Treasury underlying rate of inflation as deflator), the real unit-labour-cost based exchange rate and the terms of trade.[22] The decline in the MCI since the middle of 1997, during a period when the RBA held the cash rate unchanged at 5 per cent, reflects the depreciation of the real (trade-weighted) effective exchange rate which more than compensated for the contractionary effect of a (small) terms-of-trade loss, combined with a (small) decline in the real three-month bank bill interest rate. An MCI based on an import-weighted exchange rate index and on a

Figure 13. **Monetary conditions indicator and the Taylor rule**



1. For technical details, see last year's *OECD Economic Survey of Australia*, Chapter II.
Source: OECD Secretariat.

representative measure of borrowers' credit cost, to capture the recent compression of financial intermediaries' interest margins, would tend to indicate a somewhat more pronounced move towards easier monetary conditions. The recent path of monetary policy is also in line with that of the normative target interest rate derived from a Taylor rule[23] (Figure 13, Panel B) and consistent with the OECD Secretariat's projection of inflation to remain within the RBA's 2 to 3 per cent target range over the next two years.

The fiscal stance

Medium-term framework

Fiscal policy has been set in an explicit medium-term framework since 1996, when the current Coalition government was elected. This framework was set out in the Charter of Budget Honesty; the relevant legislation was introduced to Parliament that year and enacted this year. The Charter requires the government to lay out its medium-term fiscal strategy in each budget, along with its shorter-term fiscal objectives and targets. The fiscal strategy must be based on principles of sound fiscal management, as outlined in the Charter. These include: achieving adequate national saving; moderating cyclical fluctuations; maintaining Commonwealth general government debt at prudent levels; pursuing spending and taxing policies that are consistent with a reasonable degree of stability and predictability in the tax burden; maintaining the integrity of the tax system; and ensuring that policy decisions have regard to their financial effects on future generations.

The government's medium-term fiscal objective is to achieve underlying budget balance, on average over the cycle. Consistent with this objective, the government aimed, on taking office, at returning the underlying budget balance to surplus in the life of the Parliament elected in 1996. The government also committed itself to doing this without introducing new taxes or raising existing taxes. In FY 1996/97, underlying outlays were projected to decline by 1.8 percentage points of GDP over the two-year period to FY 1997/98. In the event, the outcome for FY 1997/98 showed that the degree of consolidation was better than projected. Now that the budget deficit has been eliminated, the government has set itself the target of maintaining surpluses while economic growth prospects remain sound. It has also made a commitment to halving the ratio of Commonwealth general government net debt to GDP, from 20 per cent in FY[24] 1995/96 to 10 per cent by the turn of the century. In 1996-97, underlying outlays were projected to decline by 1.8 percentage points of GDP over the two-year period to 1997-98. In the event, the outcome for 1997-98 showed that the degree of consolidation was better than projected.

An important consideration in setting the medium-term fiscal objective was to strengthen the structural current account position. Balancing the budget over the cycle means that the structural current account position only reflects the private sector's (and possibly other parts of the public sector's) net lending decisions. The other plank in the government's strategy in that direction has been to improve the quality of investment and saving decisions through microeconomic reform and the establishment of a medium-term framework for monetary policy aimed at maintaining low inflation (see above and Chapter III). The performance of Australian financial markets since the Asian crisis began, especially for long-term government bonds (see above), suggests that the government has been perceived to be successful in enhancing the sustainability of Australia's current account position.

The Commonwealth budget

The FY 1997/98 out-turn

The Commonwealth budget balance improved significantly in FY 1997/98, moving from a deficit of 0.9 per cent of GDP to a small surplus (Table 8). This outcome was significantly higher than the original forecast in the FY 1997/98 budget, primarily because revenues as a share of GDP declined much less than had been foreseen. Compared with the previous year, the improvement in the budget balance reflects lower expenditures as a share of GDP, notably in the areas of personal benefit payments, debt interest and capital outlays.[25]

The FY 1997/98 out-turn brought forward by one year the fulfilment of the government's commitment to reach a surplus within the life of the Parliament elected in 1996. For the most part, this fiscal consolidation has been achieved through expenditure restraint, especially in the areas of current transfers and capital outlays. An increase in personal income tax receipts as a share of GDP also contributed to this consolidation.

The FY 1998/99 plan

In view of the substantial degree of fiscal consolidation contained in its first two budgets, the government did not consider that it was necessary to introduce further restraint in the FY 1998/99 budget to achieve its medium-term objectives. Accordingly, there were some new policy spending measures in high priority areas concerning the elderly and youth, and in health care and in education and training. Nevertheless, these and other measures introduced since the previous budget only increased outlays by A$ 2 billion in FY 1998/99, rising to A$ 2.6 billion in FY 2001/02. Revenue measures being insignificant, in all the budget balance was officially forecast to improve by A$ 3.8 billion in FY 1998/99 to a surplus of A$ 2.7 billion (0.5 per cent of GDP). Assuming a growth rate equal to the long-term average (3½ per cent) in subsequent years, the surplus was

Table 8. **Commonwealth budget developments**

	1995/1996	1996/1997	Budget	Revised[1]	1997/1998 outturn	1998/99	1999/2000	2000/2001	2001/2002
Revenue (A$m)	**121 688**	**131 031**	**133 351**	**135 448**	**136 966**	**144 258**	**151 299**	**160 200**	**171 096**
Per cent of GDP	**24.7**	**25.4**	**24.5**	**24.9**	**25.2**	**25**	**24.7**	**24.7**	**24.9**
of which:									
Individuals' income tax	12.3	12.9	12.8	12.9		13	13	13.1	13.3
Other income tax	5.1	5.3	4.8	5.0		4.9	4.9	5	5
Indirect tax	5.9	5.8	5.7	5.8					
Non-tax revenue	1.1	1.0	0.7	0.9		1.1	0.8	0.7	0.7
Underlying outlays (A$m)	**131 966**	**135 933**	**137 204**	**136 603**	**135 803**	**141 570**	**146 566**	**151 586**	**156 508**
Per cent of GDP	**26.8**	**26.3**	**25.2**	**25.1**	**25**	**24.6**	**24**	**23.4**	**22.8**
of which:									
Final consumption expenditure	4.4	4.2	4.3	4.3		4.4	4.1	3.9	3.7
Personal benefit payments	9.2	9.3	9.0	8.9		8.7	8.6	8.4	8.2
Grants to State	4.9	4.8	4.6	4.6		4.5	4.5	4.4	4.3
Interest	1.9	1.9	1.7	1.5		1.4	1.2	1.0	0.7
Capital outlays	0.8	0.8	0.4	0.4		0.5	0.5	0.5	0.5
Contingency reserve				0.0		0.0	0.2	0.5	0.7
Underlying balance (A$m)	**–10 278**	**–4 902**	**–3 853**	**–1 155**	**1 163**	**2 688**	**4 733**	**8 614**	**14 588**
Per cent of GDP	**–2.1**	**–0.9**	**–0.7**	**–0.2**	**0.2**	**0.5**	**0.8**	**1.3**	**2.1**

1. Revised in the 1998/99 Budget.
Source: Commonwealth Treasury of Australia.

officially projected to rise to 2.1 per cent of GDP in FY 2001/02. The forecast/projected fiscal consolidation is attributable to declining outlays as a share of GDP, notably in the areas of debt interest, personal benefits and direct government consumption.

Budget implications of the tax reform package

The Commonwealth government also announced in August 1998 a tax reform package which is intended to come into effect in July 2000. The package includes: the introduction of a GST at a 10 per cent rate, with all the revenues going to states provided that they agree to abolish a range of other indirect taxes; the abolition of Financial Assistance Grants to states; the abolition of wholesale sales tax (which is levied by the Commonwealth government); cuts in personal income tax; and increases in social security benefits, especially for families (see Chapter III for more detail). In all, the package reduces the budget surpluses of the Commonwealth and states in FY 2000/01 by A$ 4.8 billion (0.7 per cent of GDP) and A$ 0.7 billion (0.1 per cent of GDP), respectively. Taking both levels of government together, the package increases indirect taxes by a little more than the reduction in direct taxes, with this revenue gain being more than offset by higher outlays.

The Pre-Election Economic and Fiscal Outlook

In accordance with the *Charter of Budget Honesty Act, 1998,*[26] the Secretaries to the Departments of the Treasury and of Finance and Administration published the *Pre-Election Economic and Fiscal Outlook* report in the run-up to the October election. This updated the May budget forecasts for more recent economic developments and policy decisions, including the tax reform package. The forecast growth rate in FY 1998/99 was cut slightly, to 2¾ per cent, but the assumed growth rates in subsequent years remained unchanged (3½ per cent, the long-term average rate). Despite an increase in estimated revenues for FY 1998/99, principally reflecting the flow through of the higher than estimated out-turn in the previous year, a slightly smaller budget surplus is now forecast owing to policy decisions and parameter and other variations which increase outlays (Table 9). Downward revisions in the projected surpluses in subsequent years principally reflect the impact of the tax package.

The prospects for states/local government and general government finances

The *state/local government* sector surplus is estimated to have declined to 0.4 per cent of GDP in FY 1997/98, partly reflecting lower privatisation-related revenues (Figure 14). A further decline to around 0.1 per cent of GDP is officially forecast for FY 1998/99 owing mainly to the non-recurrence of one-off factors. These include stamp duty receipts and other privatisation-related revenues in

Table 9. **Reconciliation of underlying budget balance estimates**[1]

($ million)

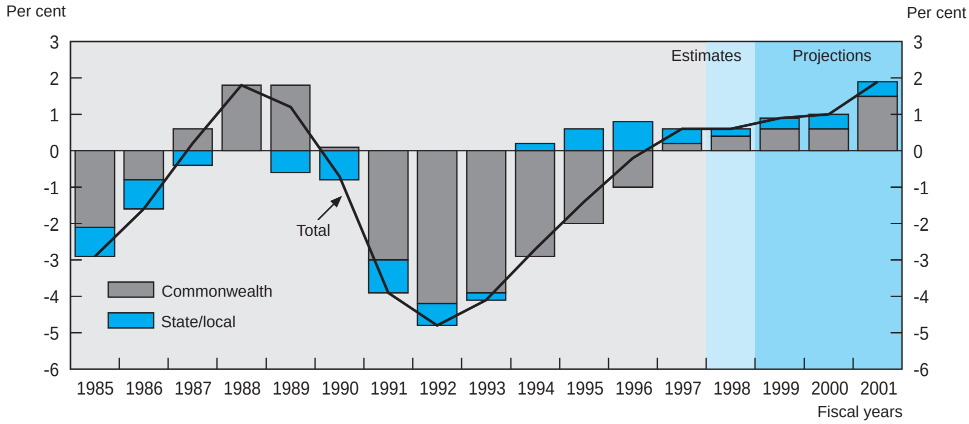
	1998-1999	1999-2000	2000-2001	2001-2002
May 1998 Budget underlying balance estimate	**2 688**	**4 733**	**8 614**	**14 588**
Per cent of GDP	***0.5***	***0.8***	***1.3***	***2.1***
Changes between May 1998 Budget and PEFO[2]				
Effect of parameter and other variations				
Revenue	982	87	–257	–282
Underlying outlays				
Unemployment benefits	396	324	246	186
Prices and wages	–107	–147	–73	–11
Interest and exchange rates	100	399	203	203
Public debt interest	–412	–228	–405	–690
Sub-total: revisions to economic parameters	–23	348	–29	–312
Programme-specific parameters	101	–125	–173	–235
Slippage in May 1998 Budget decisions	5	–	–	–
Other revisions	444	–420	–355	–498
Sub-total: programme-specific parameters and other variations	549	–545	–528	–733
Total underlying outlays revisions	526	–197	–557	–1 045
Total	–455	–284	–300	–763
Effect of policy decisions[3]				
Revenue	3	734	–16 558	–17 435
Underlying outlays	601	2 315	–11 611	–12 459
Total	598	1 581	4 947	4 976
PEFO[2] **underlying balance estimate**	**2 545**	**3 435**	**3 967**	**10 374**
Per cent of GDP	***0.4***	***0.6***	***0.6***	***1.5***

1. A negative figure for revenue indicates a deterioration in the budget balance. For all other items, a negative figure indicates an improvement in the budget balance.
2. Pre-Election Economic and Fiscal Outlook.
3. Includes total budgetary cost of the tax reform package (including Public-debt interest (PDI) effects of the tax reform policy). For all other policy decisions, PDI effects are included in parameter and other variations.

Source: Commonwealth Treasury of Australia.

Victoria, a large fixed asset sale in Western Australia and higher than expected interest earnings on superannuation balances in Queensland. Small surpluses are expected to continue over the projection period. Outlays are projected to decline as a share of GDP, mainly owing to improvement in public sector efficiency and to interest savings associated with declining net debt (Figure 15). Own source revenue is also expected to fall as a share of GDP, partly reflecting policies in several states which explicitly seek to restrain tax levels.

Figure 14. **Underlying budget balances**[1, 2, 3]
As a per cent of GDP



1. Budget data in "underlying terms" exclude net advances, which consist primarily of equity assets sales and net repayments of debt by the States to the Commonwealth.
2. Fiscal year begins on 1 July of the year indicated.
3. Data for the Commonwealth are at the time of the *Pre-Election Economic and Fiscal Outlook* while data for State/Local are at the time of the 1998-99 Budget. The estimation of "Total" is based on the aggregation of the two sectors.

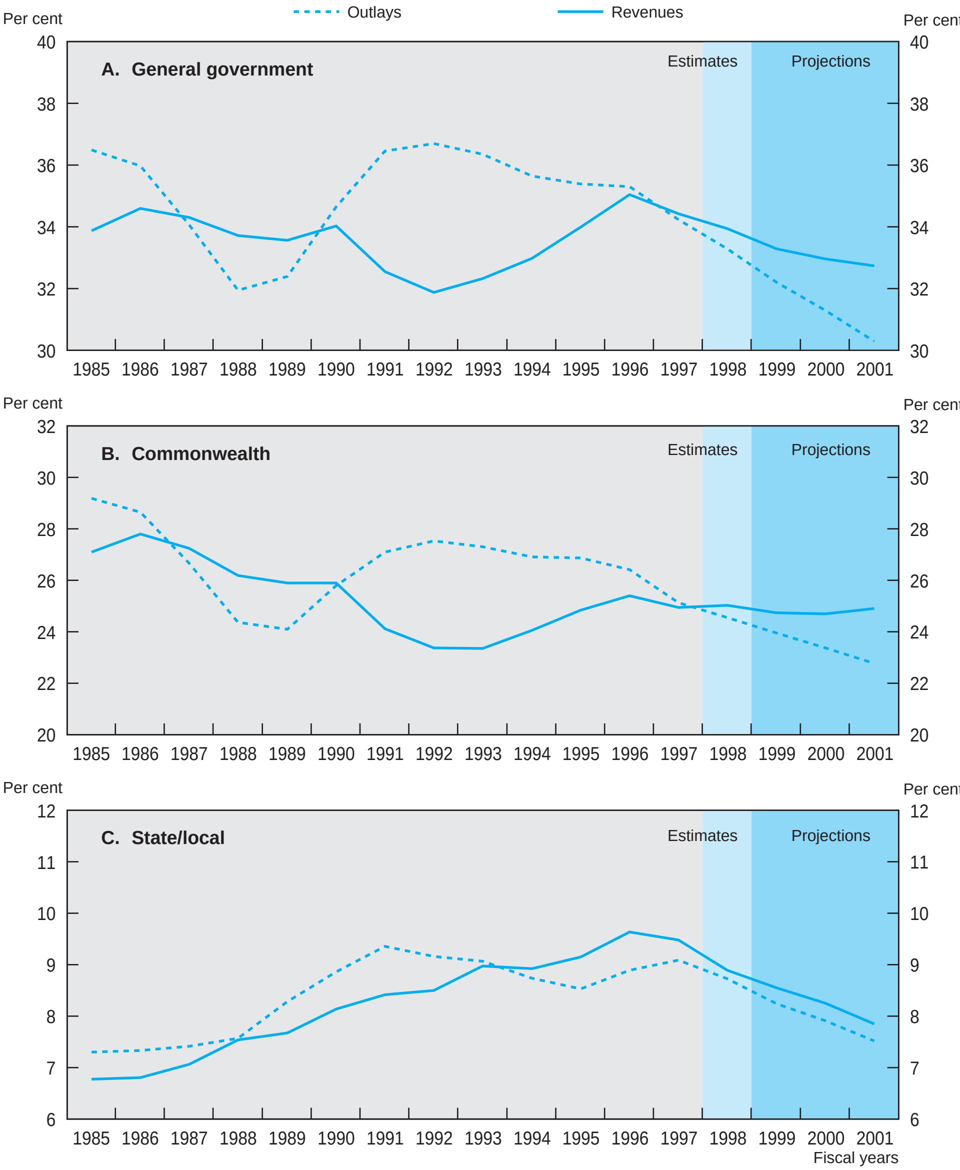
Source: *1998-99 Budget Statements, Budget Paper No. 1,* and *Pre-Election Economic and Fiscal Outlook,* September 1998.

The *general government* surplus is forecast to remain unchanged in FY 1998/99 at around ½ per cent of GDP. This reflects small offsetting changes in the budget surpluses of the Commonwealth government and of the state/local government sector. Subsequently, projected changes in the general government surplus reflect those in the Commonwealth surplus. The general government budget surplus is projected to rise to almost 1 per cent of GDP in FY 1999/2000 and to increase further to almost 2 per cent of GDP in FY 2001/02. This fiscal consolidation is to be achieved through outlays restraint, outlays being projected to decline as a share of GDP.

The improvement in Commonwealth finances in the past two fiscal years, amounting to 2.3 per cent of GDP, has been essentially structural as, on average, growth during this period has been around the trend rate. The further small increase in the budget surplus officially forecast in FY 1998/99 (see above), despite projected growth somewhat below trend, suggests a further improvement in the structural balance. In subsequent years, officially projected changes in the budget surplus correspond to changes in the structural balance as growth is assumed to be at the trend rate. Accordingly, the structural surplus is projected to

Figure 15. **Revenues and underlying outlays**[1, 2]

As a per cent of GDP



1. Fiscal years begins on 1 July of the year indicated.
2. These figures do not take account of developments since the 1998 Commonwealth Budget.

Source: *1998-99 Budget Statements, Budget Paper No. 1.*

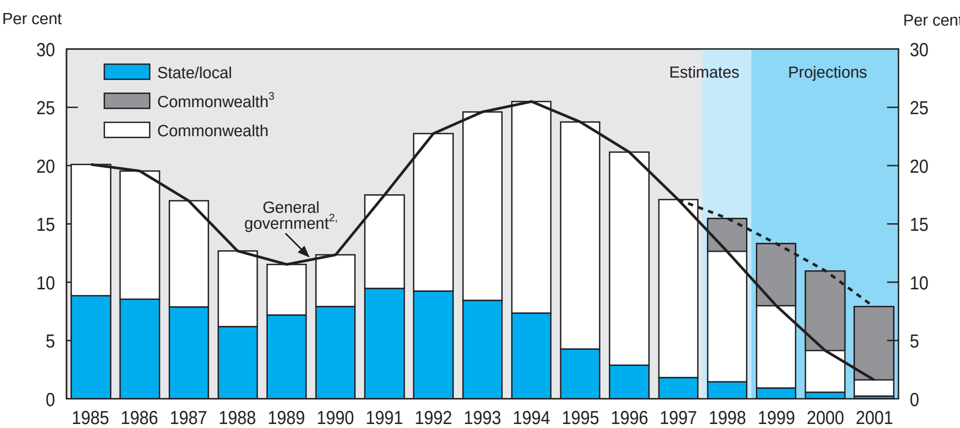
rise slightly in FY 1999/2000 and to be unchanged in the following year, despite the implementation of the tax package, which offsets the budget consolidation that would otherwise occur in FY 2000/2001. A further rise in the structural surplus of 1 per cent of GDP is projected in FY 2001/02.

Public debt developments

General government net debt peaked in 1995, at 26 per cent of GDP, and has since fallen sharply, to 17 per cent of GDP in 1998 (Figure 16). About ²⁄₃ of this decline is attributable to the state/local government sector, as a result of their small budget surpluses and large asset sales. General government net debt is projected to continue its downward trend over the next few years, to reach 1½ per cent of GDP in 2002. This is due to the Commonwealth government, reflecting asset sales and the budget surpluses in prospect. If there were no more Commonwealth asset sales from the FY 1998/99 onwards, general government net debt would fall less, to around 7½ per cent of GDP in 2001/02.

The projected decline in Commonwealth net debt as a share of GDP is consistent with the government's commitment to halve the FY 1995/96 debt ratio (19.5 per cent) by the turn of the century. It is expected that reductions in net

Figure 16. **Net government debt**[1]
As a per cent of GDP



1. These figures do not take account of developments since the 1998 Commonwealth Budget.
2. Plus universities.
3. Excluding the effect of Commonwealth assets sales in FY 1997/98 and in subsequent years.
Source: *1998-99 Budget Statements, Budget Paper No. 1.*

debt will be made through reductions in gross debt (primarily through cuts in Commonwealth Government Securities (CGS) on issue) and acquisitions of selected financial assets. Decisions about the balance between the two will be taken once available options have been assessed against a broad range of risk-management considerations. More generally, the reduction in CGS on issue will be managed in line with the objective of maintaining the liquidity and efficiency of the yield curve for Treasury fixed coupon bonds.

Assessment

The Commonwealth government has made considerable progress in putting fiscal policy on a sounder basis. It is now set in a medium-term framework with rules for prudent conduct laid out in legislation. Transparency has been improved, not least by emphasising the underlying budget balance (as opposed to the headline balance) and by requiring the preparation of a Pre-Election Economic and Fiscal Outlook. Moreover, substantial fiscal consolidation has been achieved in the past two years, bringing the Commonwealth budget into surplus. The fact that consolidation was mainly ensured through expenditure restraint increases the likelihood that it will prove to be durable. As it has turned out, this progress was opportune, putting Australia in a better position to weather the Asian/emerging markets crisis. However, given the risks stemming from the external environment, it is important that fiscal policy should remain geared towards preserving the gains from fiscal consolidation.

III. Progress in structural reform

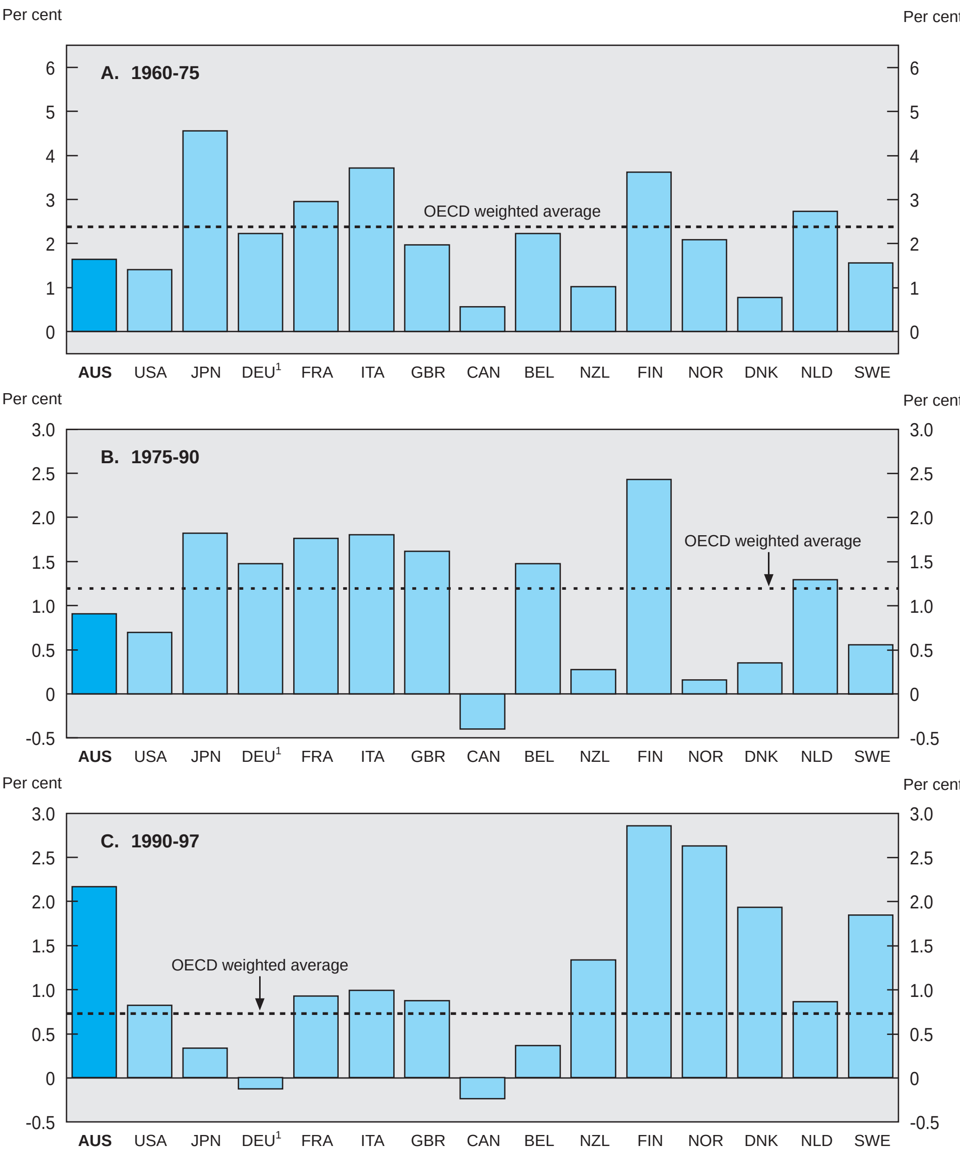
Overview

Following first major tariff reductions on manufacturing imports in the 1970s, Australia has undertaken a widening range of microeconomic reforms throughout the 1980s and 1990s, all of which aim at providing incentives for greater productivity. The reforms were driven by the recognition that barriers to external and internal trade had contributed substantially to comparatively slow total factor productivity growth in Australia from the 1960s to the 1980s (Figure 17), which was reflected in a decline in the rate of growth of real GDP per capita. Moreover, the experience of the ratcheting up of the unemployment rate over successive business cycles and the concomitant increases in estimates of the structural (non-cyclical) rate of unemployment broadened the reform agenda further since the mid-1980s, to encompass an overhaul of the entire industrial relations system.

The previous OECD *Economic Survey of Australia* observed that structural reforms undertaken so far have made the Australian economy more flexible and adaptable to changing economic conditions. At a microeconomic level, gains from deregulation and industrial relations reform became visible *inter alia* in lower air fares, cheaper and more reliable telephone services, reduced electricity prices, healthier finances of government business enterprises and enhanced company productivity.[27] At the aggregate level, the process of accelerated structural reform in the 1990s coincides with estimates of increased trend growth of total factor productivity[28] in the non-farm business sector from 3/4 per cent per year in the 1970s and in the 1980s to 1 3/4 to 2 per cent per annum in the 1990s (Figure 18). There are, of course, factors other than structural reform which can lead to a pick-up in total factor productivity, for example the well-known effect of the business cycle on short-term productivity measures. However, recent evidence, which takes account of the effects of such factors, supports the notion that over the 1990s Australia's annual total factor productivity growth was around 1 percentage point higher than in the 1970s and 1980s.[29]

Figure 17. **Total factor productivity in the business sector: an international comparison**

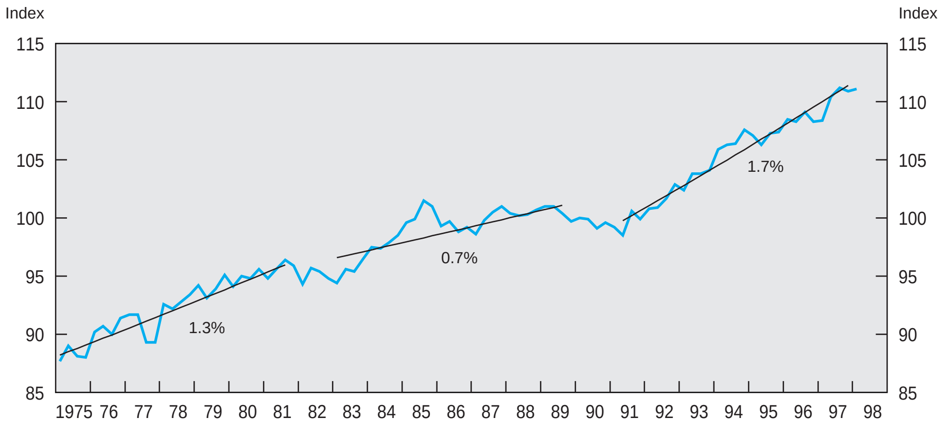
Average annual rate of growth



1. Western Germany before 1990.

Source: OECD Secretariat.

Figure 18. **Trends in total factor productivity**[1]
1989-90 = 100



1. Calculated by running a simple linear time trend through the data starting in March 1975, March 1983 and June 1991 and continuing in each case for 27 quarters. This suggests TFP growth was at rates of 1.3, 0.7 and 1.7 per cent annually in each of three periods.

Source: Reserve Bank of Australia.

Increased productivity and reduced inflation illustrate the benefits of past structural reform. Various attempts to quantify the prospective aggregate long-run benefits[30] from microeconomic reform suggest that these can be substantial if reform is comprehensive. These benefits include higher real wages, increased employment and higher living standards. The achievements of these will depend on a sustained process of microeconomic reform. Reforms which were proposed or implemented during the past 12 months[31] or so (Table 10) relate to the areas of industrial relations, the waterfront industries, the financial system, corporate governance and the tax system; they are reviewed in this chapter.

Industrial relations

Until just a few years ago, Australian industrial relations were characterised by an unusually high degree of regulation. Wages and conditions of work for most categories of labour were specified by a complex system of highly prescriptive, centrally-determined awards – based on compulsory arbitration by the Australian Industrial Relations Commission (AIRC) and similar industrial tribunals in the states. However, it should also be noted that a considerable number (precise

Table 10. **Implementing structural reform – an overview**

Proposal	Actions taken	Assessment/recommendations
I. Increase the flexibility of wages and employment conditions		
• Make a more decisive shift towards enterprise bargaining than has occurred to date.	Implementation of the *Workplace Relations and Other Legislation Amendment Act 1996* (WRA) in early 1997.	The WRA provides a more favourable environment for enterprise-level bargaining.
• Increases in award wage rates should be modest and focus on the low paid, consistent with the intention that awards operate as a true safety net.	April 1998 "Safety-Net Review" delivered a three-tiered increase in award wages which implies raises between 2½ and 4 per cent, with the largest increases benefiting those on the lowest award of pay.	It would be preferable to reduce the number of allowable award matters further in order to accelerate the move towards enterprise bargaining.
• States which maintain award systems should harmonise their industrial relations legislation with that of the Commonwealth.	Queensland aligned labour legislation to WRA in 1997.	More legislative support for the operation of the WRA is needed from other states.
• Reform employment protection legislation, limiting the potential costs of dismissal and reduce disincentives to hiring.	Federal government is conducting a review on current arrangements.	Simplify legislation further.
II. Reform labour market assistance		
Make labour market assistance more responsive to the needs of the clients and enhance its efficiency by introducing more competition into the market.	The employment services market (*Job Network*) commenced on 1 May 1998. It comprises more than 300 private, community and government providers of assistance.	Make careful evaluation of reform as soon as possible.
III. Enhance product market competition		
• States and Commonwealth regulators should co-operate to ensure that the National Competition Policy works effectively.	All legislation impacting on competition is subject to review.	Continue to make phased compensation payments to States and Territories dependent on progress in implementation of agreed competition policy reform.
• Enhance efficiency of the rail system.	The Government privatised the Australian National Railway Commission, which *inter alia* operates freight and passenger services. Further asset sales are planned in this context (including the National Rail Corporation). The Australian Rail Track Corporation was established to manage the interstate track.	Develop a common standard for rail regulation, establish an access regime for interstate track and privatise the National Rail Corporation.

Table 10. **Implementing structural reform – an overview** *(cont.)*

Proposal	Actions taken	Assessment/recommendations
• Establish a tariff reduction programme for the period beyond 2000, when the present programme expires.	In 1997 it was decided to freeze tariffs on cars at 15 per cent from 2000 until 2005, and then cut them to 10 per cent. Similarly, tariffs on textiles, clothing and footwear (TCF) will be legislated to remain at their 2000 levels of 10-25 per cent until 2005 when they will also decline by one third.	Large cuts in high tariffs for cars, and TCF would boost overall economic efficiency.
IV. Reform complex, inefficient and inequitable tax system		
• Replace Wholesale Sales Tax by general consumption tax.	The Commonwealth Government made a tax reform proposal in August 1998, which addresses most drawbacks of the current tax system.	Reform proposal should be fully implemented. Also reform the narrow-based payroll tax of the states and determine the role of environmental taxes in achieving ecological objectives.
• Reduce high effective marginal tax rates and alleviate poverty trap problem.		
• Abolish inefficient indirect state taxes.		
V. Reform the financial system to increase competition and to improve efficiency	First stage of the government reform along the proposals of the Financial System Inquiry Final Report came into effect in July 1998.	Implement second stage of financial system reforms.
VI. Reform take-over provisions of the Corporations Law	The Commonwealth Government introduced the Corporate Law Economic Reform Bill into the Parliament in July 1998. The Bill lapsed with the calling of the Federal election, but is expected to be reintroduced shortly.	The Corporate Law Economic Reform Program should be fully implemented.

figures are not available) of awards were made with the consent of the parties or to give effect to conciliated settlements. Awards were oriented towards occupations and industries rather than individual workplaces, with many firms covered by multiple awards. The award system continues to play an important role in Australian industrial relations although it has been subject to substantial change in recent years. Need for reform was felt already in the 1980s, when it became increasingly clear that awards had become a major obstacle to higher company efficiency as they hampered the organisational flexibility of workplaces, making it difficult for enterprises to adapt to a changing economic environment. Beginning with the Commonwealth's *Industrial Relations Act 1988* and culminating in the *Workplace Relations Act 1996* (WRA), legislation has been introduced which aims at increased regulatory flexibility and a shift in the focus of wage bargaining away from national awards to the level of the enterprise.

The WRA in particular – which was implemented at the beginning of 1997 – is a more decisive shift towards enterprise bargaining than earlier reform efforts: it seeks to reduce the complexity of awards (''award simplification'') and provides for easier access to formalised individual agreements between employer and employees (Australian Workplace Agreements) and to non-union collective agreements (Certified[32] Agreements). In order to safeguard broad public support and to honour an election commitment of the Government, the WRA stipulates that any new collective or individual agreement has to meet a ''global no-disadvantage test'', to make sure that workers entering these agreements would not be worse off as a result of reform. But relative to the previous narrow ''line-by-line'' version of the ''no-disadvantage test'', the new test allows award entitlements to be more readily traded off as long as it generates enterprise agreements no less favourable to the employee than the relevant award or relevant law.[33] It is worth noting that most awards have only been adjusted for safety net purposes since the early 1990s and that many employees covered by awards were also receiving over-award payments.

Simplifying the complex federal award system

In order to make the system of the around 3 200 awards less complex and prescriptive and to restrict the jurisdiction of the AIRC in the exercise of arbitral and award-making powers, the WRA confines awards to 20 ''allowable matters'' as from 1 July 1998. The allowable award matters are intended to provide a safety-net of **minimum** wages and work conditions. **Actual** wages and employment conditions are to be determined as far as possible at the enterprise or workplace level, either in formal agreements or informally. Currently, around one third of employees and their employers continue to rely on awards for their pay and a much higher proportion rely on them for other terms and conditions of employment. Since the introduction of the WRA in January 1997, the AIRC has been limited to making minimum rates awards only; hence there have been no new paid rates awards. Moreover, since a landmark decision of the AIRC in October 1998, all existing paid rates awards must be converted to minimum rates awards as part of the award simplification process.

Following the decision by a Full Bench of the AIRC in December 1997 which simplified the main hospitality industry award and provided guidance to the parties, a further 140 awards were simplified up to 30 June 1998. From 1 July 1998 until mid-October approximately 35 awards were simplified. In consequence, the vast majority of the existing awards continue to address issues which are no longer "allowable" and thus have become non-enforceable since mid-1998. But even those few awards which have been actively modified and aligned to the allowable matters, appear to have remained "lengthy, comprehensive and complex[34]". Although the limitation of awards to allowable matters clearly reduces the constraints they impose on the operation of firms, the remaining list of 20 allowable matters over which the AIRC retains arbitral powers still appears quite long.[35] Further reduction of the number of allowable matters to a less comprehensive set of real core conditions of employment could widen the scope for decentralised bargaining of wages and employment conditions. This is an issue that the recently re-elected Coalition Government has indicated it will seek to address.

Promoting decentralised bargaining

Decentralised wage bargaining has gradually extended across the economy since it was formally introduced in the early 1990s and recent estimates are that up to 70 per cent of federal award employees are now covered by federal certified agreements.[36] The corresponding figure for State awards is about 45 per cent. To speed up the process and remove existing legislative barriers to enterprise bargaining the WRA provided for the making of collective agreements for "non-unionised" enterprises, the streamlining of formalised agreements for "unionised" enterprises and the introduction of a new category of formalised individual agreements (*Australian Workplace Agreements*, AWAs). Latest statistics indicate that these legislative changes indeed fostered the move towards decentralised bargaining particularly in non-union workplaces: for example, some 576 "non-union" collective agreements have been concluded within the federal system since the WRA came into operation, covering more than 75 500 employees.[37] This is a remarkable achievement and is in marked contrast to the very low take-up rate of non-union collective agreements (the so-called "Enterprise Flexibility Agreements[38]") prior to the WRA.

Over 34 000 individual employer-employee agreements (AWAs) have been approved in the federal jurisdiction by the office of the Employment Advocate[39] until the end of September 1998 – the latest observation available at the time of writing. The number of AWAs being approved each month has accelerated throughout 1997 and 1998, to around 4 000-5 000 per month by mid 1998, reflecting a growing awareness and acceptance of this new form of employment agreement. Progress is reported[40] to have been also rapid in some of the states, notably Western Australia, where State legislation has facilitated individual employment contracts since 1993.

When assessing the state of the industrial relations system's transition from a high degree of regulation towards workplace flexibility, it has to be kept in mind that it will take some time for all of the parties (employer, employees, and their representative organisations) to adapt their behaviours to the new legislative framework. Comprehensive agreements, in the sense of providing a single reference document for all work practices, conditions and pay requirements and thus completely replacing awards and previous formalised agreements, are not common yet; they are estimated to cover only some 5 per cent of employees (Table 11). For the majority of employees concerned – about one-third of total employment – they remain "add-on agreements" to existing awards,[41] that is, they have to be read in conjunction with awards. Moreover, some of the agreements deal only with a relatively narrow range of topics. Hence, the growth in the incidence of enterprise agreements is not necessarily proportionate with their significance and may be a misleading indicator for the role awards continue to play as the benchmark around which wages and other employment conditions are negotiated. That said, an increasing number of certified agreements do include provisions, such as hours of work provisions, which are identified by employers as being significant in terms of enhancing the flexibility of working arrangements at individual workplaces. In 1997, nearly 84 per cent of all collective agreements certified in the federal system contained hours of work provisions, involving around 72 per cent of employees covered by certified agreements. Notwithstanding these limitations, the achievement of workplace flexibility by leading firms has been greater than many expected and is accelerating as firms and workers learn in the new environment. This is helping to establish a competitive dynamic which is enhancing the effects of the reforms.

Table 11. **Forms of labour market regulation**

Type of labour regulation	Percentage of employees covered
Awards only	35
Awards and registered enterprise agreements	30
Registered enterprise agreements only	5
Informal arrangements/individual contracts	30

Source: Buchanan, van Barneveld, O'Loughlin and Pragnell (1997).

Harmonising federal and State industrial relations systems

The Commonwealth government continued its efforts to promote the harmonisation of the federal and state industrial relations systems[42] in order to simplify administration and to reduce costs for governments and businesses. Progress in this area is expected to support the devolution to enterprise bargaining. However, since the integration of a large part of Victoria's industrial relations system in the federal framework through a referral of powers by the Victorian government at the end of 1996, no similar major breakthrough in the harmonisation of such relations has been recorded. A substantial step forward, however, was the provision of comprehensive complementary legislation by the state of Queensland to support the operation of the federal Act in 1997. It is important that this progress be sustained. The continuing existence of separate federal and state industrial relations jurisdictions remains an unresolved issue which implies significant inefficiencies for many businesses. Hence, more legislative support for the operation of the federal Act is needed from other states with regard to award simplification, individual and non-union collective agreements, unfair dismissal and freedom of association as they relate to unincorporated employers and their employees. These are the subject of ongoing discussions between the Commonwealth and other State governments.

Reforming unfair dismissal legislation

The rationale of employment protection legislation is based on potential social and economic benefits.[43] But as an undesirable side-effect it may also create severe disincentives to hiring workers, particularly in small firms, thereby stifling labour-market turnover and increasing segmentation. Out of this concern, the *Workplace Relations Amendment Bill 1997* proposed the exclusion of all new employees of small businesses with 15 or fewer regular (as opposed to casual) employees from the unfair dismissal provisions of the *Workplace Relations Act 1996*. The proposed exclusion expressly did not affect the rights of apprentices. The draft law was most recently rejected by the Senate in March 1998, but the Government remains committed to an exemption from the unfair dismissal legislation for small businesses.[44] Reflecting legislative changes, the number of federal claims fell and state claims increased, from 1996 to 1997. While these trends appear to have been partially reversed in 1998, there is a continuing decrease in the number of applications in all jurisdictions overall. To shed more light on unfair dismissal issues, a review is being conducted by the Government in order to find out whether current arrangements have succeeded in being fair to both employees and employers, have provided a fair and simple process of appeal, have reduced legal costs and have discouraged frivolous or vexatious claims.

Enhancing the freedom of association and industrial action

One of the major objectives of the WRA is to strengthen freedom of association in the workplace. To this end closed shop arrangements were made unlawful and provisions were introduced to make it easier for employees to leave unions and to establish alternative representational structures. So far the registration of new enterprise associations has proved very slow – latest statistics are for four applications lodged, including one which has been approved, for the registration of enterprise unions. The earlier process of concentration and consolidation of the unions' organisational base appears to have been a means by which unions tried to counter the trend decline in membership (Table 12).

Finally, the Commonwealth Government has restricted the right to strike or lock out to the period of negotiation of agreements; hence industrial action is prohibited during the operation of a certified agreement or an AWA. The sanctions against unlawful industrial actions were strengthened and it has been made illegal for employers to pay employees for the time they are engaged in industrial action. Moreover, the secondary boycott provisions were made more effective by including them in the Trade Practices Act, which reduced the possibility of illegitimate and unwarranted industrial action, especially sympathy action.[45] These legislative changes are likely to further reduce the level of industrial disputation. Since the WRA was introduced industrial disputes have fallen to record low levels,

Table 12. **Unionisation rate**

Union members as a percentage of employees

	Trade Union Members Survey[1]	Trade Union Statistics[2]
1976	49.7[3]	53[4]
1982	48.3[5]	54[4]
1986	45.6	50
1990	40.5	46
1994	35.0	38
1996	31.1	35

1. The Trade Union Members Survey is a survey of households conducted in conjunction with the monthly Labour Force Survey. It was conducted in November in 1976 and during March-May in 1982. Since 1986 the survey has been conducted in August. It is currently held every two years.
2. The Trade Union Statistics series is based on a census of trade unions, and relates to all financial members on 30 June each year (31 December prior to 1985).
3. The 1976 publication reports a unionisation rate of 51 per cent, which does not square with the reported number of union members (2 512 700) and the reported number of employees (5 052 100).
4. Financial members were not separately reported prior to 1985. The figures reported here are estimates made by Peetz (1997).
5. The published figure in the 1982 survey (49.5 per cent) included as union members, employees who were members of the union in their second job but not their main job. The number of union members has been adjusted downwards (by 61 600) to account for this.

Source: Hawke and Wooden (1998).

Table 13. **Working days lost in labour disputes**

Per 1 000 employees in all industries and services[1]

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Average[2]		
											1987-91	1992-96	1987-96
Australia	**221**	**266**	**184**	**210**	**250**	**148**	**100**	**76**	**79**	**131**	**226**	**107**	**165**
United States	44	42	153	55	43	37	36	45	51	42	68	42	55
Japan	6	4	5	3	2	5	2	2	1	1	4	2	3
Germany[3]	1	2	4	15	5	47	18	7	8	3	5	17	12
France	99	107	177	65	46	36	48	39	303	58	98	97	97
Italy	319	226	300	342	195	180	235	236	65	140	276	172	225
United Kingdom	164	166	182	83	34	24	30	13	19	58	126	29	78
Canada	340	423	312	427	216	183	130	136	131	276	344	172	257
New Zealand	287	313	163	279	87	99	20	31	42	55	228	49	137
EU average	305	257	229	316	128	125	81	102	98	59	246	93	167
OECD average	159	144	170	175	92	77	53	63	78	54	148	65	105

1. Employees in employment; some figures have been estimated.
2. Annual averages for those years within each period for which data are available, weighted for employment.
3. From 1993 data cover the entire Federal Republic of Germany; earlier data represented West Germany only.

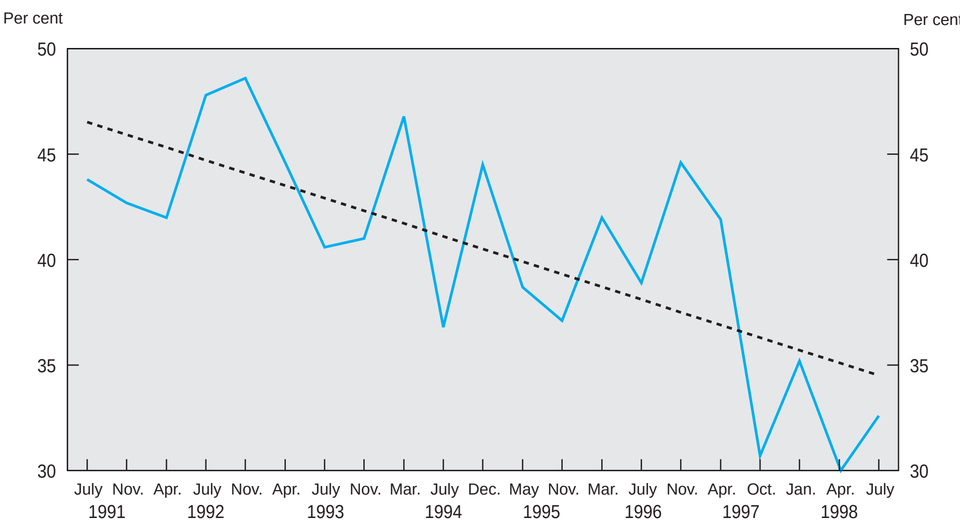
Source: Working days not worked: International Labour Office (ILO) Geneva, Statistical Office of the European Communities (SOEC) Luxembourg; employees in employment: OECD, except for the United Kingdom, Office for National Statistics (ONS); Davies, J. (1998).

although they are still relatively high in comparative terms[46] (Table 13). The recent legislative changes with respect to industrial action proved effective in the 1998 waterfront conflict as it did not spill over onto other industries.

Assessment

The *Workplace Relations Act 1996* (WRA) has clearly given the industrial relations reform process a fresh impetus and thus constitutes an important reform step towards labour market deregulation. But there is still a long way to go to arrive at an entirely decentralised and highly flexible industrial relations system. The WRA has expanded the opportunities for enterprise bargaining, as reflected in the rapidly rising uptake of non-union (collective and individual) agreements. While many enterprise agreements still need to be read in conjunction with awards, they are increasingly addressing issues of workplace flexibility such as hours of work arrangements. The simplification of awards is also assisting in this respect. That said, a further reduction in the number of allowable matters would progress this process more quickly. The Government has signalled that further evolutionary changes to the current system are on the agenda, which should assist in further enhancing labour market flexibility.

Figure 19. **Union resistance to change as a constraint on investment**[1]



1. Per cent of entrepreneurs in business survey who consider union resistance to change as impediment to investment.

Source: Australian Chamber of Commerce and Industry (ACCI), *Survey of Investor Confidence.*

The overall success of industrial relations reform also depends to a large measure on the harmonisation of federal and State legislation which has not made much progress over the past twelve months or so. Another pending issue is the appropriate balance between protection of employees against unfair dismissals and incentives of firms to hire workers. The amended legislation on dispute settlement appears to contribute to containing industrial action and predictions that the enactment of the WRA would lead to a surge in the number of industrial conflicts have proved false. The Survey of Investor Confidence of the Australian Chamber of Commerce and Industry (ACCI), shows that employers consider union resistance to change a diminishing constraint on investment[47] (Figure 19).

The waterfront industries

Some international perspectives

The waterfront, the interface between sea and land transport, is critical both to Australia's international sea trade and to domestic trade, with coastal shipping being a significant mode of domestic transport. Since around 70 per cent of imports (in value terms)[48] and nearly 80 per cent of exports are transported by sea, the efficiency of the waterfront industry affects international competitiveness and thus overall welfare. A recent international benchmarking study by the Productivity Commission (1998*a*) suggests that Australia is under-performing on the waterfront. The key findings of the study are that:

- *Charges related to container stevedoring* (the process of loading and unloading ships) were generally higher than overseas, ship loading and unloading were slower, and services were less reliable.
- Break-bulk (non-bulk cargo that is not containerised) stevedoring also performed relatively poorly, but there were disparities in the area of traditional bulk (cargo that is carried loose and takes up the shape of the ship's hold), with grain handling performing well[49] (a previous benchmarking study found that many of Australia's bulk terminal operations were among the best in the world) while fertiliser handling performance was relatively poor.[50]
- *Cruise ship* baggage handling charges in Sydney were five times those in Auckland. The cost of provedoring[51] was four times that in Miami.
- *Marine services and port infrastructure* charges were two to three times greater in Australia than elsewhere, not all of which reflects differences in pricing policies to recover costs.
- The *port-land interface* is not operating effectively. There is a need for better co-ordination throughout the transport chain.

– Poor performance increases costs to exporters, importers and other shippers both directly, and indirectly.[52]

Numerous factors have an important impact on relative waterfront performance, some of which are exogenous to economic policy. The most significant exogenous factor which disadvantages Australia is that its sea trade and waterfront operations are relatively small compared with many other countries, so that there is less scope for economies of scale. Comparatively "thin"[53] shipping trade keeps the level of cargo throughput low, and with port facilities capital intensive and the share of fixed costs high, this leads to a relatively high burden per service activity. Another source of high waterfront services cost is the combination of fluctuating demand[54] for waterfront services with a fixed level of quality required for periods of peak demand: with shipping trade being thin, capacity can indeed be idle for significant periods of low demand. A further consequence of thin shipping trade and the dispersion of Australia's major ports is that shipping lines engaged in container trade often make multiple port visits. An implication of this multi-port pattern of operation is that disruption to schedules in one port, because of unreliable port and stevedoring services, can disrupt the schedule of services in subsequent ports, creating the potential for further delays to the ship. To counter these "knock-on effects" shipping lines may build slack into their service schedule, which raises costs. Other factors also distort international performance comparisons, among them the nature of government involvement: several overseas ports receive explicit or implicit government support so that charges for port infrastructure and marine services do not fully reflect costs. In contrast, Australian ports are subject to competitive neutrality principles.[55]

With these qualifications in mind, the Productivity Commission nevertheless concluded that there is significant scope for improvement of waterfront service productivity, in spite of reform which has been undertaken so far. In the course of this earlier and rather gradual reform process – mainly in the context of the Waterfront Industry Reform Authority programme from 1989 to 1992 – enterprise agreements were concluded which have led to some improvements in work arrangements; these included the – limited – use of supplementary employees at major ports and decreased manning scales. However, numerous existing work arrangements continue to provide inappropriate incentive structures and constrain the ability of workplaces to adapt to changes in industry conditions. Container stevedoring seems to offer significant scope for productivity improvements as in this industry a system of particularly complex, inflexible and prescriptive work arrangements is in place which constrains workplace performance.[56] This weighs especially heavily in the face of the highly variable demand for container stevedoring services at Australian ports. The notion of low productivity in the container stevedoring business in Australia is supported by a comparison of container stevedoring charges in 15 selected ports around the world which shows higher costs at all Australian container terminals than at any of the overseas terminals surveyed, with the exception of Nagoya.[57]

Factors adversely affecting waterfront productivity

Of the work arrangements in container stevedoring which constrain relative performance, the order of engagement, shift premiums, penalty rates and redundancy provisions stand out. The order of engagement specifies the order in which different types of employees are engaged for a shift. By constraining the management's ability to make the most effective use of the workforce, its provisions reduce productivity, timeliness and reliability of services. In particular, at several workplaces, management cannot use less costly supplementary workers until permanent employees have been given the option of working "double header shifts" (two shifts worked consecutively). This increases the access of permanent staff to high levels of overtime[58] which not only raises unit labour costs but is also likely to lower health and safety of employees; among all major industries, stevedoring has indeed the highest cost of work-related injuries per employee due to its poor record of work-related fatalities, injuries and disease (Table 14). A powerful incentive for employees to work overtime stems from high shift premiums and penalty rates, which are higher in stevedoring than in other industries.[59] The restriction of the amount of time which supplementary employees are allowed to work limits their potential to raise their skills and

Table 14. **Occupational health and safety indicators in stevedoring and other selected industries**

Average for 1991-92 to 1994-95

Industry	Incidence of new cases[1]	Average duration[2]	Average cost of claims	Costs per employee
	Number	Weeks	A$'000	A$
Stevedoring	148.6	9.2	7.0	1 061
Mining	64.9	8.7	8.4	547
Manufacturing	46.6	10.0	7.7	359
Construction	47.6	12.2	9.3	443
Transport and storage	47.7	10.2	7.5	361
All industries	**28.0**	**11.0**	**8.1**	**228**

1. Number of new compensation cases per thousand employees.
2. Working weeks lost per occurrence.
Source: Easson, McCann and Ronfeldt (1997).

income. Moreover, the complexity of work arrangements is likely to raise the cost of administration.

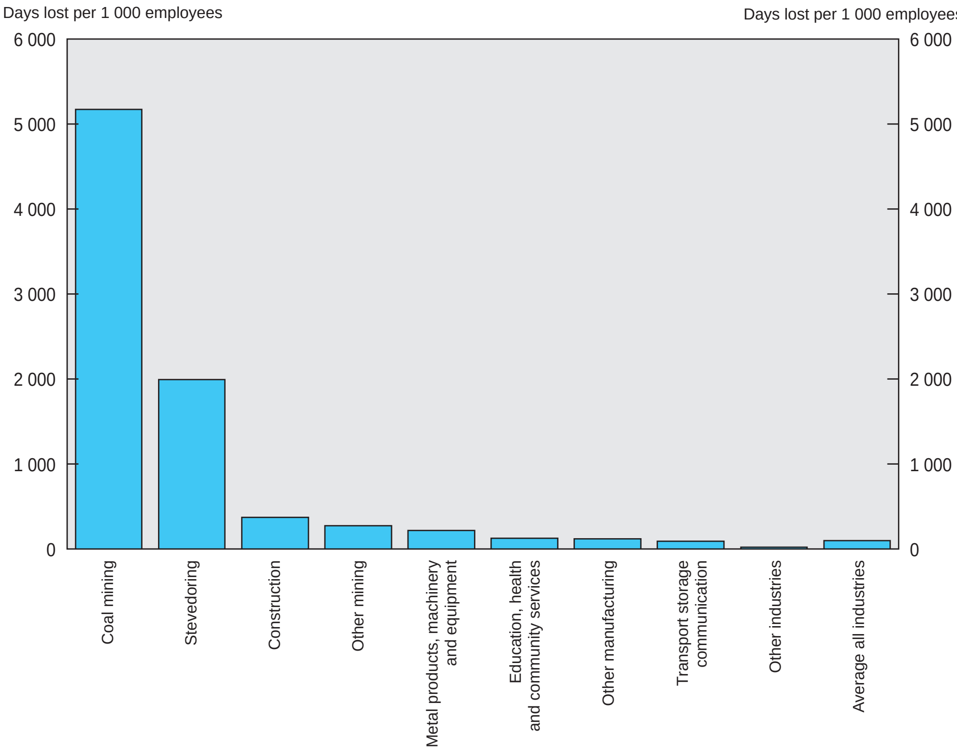
In container stevedoring, some schemes exist which equalise earnings across permanent operational employees[60] within functional areas. The schemes are claimed to raise the morale and motivation of staff, but are likely to impede the management's ability appropriately to allocate labour to tasks. Also, call-up payments[61] and idle time provisions[62] reduce the uncertainty of the employees' earnings due to the variability of container stevedoring, but when combined with rigid notification rules and the order of engagement, they create additional costs, particularly for weekend shifts.

Retirement and redundancy agreements impose high redundancy costs, even for employees with short periods of service. They exceed markedly such costs in many other industries, limit the flexibility to adjust staffing to operational requirements and make stevedores reluctant to dismiss poorly performing employees. This reduces competition for jobs and the incentive for employees to improve their performance. Not surprisingly, employee turnover in stevedoring remains very low compared with other industries. Retirement and redundancy agreements are likely to foster skill mismatches, because it may be cheaper to retain and retrain employees than offering them generous redundancy packages, and this may lower productivity of the firm. Another significant deterrent to adjusting work arrangements, including manning levels is the industry's proneness to disputes, which contributes to the retention of surplus labour, thereby lowering productivity. The adversarial character of relations between management and employees is a major impediment to reform in general. Adversarial relations show up in the second highest annual average number of workdays lost in industrial disputes in the 1992-97 period, after the notoriously strike-prone coal-mining industry (Figure 20).

Lack of competition in the stevedoring industry's labour and product markets is key to understanding why there are so many restrictions imposed on the management of stevedores. The product market is characterised by a duopoly of two companies in most ports – Patrick and P&O – which account for about 95 per cent of Australia's A$ 40 billion container trade. An important barrier to market entry, which restricts stevedoring and shipping competition in general, is the capital intensiveness of the industry combined with the thinness of shipping trade referred to above. Another major barrier to entry is the exclusive, long-term wharf-leasing arrangements which stevedores presently have in place with Australian port authorities (Table 15). Further constraints on competition are due to the large distances between ports in combination with the relatively high cost of land transport, which reduce the scope for inter-modal competition.

The labour force is represented by a single union, the Maritime Union of Australia (MUA) which covers almost all operational employees in container

Figure 20. **Industrial disputation in selected industries**
1992-97 (working days lost per 1 000 employees)



Note: The number of working days lost is from ABS. Employment in 1992 and 1993 uses industry statistics collected by the Waterfront Industry Reform Authority. Productivity Commission estimates of employment for each year over the period 1994 to 1997 assumes a fixed intake per year to reach employment levels in 1997. Estimates of employment in the stevedoring include full-time, part-time and supplementary employees working in container, break bulk and bulk operations.
Source: Productivity Commission (1998*b*).

stevedoring. The bargaining power of the MUA is strong because of its monopoly position in combination with the high cost of berthing delays or stoppages which usually induces stevedores to settle labour disputes quickly. Employers’ resistance to union demands is further weakened by the constrained product market competition, which makes it possible to pass high costs on to the users of stevedoring services, such as shipping lines, exporters and importers. The low potential for loss of employment through loss of market share also adds to the bargaining power of unions.

Table 15. **Length of container terminal leases at the ports of Sydney and Melbourne**

Lessee	Commencement year of lease	Length of lease	Additional years if option to renew lease is taken up
Patrick Sydney	1978	40 years[1]	5 years
CTAL Sydney	1979	25 years	5 years
Patrick Melbourne	1993	21 years	21 years
P&O Ports Melbourne	1993	20 years	20 years

1. Recently re-negotiated and increased from 25 years by the stevedore – on the basis of additional capital expenditure of approximately A$100 million in the short term.

Source: Productivity Commission (1998*a*).

The weak product market competition combined with strong union power not only favours less flexible working arrangements and lower employment levels than in industries exposed to greater competitive conditions, but is also conducive to the phenomenon of "rent-sharing" enforced by unions.[63] The notion of rent-sharing is corroborated by relatively high annual gross earnings of operational stevedoring employees; these were in the range of A$ 60 000 to A$ 100 000 and averaged A$ 72 000 in FY 1995-96, which is nearly three times the average earnings of their occupational equivalents in other industries.[64] They place these employees in the top 5 per cent segment of Australian wage and salary earners. The work arrangements' bias towards overtime is reflected in the contribution to salaries from overtime pay of around 20 to 30 per cent.

The scope for reform

The Productivity Commission estimates that savings from faster and more reliable container stevedoring services have a potential to cut costs by A$ 50 per container (hence by around 8 per cent), which could save shippers some A$ 100 million, given more than 2 million containers cross the Australian waterfront per year. Such an estimate does not, however, include insurance, contingency transport costs, storage costs and other indirect costs. Hence, the Commission considers that it may be conservative. Reduced unit costs of transport could translate into substantial savings for goods which have a relatively low unit value – for example, many agricultural products – and could therefore result in considerably higher profit margins for producers. In general, improved stevedore performance would impact positively on output and employment in other industries which rely on the efficient distribution of their products, and would ultimately affect national economic performance and welfare.

To the extent that the provisions of the *Workplace Relations Act 1996* (WRA), and secondary boycott provisions of the *Trade Practices Act 1974* (TPA), reduce the level of industrial conflict in waterfront industries – through enhanced freedom of association and improved dispute settlement – Australian ports should become more reliable and hence, more productive. Waterfront reform will be fostered further by a number of important sections of the WRA which affect the negotiation and organisation of enterprise agreements. But as most current enterprise agreements have been concluded before the enactment of the WRA, the new legislation will only impact on new enterprise agreements once current contracts are to be renewed (at the end of 1999 in many cases). Award simplification – confining awards to only twenty "allowable matters" – could have an immediate influence on work arrangements as several provisions of the Stevedoring Industry Award are non-allowable matters and thus no longer enforceable since July 1998. For example, this is likely to be the case for the provisions of the Award concerning the right of entry of union officials to a workplace and so-called stop-work meetings. But there is the possibility that these provisions and other non-allowable matters might be included in future enterprise agreements,[65] given the strong bargaining position of the Maritime Union.

The 1998 waterfront dispute

Of the industrial relations reforms which came into operation in 1997, the restored effectiveness of the secondary boycott provisions in the TPA has probably the most direct and significant effect on the balance of bargaining power between the MUA and the stevedoring companies. This appears to have encouraged the Patrick stevedore company to try to break the MUA's labour supply monopoly and to regain better control over decisions concerning work practices. An attempt was made by the company in April 1998 to restructure its activities in a way which would have allowed the dismissal of the entire workforce and their replacement by non-union labour. This led to a conflict with the MUA in April 1998 which induced the withdrawal of labour, the establishment of picket lines, lock-out and a complex legal dispute; it also involved the Commonwealth Government, who supported the opening up of the union closed shop and reform on the waterfront. The conflict was settled by negotiation in June 1998, with substantial concessions being made by both sides of the industry.

The agreement reached includes that the stevedore company may make over 500 jobs redundant – with redundancy entitlements being paid – and contracts out another 200 posts to (unionised) labour-hire firms, while guaranteeing existing employment entitlements for those doing the outsourced jobs. The stevedore company is required to repay its 1 400 workers the wages they lost during the time they were locked out and to raise wages by 12 per cent over three years. In exchange, the MUA accepts a considerable shake-up of the pay system which *inter alia* replaces the existing base wages plus overtime arrangements with annualised salaries including variable productivity bonuses to speed up crane rates.[66] The agreement also introduces new flexibility in work arrangements which imply substantially greater rights of managers to allocate workers to particular tasks and jobs, and new rosters. This will allow the removal of existing incentives for dock workers to maximise their earnings by arranging to work substantial amounts of overtime. However, the aim of Patrick to secure a non-union labour force and to break the labour supply monopoly of the MUA was not achieved. According to estimates of the stevedore company, the agreement will entail cost savings of between A$ 50-60 million *per annum*. But, given the de-facto duopoly in stevedoring services it remains unclear how much of the savings will flow through to port users in the form of lower stevedoring charges, although port users should benefit from a higher reliability of services. This is the more so, as in June 1998, P&O – the other major stevedore – initiated workplace bargaining to achieve reforms of the type achieved by Patrick.

Assessment

Altogether, the recent changes in the work organisation in the container stevedoring industry appear a welcome step in the direction of higher container terminal efficiency. As they are likely to encourage similar reform in other maritime sectors – for example, the shipping industry, where the crew-to-berth ratio is high by international standards – their importance goes beyond the industry level. However, the recent agreement reached between one major stevedore company and the MUA still leaves scope for further improvements of workplace flexibility in container stevedoring. A promising way of realising remaining productivity gains would be to enhance competition in the industry's product market, which would exert pressure on both the management and employees to improve performance further and to make sure that a fair share of the resulting efficiency gains would be passed on to customers.

With the length of wharf leases being identified as a major barrier to entry to the *container* stevedoring market,[67] enhanced competition could be facilitated through the provision of common user facilities,[68] which are offered by several ports in New Zealand. For example, at the Ports of Auckland any stevedore can access a berth with container handling facilities such as quay lines for variable length of time. Another way of increasing competition on the waterfront would be to stimulate additional inter-port competition. Given the large distances between ports in Australia, this would require a reduction in the relatively high cost of land transport, in particular through reform of the markets for rail transport.

To improve the services of the rail system, deferred maintenance should be undertaken over the next few years. Further progress is required on proposed reforms to simplify the access regime for interstate track, to develop a common standard for rail regulation and to privatise the National Rail Corporation. At present, different access regimes apply to different segments of interstate rail track owned by state and federal governments. There is an in-principle agreement among the respective governments to establish a "one-stop shop" access system. To that end, the Australian Rail Track Corporation commenced operation on 1 July 1998, taking over management of Commonwealth and Victorian interstate track and having the task of negotiating management of access arrangements to track in the states of New South Wales and Western Australia. It would be desirable for this process to be completed as soon as possible. Having sold the business (other than interstate track) of the Australian National Railways Commission, the Commonwealth Government should press on with its announced intention to sell the Commonwealth's interest in the National Rail Corporation (an interstate rail freight business).

The importance of an integrated approach to structural reform is highlighted by New Zealand's experience, whose container stevedoring workplaces appear considerably more flexible, although its waterfront shares several exogenous characteristics with Australia, notably the relatively small volume of shipping trade.[69] In the context of New Zealand's broad range of economic reforms the land transport sector was liberalised as from the early 1980s, the ports reformed in 1988 and 1990 and the labour market overhauled in 1991. The interaction of these changes resulted in increased competitive pressures within and between ports. Notwithstanding the high union coverage of the workforce, this in turn enforced improvements in work arrangements of stevedores, and much improved performance in the New Zealand stevedoring industry. Work arrangements now vary considerably across New Zealand stevedores while they are relatively uniform across Australian stevedores workplaces. This strengthens the case for decentralised industrial relations in this area.

The financial system

Following the recommendations of the Financial System Inquiry (1997),[70] the Government announced in September 1997 a comprehensive set of reforms[71] which respond to recent and prospective developments in the financial sector, including the blurring of the boundaries between financial instruments and institutions, increasing competition from non-financial institutions and from abroad and the substitution of financial market transactions for direct financial intermediation. A series of twelve Bills was passed by Parliament in June 1998 and came into effect on 1 July 1998, implementing the first stage of the Government's response to the Wallis Inquiry Final Report.[72]

Australian Prudential Regulation Authority

The legislation establishes a single prudential regulatory agency, the Australian Prudential Regulation Authority (APRA), which became fully operational, on 1 July 1998. APRA is the independent prudential regulator of: authorised deposit-taking institutions (including banks and non-operating holding companies); life and general insurance companies; superannuation funds; and retirement savings accounts. Consistent with the need for regulatory flexibility, APRA has the power to set standards on prudential matters in relation to authorised deposit-taking institutions. The standards making power can be used very quickly in the event of a crisis to prevent contagion effects in the financial system.

Intervention powers to manage failure have also been improved. Amendments to the *Banking Act 1959* provide for earlier arm's length intervention via directions. Further, in the event that it becomes necessary to assume control, the amendments both clarify the mechanisms by which the prudential regulator may take control of a troubled deposit-taking institution, and allow the prudential regulator to appoint an administrator for that purpose. While these statutory management powers provide the means for control in a crisis, APRA also has the option of using less direct strategies, such as facilitating the take-over of a troubled institution or its business by other sound institutions. In Australia and elsewhere, such action has provided the most common response in practice to financial distress in deposit-taking entities. These intervention powers are further supplemented by a new power enabling APRA to initiate the wind-up of a deposit taking institution that is insolvent and cannot be restored to solvency within a reasonable period. Such action may prevent further losses from accruing and would, therefore, be in the best interests of depositors. State Supervisory Authorities already have clear powers to wind-up building societies and credit unions.

In the case of superannuation and retirement savings accounts, APRA is also responsible for the administration of legislation designed to achieve retirement income objectives. This reflects the close association between regulation for that purpose and prudential regulation in these sectors. While APRA currently has regulatory responsibility for all superannuation funds, from 1 July 1999 self-managed superannuation funds will be regulated by the Australian Taxation Office, which will have responsibility for ensuring such funds comply with the non-prudential requirements of superannuation law.

The Australian Securities and Investments Commission

The Australian Securities and Investments Commission (ASIC) has adopted the corporate regulatory functions of the former Australian Securities Commission (ASC). It has also has taken on responsibility for consumer protection and market integrity in the areas of insurance, superannuation and aspects of banking. When stage 2 of the financial system reforms are complete, ASIC will have these responsibilities across the whole financial system. Responsibility for consumer protection and market integrity vested in a single entity will enable ASIC to adopt a functional and objective-based regulatory approach, thereby promoting competitive neutrality and permitting better comparability by consumers of different financial products and services.

The Payments System

The Government has strengthened, and made more transparent and accountable, the regulation of the payments system undertaken by the Reserve Bank. With an increasing number of non-bank participants emerging to increase competition in the payments system, more direct means of achieving effective regulation were required. The reforms were necessary to ensure that the payments system retains its high standard of safety while adapting to the demands of new technologies and globalisation in the payments system. The Reserve Bank under the direction of the newly-established Payments System Board (PSB) remains the regulator of the system, given the importance of the payments system to the overall stability of the financial system and in view of the central role of the Reserve Bank itself in the core areas of the payments system, particularly settlement. The objectives of these reform measures are to improve the efficiency of the payments system, promote competition in the market for payment services and control risk in the financial system.

The *Payment Systems (Regulation) Act 1998* implements a new regulatory framework for the payments system. Existing industry self-regulatory arrangements will be retained wherever these are performing satisfactorily, that is, where a payment system is financially safe for participants, stable, efficient and does not have unreasonable barriers to entry. As a new feature, the Reserve Bank now has the power to undertake more direct regulation by "designating" payment systems where it is considered to be in the public interest to do so. Once a payment system is designated, it may be subject to the imposition of rules of access for participants on commercial terms, the determination of standards, the issuing of enforceable directions, or the voluntary arbitration of disputes on technical standards. The development of access regimes and standards will be undertaken, as far as possible, in conjunction and consultation with the private sector.

A comprehensive regime of prudential regulation of the store-of-value backing purchased payment facilities has also been implemented. This applies to all forms of such facilities, including stored value cards, travellers cheques and Internet cash facilities. The holder of the store-of-value must either be an authorised deposit-taking institution regulated by APRA or otherwise be authorised (or exempted) by the Reserve Bank (in which case further regulation may be required).

Financial sector shareholdings

The package of legislation passed by Parliament also includes a new *Financial Sector (Shareholdings) Act 1998* aimed at streamlining the existing legislation and rules governing ownership and acquisitions in the financial system, consistent with the recommendations of the Financial System Inquiry. It has replaced the *Banks (Shareholdings) Act 1972* and the relevant parts of the *Insurance Acquisitions and Take-overs Act 1991*. The new Act provides that all prudentially regulated financial sector companies will be limited to a 15 per cent shareholding by any one person (and their associates), or such higher percentage as the Treasurer may determine as being in the national interest. Provision is also made for the Treasurer to declare a person to have "practical control", that is, the power to control the policies and operations of the financial institution, regardless of the size of their shareholding. Under such a declaration the person must relinquish practical control.

The streamlined provisions are particularly useful for corporate groups which contain more than one licensed entity. Common rules apply to each class of licence, simplifying regulatory applications and their assessment. Moreover, provision is made for authorisations applying to the non-operating holding companies of financial conglomerates to flow through to 100 per cent subsidiaries of the corporate group.

Outlook

The second stage of the reforms will include the transfer to the Commonwealth of prudential and corporate regulatory responsibilities for building societies, credit unions and friendly societies which are presently regulated by the states and territories. In addition, this stage of financial market reform will aim at a consolidated law for market conduct and disclosure in the financial system to be administered by ASIC. The Commonwealth Government has reached an in-principle agreement with the states and territories to transfer their prudential and corporate regulatory responsibilities to APRA and ASIC, respectively.

The Corporate Law Economic Reform Program

The Commonwealth Government's Corporate Law Economic Reform Program[73] (CLERP) is a comprehensive initiative to enhance the efficiency of the economy, while maintaining investor protection and market integrity. It is motivated by the concern that some of the past tightening in regulation of business and financial markets may not have struck an optimal balance between costs and benefits of regulation. Following consultations with the business community and other interested parties, the Government introduced the CLERP Bill into Parliament on 2 July 1998. The Bill lapsed with the calling of the election, but is expected to be reintroduced shortly. Among other measures, the Bill proposes provisions of the Corporations Law which are intended to remove unnecessary obstacles to take-overs and which would complement the improvements to the operation of financial markets arising from the Financial Sector reform process.

The Commonwealth Government considers that the existence of good corporate governance is a judgement best made by capital markets. Corporate governance practices should, as far as practicable, be continuously monitored by the Australian Stock Exchange, relevant industry and professional bodies who promote best practice, investors and Government to maintain investor confidence in Australia's capital markets. The Government will not impose additional mandatory legislative requirements unless there is a failure of the current requirements or these regulatory mechanisms.

Promoting a more competitive market for corporate control

Mandatory bid rule

The present Corporations Law discourages take-overs by a requirement for bidders holding 20 per cent of any class of shares in a company to make bid for all or a proportion of the remaining shares in that class; the legislation is based on the equality of opportunity principle, which aims at ensuring that all shareholders can benefit from the "control premium" paid by the purchaser in a take-over transaction. To promote a more active market for corporate control and to make sure that scarce resources are managed by those able to make best use of them, the Government's Bill proposes as a key element of reform the introduction of the "mandatory bid" rule. This would allow a bidder to exceed the statutory threshold of 20 per cent of total voting rights to gain control of a target, provided that the announcement of a full, unconditional take-over bid immediately follows the acquisition that takes the bidder through the threshold. The new rule is based upon a similar one used in the United Kingdom, and provides two significant advantages over the current take-over regime. First, it gives potential bidders the choice of which take-over method to apply, which should make it more likely that they proceed with their bids. Under the current system, bidders incur costs in identifying and analysing target companies. If rival bidders force an auction for control, they can "free-ride" on the information produced by the initial bidder. Hence, there is less incentive for bidders to engage in searching for potential targets. The new mandatory bid rule would reward bidders willing to put up search costs by giving them the opportunity to secure control without an auction. More investment in research could be expected to result in more take-over bids. The second advantage is that the rule would ensure that all target company shareholders have the opportunity to sell their interest at a fair price and to benefit from the premium a bidder for control places on the securities. However, sharing of the control premium with all shareholders tends to raise the cost of take-overs. By applying the take-over provisions to listed managed investment schemes, members of these schemes would have the same rights to share in a control premium as shareholders, while responsible entities of these schemes will face the same competitive pressure to perform as company directors.

Better dispute resolution

Under the current take-over provisions, bids for corporate control can be disrupted as a result of litigation. It is argued that target companies may sometimes resort to litigation for tactical reasons, which could impose considerable extra costs on the bid process. The threat of costly litigation may act as a deterrent to the initiation of take-over bids, even where the benefits of proceeding with a take-over bid are clear. The Reform Bill seeks to expand the role of the Corporations and Securities Panel so that it, rather than the courts or the Administrative Appeals Tribunal, becomes the primary forum for resolving take-over matters. This should resolve take-over disputes as quickly and efficiently as possible by a specialist body largely comprised of take-over experts.

Streamlined take-over procedures and liability provisions

Streamlined procedures that must be followed by bidders and target companies will clarify the current rules, and remove anomalies and unnecessary requirements in order to reduce transaction costs and lighten the regulatory burden on business. The reforms will also ensure that the liability regime for the content of take-over disclosure documents is generally consistent with that applying to the proposed new fund-raising rules. Altogether, the proposed reforms should enhance competition in the market for corporate control.

Other reforms

Other reforms of CLERP Bill include:

– change in fund-raising rules to make access to capital easier for small business, enabling companies to raise up to A$ 5 million using an Offer Information Statement, up to A$ 2 million from 20 private investors and amounts of less than A$ 500 000 from individual ‘‘business angels’’ without a prospectus;
– a greater international focus for the accounting standard setting process, the adoption of new institutional arrangements for standard setting and the adoption of new procedures that must be followed by the standard setter when it is making or formulating accounting standards;
– in relation to directors’ duties and corporate governance, introduction of a statutory form of business judgement rule, to protect the authority

of directors in the exercise of their duties and to clarify their liability and introduction of a statutory derivative action to provide a new avenue of enforcement and action by shareholders where previously there has been a gap;
– adaptation of regulation to facilitate the more widespread use of electronic commerce.

The tax system

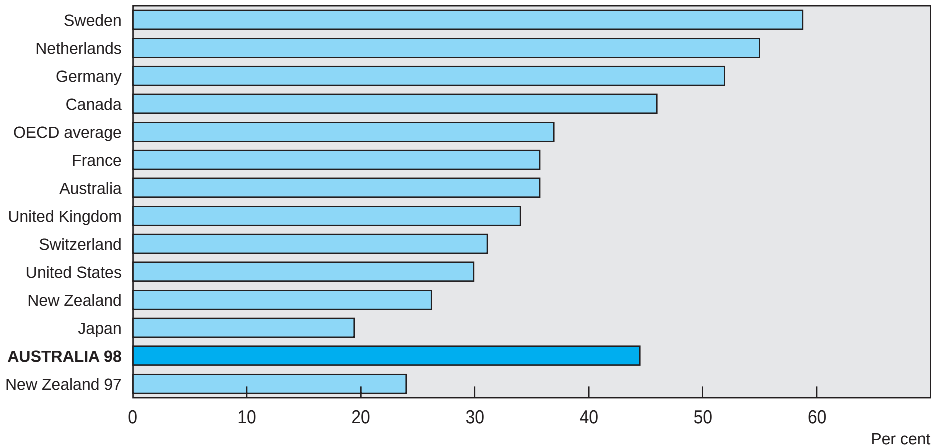
Like in other OECD countries, the Australian tax system has evolved largely in an ad hoc way over several decades. In many cases, changes to its features tend to reflect pragmatic reaction to events and the influence of group interests rather than adherence to established principles of taxation economics.[74] Over time, this haphazard approach has led to an accumulation of problems which result in a growing deviation of the system from standard objectives such as revenue security, allocative efficiency, equity and simplicity. It is therefore not surprising that tax reform is back on the government agenda. Among the difficulties raised by the current system of direct and indirect taxes in Australia, the following seem the most pressing and in need of being addressed through tax reform: high marginal tax rates, too narrow a tax base, uneven distribution of the tax burden, distortions in resource allocation, imbalances in the funding of different levels of government, and high compliance costs. These are first reviewed before discussing how to cope with them.

Problems with the current system

High marginal tax rates

Australia's present personal income tax schedule is progressive with a zero rate on the first A$ 5 400 and a top rate of 47 per cent for incomes exceeding A$ 50 000. However, average wage income is projected to move into the A$ 38 001 to 50 000 tax bracket in FY 1998-99 so that the average wage earner will face a marginal personal income tax rate of 43 per cent,[75] or of nearly 45 per cent, if the medicare levy, is included. Such a rate is one of the highest among OECD countries (Figure 21). Moreover, the welfare system is strictly targeted and means-tested, which implies that increases in the private income of social security recipients are accompanied by withdrawals of welfare payments and services. Hence, the marginal *effective* tax rates (METR), which combines the increase in personal income tax with the reduction in social security entitlements and other benefits as private income increases, can be substantially higher than the statutory marginal personal income tax rate. A study of Harding and Polette (1995) found that in 1994 high METRs were concentrated in the low to middle income

Figure 21. **Marginal income tax rates**[1]
1996, at 100% of average wage



1. Marginal tax rate for a single taxpayer covering employees' social security contributions and personal income tax.
Source: OECD, *The Tax/Benefit Position of Employees*, 1995-1996.

deciles where most social security income tests operate at present.[76] One-third of individuals in the third family income decile had METRs over 50 per cent and almost one-quarter of people faced METRs in excess of 80 per cent. In some cases METRs can approach or even exceed 100 per cent.[77] It is highly likely that high marginal effective tax rates have an adverse effect on incentives to work,[78] inducing *inter alia* people to work in the underground economy.

Narrowing direct and indirect tax bases

By encouraging tax minimisation through avoidance and evasion, high effective marginal income tax rates tend to reduce the direct tax base. The narrowness of the personal income tax base is reflected in current revenues from personal income tax and employee social security contributions of only 12 per cent of GDP – lower than in most other OECD countries – in spite of the high marginal tax rates at even modest levels of income. There is a variety of ways to avoid income taxes, among them the rather widespread use of trusts and partnerships, which facilitate artificial income splitting, and allow the concealment or artificial minimisation of income.[79] The marked gap between the company tax rate of 36 per cent and the higher personal income tax rates of 43 and 47 per cent provides an opportunity for tax arbitrage once an individual's income exceeds A$38 000. The trend to incorporation and the stronger growth in taxable business income than in taxable wage and salary income suggests that this potential for tax minimisation has been used by taxpayers.[80]

Australia's indirect taxes, which currently contribute around 45 per cent of total tax revenues of all levels of government,[81] are also characterised by narrow and insecure tax bases and high and variable rates. The most important indirect taxes of the Commonwealth are the Wholesale Sales Tax (WST), which is levied on a rather narrow range of goods only, excise duties on tobacco, fuel and alcohol and custom duties on imports. State and Territory indirect taxes include the employers' payroll tax, stamp duty, financial transactions taxes, motor vehicle taxes, gambling taxes and land taxes.[82] Of these indirect taxes, the WST – introduced in 1930 – appears particularly antiquated compared with modern goods and services taxes (GST) or value-added taxes (VAT) of all the other OECD member countries with the exception of the United States.[83] The WST exempts a large proportion of goods and all services from taxation. Three main categories of goods are taxed at rates of 12, 22 and 32 per cent; the majority are taxed at 22 per cent, including non-luxury passenger motor vehicles. Special rates are applied to beer and spirits (37 per cent), wine (41 per cent) and luxury cars (45 per cent). It is obvious that with the rising share of services in GDP – which is now at about 78 per cent – the base of the Commonwealth indirect taxes is bound to shrink further. The fact that revenues from WST grew nevertheless somewhat faster than nominal GDP over the past ten years reflects increases in tax rates as well as policy changes to expand the WST base.

The most important indirect tax imposed by States[84] and Territories is payroll tax, which is levied on the wages, salaries and benefits of employees and provides for one-quarter of State tax revenue. Although the payroll tax has the potential of providing the States with growing tax revenues, many exemptions have been introduced over time, which narrowed the tax base. A typical case is the "small firm exemption" whose thresholds vary widely between the States. Faster growth of small business than of large business over the past 10 years has helped to erode the payroll tax base, so that today less than 10 per cent of private sector firms pay payroll tax.

"Unfair" distribution of the tax burden

Many of the tax minimisation vehicles, such as trusts and partnerships are effectively only available to the better-off. Their greater capacity to save enables high income recipients to better exploit tax concessions and differing effective tax rates on classes of assets. High income recipients are also more likely to receive salaries which include superannuation contributions, fringe benefits and share options in addition to wages. The complexity of the Income Tax Act[85] implies that expert advice to keep tax payments low is expensive and therefore primarily available to high income earners.

The fairness of the tax and social security system is also undermined by the growing practice of salary sacrificing, whereby a portion of salary is taken in the form of fringe benefits. While most fringe benefits do not escape tax (due to a comprehensive fringe benefits tax introduced in the 1980s), by converting some salary to non-salary fringe benefits, a taxpayer can retain access to some social security entitlements, because of the limited coverage of fringe benefits in the income tests for such entitlements.

Distortionary effects of the tax system

Since virtually all taxes distort economic decisions, the allocative efficiency objective of taxation is to raise a given amount of revenue with a minimum of dead-weight cost (excess burden). The present Australian tax system deviates much from such requirement as it clearly distorts resource allocation in many ways and to a much higher degree than necessary. *First*, there are different effective income tax rates on various forms of saving and investment (Table 16) which distorts decision making and probably results in efficiency losses. *Second*, there is a great variety of effective retail tax rates of purchases by private consumers ranging from 4 to nearly 30 per cent.[86] Although optimal tax theory suggests that non-uniform indirect tax rates could be desirable from an efficiency standpoint,[87] multiple tax rates were introduced to raise additional revenue and are highly unlikely to reflect different price elasticities of demand so as to minimise the dead-weight loss of indirect taxes, nor are they likely to reflect negative externalities associated with the consumption of different goods. *Third*, recent estimates of the Productivity Commission (1998*c*) suggest that over 60 per cent of the first-round incidence of Australian indirect taxes fall on business inputs at different rates, which leads to distortions in the choice of production inputs and is likely to result in efficiency losses. *Fourth*, different tax systems and effective tax rates distort the choice of business form (as between companies, unincorporated businesses and trusts), business financing and the packaging of salaries in terms of wages, superannuation and a range of fringe benefits. *Fifth*, relatively high METRs probably distort work-leisure choice (particularly for secondary earners) with adverse employment effects.

Levying a great variety of indirect taxes from many business inputs appears a particularly welfare detracting feature of the present tax system. To the extent that it is not reflected in the exchange rate or in labour costs, it puts exporting industries at a disadvantage as most competitors from other OECD and non-OECD countries benefit from refunding of input taxes as the key feature of

Table 16. **Effective tax rate[1] on major asset classes for individual savers, 1992**

Asset category	Statutory personal tax rate	
	39 per cent	48.25 per cent
Interest-bearing deposit	62.4	77.2
Owner-occupied home	11.4	19.8
Negatively-geared rental property	–0.8	–0.8
Unincorporated enterprise	23.0	33.5
Local company	36.6	53.1
Investment abroad	62.9	70.4

1. Effective tax rate is measured as tax paid divided by the real income return, expressed as a percentage. In all cases inflation of 3 per cent is assumed.

Source: Pender and Ross (1993).

the prevailing VAT systems. The problem is aggravated by the hidden and highly arbitrary pattern of cascading of WST through the production process. To limit collection of the tax to the wholesale stage and to prevent the "tax-on-taxes" problem, a registration system has been designed under which raw material suppliers, manufacturers, and others businesses can register in order to purchase inputs free of tax. The registration system is complemented by separate provisions, which exempt from WST some purchases made by non-registered producers, and a system for obtaining credits or refunds where tax has been overpaid or should not have been paid. But while the extended and detailed nature of the exemptions add substantially to the complexity of the WST system and make it very difficulty to administer, the investigations of the Productivity Commission (1998*c*) suggest that virtually no firm escapes paying WST on at least some of its inputs.

Fiscal imbalances between levels of government

Under the current rules which guide the financial relations between different levels of government, the States are responsible for some two-fifth of government expenditure but raise about one-quarter of tax revenue. Hence, the States spend substantially more than their tax collections; as do local governments. At present, the imbalance between revenues and expenditures of different levels of government implies complex and inefficient fiscal arrangements. It may also carry the risk of rent-seeking behaviour of different levels of government.

Heavy compliance costs

The complexity of the Australian tax system is likely to cause relatively high compliance costs, in addition to the cost of administering the collection of

Table 17. **International comparison of administrative and compliance costs**

As per cent of tax revenue

	Compliance costs	Administrative costs	Total costs
Australia[1] (1990-91)	**12.1**	**1.1**	**13.2**
United Kingdom[2] (1986-87)	2.5	1.2	3.7
Canada[3] (1986)	5.9	n.a.	n.a.
United States[4] (1990)	3.2	n.a.	n.a.
Sweden[5] (1992)	1.3	0.7	2.0
Netherlands[6] (1990)	4.1	1.1	5.2

1. Pope (1995), includes personal income tax, employees PAYE tax, employers payroll tax, company tax and wholesale sales tax.
2. Godwin (1995), includes income tax, capital gains tax, value added tax, corporation tax, petroleum revenue tax, excise duties, stamp duties, gambling taxes and local government rate.
3. Vaillancourt (1995), includes personal income tax and payroll taxes.
4. Blumenthal and Slemrod (1995), includes Federal and state income taxes.
5. Malmer (1995), includes income tax, payroll tax, value added tax and excise duty.
6. Allers (1994), includes value added taxes, excise duties, transfer taxes, taxes on motor vehicles, personal income tax, wealth tax, succession duty, property tax and import duties.

Source: Johnson, Freebairn, Creedy, Scutella and Cowling (1997).

taxes.[88] Although the quantification of such costs are fraught with numerous difficulties so that estimates may be taken only as rough indicators of magnitude, available international comparisons suggests that, as percentage of tax revenue, they are substantially higher in Australia than elsewhere (Table 17).

Reform of the system

Objectives

From the problems with the present tax structure sketched out above, the main planks of reform should be:

– to reduce the complexity of the whole system by abolishing exemptions and loopholes of direct taxation – which also could contribute to making the system fairer – and to cut the number of indirect taxes;
– to lower the excessively high effective marginal personal income tax rates which result from the tax system's interaction with the welfare system;
– to reduce the progressivity of the direct personal tax;
– to abolish the distortionary effects of indirect taxation on production and consumption decisions by introducing a broad based consumption tax;
– to reduce fiscal imbalances between different levels of government.

The tax reform package of August 1998

The Commonwealth Government unveiled the details of a comprehensive tax reform proposal in August 1998. Of the large number of planned legislative changes, the following sketches out major features of the reform programme:

– *Indirect taxation:* The Wholesale Sales Tax is to be replaced by a goods and services tax[89] (GST), which is basically a value-added tax. A uniform tax rate of 10 per cent will apply to the consumption of most goods and services, including those which are imported. Only expenditures for health care, education, child care, and water and sewerage rates and charges will be zero-rated (GST free). The GST is a multistage tax, which is levied whenever a registered business sells goods or services to another business or a consumer. When calculating the amount of tax paid to the Tax Office, businesses will offset the tax paid on their inputs. This makes sure that the tax will be levied only on the value added by each business in the production and distribution chain, with its cost ultimately paid by the consumer. Like in most other countries, the GST is not to be levied on exports of goods and services. Very small businesses (less than A$ 50 000 annual turnover) will not have to register but may choose to do so. The tax is planned to be introduced on 1 July 2000, which will give businesses sufficient time to make themselves familiar with the new system.
– *Commonwealth/State financial relations:* States will receive all revenue[90] from the new GST – estimated at around A$ 27 billion in its first year of operation – as compensation for the abrogation of the present Commonwealth General Financial Assistance Grants to them of about A$ 18 billion per year and conditional on the abolition of nine of their indirect taxes[91] regarded as both complex and inefficient; the latter will cost over A$ 5 billion in terms of foregone revenues. The States have been guaranteed by the Commonwealth that in each of the first three years following the introduction of the GST, they will be no worse off than they would be under current arrangements. Given the expected strength of GST collections relative to the existing system of Commonwealth grants and narrowly based State indirect taxes, the State budgets are bound to improve in the future.
– *Personal income tax:* Personal income tax brackets will be lifted, which *inter alia* will raise the tax-free income threshold by A$ 600 to A$ 6 000 and make the unchanged top marginal tax rate of 47 per cent[92] become effective from A$ 75 000 instead from A$ 50 000. Below A$50 000, marginal rates of tax will be cut so that some 80 per cent of taxpayers will have marginal tax rates of 30 per cent or below. Personal income taxes will be cut by about A$ 13 billion in FY 2000-01 (14 per cent of personal income tax collections and about 2¼ per cent of GDP).

– *Family tax reforms:* Tax free income thresholds for families (including sole parents) will be raised and benefit withdrawal rates reduced, which will lower the effective marginal tax rate of low income working families from 85.5 per cent to 61.5 per cent over a substantial range of income. Under the Family Tax Initiative the tax free income threshold will be raised for families with dependent children.
– *Tax avoidance:* Specific anti-avoidance provisions targeted at tax avoidance through trusts were announced with immediate effect, with trusts forced to disclose their beneficiaries.
– *Petroleum taxes:* Effective excises payable on diesel fuel used in heavy transport and rail are to be cut from 43 cents per litre to 18 cents per litre. Marine transport will effectively be relieved of all excise on diesel and like fuels. These measures are intended to ease transport costs in rural areas in particular.
– *Fringe benefits:* The Fringe Benefits Tax provisions will be made fairer by stopping abuses of welfare entitlements and avoidance of income tax surcharges, starting in mid-2000.
– *Pensions and benefits:* Pensioners and recipients of social security and other income support will be provided with extra assistance to ensure that the price impact of tax reform does not make them worse off. Special payments will be made to older Australians to protect the value of their savings and their retirement income after the tax reform is implemented. The rate of withdrawal of entitlements under the pension income test will be cut from 50 per cent to 40 per cent, which together with reductions in marginal income tax rates, will go some way to enhancing work and saving incentives for older Australians.
– *Taxes on business:* Business costs will be cut by an estimated 3 per cent as a result of indirect tax reform. Companies and trusts will be treated in the same way for tax purposes through a redesigned "entity based" company taxation system as from FY 2000-01. The Commonwealth Government will seek to move toward a 30 per cent corporate tax rate, funded by base broadening measures.

Assessment

The Commonwealth Government's tax reform proposal addresses a great number of problems of the current regime. Not covered by the reform is the distorting and narrow based payroll tax, which is in the jurisdiction of the States. If implemented, the measures would go a considerable way toward remedying the above-listed shortcomings of the current system, the most important being the lack of a broad-based modern consumption tax. In addition, tax system complexity would be addressed by the replacement of ten complex indirect taxes with a modern GST and by foreshadowed reforms to business tax arrangements. Poverty traps, particularly for families, would be reduced because of substantial cuts in METRs. A flatter personal income tax rate scale should enhance work and saving incentives. Finally, the package provides effective revenue security for the states.

The estimated impact of the tax reform package on the Commonwealth budget is a deterioration in the underlying budget balance by A$ 4¾ billion in FY 2000-01 (¾ per cent of GDP), which will rise to A$ 7¼ billion in FY 2002-03 (Table 18). Hence, in the short run, the package would use up a substantial part of the projected underlying budget surpluses.[93] In the longer run, however, tax reform should entail substantial benefits to the operation of the economy and the sustainability of the Commonwealth and State government finances. Economic activity should be stimulated: *i)* by the new tax regime's lower effective marginal income tax rates, which should encourage incentives to work and save; *ii)* by lower

Table 18. **Estimates of the impact of tax reform on government budgets**

A$ billion

	Fiscal year			
	1999-2000	2000-2001	2001-2002	2002-2003
Commonwealth				
Direct tax				
Personal	0.72	–11.69	–11.86	–12.78
Business	0.12	1.67	0.97	0.65
Administration	0.21	1.72	4.03	2.86
Indirect tax	–0.31	–9.39	–11.53	–12.42
Other revenue	0.00	1.05	0.85	0.99
Outlays (including public debt interest)	–1.90	11.89	12.74	13.46
Impact on underlying Commonwealth budget[1]	**–1.16**	**–4.76**	**–4.80**	**–7.25**
States, Territories and local government				
Indirect tax				
GST revenue	0.00	27.20	31.96	32.81
Taxes abolished/reduced	0.00	–8.19	–12.38	–12.76
Other revenue[2]	0.00	–17.98	–17.57	–18.74
Outlays	0.00	–1.72	–1.32	–1.31
Impact on State, Territory and local government budgets[1]	**0.00**	**–0.69**	**0.69**	**0.00**

1. As a consequence of the Commonwealth's one-year interest free loan to the States in 2000-2001, the net financing requirement of the States will be unaffected by tax reform in each of the years 1999-2000 to 2002-2003. The impact on the headline balance for the Commonwealth is –A$ 1.16 billion in 1999-2000, –A$ 5.45 billion in 2000-2001, –A$ 4.12 billion in 2001-2002 and –A$ 7.25 billion in 2002-2003.
2. Principally due to the abolition of Financial Assistance Grants.

Source: Commonwealth Treasury (1998), *Tax Reform – Not a New Tax – A New System,* Overview, AGPS, Canberra.

tax compliance costs,[94] freeing resources for more productive purposes; and *iii)* by the removal of numerous distortions of the relative price system, which should raise overall economic efficiency. Johnson *et al.* (1998*a*) estimate that a comprehensive indirect tax reform alone could increase real GDP by about 3¾ per cent in the long run.[95] However, as usual, there could be some initial adverse effects of reform, stemming from the transition from the current system to the new regime. For example, economic agents might postpone expenditures for certain consumption or investment items which are expected to become cheaper from tax reform. However, other goods and services might be charged higher under the new tax system, which could induce anticipated expenditure. In addition, the fiscal stimulus inherent in the package should help cushion initial costs of adjustment to the new tax structure.

The proposed GST will not provide concessional treatment for food. This has been criticised by some groups, as food weighs particularly heavily on low income earners' budgets. However, based on international experience, concessional treatment of food would raise numerous practical problems, including the appropriate definition of foodstuffs. It is also more efficient to pursue equity goals directly through the personal income tax and social security systems rather than indirectly through concessions in consumption taxes. Important elements of the tax reform package which target lower and middle income groups, such as higher family assistance for low and middle income families, increased age pensions and other benefits for older persons, are consistent with this view. In short, there is no case on either equity or efficiency grounds for concessional treatment of food.

It is estimated that the GST would raise the consumer price level by some 2 percentage points[96] by the second year of its introduction. Such a price effect is the net outcome of the broad based taxation of final sales of goods and services, as well as of lower input prices from input tax credits under GST, the cut in high indirect tax rates for a variety of goods under WST and the abolition of State taxes.

The proposal to reduce the effective excise payable on diesel fuel used in heavy road and rail transport raises the question of how Australia intends to meet its Kyoto obligations with respect to CO_2 emissions (should the protocol be ratified). The obligations stipulate that the increase in greenhouse gas emissions from 1990-2008 be constrained to 8 per cent. The net effect of reducing the excise will depend on the use of other measures, such as eco-taxes and emissions trading to meet any obligations.

IV. Coping with population ageing

Australia's population is ageing progressively. As in other OECD countries, this is mainly attributable to the sharp decline in natality in the last three decades. The economic effects of these developments are expected to be most strongly felt when the large "baby boom" generation, born in the two decades following World War II, moves into retirement. Population ageing creates interrelated problems of three main kinds: fiscal; macroeconomic; and social. In particular, on unchanged policies it increases government outlays for public pensions and health care, causing a deterioration in budget balances. This aggravates the decline in economic growth caused by lower growth in the labour force by reducing investment and hence, the capital intensity of production. And these developments place pressure on the relationship between generations, notably by leaving future generations with an increased tax burden and smaller capital stock. The challenge for policy makers is to effect reforms which minimise these kinds of problems. OECD Ministers have agreed to take into account the principles (see Box 1) to guide such reforms enunciated in *Maintaining Prosperity in an Ageing Society* (OECD, 1998*c*) and to monitor progress in implementing them through the OECD. This chapter is part of that surveillance process.

The gravity of these problems depends in particular on the scale of population ageing and on institutional arrangements for supporting the elderly, the topics covered in the first two sections of the chapter. The main economic effects of population ageing, including those on public finances, are then discussed, followed by an examination of some aspects of government policy where reforms could facilitate adjustment. A summing up of the main conclusions closes the discussion.

The scale of the demographic problem

Australia's population age structure is changing from the traditional pyramid shape to something more like a high-rise building and the median age is rising (Figure 22). On the basis of central assumptions about fertility rates, net immigration and life expectancy,[97] the Retirement Income Modelling (RIM) Unit

Box 1. OECD principles for population ageing reforms

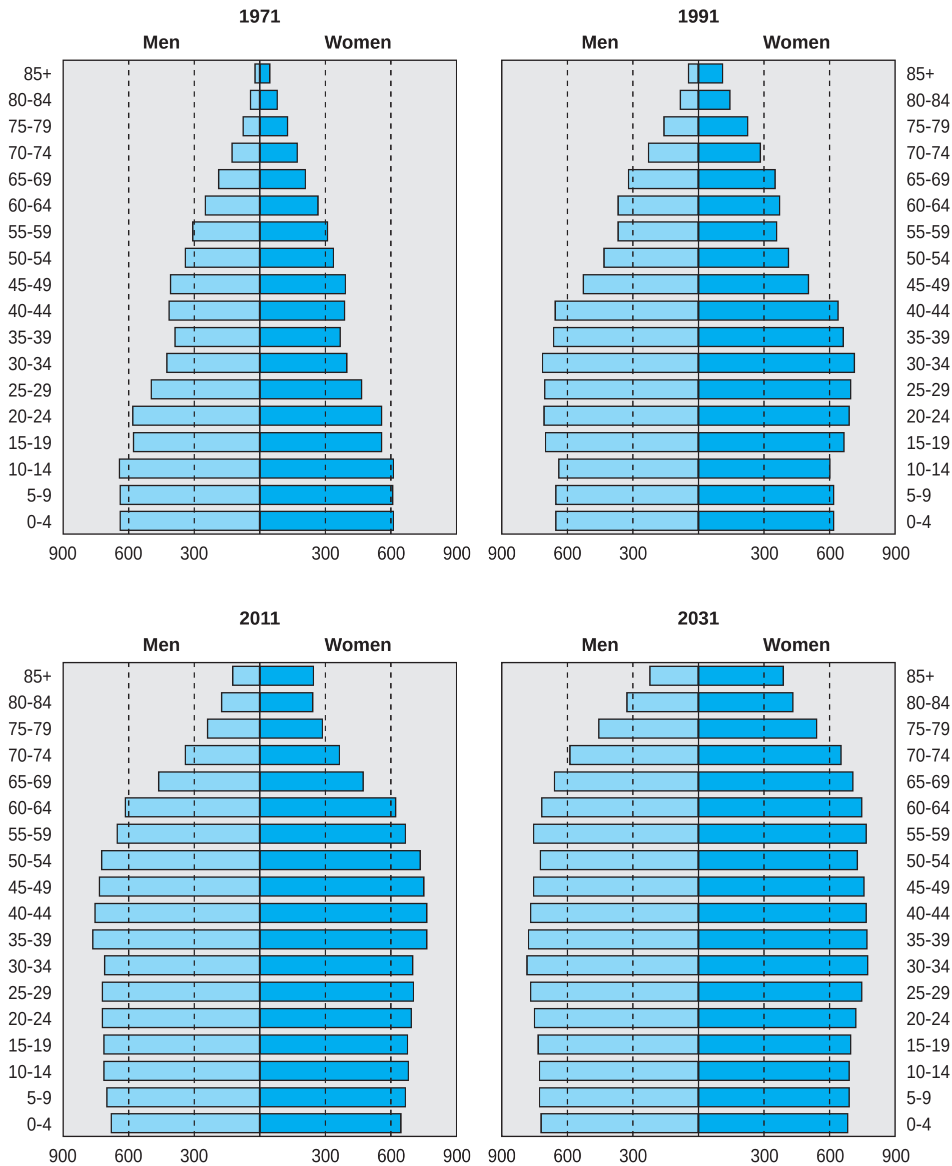
Seven principles have been identified to guide reforms aimed at ensuring that the way societies transfer resources to a rapidly growing number of retired people creates neither major economic nor social strains:

1. Public pension systems, taxation systems and social transfer programmes should be reformed to remove financial incentives to early retirement, and financial disincentives to later retirement.
2. A variety of reforms will be needed to ensure that more job opportunities are available for older workers and that they are equipped with the necessary skills and competencies to make them.
3. Fiscal consolidation should be pursued, and public debt burdens should be reduced. This could involve phased reductions in public pension benefits and anticipatory hikes in contribution rates.
4. Retirement income should be provided by a mix of tax-and-transfer systems, funded systems, private savings and earnings. The objective is risk diversification, a better balance of burden-sharing between generations, and to give individuals more flexibility over their retirement decision.
5. In health and long-term care, there should be a greater focus on cost-effectiveness. Medical expenditure and research should be increasingly directed to ways of reducing physical dependence, and explicit policies for providing care to frail older people should be developed.
6. The development of advance-funded pension systems should go hand-in-hand with that of a strengthening of the financial market infrastructure, including the establishment of a modern and effective regulatory framework.
7. Strategic frameworks should be put in place at the national level now in order to harmonise these ageing reforms over time, and to ensure adequate attention to implementation and the build-up of public understanding and support.

projects that the median age of the population will rise from 34.3 years presently to 44.1 years in 2051. Growth in the working age population (defined in Australia to be aged 18-64) is projected to slow from an annual average rate of 1.3 per cent in the current decade to 0.2 per cent in the 2020s while growth in the elderly population (65+) is expected to rise to a peak of 3.1 per cent per year in the 2010s (Table 19). Overall, growth in Australia's total population is predicted to slow progressively to just 0.3 per cent per annum in the 2040s. These projections imply reductions in the proportions of the population aged less than 18 and 18-64 and a steep rise in the proportion aged 65 and over (Figure 23).

The aged dependency ratio (*i.e.* the ratio of people aged 65 and over to those of working age) rises in these projections from 18 per cent in 1997 to 40 per cent by the year 2051 (Figure 24). In other words, the number of people of working age for each person aged 65 and over is expected to decline from 5.6 to 2.5. A

Figure 22. **Ageing Australia**[1]



1. In thousand.

Source: RIM Unit, Commonwealth Treasury of Australia.

Table 19. **Population growth**

Average annual rate, per cent

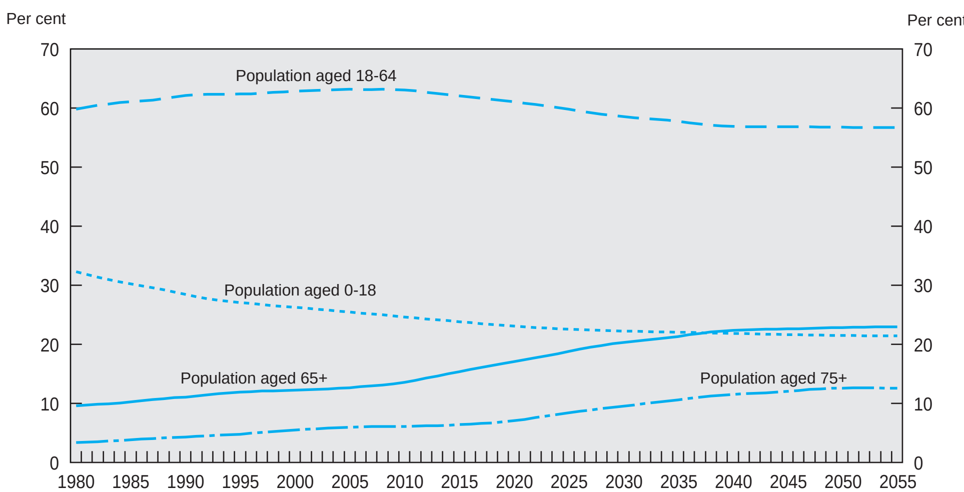
	Aged 18-64	Aged 65+	Total population
1981-1990	1.9	3.0	1.5
1991-2000	1.3	2.2	1.2
2001-2010	1.0	2.0	0.9
2011-2020	0.4	3.1	0.8
2021-2030	0.2	2.4	0.6
2031-2040	0.1	1.4	0.4
2041-2050	0.3	0.5	0.3

Source: RIM Unit, Commonwealth Treasury of Australia.

better indication of the scale of the long-term challenge of funding retirement and age-related services can be obtained by considering developments in the ratio of persons aged 65 and over to the actual number of workers,[98] as it is they who pay the bulk of taxes. While this ratio is also projected to double by the middle of next century, the level attained means that eventually there will be less than two workers per person aged 65 and over. This ratio also provides a better indication of the total funding pressures which may come to bear on government than the

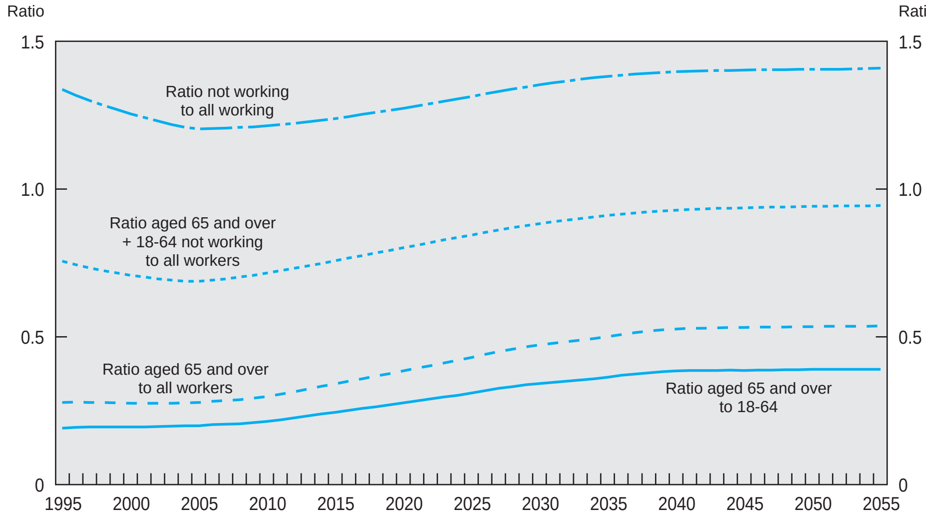
Figure 23. **Demographic projections, by age sub-group**

Per cent of total population



Source: RIM Unit, Commonwealth Treasury of Australia.

Figure 24. **Dependency ratios**



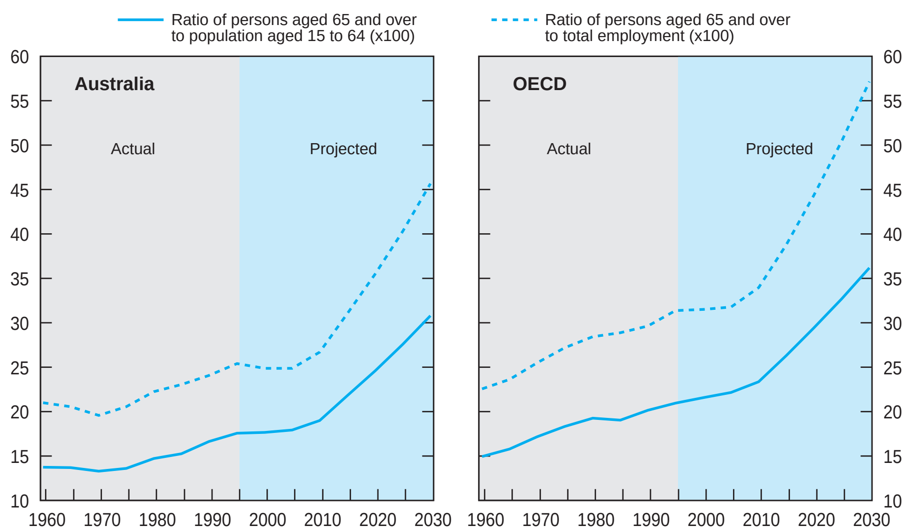
Source: RIM Unit, Commonwealth Treasury of Australia.

total dependency ratio (the ratio of persons not working to working) because the cost to government of an aged person considerably exceeds that for a young person: indeed, an aged person costs all governments 2.3 times as much as a young person and for the Commonwealth government the ratio is 4:1 (Gallagher, 1995).

These projections are not greatly affected by plausible changes in the underlying assumptions. In particular, increased immigration would only have a small effect because it only accounts for a modest part of population growth in Australia and the age structure of immigrants is quite similar to that of the total population.[99] For example, an increase in net immigration from 70 000 per year (the central assumption) to 90 000 would only reduce the aged dependency ratio attained in 2051 by 1 percentage point. Similarly, stable instead of rising life expectancy would lower the aged dependency ratio reached in 2051 by less than 1 percentage point. The ageing of Australia's population is therefore inevitable, mainly depending on past demographic developments.

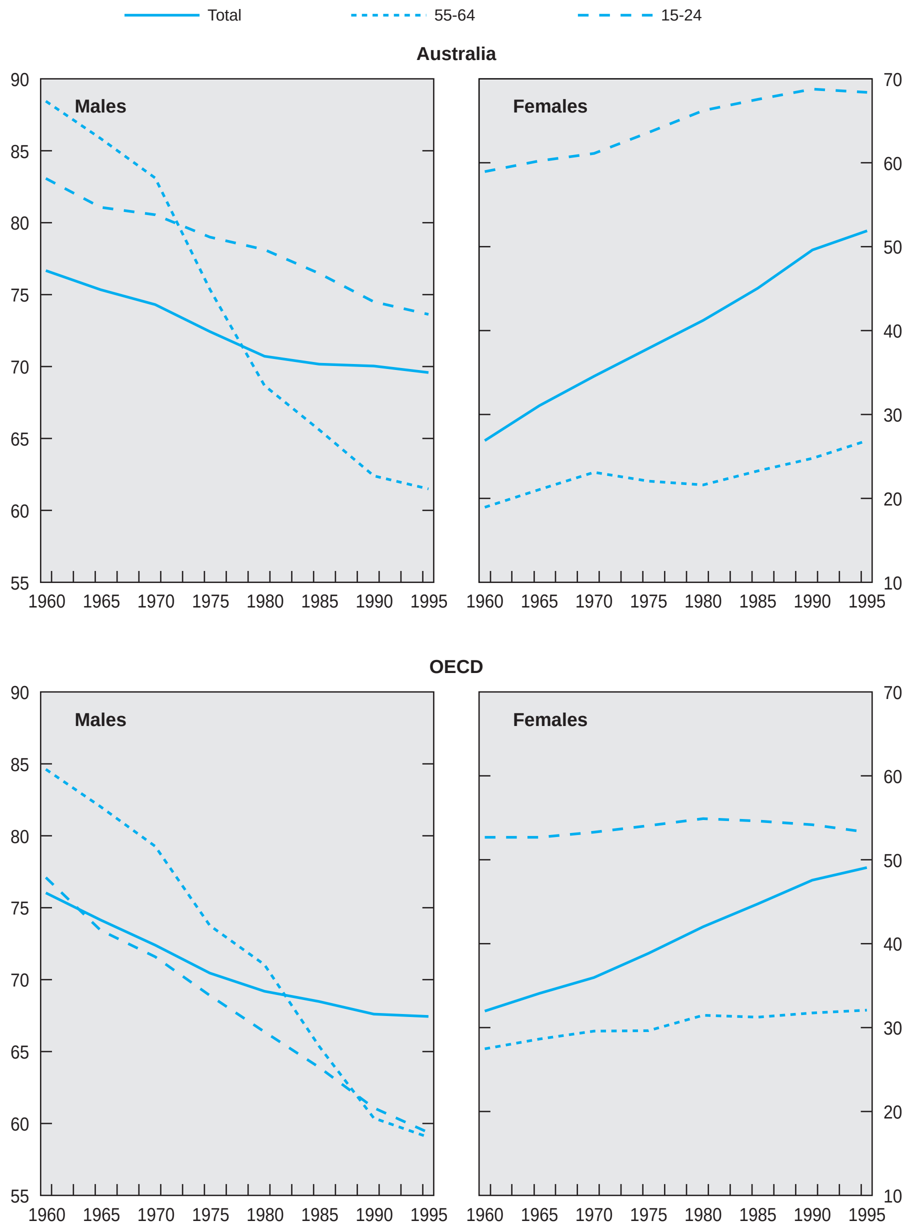
The factors which underpin such an evolution – the ageing of the baby boom generation, the small generations which follow and increasing longevity – are also common to other OECD countries. For the OECD as a whole, the aged dependency ratio is projected to rise by 75 per cent between 1995 and 2030, similar to the increase projected for Australia on the OECD's standardised assumptions (these are summarised in Annex 1)[100] (Figure 25). This would leave Australia with an age dependency ratio about 15 per cent lower than the OECD average. A slightly greater increase in the ratio of the population aged 65 and over to employment is projected for both Australia and the OECD as a whole (see Figure 25), despite the assumption that the unemployment rate falls to 5 per cent from 2005 onwards. This reflects declines in labour force participation rates based on an extrapolation of recent trends. Participation rates in both Australia and the OECD have fallen sharply for males aged 55 to 64 and 15-24, outweighing the increase for females (Figure 26).[101] The smaller decline in participation rates for older males in recent years reflects more buoyant economic activity, while the rise in rates for older females reflects the ageing of generations with greater prior labour force experience. Overall, the proportion of the population in employment is projected to continue to rise until 2005 but to fall steeply thereafter, reaching a little over 40 per cent in Australia and slightly less for the OECD by 2030 (Figure 27).

Figure 25. **OECD dependency ratios: an international comparison**



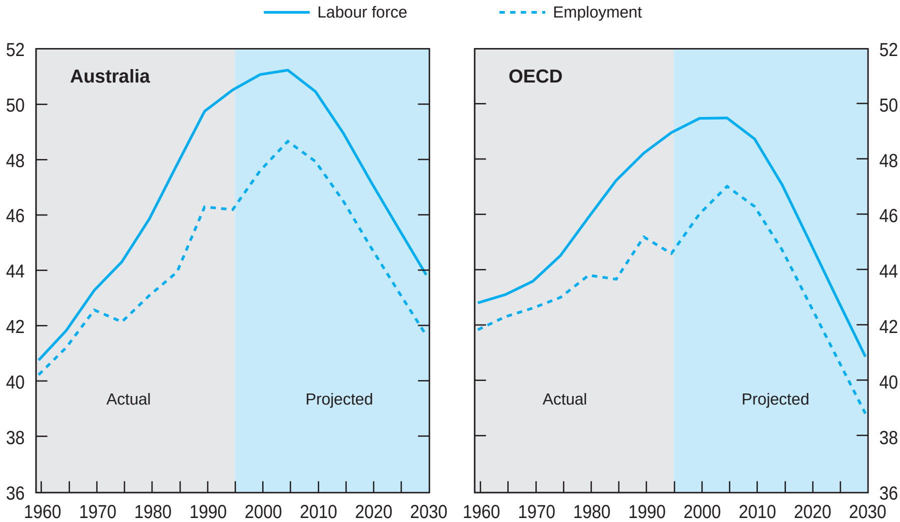
Source: OECD Secretariat.

Figure 26. **Labour force participation rates**



Source: OECD Secretariat.

Figure 27. **Labour force and employment shares in the total population**



Source: OECD Secretariat.

Institutional arrangements for supporting the elderly

Population ageing will increase transfers to the elderly. The scale and nature of this increase will depend on institutional arrangements for supporting the elderly, notably in the form of retirement income and subsidies for health-care costs. These arrangements are described in this section.

Retirement income

Retirement income can be considered to comprise three main components in Australia.[102] The first is the targeted age pension, which provides a safety net and is financed out of general taxation. The second is distributions from pension funds (known locally as superannuation funds) financed by employment related contributions mandated by the Superannuation Guarantee. And the third is voluntary savings, which include sums voluntarily placed in superannuation funds, the purchase of owner-occupied housing and other private savings. These arrangements are similar to those in most other OECD countries except that the second pillar is generally funded and managed privately in Australia but publicly managed on a pay-as-you-go basis in most other countries. Each of the pillars is discussed below followed by a brief description of the regulation relevant to superannuation funds.

Age pension

The age pension is a non-contributory flat-rate entitlement to which persons continuously resident in Australia for at least 10 years become eligible when they attain the qualifying age, subject to meeting income and assets tests (Table 20). To qualify, men must be 65 years or older and, since July 1997, women must be 61 years or older.[103] The minimum qualifying age for women is being increased by six months at two-year intervals until January 2014, when it will be 65 years.

The age pension is adjusted every six months in line with movements in the Consumer Price Index (CPI). In addition, in 1997 the Government also introduced legislation to maintain the single rate of pension at no less than 25 per cent of Male Total Average Weekly Earnings.[104] This is the first time a government has explicitly committed itself to implementing the benchmark through legislation. The pension for an aged pension couple (combined) is 1.6 times that of the single age pension. These replacement rates are comparable to those for first pillar arrangements in many other OECD countries. In September 1998, the single rate of pension was A$ 357 per fortnight and the married rate was A$ 596. Net of tax, this represented a replacement rate for a single person who had been earning average weekly ordinary (*i.e.* full) time earnings of 32 per cent of final salary.

The rate of pension is means tested on the basis of a person's income or assets, whichever gives the lower rate of pension. Under the income test, the pension is reduced by 50 cents[105] for every dollar that income exceeds the allowable limits.[106] Currently an individual may receive up to A$ 100 each fortnight and still receive the maximum age pension (couples A$ 176 combined). They cease to receive any payment if their fortnightly income exceeds A$ 825.40 (A$ 1 379.20 for a couple). Under the assets test, the pension is reduced by A$ 3 per fortnight for every A$ 1 000 of assets over the allowable limits. The asset limits are higher for couples and for non-homeowners. Owner-occupied housing is exempt from the assets test.

Pension payments are subject to personal income tax but a pensioner rebate is available which fully exempts full-rate pensioners from income tax and provides partial exemption for part-rate pensioners.

The Superannuation Guarantee[107]

In the mid-1980s, less than one half of the labour force was covered by occupational superannuation (Table 21). Coverage was much higher in the public sector than in the private sector. Both the government and unions considered that

Table 20. **Features of Australian age pension**

Established	1908
Contributions	Non-contributory
Funding	Pay-as-you-go from general Government revenue.
Benefits	As at September 1998, the maximum pension for a single person was A$ 357.30 per fortnight (A$ 9 290 per annum) and for a couple A$ 596.20 per fortnight (A$ 15 501 per annum). Benefit levels are adjusted in line with the Consumer Price Index every six months. In addition, legislation requires the Government to maintain the single rate of pension at not less than 25 per cent of Male Total Average Weekly Earnings. Rental assistance for private renters, subject to maximum limits and payment of rent above minimum threshold.
Eligibility/coverage	Eligibility is subject to residency, age and means tests. There is no requirement to have retired from paid work. There are approximately 1.2 million age pensioners and 391 000 service pensioners plus dependants.
Residency test	10 years residence in Australia required before eligible (unless benefit from bilateral Social Security Agreement).
Age test	65 for males; currently 61 years for females (being progressively increased to 65 for females, *i.e.* by 1 July 2013). 5 years earlier for service pensions.
Means tests	Subject to both income and assets tests. The test that gives the least amount of pension is applied. *Income test* Above income test threshold (currently A$ 100 per fortnight for singles, A$ 176 for couples), payment is reduced at the rate of 50 per cent for each additional dollar of income. (The tax reform package proposes to reduce this to 40 per cent.) Deeming rules apply to determine income from financial investments; 3 per cent for the first A$ 30 400 of assets of a single person and A$50 600 for a couple and 5 per cent on the remainder of assets. *Assets Test* Pension reduced by A$ 3 per fortnight for every A$1 000 in assets over the thresholds, currently: Single homeowner A$ 125 750 Single non-homeowner A$ 215 750 Couple homeowner A$ 178 500 Couple non-homeowner A$ 268 500 The family home and lifetime and life expectancy income streams with specific characteristics are not included in the assets test.
Taxation	Age pension payments are included in taxable income. Age pensioners are entitled to a tax rebate sufficient to cover the tax on the full-rate pension and the income-free threshold. The amount of this rebate is reduced at the rate of 12.5 cents in each dollar in *taxable income* over the sum of the full-rate pension and the income test free threshold.
Administration and costs	The direct administration costs are estimated to account for 1.2 per cent of total age pension (and wife pension) outlays.

Source: Commonwealth Department of Family and Community Services.

Table 21. **Coverage of occupational superannuation**

Occupation	Private		Public		Total	
	1986-87	1993-94	1986-87	1993-94	1986-87	1993-94
Mining	71.9	96.4	92.9	100.0	73.6	96.6
Manufacturing	44.6	96.0	54.3	99.7	45.1	96.1
Electricity, gas, water	85.7	98.2	79.6	98.1	79.9	98.1
Construction	41.3	91.9	62.9	98.9	45.3	92.5
Wholesale trade		93.2		98.2		93.2
Retail trade	23.6	81.8	62.2	87.2	23.9	81.8
Hospitality	n.a.	87.6	n.a.	97.1	n.a.	87.6
Transport and storage		94.4	65.5	99.4		96.4
Communication	35.7	87.3	91.7	98.5	62.9	97.8
Finance		83.9		99.8		88.0
Property and business services	35.2	90.0	74.3	99.5	41.0	90.9
Government administration and defence				96.9		96.9
Education		85.2	74.2	96.8	74.2	94.2
Community	18.1	89.9	50.7	93.5	39.2	91.6
Recreational		81.0		97.5		84.3
Personal and other	10.7	88.3	41.5	99.6	13.1	92.3
Total	31.8	89.4	63.4	97.0	41.6	91.5

Source: Bateman, H. and J. Piggott (1997).

greater coverage was required so that retirees could have higher living standards in the future – too many people were relying exclusively on the age pension, which was only intended to provide a safety net. At the same time, the government and unions wanted to reduce the effects of wage rises on inflation and the balance of payments. Accordingly, in the context of the Accord in 1987 they agreed a wage increase (6 per cent) half of which was to be paid in the form of employer superannuation contributions on behalf of employees. Following difficulties in ensuring that award superannuation contributions were actually paid by employers and the refusal by the Australian Industrial Relations Court to rule in favour of a further increase, the government legislated in 1992 the Superannuation Guarantee (Table 22). This scheme requires employers to make superannuation contributions on behalf of their employees to complying superannuation funds, which are frequently industry based. Employers who fail to do so are subject to the Superannuation Guarantee Charge (SGC), which is greater than the SG contributions as it consists of the employer's individual shortfall, an interest component and an administration fee. In addition, the charge is not a tax deductible business expense (SG contributions are tax deductible within the age-based limits). The SGC is paid to the Australian Tax Office, which then transfers the

Table 22. **Features of the Superannuation Guarantee**

Established	1992
Contributions (by 2002):	9 per cent employer (being phased in over the period to 2002)
Funding	Fully funded Individual accounts Many private funds Few investment restrictions
Benefits:	Defined contribution or defined benefits Fully vested, and preserved to aged 55 (being increased to 60) No early withdrawals Choice of lump sum, pension, annuity – tax incentives to encourage income streams
Statutory coverage:	All employees aged 18-70 with earnings > $A450 per month Self employed not covered
Taxation	Employer contributions tax deductible Fund income (contributions and earnings) and benefits taxed at concessionary rates
Administration and costs	Perceived to be complex. Member protection rules for workers contributing small amounts
Safety net:	Public age pension provided to all elderly residents, subject to income and assets means tests

Source: Bateman, H. and J. Piggott (1977).

shortfall and interest components to the chosen fund of the employee. Almost all employers pay the required contributions rather than the Charge. Contribution rates were initially set at 3 per cent, rising progressively to 9 per cent by 2002. Increases in contribution rates during the early years were lower for small employers.

The Superannuation Guarantee applies to most workers, the main exceptions being employees earning less than A$ 450 per month and part-time employees under 18.[108] Low wage employees are excluded on the grounds of high relative administrative costs for small amounts. The Government has announced that it will give workers earning between A$ 450 and A$ 900 per month the option of opting out of compulsory superannuation in favour of higher wages or salary. However, legislation for opting out of superannuation arrangements has not been passed. Following the introduction of the Superannuation Guarantee, the proportion of workers covered by superannuation arrangements has risen markedly, to over 90 per cent (see Table 21).

Employer contributions made under the Superannuation Guarantee must be fully vested (*i.e.* the member is entitled to all accrued benefits) and fully funded in an approved fund.[109] Benefits must remain in the fund until retirement and the attainment of the statutory age for access to them (the preservation age) except in limited circumstances.[110] The preservation age is currently 55, but will be increased progressively to 60 between 2015 and 2025. This is being done to reduce the scope for individuals to dissipate superannuation benefits before reaching age pension age and thereby maximise their age pension entitlements; this practice is known in Australia as ‘‘double dipping’’. There is an indexed cap on earnings subject to the Superannuation Guarantee, which was A$ 94 520 in FY 1997/98, about 2½ times average earnings.

Contributions paid by the employer are tax deductible, just as other wage and salary payments. However, funds must pay a concessional tax in respect of contributions received. Fund earnings and benefits are also taxed concessionally (Table 23).

Superannuation benefits may be taken as a lump sum, a retirement income stream or any combination. Most benefits are taken as lump sums (Table 24). Insurance and Superannuation Commission (ISC) data for 1992/93 show that 84 per cent of the value of benefits was paid as lump sums. However, almost half of lump sums are transferred to other superannuation funds or rolled over in the same fund; this mostly occurs with large lump sums. Transfers and rollovers are generally used to buy retirement income streams known as *allocated pensions*. These entail regular drawings from an account containing a retirement accumulation which is subject to legislated annual limits. The maximum withdrawal rate would empty the account by age 80 while the minimum rate never liquidates the account. Allocated pensions are more attractive than lifetime annuities because

Table 23. **The taxation of superannuation**[1]

Type of scheme	Type of contribution	Contributions	Fund income	Benefits[2]
Funded	Employer	Tax deductible up to age-based contribution limits		Lump-sum: – Undeducted contributions, untaxed
	Employee	Limited tax deductions if no employer support Rebate if earnings below $31 000 Otherwise not tax deductible or rebatable	Contributions: Deductible contributions taxed at 15-30 per cent. Otherwise not taxed	– First part of taxable benefit, untaxed (A$ 90 474 in FY 1997/98)[3] – Excess to RBL (A$454 718 in FY 1997/98)[3] taxed at 15 per cent – Excess over RBL taxed at highest personal marginal tax rate
	Self-employed	Limited tax deductions	Earnings: taxed at 15 per cent	Pension/annuity: – UPP untaxed[4] – Up to RBL (A$909 435 in FY 1997/98)[3] taxed as ordinary income less 15 per cent rebate[5] – Excess over RBL, taxed as ordinary income, no rebate
Unfunded[6]	No contributions		No income	Lump sum: – As above + 15 per cent for benefits below RBL Pension/annuity: – as above with no rebate

1. Transitional provisions ignored.
2. Only applies where preservation age of 55 is reached. Otherwise higher taxes on benefits.
3. Indexed to average weekly ordinary time earnings.
4. UPP – the undeducted purchase price – refers to that part of the purchase price of a pension or annuity which has not been claimed as a tax deduction.
5. Rebate equal to 15 per cent of taxable annuity/pension.
6. Including funded but constitutionally-protected schemes.

Source: Bateman, H. and J. Piggott (1997).

Table 24. **Superannuation benefits paid by type of fund**

A$ million, 1992/93

	Benefits paid					
	Pensions	Lump sum	Annuities	Transfers or rollovers	Death or disability payments	Total benefits
Type of fund						
Public sector	1 690	3 093	0	2 390	549	7 721
Private sector						
Single-employer sponsored	134	2 906	12	3 132	259	6 444
Multi-employer sponsored	47	1 285	0	944	117	2 394
Personal	19	317	1	167	15	518
Total	1 890	7 600	13	6 634	939	17 077

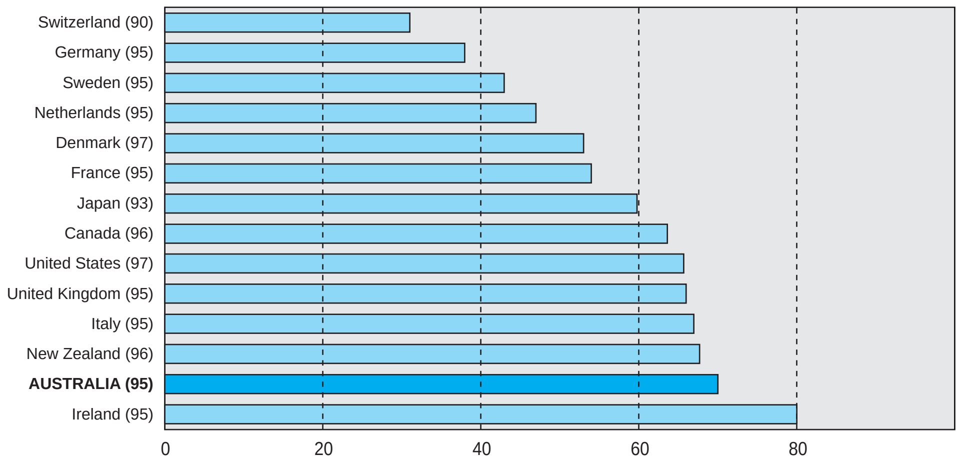
Source: Insurance and Superannuation Commission, *Superannuation Bulletin,* 1992-93, Table 5.

beneficiaries have greater flexibility to take extra income when exceptional expenses arise (such as an operation in a private hospital, moving house or replacing the car) and because the purchase price is not inflated by adverse selection problems.[111] In addition, allocated pensions enable beneficiaries to maximise age pension receipts later in life. Amounts left in an allocated pension account at the end of life form part of the deceased person's estate.

Voluntary savings

There are two main tax-preferred channels for voluntary saving in Australia – owner-occupied housing and superannuation – and not surprisingly, these are the vehicles through which Australians do most of their saving. The most significant other vehicle for savings is negatively-geared property investment. Approximately 70 per cent of households own their principal residence, a high rate of owner-occupation by international standards (Figure 28), and around one half of superannuation members make voluntary contributions, with the average rate of contribution being about 5¾ per cent (Table 25). Members are encouraged through tax incentives to retain their benefits in the superannuation system until at least the preservation age is attained. So as to reduce further the possibilities for double dipping, all contributions and earnings accruing from 1 July 1999 will have to be retained in the superannuation system at least until preservation age. This measure, together with the increase in the preservation age, will contribute to a significant reduction in the proportion of superannuation assets which are not preserved (Figure 29).

Figure 28. **Share of owner-occupied housing in selected OECD countries**[1]



1. Data in brackets is the census year.

Source: National sources and OECD Secretariat.

Total retirement income

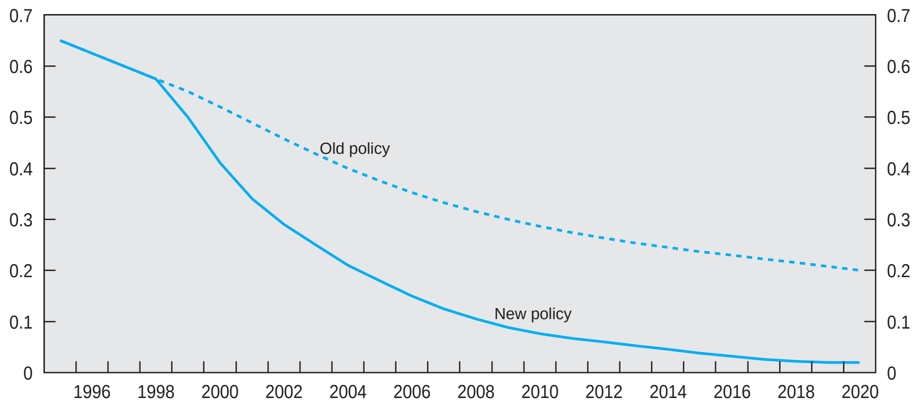
At present, the major sources of retirement income for persons eligible for pension benefits are the age- and age-related pensions and home ownership. In 1997, over half of persons old enough to qualify for an age pension received a full pension and a little over 80 per cent received at least some pension. And 69 per cent of age pensioners were homeowners, mostly with little or no mortgage

Table 25. **Employee superannuation contributions**

	Members making voluntary contributions %
Males	56.2
Females	41.0
Full time	54.7
Part time	25.4
Public sector	71.4
Private sector	41.1
Total	49.7

Source: Superannuation, Australia, November 1993, ABS 6319.0, Table 12, page 18.

Figure 29. **Proportion of superannuation assets not preserved**

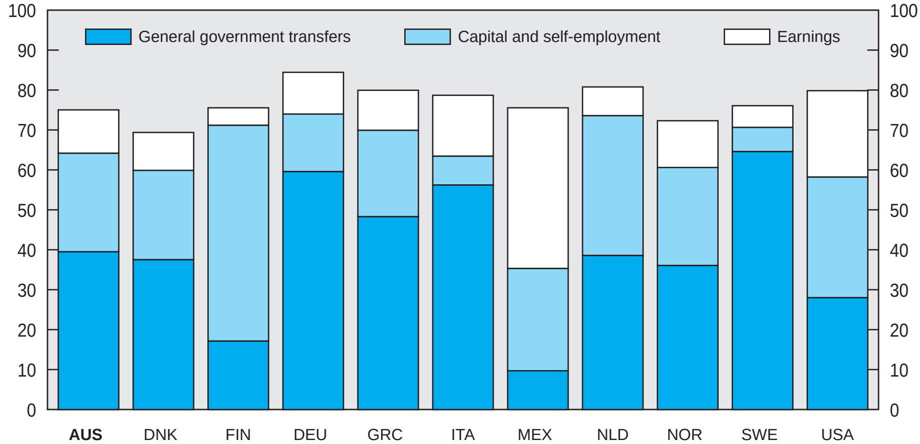


Note: Benefits from superannuation assets which are not preserved are taxed concessionally even if taken before the preservation age.
The preservation age is the age until which all other benefits must be retained in a superannuation scheme to receive concessional tax treatment.
Source: RIM Unit, Commonwealth Treasury of Australia.

debt. For most members of this group, imputed rental income is substantial in relation to other sources of income.[112] Most age pensioners receive some income from financial investments but only about 10 per cent get an income from superannuation. Excluding imputed rental income on owner-occupied housing, the average income of retired households (*i.e.* not receiving wage or business income, not in the labour force and aged 55 or more) was 27 per cent of that of prime-age worker households (*i.e.* receiving wage or business income, aged 25-54). The age and equivalent pensions[113] accounted for a little over one half of retired households' income. For couples aged 65-74, total disposable income (net of taxes) was three-quarters of that for couples aged 55-64, similar to the proportion in many other OECD countries (Figure 30). This shows that older people, on average, rely on alternative income sources in addition to public pensions so as to generate a suitable standard of living.

The contribution of superannuation to retirement income is set to grow markedly owing to the Superannuation Guarantee. The RIM Unit projects an increase in average gross annual retirement income from superannuation from A$ 2 012 for people presently retiring to A$ 10 214 (in constant FY 1997/98 dollars) for people retiring in FY 2015/16 (Table 26). However, allowing for reductions in the means-tested age pension, the extra average income from superannuation

Figure 30. **Quasi replacement ratios for persons aged 65-75**
Year around 1995, levels and composition



Note: The values compare total disposable income of people age 65-75 with total disposable income of people aged 55-64. Aggregates are calculated net of taxes.
Source: OECD Secretariat.

only rises to A$ 6 407 for retirees in FY 2015/16; the extra income for present retirees is unaffected by the age pension means test, falling within the test-free area. The combination of both means testing and tax almost halves the average extra income from superannuation for people retiring in FY 2015/16.[114]

As the Superannuation Guarantee matures, retirement income replacement rates will rise significantly, especially for low income persons. The RIM Unit

Table 26. **Superannuation income for persons retiring at different times**

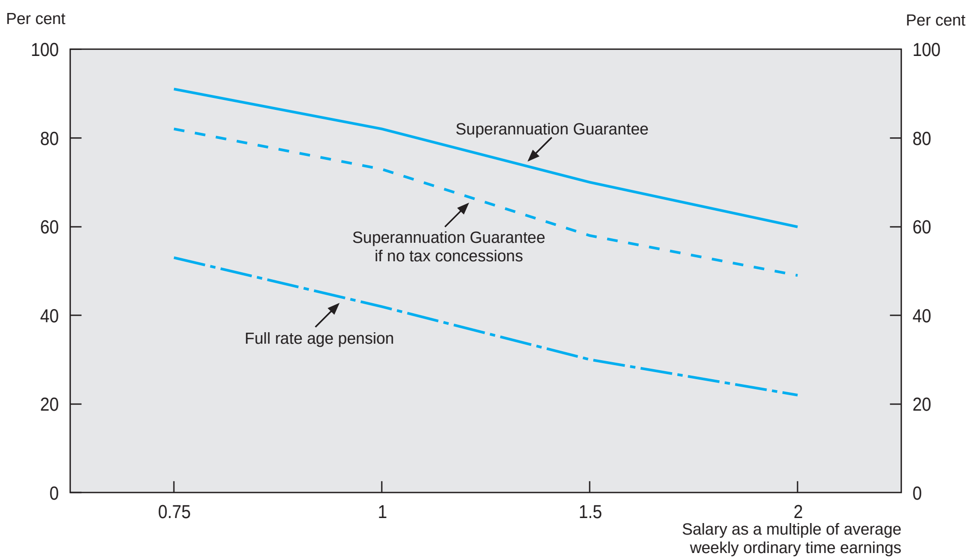
	Average super payout (A$)	Ratio of payout to average financial assets of retired	Estimated annual extra income A$	Extra income after reduction of pension A$	Extra income net of tax and of pension reductions (A$)
1997/1998	52 241	0.9	2 012	2 012	2 012
2000/2001	69 484	1.2	2 874	2 737	2 737
2005/2006	93 083	1.3	4 054	3 327	3 191
2010/2011	115 051	1.3	5 153	3 876	3 662
2015/2016	216 281	1.9	10 214	6 407	5 504

Source: RIM Unit, Commonwealth Treasury of Australia.

estimates that for a couple with a single earner on average weekly ordinary time earnings (AWOTE) throughout a 40 year working life, the replacement rate relative to expenditure in the final working year will be a little over 80 per cent in 2032 (Figure 31). This compares with a replacement rate of a little over 40 per cent in 2032 for a full-rate age pension alone.[115] Replacement rates in the matured system are inversely related to earnings owing to means testing of the age pension and progressive income tax rates; someone earning 75 per cent of AWOTE has a replacement rate of over 90 per cent, while the rate falls to 60 per cent for someone earning twice AWOTE. Concomitantly, the proportion of retirement income derived from the age pension is inversely related to earnings.

A strength of these arrangements is that income sources are diversified. This reduces the risk of total retirement income differing markedly from what had been expected as the components of retirement income are not perfectly correlated. In particular, the age pension is subject to the political risk that benefits could be altered: the budgetary problems caused by population ageing could lead to benefit cuts; on the other hand, electoral pressure from the increasingly elderly electorate could mean benefits are not cut and indeed, could even be increased. Superannuation income, on the other hand, is subject to market risk: the value of superannuation assets available to pay for consumption in retirement

Figure 31. **Replacement rates of expenditure in the final working year**



Source: RIM Unit, Commonwealth Treasury of Australia.

depends on investment returns. This risk is borne by beneficiaries in defined contribution (DC) schemes, the most common arrangement, and by sponsors in defined benefit (DB) schemes. Because the age pension is means tested, it is automatically inversely related to market returns, reducing the variation in expected retirement income for persons with DC superannuation schemes and who expect to receive a part pension. For persons whose DC superannuation benefits are likely either to have no effect on age pension entitlements or to disqualify them from receiving the age pension there is still risk diversification, albeit less than for part pensioners. The small DC superannuation benefits of full pensioners still depend on market returns, which have little relation to political risk, while persons with large expected DC superannuation benefits still have the safety net back-up of the age pension should market returns turn out to be very low. Investment in owner-occupied housing also reduces the risk of financing expenditures in retirement as imputed rental returns are perfectly correlated with implicit outgoings for rent.

Regulation,[116] size and performance of superannuation funds

The Superannuation Industry (Supervision) Act 1993 stipulates rules in the following areas with which superannuation schemes must comply:

- management of the trust structure (the predominant form in which superannuation is offered), with trustees charged with prudent management on behalf of fund members;
- vesting and preservation;
- requirements that member benefits be fully secure and not restricted by lien; and
- obligations to inform members through annual reports detailing benefits, fees and charges, investment strategy and the fund's financial position.

Since its inception in July 1998, the Australian Prudential Regulation Authority (APRA) has been responsible for ensuring that superannuation schemes comply with these rules, except those pertaining to disclosure, and more generally with government retirement income policies. Superannuation which takes the form of a deposit or other capital backed product is prudentially regulated on the same basis as similar products. However, where the superannuation benefits promised depend on market returns, as is generally the case, the focus of regulation is on ensuring that superannuation funds have risk management strategies and conduct, and administrative systems, which are appropriate to their purpose and which accord with both government requirements and with the governing investment policies contained in the trust deed. Regulations pertaining to consumer protection and market integrity have been administered by the Australian Securities and Investments Commission (ASIC) since its inception in July 1998.

The assets of superannuation funds are growing quickly in Australia, having more than doubled between 1990 and 1996 (Table 27). By comparison, the average increase in the OECD over this period was only 11 per cent. Pension fund assets in Australia are now considerably higher than in many OECD countries, notably in continental Europe, but are lower than in the United States, the United Kingdom, the Netherlands and Switzerland.

Long-term returns on pension fund portfolios in Australia, on average, have been rather low by international comparison over the period from 1967 to 1990 (Table 28). A factor contributing to this outcome may have been that regulation was used to reduce risk by restricting asset choice in Australia up until the mid 1980s. Australia since has followed other countries in adopting a "prudent

Table 27. **Assets of pension funds**

As per cent of GDP

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia[1]	**..**	**28.9**	**30.3**	**33.0**	**37.3**	**41.3**	**43.2**	**45.3**	**47.7**	**53.9**
Austria	..	..	..	..	0.5	0.5	0.6	0.8	0.9	1.2
Belgium	2.4	2.4	2.7	2.5	2.7	2.5	2.8	3.1	3.7	4.1
Canada	26.4	26.8	28.7	30.0	32.0	32.8	35.7	37.7	41.0	43.0
Czech Republic	..	..	..	..	..	..	..	0.1	0.2	0.5
Denmark[2]	10.9	10.3	12.2	12.4	12.8	16.6	19.3	18.9	21.1	23.9
Finland[3]	19.7	20.3	21.0	25.1	30.9	34.7	38.1	39.3	39.6	40.8
France	..	..	..	3.4	3.5	3.2	3.3	3.8	4.3	5.6
Germany[4]	3.4	3.1	3.4	3.3	3.5	5.1	5.5	5.4	5.2	5.8
Greece	..	..	6.2	6.5	7.1	6.9	8.0	10.3	10.9	12.7
Hungary	..	..	..	..	..	..	..	0.2	0.2	0.2
Ireland	..	29.0	34.0	31.5	35.2	30.6	40.1	38.9	40.5	45.0
Italy	..	..	..	..	0.6	1.1	1.7	2.2	2.6	3.0
Japan	38.0	33.7	31.8	37.4	37.9	37.3	41.0	49.4	40.6	41.8
Korea	3.2	3.4	3.0	3.1	2.9	3.2	3.4	3.3	3.1	3.3
Luxembourg	19.5	16.9	18.5	19.7	20.5	18.8	18.7	20.3	19.6	19.7
Netherlands	45.5	72.7	81.6	78.4	81.1	72.1	83.5	85.0	86.6	87.3
Norway	3.8	3.9	4.2	4.6	5.1	4.7	5.7	6.6	6.6	7.3
Portugal	..	..	1.4	1.9	3.2	2.9	5.6	7.3	8.0	9.9
Spain	..	0.1	0.4	1.5	3.0	2.9	2.1	2.3	3.1	3.8
Sweden[5]	33.4	30.9	30.6	31.0	38.6	29.6	27.1	25.7	30.5	32.6
Switzerland	74.7	64.5	71.3	72.5	75.5	74.7	82.2	86.5	104.3	117.1
United Kingdom	62.3	58.2	65.0	59.7	64.1	58.2	72.4	69.2	73.2	74.7
United States	35.7	36.8	36.3	38.1	48.0	48.2	53.4	50.6	58.9	58.2

1. Includes superannuation fund assets invested with life insurance offices.
2. Including company pension funds as from 1995.
3. Financial assets.
4. Including company pension funds as from 1992.
5. Including first pillar assets up to and including 1991.

Source: Insurance and Superannuation Commission Research Unit for Australia; Pragma Consulting, *OECD Institutional Investors Statistical Yearbook,* 1997, and OECD Secretariat estimates.

man'' approach to regulation, which does not impose quantitative restrictions but rather requires managers to behave as careful professionals, which should result in higher long-term returns. On the other hand, there is a risk in all OECD

Table 28. **Returns on pension fund portfolios 1967-90**[1]

Mean of real total return in local currency, standard deviations in brackets

	Portfolio return[2]	Domestic artificial portfolio[3]	Domestic and international artificial portfolio[4]	Average earnings growth	Portfolio less average earnings
Australia[5]	**1.6**	**2.7**	**2.8**	**0.7**	**0.9**
	(14.7)	(16.1)	(15.1)	(3.4)	
Belgium	. .	4.2	3.8	. .	. .
	(18.4)	(16.7)			
Canada[5]	1.6	2.2	2.2	1.7	–0.1
	(9.8)	(11.2)	(10.8)	(2.8)	
Denmark	3.6	5.3	4.6	2.8	0.8
	(12.7)	(18.9)	(13.4)	(3.6)	
France	. .	5.2	4.9	4.0	. .
	(18.0)	(15.9)			
Germany	5.1	6.1	6.2	4.0	1.1
	(4.4)	(15.2)	(13.4)	(3.1)	
Ireland[5]	5.0	3.8	3.8	2.0	3.0
	(11.9)	(13.3)	(12.4)		
Italy	. .	1.9	2.0	3.1	. .
	(22.1)	(18.7)	(4.3)		
Japan	4.0	5.5	5.3	4.2	–0.2
	(9.4)	(15.5)	(14.3)	(4.2)	
Netherlands[5]	4.0	4.5	4.2	2.4	1.6
	(6.0)	(17.0)	(15.2)	(3.2)	
Sweden	0.2	3.8	3.7	1.5	–1.3
	(7.6)	(13.5)	(15.2)	(3.5)	
Switzerland	1.5	2.0	2.0	1.9	–0.4
	(6.4)	(15.4)	(12.3)	(2.1)	
United Kingdom[5]	5.8	3.8	3.7	2.6	3.2
	(12.5)	(14.8)	(14.1)	(2.5)	
United States[5]	2.2	2.1	2.8	0.2	2.0
	(11.9)	(12.9)	(12.5)	(2.1)	
Prudent man	3.4	3.2	3.3	1.6	1.8
	(11.1)	(14.2)	(13.4)		
Asset limits	2.9	4.5	4.4	2.9	0.0
	(8.1)	(15.7)	(13.7)		

1. Retunrs are before tax but after administrative costs. Annual holding period returns on marketable fixed-rate instruments are used instead of redemption yelds.
2. Estimated return on actual pension fund sector portfolios.
3. 50 per cent domestic equity, 50 per cent domestic bonds.
4. 40 per cent domestic equity, 40 per cent domestic bonds, 10 per cent foreign equity, 10 per cent foreign bonds.
5. Countries with prudent man principle. Australia and Canada have followed this principle since the 1980s.

Source: E.P. Davis (1998), ''Regulation of pension fund assets'', in *Institutional Investors in the New Financial Landscape*, OECD, forthcoming; *superfunds,* 1995.

countries that population ageing could reduce long-term returns for the "baby boom" generation. This is because their high demand to accumulate stocks during middle age may have driven up prices (reduced the equity premium over bond yields) and high net sales when they retire (to a much smaller younger generation) could drive down prices.

Health care

Australia has a universal public medical insurance scheme, known as Medicare. It subsidises access to ambulatory care in the private sector and to pharmaceuticals and finances Medicare-designated (*i.e.* public) hospitals; they are open to all citizens. In all, government finances about 69 per cent of total health-care expenditures. These outlays are financed from general taxation, supplemented by the Medicare levy (1.5 per cent of taxable income). Around 60 per cent of public expenditure is used to subsidise access to private providers in the areas of: community-based medical care; hospital-based medical care; pharmaceutical products; allied health care by optometrists and dentists; domiciliary care; and long-term care for the elderly. The remaining 40 per cent of public expenditure mainly finances Medicare-designated (*i.e.* public) hospitals. Private outlays are essentially for out-of-pocket costs (*i.e.* not reimbursed) and private insurance. Pensioners, including part-pensioners, may be eligible for a Pensioner Concession Card, which entitles the holder and dependants to concessional pharmaceuticals and other concessions which vary in each State and Territory. The Commonwealth Seniors Health Card (CHSC) provides equivalent pharmaceutical concessions to non-pensioners whose income is below the pension income test cut off (around A$ 22 000), but who are not eligible for the pension due to assets. From 1 January 1999, eligibility for the CSHC will be determined by a means test based on taxable income. The annual income limit for a single person will be A$ 40 000, and A$ 67 000 for a couple. It is estimated that up to 220 000 additional non-pensioners will be eligible to receive the CHSC.

Long-term care for the elderly

A significant and growing part of health-care and related expenditures for the elderly is for long-term care. Government plays the leading role in planning and funding such care. Long-term residential care is available for those elderly people whose level of disability prevents them from remaining in the community, with nursing homes generally catering for the most disabled in this group and hostels for the least disabled; around half of the nursing homes are run by private for profit providers (47 per cent), while hostels are almost all run by community and government organisations (98 per cent). Community Aged Care Packages (CACPs) and community services under the Home and Community Care Program (HACC) provide assistance for people who wish to remain, and are able to be supported, in the community. CACPs provide hostel equivalent care for people with an equivalent level of dependency. The Commonwealth government finances all of these programmes, with state governments also contributing to the HACC program. In all, government expenditure on such programmes amounts to A$ 5 billion, 2½ per cent of total public expenditure. Commonwealth subsidies for long-term residential care cover about ¾ of the costs of such care; residents pay the balance of the costs.

Box 2. User charges for long-term residential care

The Australian government sets the daily care fees which nursing homes and hostels may charge based on residents' capacity to pay. Residents are required to pay a basic daily fee (currently A$ 21.69 for pensioners and A$ 27.11 for non pensioners), which is defined as a proportion of the maximum income tested age pension so as to be affordable for all residents. New residents are subject to an additional income tested fee, assessed using the same rules as for the age pension. 65 per cent of residents receive the maximum rate of pension and so will not pay this additional fee. Residents cannot pay more than the cost of their care, or a total of three times the basic daily fee if this is lower. Most residents will pay much less.

The government subsidy is the government contribution to the costs of care based on the assessed needs of residents. The subsidy is reduced by the means tested amount paid by residents. Because the government subsidy falls as resident income increases, there is no incentive for providers to take residents who pay higher fees. Income testing is expected to finance 2.5 per cent of total residential care expenditure by 2007. Presently, the government subsidy averages A$ 30 000 a year for each nursing home resident, A$ 8 000 for each hostel resident, and A$ 9 500 for each community care place.

Nursing homes and hostels which are certified as meeting set standards of care and accommodation can charge capital contributions, known as accommodation payments. These payments, which are new for nursing homes, are kept by the provider and must be used for accommodation and care in that facility. Residents are not required to make an accommodation payment which would leave them with less than a minimum asset level (currently A$ 23 000), amounting to 2.5 times the age pension; assets for a married resident are half the couple's combined assets, and the former home is not included if a partner or dependent child is living in it. There are two types of accommodation payment, depending on whether people enter a nursing home or hostel level care. Those who benefit from nursing home level care may pay the accommodation charge, which is an additional fee of up to A$ 12 per day payable for up to five years from entry, while those who enter a hostel level care may be asked for an accommodation bond, which is generally paid as a lump sum and is largely refundable. The provider retains interest on the bond and a retention amount of up to A$ 2 600 per year for up to five years. Residents can alternatively pay an equivalent periodic payment, or a combination.

Over the past 20 years, the Federal Government has introduced reforms aimed at containing the growth in nursing home places and shifting the balance of care to more appropriate and less costly forms, in hostels and in the community. Since 1986, the government has operated a needs-based planning framework, which sets long-term targets for the numbers of places to be offered in the different forms of long-term care. Presently, these targets are for 40 nursing home level places, 50 hostel level places, and 10 community care places per 1 000 older people; in 1995, there were 51 nursing home level places and 43 hostel level equivalent places (including CACPs) per 1 000 people aged 70 and over. Under the 1986 reforms, gate-keeping for long-term care was also introduced. Teams of health professionals called Aged Care Assessment Teams are funded to act as gatekeepers to care, approving applicants for different forms of residential care and community care based on their care needs.

Further reforms in long-term care were announced in the Federal Government's 1996-97 Budget. These are intended to contribute towards the long-term sustainability of funding in the face of population ageing, to recognise the increasing dependency levels of residents and to improve the quality of aged care infrastructure, particularly some nursing home accommodation. A single resident classification and funding system has been created, spanning both nursing home and hostel care. The system classifies residents' care needs by degree for the purpose of determining government funding levels. A new system of accreditation has also been introduced to improve the quality of care and the quality of life for residents. Some nursing home and hostel residents entering care may pay increased charges (in hostels, new residents may pay lower fees than under the old arrangements, and the level of accommodation payments for hostel residents has not been affected) (Box 2).

Economic effects of population ageing under the existing framework

Ageing of the population can be expected to have pervasive effects on the economy. Its consequences on government finances are discussed first, followed by an analysis of its impact on national saving and on economic growth. It should be borne in mind that the consequences discussed are projections, not forecasts – unforeseen developments could easily result in quite different outcomes, especially over such long time horizons.

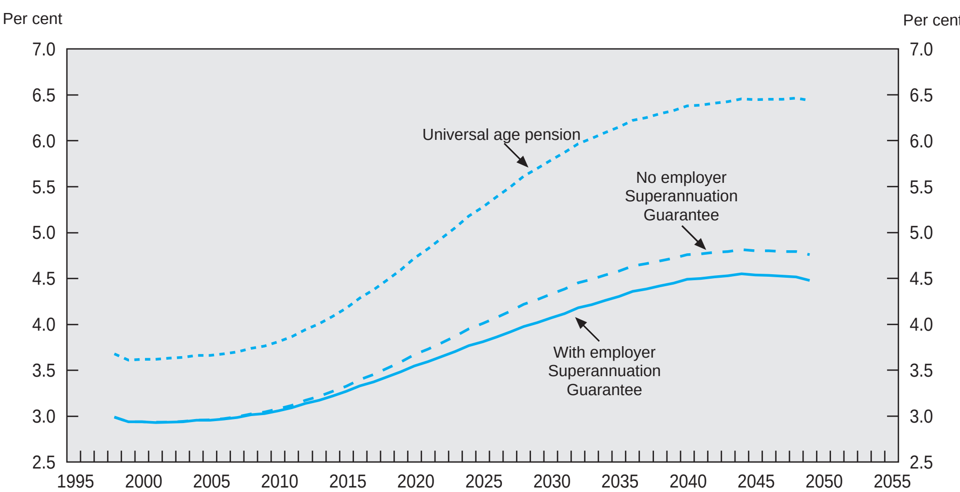
Public finances

Government's financial position is likely to be affected by population ageing, as in particular, it is expected to raise government expenditures on age and related pensions and for health care. A number of other smaller influences which nevertheless could still be significant are abstracted from in this section. These include: the likely increase in social security payments as the "baby boom" generation passes through the 55-64 age group, where labour force participation falls off sharply; *unfunded public service pensions*, for which the annual payments to beneficiaries are projected to decline from the current 0.6 per cent of GDP owing to the closure of the most generous schemes;[117] and possible effects on tax revenues.[118]

Pension outlays

Government outlays on *age and related pensions* are projected by the RIM Unit to rise by about 1½ percentage points of GDP by the middle of next century, to around 4½ per cent of GDP (Figure 32). This increase (50 per cent) is modest in relation to the rise in the share of the elderly in the total population because the age pension is means tested and the Superannuation Guarantee will reduce pension entitlements. As a percentage of GDP, the rise in public pension outlays in Australia (on standardised assumptions for all OECD countries) is smaller than that in the United States and much smaller than those in the European Union (EU) or in Japan (Figure 33). This reflects the means-tested nature of the first pillar and that the second pillar of the pension system (the earnings-related compo-

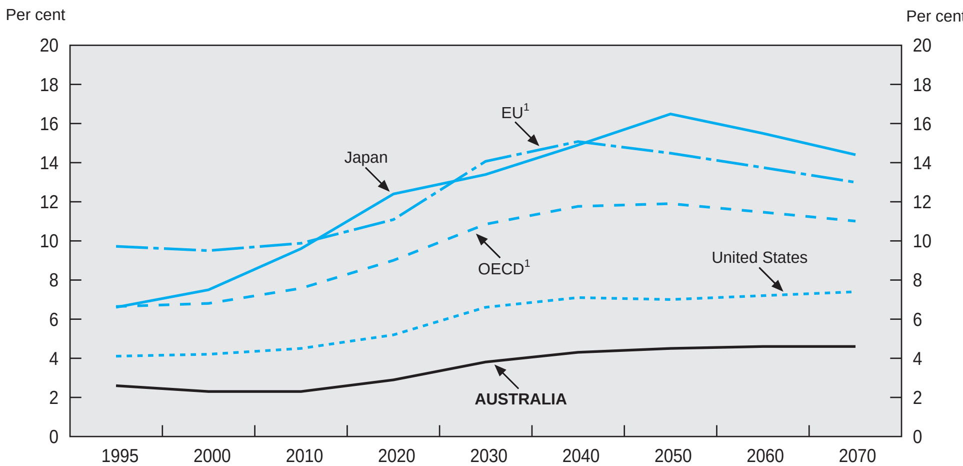
Figure 32. **Age pension outlays**
Per cent of fiscal year GDP



Source: RIM Unit, Commonwealth Treasury of Australia.

Figure 33. **Outlays for public pension: an international comparison**

As a percentage of GDP in 1994 prices



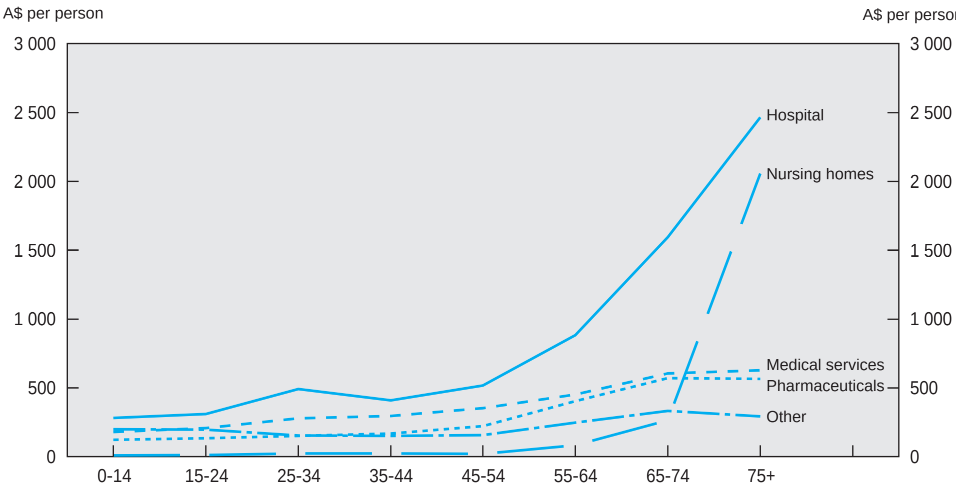
1. 1994 GDP weights at actual exchange rates.
Source: OECD Secretariat.

nent) is funded and privately managed in Australia, whereas in many EU countries and Japan it is largely or totally provided through the (pay-as-you-go) public pension system.

Health care expenditure

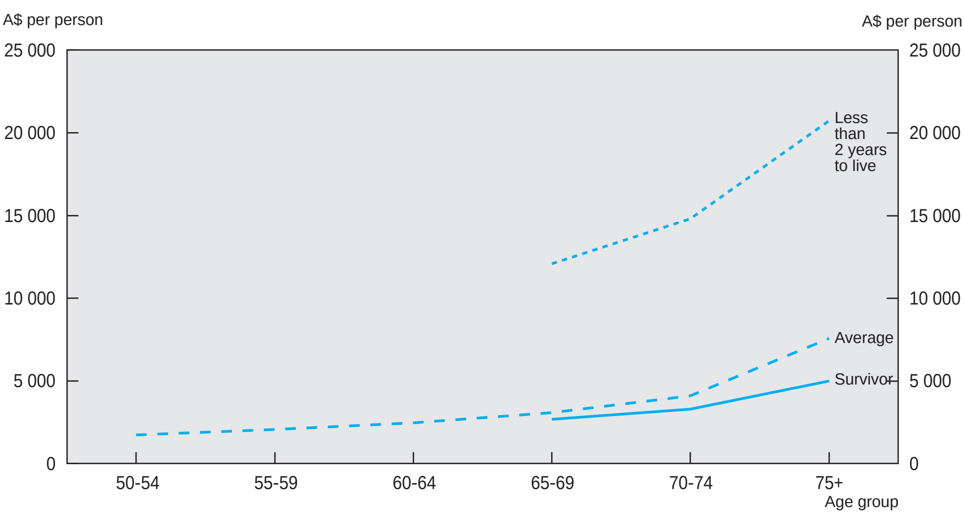
Government outlays for health care expenditures can be expected to rise as the population ages because older people use health-care services more intensively than does the rest of the population (Figure 34). Per person, health-care expenditure for persons aged 65 and over is 3.8 times higher than it is for persons aged less than 65, rising to 5 times more for persons aged 75 and over. The increase in expenditure per person with age is greatest for nursing homes and acute hospital services; it should be noted, however, that the nursing home category overstates the increase in health expenditures by age because it includes the food and accommodation costs of residents. As much of the increase in expenditure per person with age reflects high spending in the last two years of life (Figure 35), the increase in health expenditure caused by population ageing is likely to be considerably smaller than the growing weight of the elderly in the total population. The RIM Unit estimates that population ageing will contribute

Figure 34. **Health expenditure per person by age by area of expenditure**
1993/94



Source: Australian Institute of Health and Welfare.

Figure 35. **Health expenditure per person by survival status**
1989/90



Source: Goss *et al.* (1994).

about 0.6 percentage point to annual growth in health expenditures over the next two decades, similar to the contribution over the past 20 years, and a little more subsequently when the proportion of the population within two years of death begins to increase. Overall, assuming that growth in age-adjusted per capita health expenditures slows to 1 per cent per annum (the rate since 1996) and that the long-run labour productivity growth rate remains at around 1.25 per cent, the RIM Unit projects a rise in health expenditures by about 2 percentage points of GDP by 2041 (Table 29). This would correspond to an increase in government outlays for health care of about 1.5 percentage points of GDP. Considerably larger increases would occur if age-adjusted health expenditures per capita were to continue growing at 2 per cent per annum, the long-term average rate.

On standardised assumptions – including, that per capita health care treatment costs grow by the same rate as GDP per capita – the OECD projects that government outlays for health care in Australia will increase by about 2½ per cent of GDP by 2030, if costs depend on the proportion of elderly in the population, and by around ¾ per cent of GDP if costs depend on the number of deaths, similar to the increases in many other countries (Table 30). The OECD projected increase for the "number of the elderly" scenario for Australia is higher than in the RIM Unit's work on the comparable one per cent real per capita growth assumption, where the projected increase in government health outlays by 2031 is 1 per cent of GDP. This RIM projection is higher than the OECD projection on a "number of deaths" approach. These differences in part reflect the OECD's use of different methodologies as well as assumptions which may be more realistic for a large number of countries than for individual countries. A difference in this regard, which tends to reduce the OECD's "number of elderly" projection, is that it assumes that persons aged 65 will spend a declining proportion of their remaining lives with severe disabilities, attenuating the increase in the costs of long-term care, whereas there is no evidence to date of such a decline in Australia (Table 31). Indeed, as noted above, there is a risk that there will be greater call on

Table 29. **Projections of total health costs under various assumptions**

Per cent of GDP

Productivity growth per annum	Real annual growth rate in age-adjusted per capita health expenditures			
	2031		2041	
	1%	2%	1%	2%
1	10.7	15.9	11.7	19.1
1.25	9.8	14.5	10.4	17.0
1.5	8.9	13.2	9.3	15.1

Source: RIM Unit, Commonwealth Treasury of Australia.

Table 30. **Projected public health care costs in 2030,[1] across OECD countries**

As a per cent of GDP

	Health treatment cost growth rates[2]	Public health care costs in 1995	Projected public health care costs in 2030 assuming costs depend on	
			Number of elderly	Number of deaths
Australia	1% slower		6.1	4.9
	Same rate	**5.8**	**8.2**	**6.6**
	1% faster		11.0	8.9
United States	1% slower		6.1	5.2
	Same rate	6.4	8.3	7.0
	1% faster		11.1	9.3
Japan	1% slower		4.7	5.4
	Same rate	4.9	6.3	7.2
	1% faster		8.5	9.7
Germany	1% slower		5.6	5.5
	Same rate	6.2	7.8	7.4
	1% faster		10.1	10.0
France	1% slower		6.6	6.2
	Same rate	7.0	8.9	8.3
	1% faster		12.0	11.1
Italy	1% slower		6.0	5.8
	Same rate	6.4	8.1	7.8
	1% faster		10.9	10.5
United Kingdom	1% slower		5.2	4.6
	Same rate	6.0	7.0	6.2
	1% faster		9.4	8.3
Canada	1% slower		7.6	6.9
	Same rate	7.4	10.3	9.3
	1% faster		13.8	12.5
Austria	1% slower		7.6	5.9
	Same rate	7.4	10.3	7.9
	1% faster		13.8	10.6
Belgium	1% slower		6.7	5.5
	Same rate	7.4	9.0	7.4
	1% faster		12.1	10.0
Denmark	1% slower		5.2	4.3
	Same rate	5.6	7.0	5.8
	1% faster		9.4	7.8
Finland	1% slower		7.0	5.5
	Same rate	6.9	9.4	7.4
	1% faster		12.6	9.9
Iceland	1% slower		6.8	5.3
	Same rate	7.4	9.1	7.1
	1% faster		12.3	9.5

Table 30. **Projected public health care costs in 2030,[1] across OECD countries** *(cont.)*

As a per cent of GDP

	Health treatment cost growth rates[2]	Public health care costs in 1995	Projected public health care costs in 2030 assuming costs depend on	
			Number of elderly	Number of deaths
Ireland	1% slower		4.2	3.5
	Same rate	5.1	5.6	4.7
	1% faster		7.5	6.4
Netherlands	1% slower		7.3	5.5
	Same rate	6.7	9.8	7.3
	1% faster		13.2	9.9
Norway	1% slower		6.9	5.5
	Same rate	7.6	9.2	7.4
	1% faster		12.4	9.9
Portugal	1% slower		3.7	3.1
	Same rate	4.1	5.0	4.2
	1% faster		6.7	5.6
Spain	1% slower		5.5	4.5
	Same rate	5.7	7.4	6.1
	1% faster		10.0	8.1
Sweden	1% slower		5.8	5.0
	Same rate	6.2	7.8	6.7
	1% faster		10.5	9.0
EU[3]	1% slower		5.9	5.4
	Same rate	6.4	8.1	7.3
	1% faster		10.7	9.8
Total OECD[3]	1% slower		5.8	5.4
	Same rate	6.1	7.8	7.2
	1% faster		10.4	9.7

1. In projecting these public health cost scenarios, the following methods were used. First the current population and the population projections were split into those under 65 years and those 65 years and over. For some countries, the over 65 years group was split further into those aged between 65 and 74 years and those 75 years and over. Current per capita public health care costs were calculated for each of these groups using recent data. These per capita health costs, adjusted for alternative growth rates in health treatment costs were then applied to the population projections. For the scenarios with constant cost profiles, per capita costs were multiplied by the total number of people aged 65 and over. For the scenario where costs depend on fatality rates, the per capita costs were multiplied by the number of deaths amongst people aged 65 and over.
2. Assuming that per capita health care treatment costs grow by the same rate, 1 per cent slower or 1 per cent faster than real GDP growth.
3. Weighted average of the above EU countries or of the above countries. Weights are determined by 1995 GDP at actual exchange rates.

Source: OECD Secretariat.

Table 31. Comparison of disability-free and total life expectancy

		Life expectancy at 65	Disability-free life expectancy	Life expectancy at 65	Disability-free life expectancy
		Males		Females	
		Moderate disability-free life expectancy[1]			
Australia[2]	**1981**	**13.9**	**7.9**	**18.1**	**10.1**
	1993	**15.7**	**6.5**	**19.5**	**9.1**
Canada[3]	1986	14.9	8.5	19.2	9.4
	1991	15.6	8.3	19.7	9.2
France[4]	1981	14.1	8.8	18.3	9.8
	1991	15.7	10.1	20.1	12.1
Netherlands[5]	1983	14.0	8.0	18.6	7.4
	1990	14.4	9.0	19.0	8.0
United States[6]	1980	14.2	6.8	18.4	9.3
	1990	15.1	7.4	18.9	9.8
New Zealand[7]	1981	13.3	9.9	17.1	10.5
	1993	14.8	10.0	18.4	10.2
Germany[8]	1986	13.8	10.6	17.6	13.0
	1995	14.9	12.2	18.7	14.9
		Severe disability-free life expectancy[1]			
Australia[2]	**1981**	**13.9**	**11.9**	**18.1**	**13.8**
	1993	**15.7**	**13.4**	**19.5**	**14.8**
Canada[3]	1986	14.9	12.8	19.2	14.9
	1991	15.6	13.3	19.7	15.4
France[6]	1981	14.1	13.1	18.3	16.5
	1991				
Japan[9]	1980	14.6	13.2	17.7	15.8
	1990				
United Kingdom[10]	1980	12.9	11.8	16.9	15.0
	1991				
Norway[11]	1975	14.0	13.3	17.2	16.1
	1985	14.4	13.3	18.2	16.9

1. Health expectancy concepts are not yet totally harmonised. The "severe disability" measures are more comparable than those for "moderate disability". Levels for other OECD countries have been estimated for single years only: extrapolating from indirect evidence brings a prognosis of analogous trends. Results also available in *OECD Health Data 98* partially based on REVES (1997) "Health expectancies in OECD countries", paper no. 317.
2. For moderate disability: *Functional limitation free life expectancy;* for severe disability: *severe handicap-free life expectancy,* see Mathers. C. (1996).
3. Using a general scale including Activities of Daily Living, *general activity limitation,* severe disability score>11, no disability score zero. Wilkins changes in health expectancy in Canada from 1986 to 1991, Statistics Canada.
4. Moderate: *general handicap free life expectancy;* Severe: *mobility handicap free life expectancy* (Robine and Momiche, 1993).
5. *Activity restriction free life expectancy,* see Perenboom *et al.* (1993).
6. *Active life expectancy* including both major and secondary activities, moderate to severe disability (Crimmins *et al.*, 1997).
7. Davis and Graham (1997).
8. *General concept of disability.* Data refer to West Germany (old Länder) (Brückner, 1997).
9. Japan *severe disability* (Inoue *et al.*, 1997).
10. Bone *et al.* (1995).
11. Norway, concept of active independent life (Grotvedt and Viksand, 1994).

Source: OECD, *Maintaining Prosperity in an Ageing Society*, 1998.

government subsidies for long-term care owing to social trends which may reduce the supply of care givers in the home.

Budget balances

Overall, Australia's primary balance (*i.e.* the government budget balance less net debt interest payments) is projected to deteriorate by about 3 percentage points of GDP between 2000 and 2030 on the OECD's standardised assumptions (Table 32). This deterioration is less than in most other OECD countries thanks to a smaller rise in pension outlays. Allowing for net interest payments, the projected deterioration in Australia's budget balance falls to about 1½ per cent of GDP between 2000 and 2030; by contrast, most other countries' financial balances deteriorate by more than their primary balances because of the effects of snowballing public debt.

National saving

The deterioration in budget balances will lower public saving rates. Uncertainty about what may happen to private saving rates, however, makes it difficult to project the overall effect on national saving rates. According to the life cycle theory of consumption, private saving rates should decline as the "baby boom" generation spends savings accumulated during their working lives. However, empirical evidence in support of the life-cycle model is mixed (Meredith, 1995). A factor which should attenuate any decline in private saving in Australia is the maturing of the compulsory superannuation scheme. The RIM Unit estimates that this could contribute about 2.1 per cent of GDP to private saving when the scheme is mature and a little less to national saving.

Overall economic growth

The decline in the annual growth of the working-age population (RIM Unit projections) from 1.9 per cent in 1992-2000 to 0.3 per cent in the 2020s will lower the annual growth rate of GDP by 1.6 percentage points (Figure 36). Assuming labour productivity growth of 1.25 per cent per annum (the RIM Unit's central assumption and the historical rate since the early 1970s)[119] and an unchanged aggregate saving rate, GDP growth would fall to 1.5 per cent per annum by the 2020s and remain at this rate through the middle of the century. On this basis, real growth in GDP per capita would fall to about 1 per cent per annum over 2010-40 as the total population is projected to grow more quickly than the labour force over this period, in contrast to the situation over recent decades.

There is much uncertainty about the possible effects of population ageing on labour productivity growth. Greater scarcity of labour could encourage firms to adopt more capital-intensive methods of production, temporarily raising labour-productivity growth. On the other hand, the likely decline in the national saving

Table 32. **Fiscal indicators**[1]

As a per cent of nominal GDP

		Primary balance[2]	Interest-growth rate differential constant			Interest rate constant		
			Net interest payments[3]	Financial balance[2]	Net financial liabilities	Net interest payments[3]	Financial balance[2]	Net financial liabilities
Australia	**1995**	**0.0**	**2.4**	**–2.4**	**28**	**2.4**	**–2.4**	**28**
	2000	**1.8**	**2.1**	**–0.3**	**27**	**2.1**	**–0.3**	**27**
	2015	**1.3**	**0.5**	**0.8**	**7**	**0.6**	**0.7**	**8**
	2030	**–1.4**	**0.5**	**–1.9**	**10**	**0.8**	**–2.2**	**12**
United States	1995	0.4	2.3	–2.0	51	2.3	–2.0	51
	2000	0.2	2.1	–2.0	49	2.1	–2.0	49
	2015	–0.6	2.5	–3.1	51	3.0	–3.6	54
	2030	–3.8	4.8	–8.6	95	7.3	–11.1	115
Japan	1995	–3.4	0.5	–3.9	11	0.5	–3.9	11
	2000	–1.5	1.0	–2.5	25	1.0	–2.5	25
	2015	–6.0	4.2	–10.2	102	4.7	–10.7	104
	2030	–8.7	13.4	–22.1	317	16.2	–24.9	339
Germany	1995	–0.6	2.9	–3.5	44	2.9	–3.5	44
	2000	–0.1	3.5	–3.6	53	3.5	–3.6	53
	2015	–0.2	6.0	–6.2	99	6.1	–6.3	99
	2030	–6.6	9.5	–16.1	216	14.5	–21.0	247
France	1995	–1.6	3.4	–5.0	35	3.4	–5.0	35
	2000	1.2	4.0	–2.8	45	4.0	–2.8	45
	2015	–0.1	4.4	–4.5	69	5.2	–5.3	73
	2030	–4.5	8.6	–13.1	165	11.6	–16.1	193
Italy	1995	3.4	10.5	–7.2	109	10.5	–7.2	109
	2000	3.8	8.1	–4.3	109	8.1	–4.3	109
	2015	4.0	10.2	–6.2	123	8.5	–4.5	112
	2030	–5.9	14.6	–20.4	234	17.3	–23.2	241
United Kingdom	1995	–2.8	3.0	–5.7	40	3.0	–5.7	40
	2000	00.5	3.6	–3.1	47	3.6	–3.1	47
	2015	–0.1	5.8	–6.0	79	5.6	–5.7	79
	2030	–1.4	8.4	–9.8	137	10.0	–11.3	144
Canada	1995	1.5	5.6	–4.2	70	5.6	–4.2	70
	2000	4.7	4.6	0.1	60	4.6	0.1	60
	2015	4.6	0.8	3.8	3	0.9	3.7	4
	2030	–1.0	–1.1	0.1	–27	–1.6	0.6	–29
Austria	1995	–2.7	3.5	–6.2	50	3.5	–6.2	50
	2000	0.9	4.5	–3.6	59	4.5	–3.6	59
	2015	–2.3	7.8	–10.2	125	7.9	–10.3	126
	2030	–7.7	17.4	–25.1	317	20.3	–28.0	340
Belgium	1995	4.3	8.8	–4.4	128	8.8	–4.4	128
	2000	5.9	8.6	–2.8	119	8.6	–2.8	119
	2015	5.7	5.2	0.5	78	5.8	0.0	81
	2030	–0.5	4.4	–4.9	77	6.2	–6.7	95
Denmark	1995	2.0	3.7	–1.8	46	3.7	–1.8	46
	2000	3.8	3.1	0.7	37	3.1	0.7	37
	2015	1.0	1.0	0.0	12	1.1	–0.1	13
	2030	–2.3	2.1	–4.5	34	2.4	–4.7	36
Finland	1995	–4.3	1.3	–5.6	–7	1.3	–5.6	–7
	2000	2.3	0.7	1.5	–5	0.7	1.5	–5
	2015	–2.5	–0.5	–2.0	–12	–0.7	–1.8	–13
	2030	–8.8	5.6	–14.4	98	6.2	–15.0	99

Table 32. **Fiscal indicators**[1] *(cont.)*

As a per cent of nominal GDP

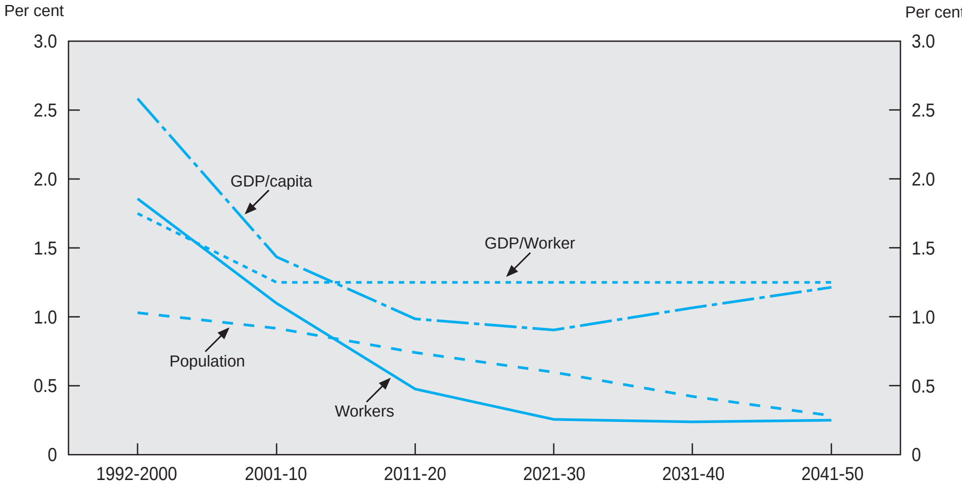
		Primary balance[2]	Interest-growth rate differential constant			Interest rate constant		
			Net interest payments[3]	Financial balance[2]	Net financial liabilities	Net interest payments[3]	Financial balance[2]	Net financial liabilities
Iceland	1995	–1.1	2.3	–3.4	35	2.3	–3.4	35
	2000	0.5	2.4	–1.8	34	2.4	–1.8	34
	2015	0.0	2.2	–2.2	32	2.3	–2.4	33
	2030	–3.3	4.4	–7.7	69	5.8	–9.1	78
Ireland[4]	1995	1.8	4.2	–2.4	86	4.2	–2.4	86
	2000	0.6	3.4	–2.7	74	3.4	–2.7	74
	2015	0.6	2.8	–2.3	71	3.7	–3.1	76
	2030	0.0	3.7	–3.7	83	5.5	–5.4	102
Netherlands	1995	1.4	4.7	–3.3	43	4.7	–3.3	43
	2000	2.8	4.9	–2.1	45	4.9	–2.1	45
	2015	0.0	5.1	–5.1	67	5.4	–5.4	68
	2030	–6.0	10.2	–16.2	185	13.3	–19.3	206
Norway	1995	3.2	0.2	3.1	–26	0.2	3.1	–26
	2000	3.2	–0.5	3.7	–37	–0.5	3.7	–37
	2015	0.4	–3.8	4.2	–73	–4.2	4.6	–74
	2030	–4.7	–3.3	–1.4	–57	–4.6	–0.2	–69
Portugal[4]	1995	0.6	5.7	–5.1	71	5.7	–5.1	71
	2000	1.5	4.3	–2.8	70	4.3	–2.8	70
	2015	–0.4	4.9	–5.3	83	5.4	–5.8	85
	2030	–5.6	9.8	–15.4	170	12.9	–18.5	192
Spain	1995	–1.1	5.1	–6.2	50	5.1	–6.2	50
	2000	1.5	5.5	–4.0	58	5.5	–4.0	58
	2015	0.5	5.6	–5.2	78	6.5	–6.0	82
	2030	–4.4	9.7	–14.1	159	13.9	–18.3	191
Sweden	1995	–5.1	2.9	–8.1	28	2.9	–8.1	28
	2000	2.9	3.2	–0.3	32	3.2	–0.3	32
	2015	0.2	2.3	–2.2	29	2.4	–2.3	30
	2030	–2.7	5.3	–8.0	78	5.7	–8.4	81
EU[5]	1995	–0.5	4.5	–5.0	53.1	4.5	–5.0	53.1
	2000	1.4	4.6	–3.1	58.9	4.6	–3.1	58.9
	2015	0.6	5.8	–5.3	85.1	5.9	–5.3	84.9
	2030	–4.8	9.6	–14.4	180.2	12.8	–17.6	201.1
Total OECD[5]	1995	–0.7	2.9	–3.7	43.6	2.9	–3.7	43.6
	2000	0.5	2.9	–2.5	48.0	2.9	–2.5	48.0
	2015	–1.2	4.1	–5.3	74.1	4.4	–5.6	75.6
	2030	–5.3	8.4	–13.7	175.0	11.1	–16.4	195.0

1. 1995 and 2000 data correspond to OECD Secretariat's (unpublished) Medium-Term Reference Scenario, prepared in the context of OECD (1995), *Economic Outlook,* No. 58.
2. Surplus (+) or deficit (–).
3. The calculation of net interest payments after 2001 is based on separating the stock of debt into two parts: debt accumulated up until 2000 ("old" debt) and additional debt accumulated from onwards ("new" debt). For the old debt the net interest payments are derived using the implicit interest rate on the old debt (net interest payments divided by new debt). For new debt, long-term market interest rates are assumed to apply. These were derived by calculating an average projected real interest rate analysed here and then using each country's projected individual inflation rate (in 2000) to calculate the nominal interest rate.
4. Gross financial liabilities for Ireland and Portugal.
5. Weighted average of the above EU countries or of the above countries. Weights are determined by 1995 GDP at actual exchange rates.

Source: OECD Secretariat.

Figure 36. **Growth in employment, population and GDP per capita**[1]

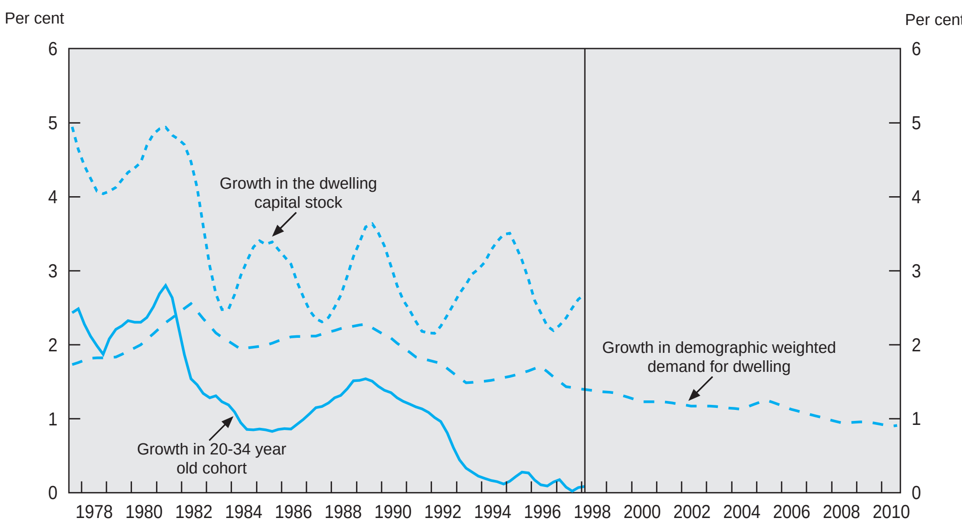
Average annual rates



1. Actual data through 1997, projections thereafter.

Source: RIM Unit, Commonwealth Treasury of Australia and OECD Secretariat.

Figure 37. **Demographics and dwelling investment**



Source: RIM Unit, Commonwealth Treasury of Australia.

rate would reduce investment and hence, capital intensity in production. This latter effect is generally expected to predominate. However, it is likely to be less significant in Australia than in most other OECD countries thanks to its healthier budget outlook.

A factor which may attenuate the decline in saving available for business investment is a reduction in dwellings investment. This might occur as baby boomers move into older age cohorts, slowing the rate of household formation. Based on projected developments in weighted housing demand,[120] which appears to be related to growth in the dwelling capital stock (Figure 37), demographic factors may reduce the underlying growth of the dwelling stock by up to 1 percentage point (amounting to 1 percentage point of GDP) over the coming decade, other things being equal. The other major determinant of underlying demand for housing is trend growth in income per household. While this has picked up in recent years, it is likely to decline as a result of population ageing. This would further reduce dwelling investment.

Policy implications

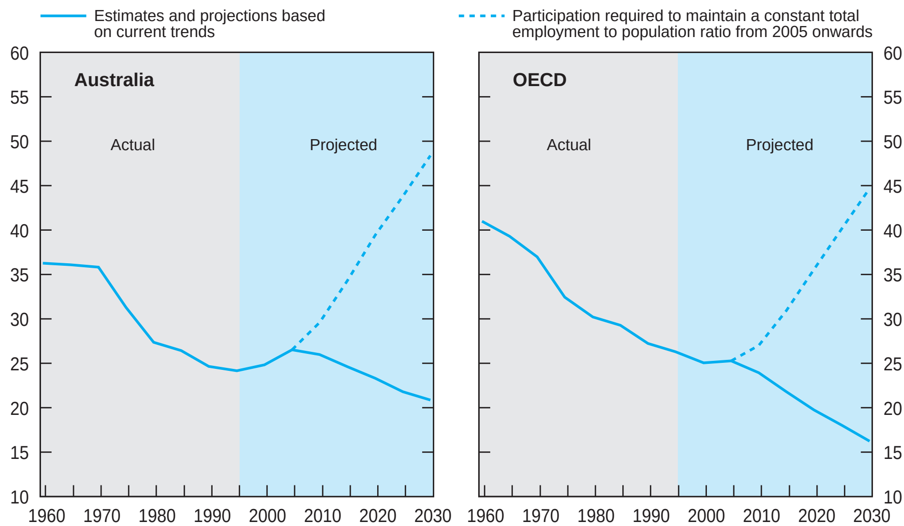
Population ageing is likely to put pressure on government budgets in the medium term. A decline in public saving could, under certain assumptions, reduce the capital intensity of production, intensifying the slowdown in the growth of real income per capita directly caused by population ageing. Any decline in private saving could reinforce this process. Future generations could be left with increased tax burdens and a smaller capital stock.

The main policy options for government to attenuate these adverse effects are to reduce both incentives to early retirement and disincentives to late retirement and to implement other reforms which would constrain the growth in government expenditures. Insofar as reforms are necessary to government programmes, early action is preferable as it reduces the eventual scale of the adjustment required and gives future retirees more time to make alternative arrangements. These issues are considered in the remainder of the chapter.

The retirement decision

Labour force participation rates for persons aged 55 and over have fallen sharply in recent decades (Figure 38). This reflects declining male participation rates (see Figure 27). Should these trends and those for other age groups continue, males will soon spend more time out of employment than in employment, while females will continue to spend a high, albeit initially declining proportion of their lives not in employment (Figure 39). If it were possible to increase labour force participation rates amongst persons aged 55 and over to the levels recorded

Figure 38. **Labour force participation rates of persons aged 55 and over**



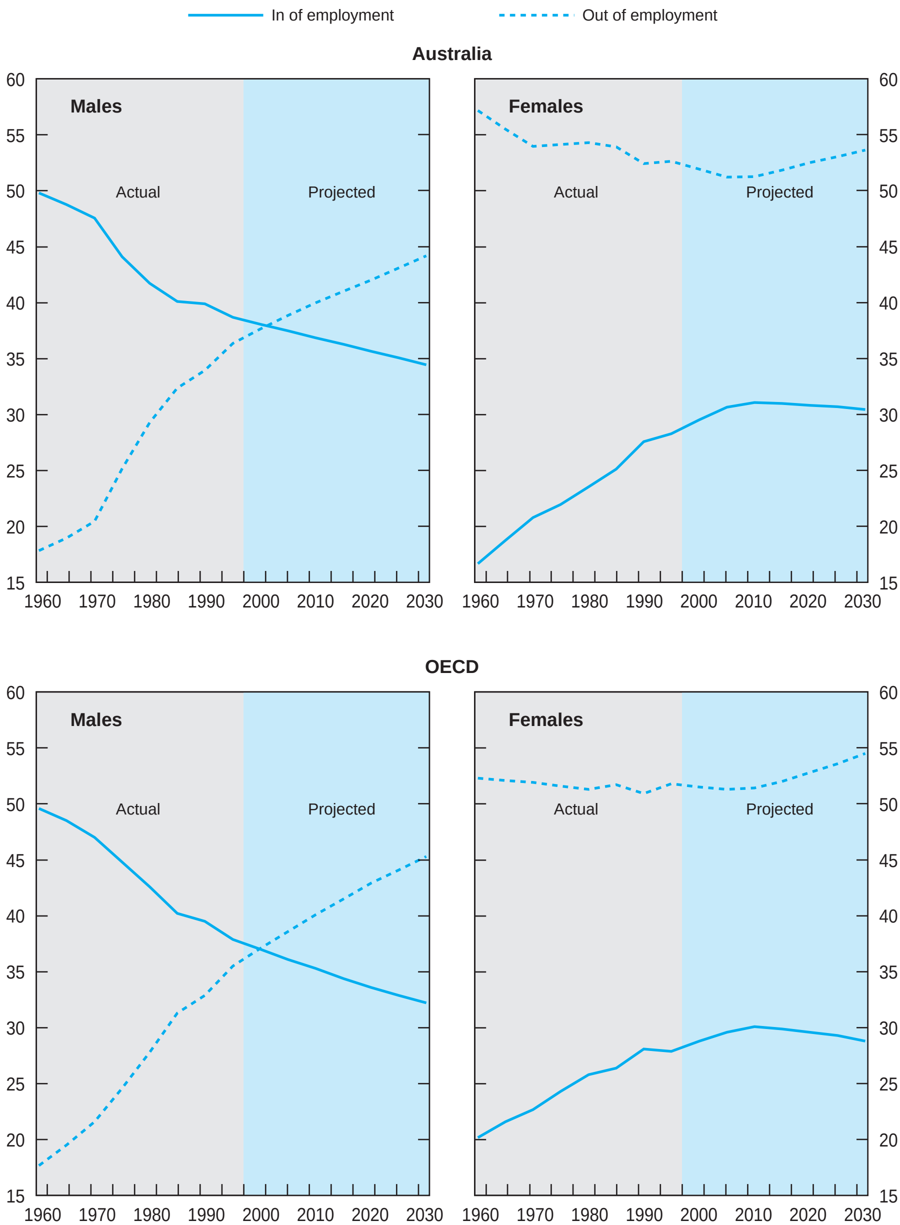
Source: OECD Secretariat.

in the 1960s, this could offset about one half of the decline in the proportion of the population in employment by 2030, greatly diminishing the economic effects of population ageing.

Declining labour force participation rates for older workers mainly reflect the trend to early retirement among males. Between 1960 and 1995, the average age of male retirement (defined as withdrawing from the labour force at age 45 or more) in Australia has fallen by four years, to 62, despite an unchanged age pension age during this period (Figure 40). This decline and the current average age of retirement are in line with the OECD average. The average age of female retirement has also declined, although the effect of this on participation rates has been more than offset by the ageing of younger generations with greater prior labour force experience (see Figure 27). Only a small minority of people retiring early (*i.e.* before age pension age) from full-time work do so for voluntary work-related reasons[121] (Figure 41). Most males retiring early do so involuntarily[122] while most females do so for family reasons.[123]

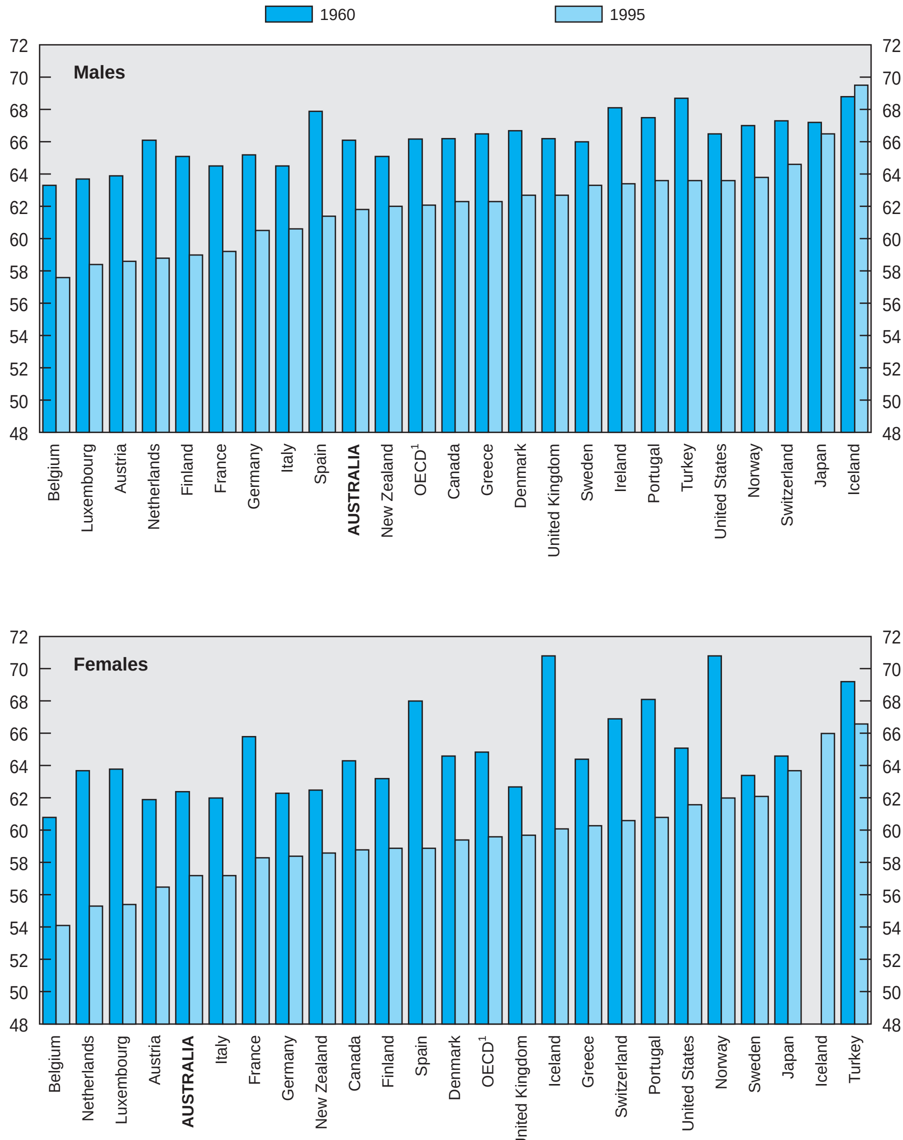
Older males who lose their jobs appear to have great difficulty finding another job. They are under-represented in new hirings[124] (Table 33) and are at great risk of entering long-term unemployment (Table 34) or of withdrawing from the labour force, usually into early retirement. However, the rate of new hires of

Figure 39. **Expected number of years in and out of employment**



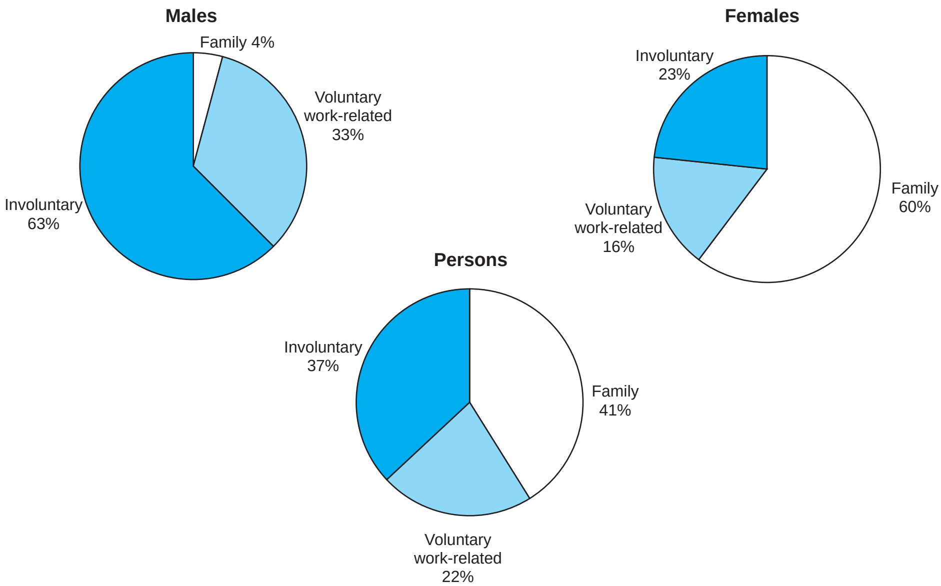
Source: OECD Secretariat.

Figure 40. **Estimates of the average age of retirement**



1. Unweighted average.
Source: ILO, *Economically Active Population 1950-2010,* December 1996.

Figure 41. **Reasons for early retirement**



Source: Australian Bureau of Statistics November 1994, *Retirement and Retirement Intention Survey.*

older males is greater in Australia than in other OECD countries. The decline in labour force participation is most marked for those without tertiary education (Table 35). These trends, which are also evident in other OECD countries, mainly seem to be related to the decline in the manufacturing sector. This is reducing the supply of well-paid blue collar jobs, a disproportionate share of which are held by older workers (declining industries hire fewer young workers). When older workers lose these jobs, their main employment options are in the service sector where many are uncompetitive on the basis of basic education skills. Faced with the option of a large wage cut to get a new full-time job or either long-term unemployment or early retirement, many older workers prefer the latter options.

Early retirement is made more palatable by the variety of social security benefits available to older workers (and others) without a full-time job. If they are actively seeking a full-time job, they are eligible for the unemployed benefit, known as New Start Allowance. In the event that they withdraw from the labour force, they may be eligible for the Mature Age Allowance if they are aged 60 or over but less than age pension age. Alternatively, if they have a disability which

Table 33. **Relative hiring intensities by age group**

Ratio of share of new hires to share of total wage and salary employment[1], 1995 data

	15-24 years	25-44 years	45-64 years
Australia[2]	**1.7**	**1.0**	**0.6**
Austria	2.3	0.9	0.4
Belgium	3.7	0.9	0.3
Canada	2.5	0.9	0.4
Denmark	2.1	1.0	0.4
Finland	3.3	1.0	0.4
France	3.4	0.9	0.4
Germany	2.2	1.0	0.4
Greece	2.9	0.9	0.5
Ireland	2.3	0.7	0.4
Italy	3.3	0.9	0.3
Japan	3.0	0.7	0.5
Luxembourg	2.9	0.9	0.3
Netherlands	2.5	0.8	0.3
Portugal	2.6	0.9	0.4
Spain	2.2	1.0	0.5
Sweden	3.1	1.0	0.4
Switzerland	2.8	1.0	0.3
United Kingdom	2.3	0.9	0.5
United States[2]	2.3	0.9	0.5
Unweighted average	2.6	0.9	0.4

1. Workers with tenure less than one year are defined as new hires.
2. Data refer to 1996.

Source: Data from the European Union Labour Force Survey were supplied by EUROSTAT. For Australia, Canada, Japan, Switzerland and the United States, see OECD (1997*a*), *Employment Outlook*.

prevents them from working full-time for award wages or are blind, they may be eligible for Disability Support Pension.[125] All of these benefits offer a similar rate of payment, are for a duration limited only by biological factors (reaching age pension age or death) and are means tested. Recipients of the New Start Allowance and Mature Age Allowance may work part-time as may some disability support pensioners, notably participants in the Supported Wages System.

Reliance on social security is high amongst male early retirees. Of men who retired 11-20 years before age pension age, 52 per cent have a social security benefit as their main source of income at retirement (ABS, 1994); this estimate does not include those receiving service pension at service pension age as early retirees. For those retiring 6-10 years early the corresponding estimate is 37 per cent and for those retiring up to 5 years early it is 38 per cent. In addition, an unknown number of early retirees reporting superannuation or investment income as a main source were part-rate pensioners or allowees.

Table 34. **Unemployment rates and the incidence of long-term unemployment**

1996 data

	Unemployment rate (percentage of labour force)		Unemployed for 12 months or more (percentage of unemployed)	
	15 to 64 years	45 to 64 years[1]	15 to 64 years	45 to 64 years[1]
Australia	**8.5**	**6.4**	**28.4**	**44.8**
Austria	5.3	5.4	25.6	37.0
Belgium	9.5	5.9	61.3	76.6
Canada	9.7	7.3	13.9	21.6
Czech Republic	3.8	2.6	31.6	37.6
Denmark	6.9	5.6	26.5	43.6
Finland	16.2	16.4	39.3	61.8
France	12.1	8.0	39.5	62.0
Germany	8.9	10.0	47.8	57.8
Greece	9.9	3.9	56.7	54.6
Hungary	9.8	6.5	54.4	58.8
Iceland	3.7	2.6	18.4	40.0
Ireland	11.9	9.5	59.4	72.4
Italy	12.3	4.5	65.6	61.2
Japan	3.5	2.8	19.5	27.4
Korea	2.0	0.8	3.6	5.7
Luxembourg[2]	3.5	1.8	26.8	33.3
Mexico	4.5	2.4	2.2	5.1
Netherlands	6.5	5.1	50.0	60.5
New Zealand	6.2	3.9	20.8	34.6
Norway	4.9	2.3	15.4	35.7
Poland	12.7	7.6	39.0	47.4
Portugal	7.7	5.1	53.1	64.8
Spain	22.4	12.8	55.7	62.9
Sweden	8.1	5.9	17.1	27.0
Switzerland	3.9	3.5	25.0	..
Turkey	6.3	2.6	43.6	45.1
United Kingdom	8.3	5.9	39.8	52.2
United States	5.5	3.3	9.3	14.6
Unweighted average:				
North America[3]	6.6	4.3	8.5	13.8
European Union	10.0	7.1	44.3	55.2
OECD Europe	8.8	6.1	40.5	52.0
Total OECD	8.1	5.5	34.1	44.5

1. Australia, Canada and Korea, 45 years or more; France, 50 years or more; Luxembourg, 45 to 54 years; Switzerland, 55 to 64 years.
2. Data for duration of unemployment are based on small sample sizes.
3. North America comprises Canada, Mexico and the United States.

Source: OECD *Unemployment Duration and Labour Force Databases.*

In view of the causes of early retirement (or long-term unemployment) of males, the most effective policy remedies are likely to be those aimed at improving labour market opportunities and discouraging premature take-up of social

Table 35. **Labour force participation rates by educational attainment and age**

1995 data

	Men aged 35 to 44 years				Men aged 55 to 64 years			
	Participation rate for educational attainment less than upper secondary (percentage)	Increase in participation rate relative to educational attainment less than upper secondary (percentage point difference)			Participation rate for educational attainment less than upper secondary (percentage)	Increase in participation rate relative to educational attainment less than upper secondary (percentage point difference)		
		Upper secondary	Non-university tertiary	University		Upper secondary	Non-university tertiary	University
Australia	**88.5**	**5.9**	**8.0**	**9.0**	**57.9**	**5.0**	**12.3**	**19.3**
Austria	92.1	5.3	5.2	6.2	40.0	4.5	19.6	43.9
Belgium	91.0	5.9	8.3	7.5	25.8	17.2	17.5	39.4
Canada	83.6	9.4	11.1	12.9	51.2	9.7	12.9	20.6
Czech Republic	88.0	9.0	..	10.8	39.6	13.5	..	32.4
Denmark	85.4	9.5	11.6	12.3	59.9	8.3	16.2	24.6
Finland	88.9	4.7	8.4	9.0	40.3	10.6	14.0	28.8
France	92.6	4.8	5.7	5.0	34.5	10.5	18.7	34.6
Germany	95.4	2.1	3.5	3.3	47.9	6.7	17.1	27.6
Greece	96.0	2.2	1.8	2.8	64.0	–15.6	–18.4	–1.1
Ireland	87.8	8.1	10.0	8.8	61.4	7.5	10.9	21.5
Italy	94.2	3.5	..	4.7	41.7	15.5	..	36.4
Korea	94.5	3.0	..	3.9	79.4	–0.5	..	2.9
Mexico	96.5	1.9	2.8	2.2	80.7	–7.3	16.9	2.0
Netherlands	90.2	6.4	..	7.1	35.5	7.8	..	19.0
New Zealand	87.2	8.0	7.8	8.1	61.3	8.8	11.7	21.1
Norway	83.3	10.5	12.9	14.5	59.4	14.3	21.9	32.6
Poland	85.5	6.7	12.4	12.8	42.6	–3.3	1.9	21.5
Portugal	95.1	2.3	4.2	4.1	60.6	–6.5	7.5	13.4
Spain	93.5	3.8	4.4	5.3	53.0	8.7	10.2	21.6
Sweden	93.7	2.3	2.8	3.4	83.7	0.0	–1.0	5.1
Switzerland	93.1	5.2	6.5	4.6	76.9	5.5	6.5	11.4
United Kingdom	83.4	11.2	12.6	15.2	53.9	11.5	14.0	14.6
United States	75.7	16.2	18.4	21.4	50.9	15.7	21.7	26.9
Unweighted average	89.8	6.2	7.9	8.1	54.3	6.2	11.6	21.7

Source: OECD *Education Database* except for Mexico where unpublished data were supplied by STPS-INEGI, *Encuesta Nacional de Empleo.*

security benefits. Reductions in social security taper rates and the extension of in-work benefits to the low paid without families could be particularly beneficial in this regard. These measures could encourage more older male workers to work part-time or in low-paid full-time jobs, topping up their incomes with social security benefits. The alternative of reducing social security benefits and/or their duration is unlikely to be socially acceptable as this could push some people into poverty.

A deterioration of general skills does not appear to be an important reason for older low-skilled workers experiencing greater employment difficulties than their younger counterparts. International evidence on workers' literacy suggests that, adjusting for demographic and economic control variables – including educational attainment – literacy skills generally decline only modestly between the ages of 40 and 65 (OECD, 1998*b*, p. 138). Moreover, even if older low-skilled workers were to gain a vocational qualification, they would still be at considerable risk of not having a job: the odds of someone aged 55 to age pension age with a skilled vocational qualification being unemployed or not in the labour force are 6 to 10. But in the longer term, the higher levels of educational attainment of future cohorts of older workers should lower rates of early retirement. This effect could be reinforced by greater investment in *lifelong learning*, which would help to keep workers' skills up to date, enhancing adaptability. As older workers may have to bear more of the labour-market adjustment which inevitably occurs as the economy evolves owing to the declining share of younger workers in the labour force, such adaptability could become more important than ever.

A factor contributing to low labour force participation rates for persons aged 65 and over is that they are subject to high marginal effective tax rates. Someone qualifying for a part age pension would have it reduced by 50 cents for every extra dollar earned, bringing the marginal effective tax rate to 66-86 per cent (including the medicare levy). So as to reduce the disincentive to late retirement, the government introduced in July 1998 a scheme which provides a bonus to persons who remain in full-time employment and defer taking up the age pension. The bonus is weighted towards retirement at age 70, at which point it reaches its maximum value. The maximum bonus is currently A$ 21 831 for a single person and A$ 36 428 for a couple. The bonus is indexed to movements in the Age pension. The planned tax package would also reduce disincentives to late retirement, both lowering marginal income tax rates and by reducing the age pension taper rate to 40 per cent.

Age pension

Pension outlays are projected to rise by 1½ per cent of GDP by the middle of next century, much less than the increases projected in most other countries; the increase in Australia is relatively small because the public pension only covers the first pillar of retirement income arrangements, is means tested and compulsory superannuation is steadily maturing, reducing average age pension entitlements. In view of the commitment to maintain the (single rate of) age pension at 25 per cent of male total average weekly earnings, the main options for avoiding a future increase in taxes to finance these outlays (apart from avoiding them by deferring retirement) are to raise compulsory superannuation contributions and/or reduce scope for dissipation of superannuation benefits, reducing average age pension entitlements, accumulate a public fund which subsequently could be run down, or increase the proportion of the population participating in the workforce.

There is a risk that outlays could be higher than projected if there were to be an increase in the rate at which superannuation benefits are dissipated (*i.e.* an increase in "double dipping"). In order to limit the scope for "double dipping", the preservation age (*i.e.* the age until which superannuation benefits must be preserved in a superannuation fund to qualify for concessional tax treatment) will be raised progressively from 55 to 60 between 2015 and 2025. The scope for "double dipping" could be limited further by raising the preservation age to age pension age (65).

Another approach to limiting "double dipping" is to shift the balance of effective tax incentives (*i.e.* allowing for means testing of the age pension) towards taking superannuation benefits as lifetime income streams rather than as lump sums. This would reduce the scope to dissipate superannuation benefits during the early years of retirement and/or invest them in forms (such as a more expensive home, or a family trust) which are exempt from the age pension means test. Arrangements for the taxation of superannuation benefits and their treatment in the age pension means test (Box 3) are so complex that it is not immediately obvious to most people what the incentives are; there is a thriving consulting industry advising retirees how to take their superannuation benefits so as to minimise effective taxation. Policy needs to remain attuned to the need to encourage people to use their superannuation benefits to generate sustainable retirement income streams, maximising self reliance. It also would be useful to limit the value of owner-occupied housing which is exempt from means tests.

Health care

The major risk to government finances in the long-term comes from rising health-care expenditures. For the most part, this reflects underlying growth in real age-adjusted health-care expenditure per capita;[126] population ageing is only expected to contribute about 0.6 percentage point to the annual growth rate in health-care expenditures over the next two decades, the same as in the past two decades. Underlying growth in health-care outlays is mainly occurring for ambulatory services covered by the Medicare Benefits Scheme (MBS) and for

Box 3. Effective taxation of superannuation benefits

The taxation of superannuation benefits and their treatment in the age pension means test depend on the form in which they are taken and whether they relate to contributions which were taxed concessionally. Only benefits which relate to contributions which were taxed concessionally are taxed; all benefits, however, may potentially be included in the means test for the age pension. Lump sums are taxed at 15 per cent (plus the medicare levy) above a tax-free limit (presently A$ 93 731) up to a Reasonable Benefit Limit (RBL) and then at the highest personal marginal income tax rate. Pensions and annuities, purchased with superannuation monies, up to the RBL are taxed as ordinary income less a 15 per cent rebate, with the excess over the RBL being taxed as ordinary income with no rebate. The RBLs for lump sums and pensions/annuities (or where at least half of the benefit is taken as a qualifying income stream) are respectively A$ 471 088 and A$ 942 175. These amounts, and the tax-free limit for lump sums, are indexed to average weekly ordinary time earnings (AWOTE). The RIM Unit estimates that the pension RBL would be exceeded at the SG contribution rates with a salary of 6.34 times AWOTE over 40 years.

Under the current means-test rules, which came into effect from 20 September 1998, income streams are classified and means tested on the basis of their characteristics. Products which provide an income stream for life or for a fixed term of life expectancy – or at least 15 years where the life expectancy exceeds 15 years – and which meet other requirements set out in the social security legislation (*e.g.* non-commutable, no residual capital value) are exempt under the social security assets test. All other income stream products are assets tested. Under the income test, the actual income paid from income stream products with a term in excess of five years is assessed, with a deduction allowed based on the purchase price. Assessable income from other income stream products is deemed at standard rates.* Where lump sums are invested in income-earning assets, assessable income is deemed. Such assets are also subject to the assets test. Pension entitlements are determined by whichever test gives the lower pension.

* Deemed income is the income an asset is considered to earn, not the actual income earned. Deeming rates are set from time to time based on market rates of return. They are presently 3 per cent for the first A$ 30 400 of assets of a single person and A$ 50 600 of assets of a couple and 5 per cent on the remainder of assets. Deeming rates were introduced to discourage people from investing in assets with low or zero returns so as to minimise the effects of means testing on their age pension entitlements.

pharmaceuticals, which are subsidised under the Pharmaceuticals Benefits Scheme (PBS). A key factor contributing to the high growth in MBS outlays is that ambulatory services are generally provided on a fee-for-service basis. Given that patients are usually not in a position to judge what treatment they require, the combination of fee-for-service and payment by a third party creates an incentive for excessive service provision (*i.e.* there is moral hazard). The main cause of high growth in the PBS during the 1990s has been the shift to new higher priced drugs. Other causes have been the increase in the proportion of the population eligible for concession cards (and therefore making smaller co-payments) and the rising number of doctors, which has increased the number of prescriptions being written.

The most recent reforms aimed at stemming growth in these two schemes have been measures which should slow the growth in the number of general practitioners (effective January 1997) and the move to subsidise only a set base price within certain therapeutic groups (drugs that are not chemically identical but which have similar clinical effects, effective February 1998) (*OECD Survey of Australia*, 1998, Chapter III); the price difference between higher priced drugs and the base price must be paid by the patient, in addition to the usual co-payment. While these measures should slow the growth in outlays, the fundamental drivers of growth remain in place. Further measures which address the moral hazard inherent in current arrangements are likely to be required if a substantial increase in health-care outlays as a proportion of GDP is to be avoided in the long-term.

An important initiative in this regard is the co-ordinated care trials presently underway. Co-ordinated care is about enabling health and related professionals to co-ordinate health and community services for people with a chronic illness (or multiple service needs) to achieve better outcomes, in terms of health and well-being, within current funding levels. Funds from the MBS, PBS, HACC, state hospital and community services budgets are pooled in the trials; the amount pooled is based on the best estimates of what would have been spent on trial participants had there not been a trial. The trials are intended to test whether better health and well -being outcomes can be achieved for such people within current funding levels and whether the pooling of Commonwealth and State funds allows better care co-ordination. The expectation is that trials will be able to generate sufficient savings to pay for care co-ordination and for their own administration. To achieve these savings, trials aim to:

– reduce unnecessary servicing;
– improve effectiveness, thereby reducing costly institutionalisation;
– improve purchasing arrangements for goods and services; and
– better integrate medical workers to allow strategic use of the more costly professions.

The trials are to run from late 1997/early 1998 until December 1999 and a final national evaluation report is to be prepared in June 2000.

Co-ordinated care could bring substantial benefits to the elderly as they are much more likely than the rest of the population to have a chronic illness or to require regular assistance. They would gain access to paramedical services, such as podiatry, which may be an appropriate part of a treatment package for an elderly person but which currently tend to be under-utilised because they are not covered by the MBS; when care is not co-ordinated, there is a tendency to substitute more expensive and often less appropriate services which are covered by the MBS. Co-ordinated care could also pave the way to increased professionalism in the management of geriatric care.

Population ageing is already placing pressures on health care expenditures, and will increase over the next 30 years as increasing numbers of baby boomers begin entering the ranks of the very elderly. This will contribute to higher mortality- and morbidity rates. Health-care expenditures tend to rise sharply in the last months of a person's life mainly because they are frequently hospitalised and receive intensive care: expenditure during the last three months of an elderly person's life is eight times that for survivors. This pattern became much more pronounced in the 1980s reflecting enhanced income-earning opportunities with the introduction of Medicare and the availability of new techniques, which doctors were ethically obliged to use.

The other main factor contributing to high outlays towards the end of an elderly person's life is that they are often obliged to stay in a nursing home owing to severe disability: some 40 per cent of those over 70 will enter residential care in their lifetime, with the average length of stay (usually terminated by death or transfer to a hospital, where they die) being about 22 months. The incidence of severe or profound disability (meaning that daily assistance is required) rises sharply with age: 17 per cent of people aged 65 and over have a severe or profound handicap, rising to 41 per cent for people aged 80 and over (ABS, 1993). The main cause of disability amongst the very elderly is dementia: approximately 25 per cent of the population aged 85 and over suffers from it. The most recent resident classification data suggests that around 60 per cent of nursing home residents have dementia, and 28 per cent of hostel residents. As dementia is age-related, the number of years that people suffer from it may possibly increase as life expectancy rises. Accordingly, the need for long-term residential care is likely to rise in step with growth in the very elderly population.

This suggests that the government may eventually have to review its needs-based planning targets for long-term care. Demand for residential care is also being managed by a change in the balance of care to increase the provision of community based care options as an alternative, for example, through increased funding for Health and Community Care services. Presently, these provide for a target of 40 nursing home level places, 50 hostel level places and 10 community care places per 1 000 people aged 70 and over; on the basis of demographic trends, the target number of packages would more than double over the next 30 years. Changing social patterns also pose a risk to these targets. Changing family structures and differentials between male and female life expectancy mean that very old people are increasingly likely to live alone. In addition, female participation in the labour force is still rising. All of these factors will tend to reduce the supply of spouses and daughters available to care for people with severe and profound handicaps (*i.e.* requiring daily assistance) in the home. Surveys on disability and handicap suggest that only about one-third of persons with a severe and profound handicap presently receive government-financed services. This proportion could grow markedly in the medium-term.

In the absence of the development of an effective treatment for dementia, large increases in outlays for long-term care can be expected, especially after 2030. These could be funded by increased taxation, but there are already likely to be other pressures on government finances associated with population ageing. Alternatively, the financing burden could be shifted back to individuals. One approach, recommended by the Commission of Audit, would be to recuperate as much of the subsidies as possible from the estate of the person who received them. But given the inevitable pressures to exempt the family home, as occurs in other forms of means testing, this strategy is unlikely to be very successful. Alternatively, individuals could be required to pre-fund long-term care; compulsion would be necessary because pre-funding would reduce individuals' eligibility for government subsidies. This could involve increased superannuation contributions, which would have to be preserved until either long-term care was required or death, or insurance (including an increase in the Medicare levy now to pre-fund future rises in outlays for long-term care). The advantage of insurance is that contributions could be lower as they would only have to cover the expected costs of long-term care rather than the actual costs. Given a life-time probability of requiring long-term residential care of about 40 per cent, this would make a substantial difference to the required contribution rates.[127] On the other hand, Australians are familiar with superannuation and have shown a distinct aversion to lifetime annuities, which offer the comparable advantage of reducing the cost of providing for the risk of longevity (although the unpopularity of lifetime annuities is partly explained by adverse selection, which makes them expensive, a factor which would not apply to a compulsory insurance scheme). In either case, long phase-in periods would be required to reduce the transitional problem of the generation which pays twice.

It also may be possible to enhance the efficiency of supply of long-term care. Presently, there is little scope for private provision of community-based care. There is no incentive for such care to be paid for privately. A move to long-term care insurance also could enhance efficiency, as people would be able to choose their providers rather than being locked into public provision. Insurance-type mechanisms could also contribute to greater innovation and diversity in the provision of long-term residential care for the same reasons. However, considerable care would be required in designing a system so that it did not lead to inappropriate incentives and increased costs.

Concluding remarks

A significant challenge for the Australian government is to roll back the trend to early retirement evident in recent decades. This could go a long way towards easing the economic and social problems caused by population ageing. The government has taken steps to reduce disincentives to late retirement and will go further in this direction when the tax package is implemented. But more needs to be done to reduce early retirement. In the short term, the most effective approach could be to increase in-work benefits for low-paid older workers, thereby encouraging them to accept low paid jobs. This would probably be less costly for the government than paying social security benefits to early retirees. In the long term, raising levels of educational attainment and increasing investment in lifelong learning should help to increase labour force participation rates for older persons.

Compared with most other OECD countries, the prospective increase in government pension outlays in Australia is modest, despite a similar increase in the share of the elderly in the total population. This reflects the facts that the government only provides the first pillar of retirement income arrangements – in contrast to many other OECD countries, where the government also provides the second (income-related) pillar – the age pension is means tested and, with growing superannuation benefits, the average age pension to which retired persons are eligible will decline (as a proportion of wage rates). Concomitantly, Australians are pre-funding an increasing proportion of their retirement incomes through superannuation (*i.e.* pension funds), which became compulsory in 1992. The projected increase in pension outlays could be avoided altogether by raising compulsory superannuation contributions, which would reduce average age pension entitlements. Alternatively, the increase in pension outlays associated with the retirement of the "baby boom" generation could be financed without causing a concurrent rise in taxation by accumulating a public fund to finance the bulge in outlays. There is also a risk that retirees could take superannuation benefits as lump sums and dissipate them and/or place them in a form which is sheltered from the age pension means test, thereby increasing the amount of age pension to which they are entitled. This risk could be reduced by raising the preservation age to age pension age and by limiting the exemption of owner-occupied housing in the age pension means test.

Health-care outlays pose a much greater risk to government finances. This mainly reflects underlying growth in age-adjusted expenditure per person and, towards the middle of next century, the rising costs of long-term care. To contain these outlays, further reforms which reduce the scope of fee-for-service care under Medicare and which address pressure on long-term care costs are likely to be required.

Notes

1. Fiscal years begin 1 July.
2. For more details see last year's OECD *Economic Survey of Australia*, Chapter II.
3. Korea, Indonesia, Malaysia, Thailand and the Philippines.
4. Japan is Australia's largest export market, accounting for 22 per cent of Australian merchandise exports. Other major merchandise export markets are the European Union (10 per cent), New Zealand (9 per cent) and the United States (8 per cent).
5. Housing affordability is measured by the ratio of average household disposable income to the (''qualifying'') income required to meet payments on a typical dwelling (expressed as an index). In calculating qualifying income, a deposit of 20 per cent with repayments equal to 30 per cent of income is assumed using a conventional 25 year loan. An increase in the index represents an improvement in affordability.
6. However, the recorded sharp increase in sales growth in the first half of 1997 was to a large extent a consequence of the National Accounts' treatment of gold sales and the export of a frigate to New Zealand. This was discussed in last year's OECD Economic Survey of Australia, Chapter I.
7. There is, however, an upward bias in import volume data from the way the National Accounts currently estimate the prices of computers. At present, estimates of the quantity of output and its components are derived from fixed-weighted quantity indices which do not fully capture the ongoing declines in computer prices (by about 80 per cent since 1989/90). Therefore they attach too high a weight to computers, which are mainly imported. However, the effect on GDP is minor as the error in import measures largely cancels out with errors in estimates of consumption and investment expenditures. To obtain a more accurate assessment of the composition of the growth in the economy and of relative price movements, the Australian Bureau of Statistics (ABS) will replace the present set of constant price estimates by chained estimates by the end of 1998.
8. There was a positive growth contribution from the real foreign balance in the June quarter 1998, brought about by falling imports.
9. If not indicated otherwise, all references to GDP are to GDP(A), which is the average of the expenditure, income and production measures of GDP. At times, these different measures provide rather diverse results.
10. The terms of trade deteriorated, however, in the course of the fiscal year 1997/98.
11. This measure excludes from the consumer price index mortgage and consumer debt charges along with volatile items (including the prices of fresh fruits and vegetables, meat and seafood, tobacco and alcohol, petrol as well as items with a marked seasonal pattern, such as holiday travel, accommodation and clothing, and goods

and services provided mostly by the public sector). As such, it thus only retains about 50 per cent of the CPI basket.

12. The ABS will change the scope and coverage of the consumer price index from the September quarter 1998, which inter alia will remove the effect of mortgage interest rates from the index.
13. The projections embody information available at 2 November 1998.
14. Following recent changes to the construction of the CPI, including removal of interest rates from the index, this objective is, since October 1998, defined in terms of the total CPI rather than a Commonwealth-Treasury-defi ned underlying measure as previously.
15. All references to the ''budget balance'' and to ''outlays'' are in ''underlying terms'', as defined by the government, unless otherwise stated. This means that ''net advances'', which consist primarily of equity asset sales and net repayments of debt by the states to the Commonwealth, are excluded.
16. The cash rate is the overnight money market interest rate which the RBA controls through open-market operations with a high measure of precision.
17. The RBA estimates that the average interest spread of major banks has declined from a peak of 5 percentage points in the late 1980s to 3.2 percentage points in 1998. The interest spread is defined as the difference between the average interest rate received on interest-earning assets less the average interest paid on all deposits. For details see Reserve Bank of Australia (1997), Box E.
18. Non-intermediated debt has picked up sharply since 1995-96, growing in the first half of 1998 by an annual rate of 30 per cent. It remains, however, a relatively minor source of funds, amounting to some 7 per cent of intermediated credit.
19. M3 is defined as currency plus bank deposits of the private non-bank sector. Broad money comprises M3 plus borrowings from the private sector by Non-bank Financial Intermediaries, less the latter's holdings of currency and bank deposits.
20. OECD estimate, using average export and import weights and covering 40 countries.
21. Such a Monetary Conditions Index (MCI) has been discussed in last year's OECD Economic Survey of Australia, Chapter II. Technical details were laid out in footnotes 27 and 29.
22. It is, of course, impossible to fully capture in one single measure the complexities of an interdependent dynamic economic system. For a recent discussion of the shortcomings of MCIs in policy analysis see Stevens (1998).
23. The ''Taylor rule'' determines a normative target interest rate as a function of the long-term trend of a real short-term interest rate, the output gap and the difference between the actual inflation rate and an inflation objective. See last year's OECD Economic Survey of Australia, Chapter II.
24. Fiscal years begin 1 July.
25. Capital outlays were lowered by sales of government non-equity assets.
26. The Charter calls for the publication of an economic and fiscal outlook report at the time of an election; these reports are also required at the time of budgets and at mid-fiscal year.
27. For quantitative details see Productivity Commission (1996), Box 1.2.

28. Total factor productivity is defined here as the productivity of the main primary factors of production – labour and capital – in generating value added. The term is synonymous with the definition of multi-factor productivity used in Industry Commission (1997). There are other measures, which, for example, recognise intermediate transactions in materials and services, along with capital and labour as production inputs, and use gross output in the numerator. Normally growth rates of alternative productivity measures do not differ by much: for example, labour productivity in the sense of real GDP per hours worked rose from around 1 per cent in the 1980s to some $2\frac{1}{4}$ per cent in the 1990s, thus accelerating as much as total factor productivity.

29. See Dowrick (1998) whose estimates control for the effects of the business cycle, technological spillovers from other countries, international trade, differences in human capital stocks and periodic changes in the rate of invention. Dowrick's findings are consistent with the analyses of the Industry Commission (1997) and of the Reserve Bank of Australia (1997).

30. Box 1.3 of Productivity Commission (1996) gives a brief overview of these estimates. See also the comprehensive Applied-General-Equilibrium modelling exercise of the Industry Commission (1995). However, these exercises have not remained uncontested. See, for example, the critical article by Quiggin (1997), who expects the usual adverse first-round effects of many structural reforms to last for a rather long time and many of the already implemented and planned structural reforms to be unlikely to have a discernible impact on the rate of economic growth.

31. The recent reorganisation of employment assistance, which has been reviewed in the previous two OECD Economic Surveys of Australia, has not been taken up again. Given that major parts of the new arrangements came into effect only in May 1998, it seems too early to make an assessment of the performance of the new system.

32. These agreements are required to be certified by the AIRC, subject to the "no-disadvantage test", referred to below.

33. Agreements may now be approved by the Australian Industrial Relations Committee even if they do not meet the no-disadvantage test, provided they are not contrary to the public interest, for example in the case of a firm's sound strategy to overcome a short-term business crisis. Contrary to some observers' expectations, this clause has not remained purely hypothetical but has been applied in a number of cases. One example is the Greyhound Pioneer Australia Certified Agreement 1997 which the Commission certified in spite of the agreement's disadvantageous consequences for the firm's employees. The Commission concluded that the agreement was consistent with the relevant section of the WRA because it is "part of a reasonable strategy to deal with a short-term crisis".

34. See Sloan (1998), who refers to the outcome of the simplification of the Hospitality Industry Award in late 1997, which was a test case of award simplification. Sloan judges the 22 matters which were taken out of the original Hospitality Industry Award in order to simplify it as "mainly trivial, with some exceptions" (p. 17).

35. The "allowable matters" set out in the Workplace Relations Act 1996 cover the following employment conditions: classifications of employees and skill-based career paths; ordinary time hours of work, rest breaks, notice periods and variations to working hours; minimum rates of pay (such as hourly rates and annual salaries), rates of pay for juniors, trainees or apprentices, and rates of pay for employees under the supported wage system; piece rates, tallies and bonuses; annual leave

and leave loadings; long service leave; personal/carer's leave, including sick leave, family leave, bereavement leave, compassionate leave, cultural leave and other like forms of leave; cover parental leave, including maternity and adoption leave; public holidays; allowances; loadings for working overtime or for casual or shift work; penalty rates; redundancy pay and notice of termination; stand-down provisions; dispute settling procedures; jury service; type of employment, such as full-time employment, casual employment, regular part-time employment and shift work; superannuation; pay and conditions for outworkers; provisions incidental to the allowable matters and necessary for the effective operation of the award.

36. The obstacles to decentralised bargaining before the WRA came into effect are discussed in the previous OECD Economic Survey of Australia, Chapter III.

37. The coverage of agreements is concentrated in manufacturing and services, with less than proportionate coverage in construction and agriculture.

38. During the 2½ years in which the Industrial Relations Reform Act 1993 was in vigour, only 196 "Enterprise Flexibility Agreements" had been settled.

39. The Employment Advocate is a new statutory office established under the WRA. Its tasks are to make sure that the nature of a Workplace agreement was sufficiently explained to a concerned employee, that the employee genuinely consented to the making of the agreement and that the workplace agreement meets the "global no-disadvantage test".

40. See Reith (1998), and Hawke and Wooden (1998).

41. See Hawke and Wooden (1998); Buchanan *et al.* (1997).

42. Australia has a dual system of industrial law, with both federal and state levels (except in the state of Victoria).

43. These are *inter alia* reduced contracting costs by setting general rules and standards, encouraging increased investment in firm-specific human capital, and early notification of job loss to allow job search prior to being laid off. For a discussion see the *OECD Jobs Study* (1994), Part II, Chapter III.

44. Countries with employment protection provisions that apply differently on the basis of firm size include: Germany (ten or fewer employees), Austria (five or fewer employees), and the Republic of Korea (four or fewer employees). In France, the maximum amount of damages that can be awarded against an employer is less for firms with fewer than 11 employees. In the United Kingdom, an employer with fewer than five employees is not required to provide written reasons for the dismissal of an employee. Earlier exemptions from employment protection legislation which aimed at greater flexibility for smaller firms were abolished in Italy and Spain.

45. The former legislation provided for a period of conciliation of up to 72 hours which offered the unions the possibility of undermining the effectiveness of the secondary boycott provisions through so-called rolling stoppages.

46. Historically, Australia has been one of the most strike-prone countries in the OECD, ranking fifth in a list of twenty industrial countries in terms of working days lost per employee during the 30 years to the early 1980s. The level of 165 working days lost in labour disputes in Australia per 1 000 employees per year during the 1987-1996 period is a remarkable achievement given the respective figure ranging between 600 and 800 lost workdays per year during the 1970s. The downward trend in industrial disputes began already in the early 1980s, and may to a large extent be attributed to the "accord policy" from 1983 to 1995. See Hawke and Wooden (1998), p. 76. Dispute

levels have fallen further since the introduction of the WRA. In 1997 the number of industrial disputes (447) was the lowest recorded since 1940 and the number of working days lost per thousand employees (75 working days lost per thousand employees) was the lowest since 1913.

47. Taken from Kates (1998).
48. In volume terms, some 99 per cent of imports and 96 per cent of exports were transported by sea in 1995-96. This marked difference to nominal shares is due to the generally high unit values of imports and exports by air.
49. The average cost of grain handling in Australia is now significantly lower than typical stevedoring costs at four major North American grain ports. The fall in the cost of bulk grain stevedoring in Australia came about after the Australian Wheat Board assumed responsibility for stevedoring from shipping lines. For details see Productivity Commission (1998*a*).
50. Product is discharged at least 60 per cent faster in New Zealand. For details see Productivity Commission (1998*a*).
51. Supplying ships' crew and passenger provisions.
52. Examples of indirect costs are the requirement to maintain higher than normal inventory levels, loss of confidence in the reliability of services by overseas buyers and discouragement of investment throughout the economy.
53. "Thinness" of shipping trade means the shipping of low volumes over long distances.
54. Demand for stevedoring services and labour requirements is highly variable due to fluctuations in the number and types of ships, variations in the number of containers to be loaded and unloaded and unexpected factors such as delayed arrivals and difficult stows.
55. The competitive neutrality principle specifies that government businesses should not enjoy any net competitive advantage merely as a result of public sector ownership. This involves subjecting government businesses to the same tax and regulatory regimes applicable to private business and requiring them to earn similar returns on debt and equity.
56. Productivity Commission (1998*b*).
57. Among 15 ports the costs of container stevedoring were the 10th to 14th highest for the ports of Melbourne, Sydney, Brisbane, Adelaide and Freemantle, respectively; the highest cost were measured for Nagoya (see Productivity Commission (1998*a*), Chapter 6).
58. This is sometimes quoted to have created an "overtime culture" in stevedoring industries.
59. According to the Productivity Commission (1998b), the Stevedoring Industry Award specifies that a night shift must be paid at twice the ordinary rate, whereas such shift is paid 1.3 to 1.5 times the ordinary rate in other awards they have examined.
60. Operational employees are involved in tasks including operating machinery, clerical work, maintenance and lashing.
61. Call-up payments are made to operational employees for attending work for the commencement of an allocated shift for which they are then not required.
62. Idle time payments are made to permanent operational employees for full shifts during which they must be available but are not required to work. The payment of

idle time is one of the features of permanent employment which distinguishes it from supplementary employment.

63. There may also be voluntary rent-sharing of entrepreneurs with workers in order to encourage efficiency or to boost motivation.
64. For more details see Sloan and Robertson (1997).
65. Examples of work arrangements which impose major constraints on workplace flexibility and which are not covered by the Stevedoring Industry Award but by enterprise agreement are the order of engagement, earnings equalisation schemes and the specification of numbers of supplementary employed referred to above.
66. Hourly rate at which a single crane moves cargo onto or off a ship.
67. In *general* stevedoring, barriers to entry are relatively low, and it can be expected that the existing level of diversification in the supply of general stevedoring services, including in respect of employment arrangements, will increase. There is also evidence of increasing competition in container terminal operation, with the entry of a third operator in Brisbane; however, Australian trade involves relatively small volumes of containers and existing terminals have considerable capacity.
68. These are port facilities, including berths and equipment such as straddle carriers (vehicles used to move containers between yard storage areas and the quay crane or land transport) and cranes, which can be used by a number of stevedores which have a contract with the port company.
69. However, distances between ports are shorter than in Australia, and there are no stevedores operating nation-wide, which stimulates competition between ports.
70. Since it was chaired by S. Wallis, the project is also known as the Wallis Inquiry.
71. See the discussion in last year's *OECD Economic Survey of Australia*, Chapter III.
72. The following draws heavily from Commonwealth Treasury (1998*a*), Reform of the Australian Financial System.
73. Features of CLERP were already discussed in last year's *OECD Economic Survey of Australia* in the context of Corporate Governance (Chapter IV) and Entrepreneurship (Chapter V).
74. See Albon (1996).
75. The Commonwealth Treasury estimates that by FY 1999-00 the top marginal personal income tax rate of 47 per cent will be paid by a someone earning 1.2 times the average earnings. In 1954-55, the top marginal rate applied to a taxpayer who earned 19 times the average earnings.
76. Withdrawal of the Sole Parent Pension, Additional Family Payment, and unemployment benefits at a certain income threshold are the main causes of high METRs.
77. A "poverty trap" is said to occur when the effective marginal tax rate is so high – for example close to 100 per cent – that the beneficiary feels trapped into dependence on government support in spite of her/his willingness to earn income from work.
78. This is consistent with the study of Widmalm (1996), which – on the basis of pooled cross-sectional data from 23 OECD countries, including Australia – suggests that the degree of progressivity of income taxation is negatively correlated with economic growth. The study also lends statistical support to the hypothesis that the share of personal income tax revenues in total tax revenues is negatively correlated with economic growth and that a consumption tax is growth enhancing.

79. See Johnson, Freebairn, Creedy, Scutella and Cowling (1997).
80. A more complete list of gaps, concessions and inconsistencies which are likely to have eroded the direct tax base can be found in Johnson *et al.* (1997).
81. Of the Commonwealth Government taxation revenue, presently between one-quarter and one-third come from indirect taxes.
82. In 1997 the High Court called into question the constitutional validity of business franchise fees levied by the States and Territories on fuel, tobacco and alcohol. To replace lost revenues from these sources, the Commonwealth raised tax rates applying to these products to forward the extra revenue to the States and Territories.
83. Of Asian non-OECD countries, Indonesia, Singapore and Thailand also have a VAT. VAT systems have been adopted by more than 80 countries around the world.
84. In the following, the term "States" will be used to refer to both States and Territories.
85. This is illustrated by the number of printed pages needed to lay down the Act: their size doubled over the last seven years and has by now exceeded 7 000 pages. At present over 70 per cent of tax payers need help from tax agents.
86. Johnson et al. (1998a).
87. For a discussion see, for example, Atkinson and Stiglitz (1980), Lecture 12. The information on direct and cross-price elasticities of demand needed to calculate specific optimal tax rates on different goods and services is normally not available and therefore makes a flat tax rate more reasonable. A flat rate is also likely to deter rent -seeking behaviour by special interest groups. See Johnson *et al.* (1998*a*).
88. The income support system has become equally complex. There are currently over 30 major different types of income support payments and supplements under the tax and social security regime, with variable tax requirements, income thresholds and delivery mechanisms.
89. The terminology follows that used in Canada and New Zealand.
90. However, the States will be billed around A$ 300 million per annum by the Commonwealth Government for the administration of the GST.
91. These are Financial Institutions Duty; debits tax; stamp duty on marketable securities; conveyance duty on business property; stamp duties on credit arrangements, instalment purchase arrangements and rental (hiring) agreements; stamp duties on leases; stamp duties on mortgages, bonds, debentures and other loan securities; stamp duties on cheques, bills of exchange and promissory notes; and "bed taxes" on overnight stays in hotels.
92. Before counting the 1.5 per cent medicare levy.
93. In FY 2000-01, the underlying Commonwealth budget surplus is projected at A$ 8.6 billion in the absence of tax reform and A$ 4 billion if the package were implemented.
94. It could be argued that the comprehensiveness of value-added type consumption taxes results in substantial extra compliance cost for businesses. However, the widespread availability of electronic means of documentation of any form of economic activity makes this argument less convincing than in the past. Moreover, the new GST has to be compared with the old WST and its complicated registration system to obtain refunds. It also has to be kept in mind that the tax reform package comprises the abolition of nine State taxes, which reduces administrative costs.

95. This is meant to be the time it takes for all consumers and producers to adjust to change. Since many investment decisions have long lag times, the "long-run" may be of the order of ten years.
96. The estimate takes account of higher prices of new houses, which will be compensated by a new First Home Owners Scheme, and increased tobacco prices from the GST.
97. These assumptions are that:the fertility rate declines slightly from 1.8 presently to 1.75 by 2000 and subsequently remains at this level;net immigration remains at 70 000 per year;life expectancy increases on average by six years by 2051.
98. Including workers aged 65 and over.
99. Population growth was 1.2 per cent in 1997, with net immigration contributing 0.4 percentage point. The age structure of immigrants is similar to that of the total population owing to the importance of the family reunion category of immigrants.
100. Compared with the RIM Unit's central assumptions, the OECD's standardised assumptions are for Australia to have a higher fertility rate, less net immigration and a similar increase in life expectancy.
101. The assumed on-going decline in participation rates underlying the OECD projections contrasts with the outlook for broadly stable rates in the RIM Unit's projections. This is one of the many uncertainties surrounding the projections. Even so, the two sets of projections for Australia are quite similar overall.
102. This paragraph is based on Bateman and Piggott, 1997.
103. War veterans who have qualifying service may receive a service pension instead of the aged pension. The main difference from the age pension is that the minimum qualifying age is 60 for men and 56 for women, rising to 60 by 2014.
104. This legislation commenced on 20 September 1997. If the benchmark has not been met by way of CPI index increases, the single rate of pension will be increased to 25 per cent of MTAWE with the appropriate flow-ons.
105. Note that it is proposed in the tax reform package to change the age pension taper rate to 40 per cent.
106. The income test free area is the amount of non-pension income a pensioner can earn before the amount of pension begins to reduce. These limits are indexed to the CPI.
107. This section draws extensively on Bateman and Piggott, 1997.
108. Other exceptions are: members of the Defence Reserve Forces (only in respect of their reserve employment); certain non-resident employees; and employees of non-resident employers.
109. A government guarantee can substitute for full funding in the case of public sector employees. Defined benefit schemes can meet the requirements of the Superannuation Guarantee, which is framed in terms of contributions, provided that an actuarial certificate is obtained specifying that the implicit level of superannuation support is obtained.
110. These circumstances include death, disability, compassionate grounds or financial hardship.
111. Lifetime annuities tend to be priced above their actuarially fair value (for the population as a whole) because people who expect to live longest are most likely to buy them.

112. Rental assistance contributes towards the higher living costs of some non-homeowners – it was received by 16 per cent of age pensioners in 1997.
113. Service pension or income support supplement.
114. This assumes the current taper rate of 50 per cent for the income test and CPI indexed tax rates.
115. This assumes the current taper rate of 50 per cent for the income test and CPI indexed tax rates.
116. The description of superannuation regulation is based on the *Financial Services Inquiry, Final Report*, pp. 332-333.
117. In the case of the Commonwealth Government, which accounts for a little over one half of unfunded public service pensions, the Commonwealth Superannuation Scheme (CSS) was closed to new members from 1 July 1990 and the Public Service Superannuation Scheme (PSS) will (pending the passage of legislation) close to new employees on 1 July 1999. From that date, new Commonwealth employees will be able to have their employer superannuation paid to an available complying superannuation fund, or Retirement Savings Account of their choice. As at June 1997, the present value of unfunded (Commonwealth and state) pension liabilities for Australian public servants was about A$ 115.7 billion (22 per cent of GDP).
118. There is much uncertainty about these effects, especially in relation to personal income tax receipts. Slower employment growth will reduce growth in wage income, and hence personal income tax receipts but, other things being equal, greater scarcity of labour should increase growth in wage rates. The overall effect depends on which of these effects is greater. Recent (unpublished) OECD estimates for Australia suggest that they tend to cancel out, leaving the share of wages in national income constant; in other words, the elasticity of substitution (σ) between capital and labour in Australia is estimated to be unity.
119. Since the mid-1980s, however, labour productivity growth has averaged 1.5 per cent. It is too early to know if this reflects an increase in the long-term trend rate of labour productivity growth.
120. This is derived by applying cross sectional estimates of housing consumption estimates by age to ABS projections of population by age.
121. Voluntary work-related reasons include: retired; did not want to work any longer; wanted to work part-time; early retirement package; and returned to study.
122. Involuntary reasons include: retrenched; job was temporary; own ill health; business closed down; unsatisfactory work arrangements; and employer thought too old.
123. Family reasons include: to get married; pregnancy; to have children; and to look after family, house or someone else.
124. A regression equation predicting hiring shares by age, controlling for differences by age in the share of workers who actively search for a new job and for other relevant factors, implies that, on average across nine EU countries, the share of older workers in recent hires is almost 13 percentage points lower than that of prime-age workers (OECD, 1998*b*, p. 144).
125. The proportion of the total population receiving Disability Support Pension has grown rapidly in recent years, from 2.7 per cent in 1990 to 4.2 per cent in 1996. This has occurred despite the fact that labour-market conditions may not be considered as a factor in the assessment of disability. The proportion of people receiving DSP is highest just before age pension age.

126. The factors driving growth in health-care outlays are discussed more extensively in OECD Economic Survey of Australia, 1995, Chapter IV. Reforms since then are discussed in OECD Economic Survey of Australia, 1998, Chapter III.
127. At age 65, the life-time probabilities of requiring nursing home care or hostel care are respectively 40 per cent and 25 per cent.

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Annex I

Demographic assumptions for OECD projections

Table A1. **Demographic assumptions for OECD projections**

	Fertility rate[1]		Life expectancy at birth		Net migration rate[2]	
	1990-1995	2025-2030	1990-1995	2025-2030	1990-1995	2025-2030
Australia	**1.9**	**2.1**	**76.7**	**81.0**	**5.7**	**0.0**
United States	2.1	2.1	76.6	81.8	2.5	0.0
Japan	1.5	2.0	79.1	82.8	0.0	0.0
Germany	1.3	2.0	75.8	80.6	5.6	0.0
France	1.8	2.0	77.2	81.8	1.2	0.0
Italy	1.3	2.0	77.4	82.0	1.0	0.0
United Kingdom	1.8	2.0	76.2	81.0	0.9	0.0
Canada	1.9	2.1	77.8	82.2	4.4	0.0
Austria	1.6	2.0	76.6	81.5	5.1	0.0
Belgium	1.6	2.0	75.6	79.6	1.7	0.0
Denmark	1.8	2.0	74.7	79.1	1.9	0.0
Finland	1.9	2.1	75.4	80.8	1.6	0.0
Greece	1.4	2.0	77.4	81.7	6.8	0.0
Iceland	2.2	2.1	78.2	81.9	0.8	0.0
Ireland	2.0	2.1	75.2	80.6	–0.6	0.0
Luxembourg	1.7	2.0	75.7	80.6	10.2	0.0
Mexico	3.2	2.1	70.3	77.0	–2.3	0.0
Netherlands	1.6	2.0	77.3	81.5	2.6	0.0
New Zealand	2.1	2.1	75.7	80.5	1.2	0.0
Norway	1.9	2.1	77.2	81.7	1.9	0.0
Portugal	1.5	2.0	73.7	78.3	–0.8	0.0
Spain	1.2	2.0	76.8	81.2	0.5	0.0
Sweden	2.1	2.1	77.9	82.3	2.3	0.0
Switzerland	1.7	2.0	78.4	82.6	7.3	0.0
Turkey	2.9	2.1	67.3	74.8	0.0	0.0

1. Number of children per woman of childbearing age.
2. Number of net immigrants per 1 000 people.

Source: Bos *et al.* (1994).

Annex II

Calendar of main economic events

1997

November

The Federal Government announced an agreement with the States on interstate rail reform by establishing a "one-stop shop" (the Australian Rail Track Corporation) for interstate operators to negotiate access to the national track system.

The Government announced a package of measures with a total cost of A$ 180 million over five years as part of Australia's response to climate change. The measures are aimed at addressing Australia's greenhouse gas emissions, including programmes in the residential, energy and transport sectors and for re-vegetation, plantations and land use.

The Government sold one-third of the Commonwealth's equity in Telstra Corporation in a public float which will raise some A$ 14.3 billion in sale proceeds. The Telstra partial privatisation was the largest equity offering in Australian history and the largest initial public offering undertaken globally in 1997. Broadly, 60 per cent of the allocation went to Australian retail shareholders, 21 per cent to Australian institutions and the balance of 19 per cent to foreign investors.

The fourth CLERP position paper, on proposals for the reform of take-over laws, was released. A key proposal contained in the paper was the consideration of a mandatory bid rule, and expanding the role of a specialist take-over panel to resolve take-over disputes.

December

The Government released its A$ 1.3 billion *Investing for Growth* industry statement as part of its extensive reform agenda to deliver improved industry performance. A range of well-targeted measures was introduced to: increase support for business research and development and the commercialisation of that research; make investment in Australia more attractive; build Australia's strength as a trading nation; further improve the attractiveness of Australia as a financial centre; and ensure government, business and the wider community maximise the opportunities to contribute to, and benefit from, the global information revolution.

The Government announced the commencement of the Work for the Dole programme, as part of the principle of Mutual Obligation. The principle is that in return for financial support from the community, it is fair to expect individuals to improve their job prospects or contribute to their local community.

The fifth CLERP position paper, setting out reforms designed to facilitate electronic commerce, was released. Key proposals included, facilitating the use of electronic methods for transferring the legal title of debt and for companies' communications with their members and the Australian Securities and Investments Commission, and developing legislation to provide a more certain and robust legal framework for close-out and market netting arrangements.

The sixth CLERP position paper, proposing major changes to the regulatory framework for financial markets and investment products, was released. The paper which was well received set out a policy blue print for the regulation of the financial services industry and financial markets. The Government is taking account of comments received in further developing proposals for the uniform regulation of all financial products and markets.

The Treasurer released the 1997/98 Mid-Year Economic and Fiscal Outlook (MYEFO).

1998

March

At the 1998 Premiers' Conference the Commonwealth undertook to maintain financial assistance grants to the States and Territories in real per capita terms through to FY 2000/01, with this guarantee in FY 1999/2000 and 2000/01 being conditional on the States complying with their obligations under the Agreement to Implement the National Competition Policy and Related Reforms. The Commonwealth 's offer is conditional on the payment by the States and Territories of A$ 313 million in FY 1998/99 as a contribution to the Commonwealth's deficit reduction programme.

The Treasurer announced the Government's plan for implementing financial system reforms. The first stage of the reform package became effective from 1 July 1998 (see below). The announcement included a statement that the Government would seek agreement from the States and Territories for the second stage of the reforms which involves the transfer to the Commonwealth of the prudential and corporate regulatory responsibilities for building societies, credit unions, and friendly societies.

The Treasurer also announced the establishment of the Financial Sector Advisory Council (FSAC) and the FSAC Regional Financial Centre Task Force to advise the Government on policies for the financial sector and to make Australia a leading financial centre in the region.

April

The *Charter of Budget Honesty Act* came into operation. The Act aims to improve fiscal outcomes by enhancing the transparency of, and accountability for, fiscal policy. It requires governments to set out their medium-term fiscal strategy in each budget, along with their shorter-term fiscal objectives and targets. It also provides for full economic and fiscal outlook reports at the time of the budget, mid-year, and prior to elections. In addition, the Charter sets out arrangements for the costing of election commitments by the Government and the Opposition.

As part of the Government's "New Deal, Fair Deal" package for small business, a new mechanism for enforcing industry codes of conduct was established. Contravention of a prescribed code of conduct will now constitute a breach of the *Trade Practices Act 1974* (TPA), and will invite various remedies available under that Act, including damages and injunctions. To date a Franchising Code has been prescribed as a mandatory code, and a new "Oilcode" for the petroleum industry is expected to be similarly prescribed in 1999. The "New Deal, Fair Deal" reform package also introduced new provisions into the TPA designed to provide small business with further protection from unconscionable conduct in business transactions.

The *International Monetary Agreements Amendment Act 1998 (IMAAA)* received Royal Assent. The IMAAA amended the *International Monetary Agreements Act 1947* (the Act) to establish a framework for the provision of financial assistance by Australia to countries that are undertaking economic adjustment programs with the support of the International Monetary Fund. This is the framework under which Australia has participated in the financial support arrangements for Korea and Indonesia.

The Australian Industrial Relations Commission (AIRC) granted a safety net increase of A$ 14 for award rates of pay up to and including A$ 550 per week, A$ 12 for rates between A$ 550 and A$ 700 per week, and A$ 10 for rates above A$ 700 per week. These increases are absorbable into all above-award payments and are estimated to directly affect around 23 per cent of the workforce.

May

The 1998-99 Budget was delivered by the Treasurer. An underlying surplus of A$ 2.7 billion or 0.5 per cent of GDP was forecast for 1998/99 – consistent with the Government's medium-term fiscal strategy of maintaining underlying budget balance, on average, over the course of the economic cycle.

The Treasurer announced that Loan Council had endorsed (by correspondence) the Loan Council Allocation nominations of the Commonwealth and each State and Territory.

The new arrangements for the employment services market, Job Network, commenced on 1 May. The publicly operated Commonwealth Employment Service was closed and replaced by Job Network. Job Network is a national network of more than 300 private, community and government organisations which specialise in finding jobs for unemployed people, particularly those who are long term unemployed. The five main types of service available under Job Network are Job Matching, Job Search Training, Intensive Assistance, New Enterprise Incentive Scheme, and New Apprenticeship Centres. In addition, all job seekers, including those not in receipt of Government unemployment allowance, are able to use free of charge the job search facilities provided in Centrelink Customer Service Centres.

Following the sale of Brisbane, Melbourne and Perth airports in 1997, eight Commonwealth-owned airports (Adelaide, Alice Springs, Canberra, Coolangatta, Darwin, Hobart, Launceston and Townsville) were privatised through the sale of 50 year leases in May and June 1998. A prices oversight arrangement is in place, administered by the Australian Competition and Consumer Commission, to ensure that privatised airports do not misuse their market power.

The airports that were not privatised (the Sydney Basin airports, and Essendon Airport in Victoria) were leased to new Government-owned companies, and subjected to a similar regulatory regime applying to the privatised airports.

The Australian Communications Authority completed an auction of radio-frequency spectrum in the 800MHz and 1.8GHz bands. The auction has provided the opportunity for new entry to Australia's mobile telephony and other communications markets. Total proceeds from the auction were in the order of A$ 350 million.

June

The Cheques and Payment Orders Amendment (Turnback of Cheques) Act 1998 and the Payments Systems and Netting Act 1998 were passed by the Commonwealth Parliament. These Acts resolve a number of legal uncertainties in the event of the failure of a participant in the payments system, and in addition, facilitate both close-out and market netting and the implementation of a Real Time Gross Settlement System for high value payments.

The Cheques and Payment Orders Amendment Act 1998, also passed by the Commonwealth Parliament, extends cheque issuing rights to non-banks, including building societies and credit unions, from 1 December 1998.

July

The Australian Rail Track Corporation commenced operations on 1 July 1998, taking over management of the Commonwealth and Victorian interstate track, and having the task of negotiating access arrangements to track in NSW and WA.

The new regulatory framework for the financial sector commenced on 1 July 1998. The new regulatory structure is based on three agencies and set up along regulatory-objective (or functional) lines, where:

- the Reserve Bank of Australia focuses on the objectives of monetary policy, overall financial system stability and regulation of the payments system;
- the Australian Prudential Regulation Authority is responsible for providing prudential regulation of deposit taking institutions, insurance, and superannuation; and
- the Australian Securities and Investments Commission is responsible for market integrity and consumer protection across the financial system. (Note, the "Australian Securities and Investments Commission" name was adopted for the new market regulator and consumer agency rather than the previously announced "Australian Corporations and Financial Services Commission".)

The Payments System Board was established as a policy making Board of the Reserve Bank of Australia. It is responsible for the Reserve Bank of Australia's payments system policy with a view to increasing contestability, efficiency and stability in the Australian payments system. Additional powers were provided to the Reserve Bank to regulate the payments system. As a result, the Australian Payments System Council was wound-up.

A new tax rebate on savings commenced on 1 July 1998. The savings rebate applies to personal (after tax) member superannuation contributions, and/or net personal income from other savings and investments up to an annual cap of A$ 3 000. The rebate will be calculated at a rate of 7.5 per cent for one year from 1 July 1998 (a maximum rebate of A$ 225). As part of the Government's Tax Reform Package the Government has announced the discontinuation of the savings rebate from 1 July 1999.

The minimum level of employer superannuation support required under the Superannuation Guarantee legislation rose to 7 per cent on 1 July 1998.

New Mutual Obligation requirements commenced on 1 July. All 18 to 24 year olds unemployed for 6 months or more are required to participate in an additional approved activity in order to maintain full unemployment benefits. Approved activities include: Job Search Training or Intensive Assistance in Job Network; Work for the Dole; Job Placement and Employment Training; special literacy and numeracy lessons; New Apprenticeships; attendance at technical and further education institutions; and volunteer or part-time work.

The Youth Allowance came into effect on 1 July 1998. It is designed to make access to income support simpler and more flexible and removes disincentives for those under 21 to undertake full-time study or training. Youth Allowance replaced a range of payments for young people including AUSTUDY, Newstart Allowance, Youth Training Allowance, Sickness Allowance and More-than-minimum rate Family Allowance.

On 26 July 1998, the Government announced the first stage of a major expansion of the Work for the Dole pilot by providing funding for 301 new Work for the Dole projects. It is planned that 100 000 unemployed people will work on Work for the Dole projects over the next four years.

The laws regulating company formation and others aspects of company operations were reformed with the passage of the Company Law Review Act 1998 by the Commonwealth Parliament.

A long-awaited change to the regulation of the managed investment industrys commenced with the passage by the Commonwealth Parliament of the Managed Investment Act 1998. This Act facilitates a complete revamping of the structure of entities which operate within the managed investments industry. To improve accountability to investors and to streamline the operation of the management of their funds, managed investments will now be able to operate in a new simplified fashion. A single body will replace the dual system and will be responsible to investors for the management of their funds. As well investors rights were enhanced with new requirements for the appropriate governance of managed funds.

The Government introduced legislation as part of CLERP to reform the operation of Australia's capital markets through proposing significant changes in the regulation of public fundraising, take-overs, directors' duties, and the development and application of accounting standards.

August

On 13 August 1998, the Government released *A New Tax System* outlining its plans to reform the Australian taxation system. The reforms are intended to increase work incentives, provide a secure base for government finances, and promote consistency and simplicity within the tax system. Key elements of the reforms include the introduction of a 10 per cent Goods and Services tax with all the revenue being passed to the States and Territories, personal income tax cuts, increases in assistance to families, measures to compensate for the price impact of the introduction of a goods and services tax, and a review of business taxation.

On 14 August, the Treasurer announced the mechanism by which consultation with business will occur on the business tax reform proposals released as part of the Government's tax package. A report is to be made by 31 March 1999. (On 27 October, the Treasurer announced that reporting date of the review of business taxation will be extended to 30 June 1999.

The Federal Government finalised contracts for the sale of the shipping businesses of the Australian National Line (ANL). The sale of ANL's land-businesses is in progress.

Based on advice from the National Competition Council (NCC), the Treasurer announced that all States and Territories, except New South Wales (NSW), would receive their full allocation of National Competition Policy (NCP) payments, in recognition of the progress that all States and Territories had made in implementing National Competition Policy and Related Reforms. In relation to New South Wales, the NCC had recommended that if domestic rice marketing arrangements were not reformed by 31 January 1999 – as recommended by an independent review group in 1995 – then A$ 10 million should be deducted from its 1998-99 NCP payments (which total A$ 125 million). This penalty would reflect the costs imposed on consumers from maintaining the current domestic arrangements. The Treasurer delayed any decision on whether NSW would have its NCP payments reduced until early 1999. The total amount of NCP payments available to all States and Territories for 1998-99 is A$ 391.3 million.

September

The Secretaries to the Departments of the Treasury and Finance and Administration released the Pre-Election Economic and Fiscal Outlook (PEFO) report as required by the Government's Charter of Budget Honesty. The projected surpluses contained in the PEFO were lower than those projected at the time of the 1998-99 Budget. These downward revisions principally reflected the budgetary impact of the Government's tax reform package.

The Final Budget Outcome for FY 1997/98 was an underlying surplus of A$ 1.2 billion (0.2 per cent of GDP). This compares with an underlying deficit of A$ 1.2 billion estimated at the time of the 1998-99 Budget. This outcome reflected stronger than expected revenue collections and lower than anticipated underlying outlays. The achievement of an underlying surplus in FY 1997/98 fulfilled (a year ahead of schedule) the Government's commitment to return the underlying budget to surplus within its first term of office.

Government initiatives to accelerate the growth of Job Network took effect from 1 September 1998. As a result, Job Network members are now paid to place in jobs people not receiving income support, including job seekers with redundancy packages or working partners. In addition, Job Network members are also receiving funding for market development to assist them in achieving their optimum level of performance as soon as possible.

October

The Department of Finance and Administration and the Department of the Treasury costed Government and Opposition election commitments, as provided for under the Charter of Budget Honesty.

In a landmark decision relating to the award system, the AIRC ruled that all paid rate awards (that is, awards setting actual rather than minimum rates) are to be converted into minimum rates awards as par of the award simplification process.

BASIC STATISTICS:

INTERNATIONAL COMPARISONS

BASIC STATISTICS: INTERNATIONAL COMPARISONS

	Units	Reference period[1]	Australia	Austria	Belgium	Canada	Czech Republic	Denmark	Finland	France	Germany	Greece
Population												
Total	Thousands	1996	18 289	8 060	10 157	29 964	10 316	5 262	5 125	58 380	81 877	10 465
Inhabitants per sq. km	Number	1996	2	96	333	3	131	122	15	106	229	79
Net average annual increase over previous 10 years	%	1996	1.3	0.6	0.3	1.3	0	0.3	0.4	0.5	3	0.5
Employment												
Total civilian employment (TCE)[2]	Thousands	1996	8 344	3 737 (94)	3 675 (95)	13 676	4 918	2 593	2 087	21 951	35 360	3 824 (95)
of which: Agriculture	% of TCE	1996	5.1	7.2 (94)	2.5 (95)	4.1	6.3	4	7.1	4.6	3.3	20.4 (95)
Industry	% of TCE	1996	22.5	33.2 (94)	26.7 (95)	22.8	42	27	27.6	25.9	37.5	23.2 (95)
Services	% of TCE	1996	72.4	59.6 (94)	71.4 (95)	73.1	51.7	69	65.3	69.5	59.1	56.4 (95)
Gross domestic product (GDP)												
At current prices and current exchange rates	Bill. US$	1996	398.9	228.7	268.2	579.2	56.2	174.9	125.1	1 536.6	2 353.5	91.2 (95)
Per capita	US$	1996	21 812	28 384	26 409	19 330	5 445	33 230	24 420	26 323	28 738	8 722 (95)
At current prices using current PPPs[3]	Bill. US$	1996	372.7	172.4	222	645.1	..	118	96.7	1 198.6	1 736.1	133.5
Per capita	US$	1996	20 376	21 395	21 856	21 529	..	22 418	18 871	20 533	21 200	12 743
Average annual volume growth over previous 5 years	%	1996	3.9	1.6	1.2	2.2	2	2.2	1.6	1.2	1.4	1.3 (95)
Gross fixed capital formation (GFCF)	% of GDP	1996	20.3	23.8	17.3	17.7	33	16.7	16.1	17.4	20.6	17 (95)
of which: Machinery and equipment	% of GDP	1996	10.2 (95)	8.8 (95)	7.5 (95)	6.6	..	7.9 (95)	6.4 (95)	7.8	7.6	7.7 (95)
Residential construction	% of GDP	1996	4.6 (95)	5.9 (95)	4.6 (95)	5.4	..	3.2 (95)	3.5 (95)	4.4	7.3	3.3 (95)
Average annual volume growth over previous 5 years	%	1996	5.6	2.1	0.3	2.2	9.4	2	–4.1	–1.5	0.2	0.5 (95)
Gross saving ratio[4]	% of GDP	1996	18	21.9	22.2	17.8	..	17.6	19.6	18.7	20	16 (95)
General government												
Current expenditure on goods and services	% of GDP	1996	17	19.8	14.5	18.7	21.5	25.2	21.9	19.4	19.8	20.8 (95)
Current disbursements[5]	% of GDP	1995	35.6	48.6	52.2	45.8	..	59.6	55.9	50.9	46.6	52.1
Current receipts	% of GDP	1995	34.9	47.4	49.9	42.7	..	58.1	52.8	46.9	45.9	45
Net official development assistance	% of GNP	1995	0.36	0.33	0.38	0.38	..	0.96	0.32	0.55	0.31	0.13
Indicators of living standards												
Private consumption per capita using current PPPs[3]	US$	1996	12 596	12 152	13 793	12 959	..	12 027	10 282	12 506	12 244	9 473
Passenger cars, per 1 000 inhabitants	Number	1994	460	433	416	466	282	312	368	430	488	199
Telephones, per 1 000 inhabitants	Number	1994	496	466	449	576	209	604	551	547	483[8]	478
Television sets, per 1 000 inhabitants	Number	1993	489	479	453	618	476	538	504	412	559	202
Doctors, per 1 000 inhabitants	Number	1995	2.2 (91)	2.7	3.7 (94)	2.2	2.9	2.9 (94)	2.8	2.9	3.4	3.9 (94)
Infant mortality per 1 000 live births	Number	1995	5.7	5.4	7.6 (94)	6.3 (94)	7.7	5.5	4	5.8 (94)	5.3	8.1
Wages and prices (average annual increase over previous 5 years)												
Wages (earnings or rates according to availability)	%	1996	1.7	5.2	2.7	2.4	..	3.2	3.8	2.6	4.2	11.8
Consumer prices	%	1996	2.4	2.9	2.2	1.4	11.9	1.9	1.5	2	3.1	11.6
Foreign trade												
Exports of goods, fob*	Mill. US$	1996	60 288	57 870	170 223[7]	202 320	21 910	51 030	40 576	288 450	521 263	11 501
As % of GDP	%	1996	15.1	25.3	63.5	34.9	39	29.2	32.4	18.8	22.1	12.9 (95)
Average annual increase over previous 5 years	%	1996	7.5	7.1	7.6	9.7	..	6.2	12.1	6.3	5.4	5.8
Imports of goods, cif*	Mill. US$	1996	61 374	67 376	160 917[7]	170 931	27 721	44 987	30 911	271 348	455 741	27 402
As % of GDP	%	1996	15.4	29.5	60	29.5	49.3	25.7	24.7	17.7	19.4	30.4 (95)
Average annual increase over previous 5 years	%	1996	9.7	5.9	5.9	7.7	..	5.6	7.3	3.9	3.3	6.6
Total official reserves[6]	Mill. SDRs	1996	10 107	15 901	11 789[7]	14 202	8 590	9 834	4 810	18 635	57 844	12 171
As ratio of average monthly imports of goods	Ratio	1996	2	2.8	0.9	1	..	2.6	1.9	0.8	1.5	5.3

* At current prices and exchange rates.
1. Unless otherwise stated.
2. According to the definitions used in OECD *Labour Force Statistics*.
3. PPPs = Purchasing Power Parities.
4. Gross saving = Gross national disposable income minus private and government consumption.
5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.
6. End of year.
7. Data refer to the Belgo-Luxembourg Economic Union.
8. Data refer to western Germany.
9. Including non-residential construction.
10. Refers to the public sector including public enterprises.

Sources: Population and Employment: OECD, *Labour Force Statistics.* GDP, GFCF and General Government: OECD, *National Accounts*, Vol. I and *OECD Economic Outlook*, Historical Statistics. Indicators of living standards: Miscellaneous national publications. Wages and Prices: OECD, *Main Economic Indicators.* Foreign trade: OECD, *Monthly Foreign Trade Statistics*, Series A. Total official reserves: IMF, *International Financial Statistics.*

BASIC STATISTICS: INTERNATIONAL COMPARISONS *(cont'd)*

	Units	Reference period[1]	Hungary	Iceland	Ireland	Italy	Japan	Korea	Luxembourg	Mexico	Netherlands	New Zealand
Population												
Total	Thousands	1996	10 193	270	3 621	57 473	125 864	45 545	418	96 582	15 494	3 640
Inhabitants per sq. km	Number	1996	77	3	52	191	333	458	161	48	380	14
Net average annual increase over previous 10 years	%	1996	–0.3	1.1	0.2	0	0.4	1	1.3	2	0.6	1.1
Employment												
Total civilian employment (TCE)[2]	Thousands	1996	3 605	142	1 307	20 036	64 860	20 764	212 (95)	32 385 (95)	6 983	1 688
of which: Agriculture	% of TCE	1996	8.4	9.2	10.7	7	5.5	11.6	2.8 (95)	23.5 (95)	3.9	9.5
Industry	% of TCE	1996	33	23.9	27.2	32.1	33.3	32.5	30.7 (90)	21.7 (95)	22.4	24.6
Services	% of TCE	1996	58.6	66.2	62.3	60.9	61.2	55.9	66.1 (90)	54.8 (95)	73.8	65.9
Gross domestic product (GDP)												
At current prices and current exchange rates	Bill. US$	1996	43.7 (95)	7.3	70.7	1 214.2	4 595.2	484.8	17	329.4	396	65.9
Per capita	US$	1996	4 273 (95)	27 076	19 525	21 127	36 509	10 644	40 791	3 411	25 511	18 093
At current prices using current PPPs[3]	Bill. US$	1996	..	6.3	68.8	1 148	2 924.5	618.5	13.5	751.1	324.5	63.6
Per capita	US$	1996	..	23 242	18 988	19 974	23 235	13 580	32 416	7 776	20 905	17 473
Average annual volume growth over previous 5 years	%	1996	–2.4 (95)	1.5	7.1	1	1.5	7.1	4.8	1.7	2.3	3.7
Gross fixed capital formation (GFCF)	% of GDP	1996	19.3 (95)	17.5	17.2	17	29.7	36.8	20.8	18	19.7	20.9
of which: Machinery and equipment	% of GDP	1996	..	6.7	5.5 (95)	8.8	10.1 (95)	13	..	8.8	9.4	10
Residential construction	% of GDP	1996	..	3.9	4.9 (95)	4.5	5.3 (95)	7.6	..	4.7	5	5.6
Average annual volume growth over previous 5 years	%	1996	–0.9 (95)	–1.4	6	–1.4	1.3	6.9	0.2	–0.7	2.2	9.6
Gross saving ratio[4]	% of GDP	1996	..	15.6	21.7	20.5	31.4	34.2	37.5	22.7	25.7	16
General government												
Current expenditure on goods and services	% of GDP	1996	24.9 (95)	20.8	14.1	16.4	9.7	10.6	13.6	9.7[10]	14	14.4
Current disbursements[5]	% of GDP	1995	..	35.1	39.2 (94)	49.5	28.5	15.1	..	..	51.8	..
Current receipts	% of GDP	1995	..	36	39.3 (94)	44.5	32	25.1	..	..	50	..
Net official development assistance	% of GNP	1995	..	..	0.29	0.15	0.28	0.03	0.36	..	0.81	0.23
Indicators of living standards												
Private consumption per capita using current PPPs[3]	US$	1996	..	14 244	10 020	12 224	13 912	7 354	17 811	5 045	12 477	10 895
Passenger cars, per 1 000 inhabitants	Number	1994	212	434	264	517	342	115	544	91	383	457
Telephones, per 1 000 inhabitants	Number	1994	170	557	350	429	480	397	564	93	509	470
Television sets, per 1 000 inhabitants	Number	1993	427	335	301	429	618	215	261	150	491	
Doctors, per 1 000 inhabitants	Number	1995	3.4	3.9 (94)	3.4	3.0 (94)	1.7	1.6 (92)	1.8 (94)	1.1	2.2 (93)	1.6
Infant mortality per 1 000 live births	Number	1995	11	6.1	6.3	6.6 (94)	4.3	9	5.3 (94)	17 (94)	5.5	7.2 (94)
Wages and prices (average annual increase over previous 5 years)												
Wages (earnings or rates according to availability)	%	1996	..	..	3.7	3.5	1.8	..	..	–1.6	2.4	1.5
Consumer prices	%	1996	23.2	2.6	2.2	4.5	0.7	5.3	2.4	19.7	2.5	2
Foreign trade												
Exports of goods, fob*	Mill. US$	1996	15 674	1 891	48 416	250 842	411 067	129 715	..	96 000	203 953	14 316
As % of GDP	%	1996	35.9	26	68.5	20.7	8.9	26.8	..	29.1	51.5	21.7
Average annual increase over previous 5 years	%	1996	8.9	4	14.8	8.2	5.5	12.5	..	17.6	8.9	8.2
Imports of goods, cif*	Mill. US$	1996	18 105	2 032	35 763	206 904	349 149	150 340	..	89 469	184 389	14 682
As % of GDP	%	1996	41.4	27.9	50.6	17	7.6	31	..	27.2	46.6	22.3
Average annual increase over previous 5 years	%	1996	9.6	3.4	11.5	2.5	8	13.9	..	12.4	7.8	11.8
Total official reserves[6]	Mill. SDRs	1996	6 812	316	5 706	31 954	150 663	23 670	..	13 514	18 615	4 140
As ratio of average monthly imports of goods	Ratio	1996	..	1.9	1.9	1.9	5.2	..	..	1.8	1.2	3.4

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5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.
6. End of year.
7. Data refer to the Belgo-Luxembourg Economic Union.
8. Data refer to western Germany.
9. Including non-residential construction.
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Sources: Population and Employment: OECD, *Labour Force Statistics*. GDP, GFCF and General Government: OECD, *National Accounts*, Vol. I and *OECD Economic Outlook*, Historical Statistics. Indicators of living standards: Miscellaneous national publications. Wages and Prices: OECD, *Main Economic Indicators*. Foreign trade: OECD, *Monthly Foreign Trade Statistics*, Series A. Total official reserves: IMF, *International Financial Statistics*.

BASIC STATISTICS: INTERNATIONAL COMPARISONS *(cont'd)*

	Units	Reference period[1]	Norway	Poland	Portugal	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
Population											
Total	Thousands	1996	4 370	38 618	9 935	39 270	8 901	7 085	62 695	58 782	265 557
Inhabitants per sq. km	Number	1996	13	123	108	78	20	172	80	240	28
Net average annual increase over previous 10 years	%	1996	0.5	0.3	–0.1	0.2	0.6	0.8	2	0.3	1
Employment											
Total civilian employment (TCE)[2]	Thousands	1996	2 110	14 977	4 475	12 394	3 963	3 803	20 895	26 088	126 708
of which: Agriculture	% of TCE	1996	5.2	22.1	12.2	8.7	2.9	4.5	44.9	2	2.8
Industry	% of TCE	1996	23.4 (95)	31.7	31.4	29.7	26.1	27.7	22	27.4	23.8
Services	% of TCE	1996	71.5 (95)	46.2	56.4	61.6	71	67.4	33.1	71	73.3
Gross domestic product (GDP)											
At current prices and current exchange rates	Bill. US$	1996	157.8	117.9 (95)	103.6	584.9	251.7	294.3	181.5	1 153.4	7 388.1
Per capita	US$	1996	36 020	3 057 (95)	10 425	14 894	28 283	41 411	2 894	19 621	27 821
At current prices using current PPPs[3]	Bill. US$	1996	106.7	..	130.1	587.2	171.4	180.6	383.3	1 095.5	7 388.1
Per capita	US$	1996	24 364	..	13 100	14 954	19 258	25 402	6 114	18 636	27 821
Average annual volume growth over previous 5 years	%	1996	4.1	2.2 (95)	1.5	1.3	1	0.1	4.4	2.2	2.8
Gross fixed capital formation (GFCF)	% of GDP	1996	20.5	17.1 (95)	24.1	20.1	14.8	20.2	25	15.5	17.6
of which: Machinery and equipment	% of GDP	1996	8.4	..	11.7 (93)	6.1 (95)	7.9	9.3	11.9	7.6	8.3 (95)
Residential construction	% of GDP	1996	2.6 (94)	..	5.2 (93)	4.3 (95)	1.9	11[9]	8.4 (95)	3	4.1 (95)
Average annual volume growth over previous 5 years	%	1996	2.8	5.4 (95)	2.2	–1	–2.6	–0.8	6.9	1.3	6.9
Gross saving ratio[4]	% of GDP	1996	29.9	..	21.6	20.7	16	27.1	22.3	14.6	16.6
General government											
Current expenditure on goods and services	% of GDP	1996	20.5	16.9 (95)	18.5	16.3	26.2	14.3	11.6	21.1	15.6
Current disbursements[5]	% of GDP	1995	45.8	..	42.5 (93)	41.2	63.8	47.7	..	42.3 (94)	34.3
Current receipts	% of GDP	1995	50.9	..	39.8 (93)	37.9	57.5	53.8	..	37.2 (94)	32.1
Net official development assistance	% of GNP	1995	0.87	..	0.27	0.24	0.77	0.34	0.07	0.28	0.1
Indicators of living standards											
Private consumption per capita using current PPPs[3]	US$	1996	11 593	..	8 522	9 339	10 096	15 632	4 130	11 865	18 908
Passenger cars, per 1 000 inhabitants	Number	1994	381	186	357	351	406 (93)	451	47	372	565
Telephones, per 1 000 inhabitants	Number	1994	554	131	350	371	683	597	201	489	602
Television sets, per 1 000 inhabitants	Number	1993	427	298	190	400	470	400	176	435	816
Doctors, per 1 000 inhabitants	Number	1995	2.8	2.3	3	4.1 (93)	3.1	3.1 (94)	1.2	1.6 (94)	2.6 (94)
Infant mortality per 1 000 live births	Number	1995	4	13.6	7.4	6 (94)	4	5	46.8 (94)	6.2 (94)	8 (94)
Wages and prices (average annual increase over previous 5 years)											
Wages (earnings or rates according to availability)	%	1996	3.2	..	..	5.8	4.8	..	..	4.9	2.7
Consumer prices	%	1996	1.9	..	5.6	4.7	2.7	2.2	81.6	2.7	2.9
Foreign trade											
Exports of goods, fob*	Mill. US$	1996	49 576	24 417	24 614	102 067	84 836	79 581	23 301	259 941	625 075
As % of GDP	%	1996	31.4	20.7	23.8	17.5	33.7	27	12.8	22.5	8.5
Average annual increase over previous 5 years	%	1996	7.8	..	8.6	11.2	9	5.3	11.1	7	8.2
Imports of goods, cif*	Mill. US$	1996	35 575	37 185	35 192	121 838	66 825	78 052	43 094	287 033	795 289
As % of GDP	%	1996	22.5	31.5	34	20.8	26.5	26.5	23.7	24.9	10.8
Average annual increase over previous 5 years	%	1996	6.9	..	6.1	5.5	6	3.2	15.1	6.5	10.3
Total official reserves[6]	Mill. SDRs	1996	18 441	12 409	11 070	40 284	13 288	26 727	11 430	27 745	44 536
As ratio of average monthly imports of goods	Ratio	1996	6.2	..	3.8	4	2.4	4.1	3.2	1.2	0.7

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