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2000-01 in review: housing leads a temporary slowdown in Australian economic growth

After three years of very strong growth, the Australian economy experienced a slowdown in the second half of 2000, before rebounding to solid growth in the first half of 2001. The slowdown mainly reflected the impact of a range of one-off factors which changed the timing and composition of growth. In particular, there was a large decline in residential construction, which wound back the record levels of activity experienced by the industry in anticipation of the introduction of The New Tax System.

The weakness in the labour intensive construction sector in the latter part of 2000 flowed through to related parts of the manufacturing sector and resulted in slower employment growth, lower consumer spending and a decline in business confidence. These effects were in conjunction with adverse seasonal conditions in the farm sector, the contractionary impact of higher oil prices on consumer spending and a sharp slowing in world growth, only partly offset by the stimulus from the Olympics and the boost to exports from a lower exchange rate.

Despite a rapidly weakening world economy, Australia's net exports made a large positive contribution to growth in 2000-01, with the terms of trade also improving. The current account deficit as a proportion of GDP declined to a twenty year low.

Abstracting from some identifiable temporary or one-off influences on consumer prices, including the introduction of The New Tax System and sharply higher world oil prices, inflation remained within the 2 to 3 per cent target band.

Overview of the economy in 2000-01

Temporary slowdown in the Australian economy.

After three years of very strong growth in excess of 4 per cent, the Australian economy experienced a sharp slowdown in the second half of 2000, with the weakness concentrated in the residential construction sector and related parts of the manufacturing sector.

Nevertheless, the slowdown was temporary, with GDP growth rebounding to a strong 1.2 per cent and 1.1 per cent in the June and September quarters respectively of 2001.
Reflecting the sharper than expected weakness of the first half of the 2000-01 financial year, year average growth was a modest 1.8 per cent.

A number of factors interacted to lower growth.

The most significant factor contributing to the slower than expected growth in the second half of 2000 was a very sharp but temporary decline in dwelling investment. Changes in the timing of activity associated with *The New Tax System (TNTS)* saw residential construction activity rise to around its highest level as a share of GDP in around 20 years in the June quarter 2000, followed by a fall of 31 per cent in the second half of the year.

There was an unexpected record fall in expenditure on alterations and additions.

The decline in residential activity in the second half of 2000 was not confined to the construction of new dwellings. Alterations and additions (AA), which comprises around 44 per cent of dwelling investment, also fell by a record amount in these two quarters. Investment in AA had grown strongly through much of the 1990s.

Because the decline in dwelling investment was concentrated in the first half of the financial year, it had a greater impact on year average growth than if the same 31 per cent decline had been evenly distributed over the course of the year.

Early evidence of dwelling sector recovery.

The housing sector stabilised in the first half of 2001, with forward indicators at the end of 2000-01 pointing to very strong growth in the months ahead. Indeed, the housing sector contributed very strongly to economic growth in the September quarter 2001.

Household consumption grew by 2.5 per cent in 2000-01, below the 4.1 per cent increase in 1999-2000. This reflected a number of factors including the impact of higher world oil prices on Australian petrol prices. The result was a reduction in funds available to households for more discretionary expenditure. Higher interest rates

in the first half of the year, the dampening effect of the weaker housing sector and modest growth in private sector wealth also acted to dampen consumption growth.

New private business investment fell modestly in 2000-01. The main factor impacting on new investment was the large decline in non-residential construction as Olympic-related work wound down and uncertainty in relation to the world economic outlook increased as the year progressed.

After world growth of 4.7 per cent in 2000, the global economic outlook for 2001 weakened considerably and official and private sector organisations downgraded their forecasts for world growth in 2001 progressively from late 2000 onwards.[1] While a moderation in world growth in 2001 had been anticipated in the 2000-01 Budget and 2000-01 MYEFO, and many of the negative factors that acted together in the second half of 2000 had been identified, the turning point in the cycle arrived earlier and the slowdown was deeper than forecast.

Net exports contributed to economic growth.

Despite the sharp weakening in the world economy as the year progressed, net exports contributed a much stronger than expected 1.8 percentage points to overall economic growth in Australia in 2000-01, boosted by a competitive exchange rate and the impact of significantly weaker domestic demand growth on the demand for imports. The positive contribution to growth from net exports was a major turnaround from the negative contribution to growth in 1999-2000.

Australia's terms of trade continued to rise steadily during the course of 2000-01 in the face of the weakening world economy. Commodity prices held up reasonably well on world markets, with some important commodities such as coal, iron ore, beef and wool

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[1] The IMF world GDP growth forecast for 2001 was 4.2 per cent in October 2000, and was progressively lowered to 2.4 per cent by December 2001. Similarly, the OECD downgraded its forecast of OECD average GDP growth for 2001 from 3.3 per cent in December 2000 down to 1.0 per cent in November 2001.

actually increasing in $US terms. Australia also benefited from subdued prices for key imports such as Information, Computer and Telecommunications (ICT) equipment as the world economy weakened.
Australia's strong trade performance, improving terms of trade and relatively low world and domestic interest rates (which helped to keep the Net Income Deficit (NID) in check), contributed to a current account deficit at a twenty-year low of 2.8 per cent of GDP in 2000-01.

Employment was affected by the building sector downturn.

Employment increased by 2.1 per cent in 2000-01. However, the downturn in the labour intensive construction sector had flow-on effects in the labour market, reversing a large part of the employment growth that occurred in the first two months of the 2000-01 financial year. The unemployment rate averaged 6.4 per cent for the year, compared with 6.6 per cent in 1999-2000.

Wages increased by 3.9 per cent in 2000-01, with no obvious impact on wage outcomes flowing from the one-off increase in prices associated with the introduction of *TNTS*.

Leaving aside one-off factors, inflation remained within the 2-3 per cent target band.

The headline Consumer Price Index (CPI) increased by 6.0 per cent in both year-average and through-the-year terms in 2000-01. In through-the-year terms, *TNTS* is estimated to have contributed around 2½ per cent to the increase, with fuel and fruit and vegetable prices contributing around another ½ of one per cent and ¼ of one per cent respectively. Leaving these one-off influences aside, the CPI increased by around 2¾ per cent in through-the-year terms in 2000-01, in line with the 2 to 3 per cent medium-term inflation target band.

COMPARISON OF FORECASTS AGAINST OUTCOMES

International economy

World GDP grew by 4.7 per cent[2] in 2000, up from 3.6 per cent in 1999 and well above its long-term average growth rate. The outcome for 2000 was slightly above the 2000-01 Budget forecast of 4¼ per cent but in line with the 4¾ per cent growth forecast in the 2000-01 MYEFO.[3]

Strength in global economy in the first part of 2000…

The strength of the global economy in 2000 was largely the result of very strong growth early in the year in the US, strong growth in Europe, positive growth in Japan and a strong rebound in non-Japan East Asian economies. Robust economic growth in the first half of 2000 and a range of positive factors, including an expected easing in oil prices, resulted in an upgrading of the forecast for world economic growth by half a percentage point for both 2000 and 2001 in the 2000-01 MYEFO.

growth in the US fell sharply in the second half of 2000…

In the event, economic growth in the US fell more sharply than expected in the second half of 2000 and the first half of 2001, with large spillover effects on other regions. A range of forces began to act concurrently toward the end of 2000 and into 2001, including the restraining influence of earlier monetary policy tightening in the US, high energy prices[4] and falling

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2 Real GDP, weighted on a purchasing power parity (PPP) basis.

3 The IMF's forecast for world GDP growth (real terms, PPP basis) for 2000 published in the *World Economic Outlook* was 4.2 per cent in May 2000 and was 4.7 per cent in October 2000. The OECD's forecast for 2000 OECD GDP growth published in the *Economic Outlook* was 4.0 per cent in June 2000 and 4.3 per cent in December 2000.

4 World oil prices surged in 2000, from a world trade-weighted average of US$17.49 per barrel in 1999 to US$27.57 in 2000. This outcome compares to the 2000-01 MYEFO forecast of $US27½ per barrel for 2000 and the 2000-01 Budget forecast of $US25 per barrel. The world trade-weighted average oil price is a weekly contract price weighted by export volume, and is compiled weekly by the US Department of Energy's Energy Information Administration.

equity prices. As a result, inventories underwent a significant adjustment and investment fell sharply in line with substantial excess capacity and a reassessment of the likely returns, particularly in the high technology sectors.

Monetary policy in the US was then eased promptly in early 2001 and fiscal policy was supportive. The lower interest rates provided homeowners with a significant boost to disposable income by reducing mortgage payments. In addition, mortgage refinancing allowed many homeowners to increase their mortgage balance on refinancing, as this provides a ready means to 'cash out' unrealised capital gains. Consumer confidence remained high and income growth was robust. Oil prices also declined. Together, these developments seemed to have played a role in sustaining consumption in the latter half of 2000-01.

growth in most countries slowed concurrently…

The initial and most significant impact of the slowdown in the US was on those countries with close trade links with the US, including countries in East Asia. Trade, investment and financial market linkages transmitted the downturn globally and exacerbated vulnerability in individual countries. As a result, conditions in the global economy deteriorated markedly through the first half of 2001, with growth in most countries slowing concurrently and several recording negative growth.

and the outlook for 2001 weakened considerably.

As a result of developments in the US, the outlook for world growth in 2001 weakened considerably and official and private sector organisations downgraded their forecasts progressively from late 2000 onwards. While a slowdown in world growth in 2001 had been anticipated in the 2000-01 Budget and MYEFO, and many of the negative factors that acted together in the last half of 2000 had been identified, the turning point in the cycle arrived earlier and the slowdown was deeper than forecast.

Domestic economy

In Table 1, the 2000-01 actual outcomes are compared with the Budget and MYEFO forecasts for the Australian

economy.

Table 1: 2000-01 Budget and MYEFO forecasts and outcomes

	Outcomes (a) 1999-2000 Year Average (b)	2000-2001 Budget Forecasts Year Average (b)	2000-2001 MYEFO Forecasts Year Average (b)	Outcomes (a) 2000-2001 Year Average (b)
Panel A - Demand and Output(c)				
Household consumption	4.1	3 3/4	3 3/4	2.5
Private investment				
Dwellings	13.7	-3	-8	-20.6
Total business investment(d)	3.8	6	4	-2.8
Other buildings and structures(d)	-9.8	-6	-7	-20.1
Machinery and equipment(d)	9.1	9	8	1.1
Private final demand(d)	4.8	3 1/2	2 3/4	-0.2
Public final demand(d)	6.2	2	3 1/2	0.3
Total final demand	5.2	3 1/4	3	-0.1
Change in inventories(e)				
Private non-farm	-0.4	0	0	0.1
Farm and public authorities	0.0	- 1/4	0	-0.1
Gross national expenditure	4.6	3	3	-0.1
Exports of goods and services	9.3	7	9	7.0
Imports of goods and services	12.5	4	3	-1.7
Net exports(e)	-0.8	3/4	1	1.8
Gross domestic product	4.3	3 3/4	4	1.8
Non-farm product	4.2	3 3/4	4 1/4	2.1
Farm product(f)	7.4	1	-1	-4.1
Panel B - Other Selected Economic Measures				
Prices and wages				
Consumer Price Index -Headline	2.4	5 3/4	6	6.0
Consumer Price Index -'Ongoing'(g)	2.4	2 3/4	3 1/4	3.3
Gross non-farm product deflator	2.0	2 3/4	3	4.4
Average earnings(h)	3.1	4 1/4	4 1/4	3.9
Labour market				
Employment (Labour Force Survey basis)	2.7	2 1/4	3	2.1
Unemployment rate (per cent)	6.6	6 1/2	6 1/4	6.4
Unemployment rate (per cent)(i)	6.4	6 1/4	6 1/4	6.9
Participation rate (per cent)	63.4	63 1/2	64	63.7
External accounts				
Terms of trade	4.3	1/4	1 1/2	3.1
Current account balance				
$billion	-33.5	-31 1/2	-28 1/2	-18.5
Percentage of GDP	-5.3	-4 3/4	-4 1/4	-2.8

(a) Calculated using original data, except average earnings and the labour market measures which are calculated using seasonally adjusted data.
(b) Percentage change on preceding year unless otherwise indicated.
(c) Chain volume measure.
(d) Excluding transfers of net second-hand asset sales from the public sector to the private sector.
(e) Percentage point contribution to growth in GDP.
(f) Calculated at basic prices.
(g) The 'ongoing' CPI is the headline measure less the estimated impact of The New Tax System.
(h) Average non-farm compensation of employees (national accounts basis).
(i) The level in the June quarter of each year.

Domestic demand

Growth was expected to moderate in 2000-01...

In compiling the May 2000 Budget forecasts, some moderation in growth was expected in 2000-01 from the very strong rates recorded in the three previous years. These earlier very strong outcomes were supported by a period of exceptional growth in productivity and the take-up of spare capacity in the economy more generally, which had led to a considerable decline in unemployment.

and the composition of growth was expected to change.

The moderation in growth in 2000-01 was expected to be accompanied by a significant rebalancing of the components of growth. Domestic demand was expected to grow at a more moderate pace than over the preceding three years, reflecting some lagged effects of the increase in interest rates during 1999-2000 as well as an unwinding of a net bring-forward of expenditure ahead of *TNTS*. The easing in domestic demand growth was expected to be partially offset by stronger net exports, reflecting what was forecast to be a strengthening international economy in 2000, a boost to service exports from the Olympics, and the competitive level of the exchange rate.

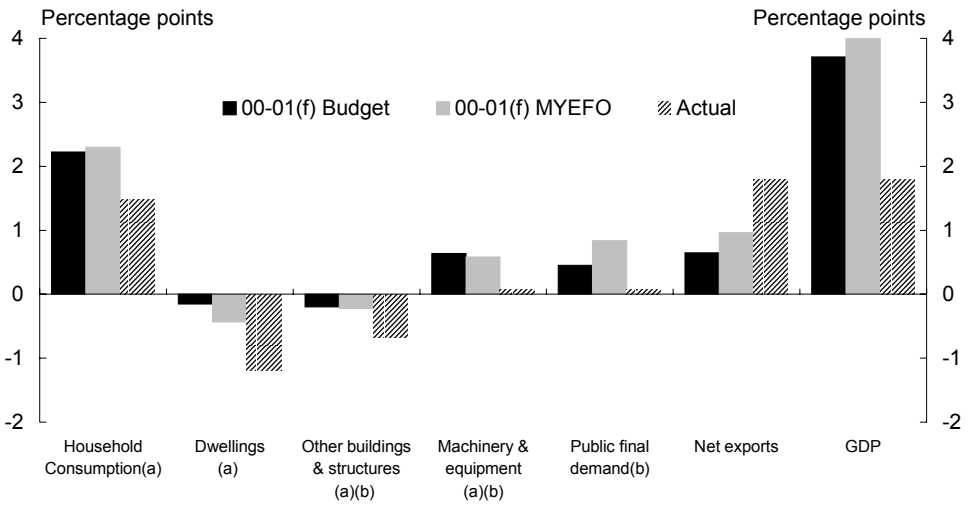
The economic growth forecast for 2000-01 was revised up in the 2000-01 MYEFO to reflect a stronger world outlook than seemed likely at Budget time, and a lower exchange rate, which together were expected to provide an added boost to net exports. At the same time, some components of domestic demand were revised down, particularly dwelling investment and business investment.

But the slowdown was sharper than expected.

While the outlook in the 2000-01 Budget and 2000-01 MYEFO incorporated an expected easing in domestic demand to reflect an unwinding of a net bring-forward of expenditure ahead of *TNTS*, the slowdown in the second half of 2000 proved to be much sharper than expected. The weakness was concentrated in the residential construction sector, which had flow on effects to other parts of the economy including related

parts of the manufacturing sector, resulting in lower employment, consumer spending and business sentiment. Net exports, on the other hand contributed more than expected to growth in 2000-01, despite the weakening world economy.

Chart 1: Contributions to GDP growth 2000-01



(a) These components, along with intangible fixed assets, livestock, and ownership transfer costs make up 'private final demand'.
(b) Excluding transfers of net second-hand asset sales from the public sector to the private sector.

Solid contribution to growth from household consumption.

Household consumption rose by 2.5 per cent and contributed 1.5 percentage points to GDP growth in 2000-01, moderating from the very strong growth recorded in earlier years.

The 2.5 per cent increase in household consumption was somewhat lower than the 3¾ per cent forecast in the 2000-01 Budget and MYEFO. The weaker than expected outcomes were concentrated in the first half of 2000-01, when consumption grew by just 0.6 per cent. In part, this reflected higher than expected petrol prices which reduced expenditure on other discretionary items, higher interest rates in the first half of 2000-01, the indirect effects of the sharp contraction in the dwelling sector and relatively modest growth in private sector wealth.

The introduction of *TNTS* on 1 July 2000 had an effect on the timing of household expenditure decisions. After 1 July, the unwinding of the bring-forward in retail trade was approximately offset by an increase in the purchase of passenger motor vehicles, due to changes in the relative prices of these items with the introduction of the *TNTS*. Therefore the net impact on household consumption growth in 2000-01 is estimated to have been relatively small and broadly in line with expectations.

Strong rebound in household consumption in second half of 2000-01.

Household consumption growth rebounded very strongly in the first half of 2001, growing by 2.6 per cent over the March and June quarters. This was underpinned by lower petrol prices, a reduction in interest rates and a strong pick-up in private sector wealth, mainly reflecting the sharp rise in property values, which increased by around 6 per cent in the first half of 2001.

Forecasts for dwelling investment overstated activity.

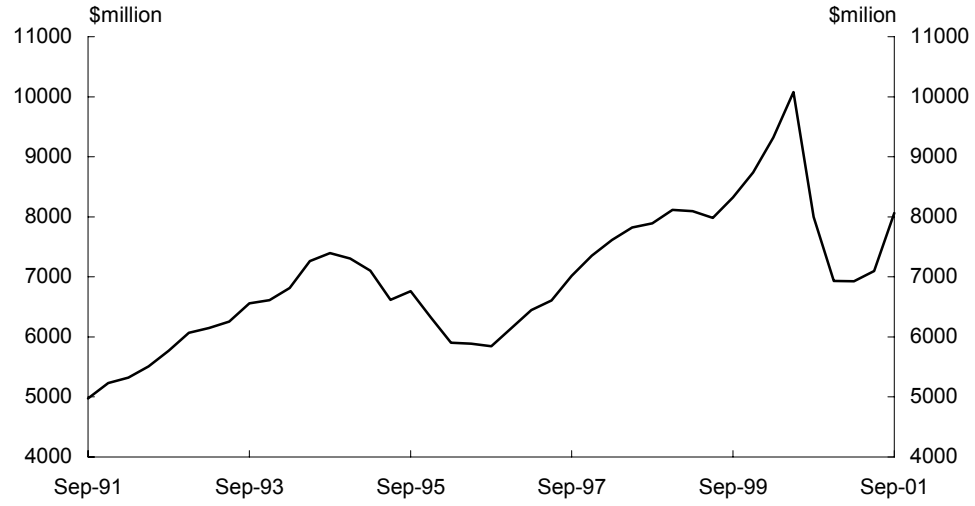
In 2000-01, total **dwelling investment** fell by more than 20 per cent in year average terms, a much larger fall than forecast in the 2000-01 Budget and MYEFO. This larger than expected decline in dwelling investment, and the probable flow on effects to the rest of the economy, was the major area where the Budget and MYEFO forecasts overestimated the actual strength of the domestic economy. Even leaving aside the flow on effects, the direct impact of the housing downturn alone accounted for a total of 1¼ percentage points of the difference between the 2000-01 Budget forecast for economic growth and actual outcomes.

Prior to the introduction of *TNTS*, dwelling investment (Chart 2) rose well ahead of underlying demand as home buyers sought to bring-forward their purchases ahead of 1 July 2000. This led to dwelling investment rising to its highest level as a share of GDP in the June quarter 2000 in around 20 years.

New dwelling activity fell by around 34 per cent in the second half of 2000.

The decline in construction of new dwellings in 2000-01 as a whole was broadly in line with earlier expectations. However, it was much more heavily concentrated in the September and December quarters than had seemed likely around the time of the 2000-01 Budget and MYEFO. At that time, there were widespread anecdotal reports that a large volume of 'pre *TNTS* building work would carry over into at least the September quarter, suggesting that building activity would not begin to decline until late in the year. In the event, however, construction of new dwellings fell sharply in both the September and December quarters, with a decline of around 34 per cent.

Chart 2: Dwelling investment

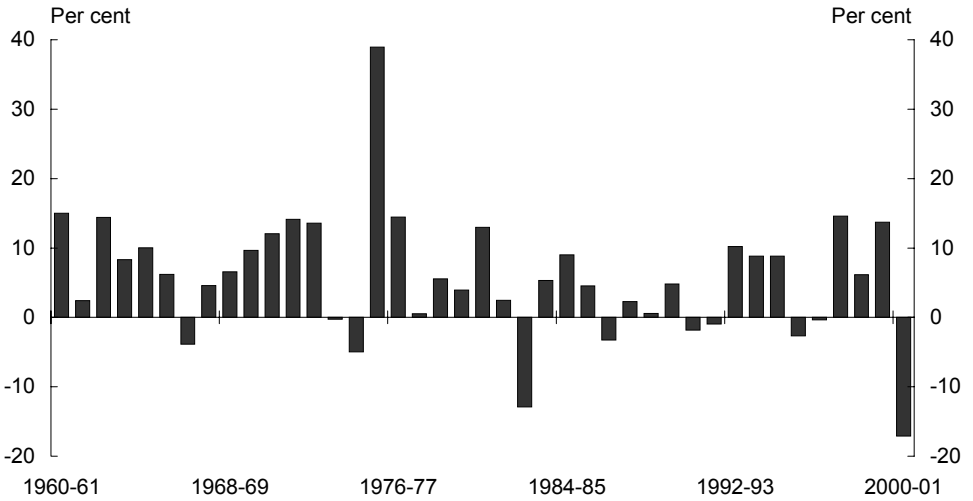


Source: ABS Cat. No. 5206.0.

AA fell by much more than was expected.

Having experienced a sustained period of strong growth during most of the 1990s, investment in alterations and additions (AA) (which accounts for around 44 per cent of overall dwelling investment), also fell sharply in 2000-01 (Chart 3). The year average fall in 2000-01 was more than 17 per cent, compared to the next largest fall of around 13 per cent in 1982-83. Importantly, as was also the case with the construction of new dwellings, the fall in AA was concentrated in the September and December quarters of 2000, with a decline of around 27 per cent over those two quarters.

Chart 3: Annual growth in alterations and additions



Source: ABS Cat. No. 5206.0.

Even leaving aside the flow on effects to other parts of the economy, the 31 per cent decline in residential construction in the September and December quarters of 2000 was sufficient to reduce economic growth in Australia by 2.0 per cent over these two quarters. To illustrate the impact of the sharper than expected housing downturn, had housing activity remained steady, economic growth in Australia (other factors unchanged) would have been a relatively strong 1.8 per cent in the first half of the financial year.

The housing sector stabilised in the first half of 2001, aided by declining interest rates and the Government's more generous First Home Owners Scheme. Forward indicators pointed to very strong growth in later quarters of 2001. Indeed, the housing sector contributed very strongly to economic growth in the September quarter 2001.

Business investment fell.

After eight years of solid growth, including growth of almost 4 per cent in 1999-2000, **private new business investment** fell by 2.8 per cent in 2000-01. This outcome was well below the 2000-01 Budget forecast of 6 per cent growth, and the 4 per cent growth forecast in the 2000-01 MYEFO.

The overall decline in new business investment reflected weaker than expected growth in machinery and equipment investment and a large decline in non-residential construction.

Large decline in non-residential construction…

In year average terms, private non-residential construction declined by 20.1 per cent in 2000-01, compared with the 2000-01 Budget forecast of a 6 per cent decline and the 2000-01 MYEFO forecast of a 7 per cent decline.

as Olympics and other work was completed.

Non-residential construction continued to fall from its peak in 1998-99, as the stock of Olympics related work was exhausted and several large engineering construction projects were completed.

Investment in new machinery and equipment rose by 1.1 per cent in 2000-01, moderating from around 9 per cent growth in 1999-2000. The 2000-01 outcome compares with the 9 per cent growth forecast in the 2000-01 Budget and the 8 per cent growth forecast in the 2000-01 MYEFO.

Slowdown in second half of 2000 was a factor in reduced overall equipment investment in 2000-01.

The slowdown in the Australian economy in the second half of 2000 is likely to have been a significant contributing factor to moderating growth in equipment investment over the course of 2000-01. Sharply slower growth in investment in new computer equipment probably also reflected a high level of investment in this area in 1999-2000 in response to Y2K and preparation for the introduction of *TNTS*.

In addition, the weakening world outlook that became increasingly apparent as the year progressed appeared to have an effect on most measures of business confidence, and likely led some businesses to reduce and/or delay their equipment investment.

The lower than expected 2000-01 outcome also partly reflected significant revisions to data since the March quarter 2001 National Accounts.

Nevertheless, investment in the capital-intensive mining industry picked up in the first half of 2001, as mining profits continued to grow strongly.

Public final demand was forecast to grow by a moderate 2 per cent in the 2000-01 Budget, following very strong growth in 1999-2000. The forecast was revised up to 3½ per cent (consistent with trend growth) at the 2000-01 MYEFO, due to additional expenditure expected on administrative costs associated with defence, immigration and telecommunications.

Growth in public demand was modest.

The 2000-01 Budget and MYEFO forecasts overstated the actual outcome for public final demand of 0.3 per cent growth in 2000-01, in part reflecting a higher expectation for defence expenditure than actually occurred.

The difficulties in determining a seasonal pattern for public final demand since the introduction of accrual accounting was a significant factor in the volatility of the series over 2000-01.

External sector

Despite a general slowdown in the world economy that started around the December quarter 2000, **net exports** contributed 1.8 percentage points to economic growth in 2000-01. This was substantially above the 2000-01 Budget and MYEFO 2000-01 forecast of a ¾ of a per cent and 1 percentage point contribution respectively, reflecting the impact of the lower exchange rate relative to the Budget assumption, and the impact on imports of lower than expected growth in domestic demand. The strong contribution to growth in 2000-01 represented a major turnaround from the negative contribution of 0.8 percentage points in 1999-2000.

Net exports contributed to growth in 2000-01.

Export volumes of goods and services grew by 7.0 per cent in 2000-01, in line with the May 2000 forecast. Both goods and services exports posted solid gains in the year, growing by more than 6 per cent and 10 per cent respectively.

Export growth was strong…

The staging of the Sydney Olympics boosted service exports, and exports of elaborately transformed manufactures (ETMs) increased by around 11 per cent, building on the strong rebound from the Asian crisis of almost 18 per cent in 1999-2000.

Growth in rural and non-rural commodity export volumes was more moderate in 2000-01, although slightly above expectations at Budget, growing by 3.7 per cent and 5.1 per cent respectively. Growth in rural exports reflected favorable world market conditions for meat and wool products, partly offset by below average seasonal conditions for crop production. Growth in export volumes of non-rural commodities was driven by higher world prices for crude oil and strong demand for coal and iron ore.

while imports fell.

Following very strong growth in 1999-2000, **import** volumes fell 1.7 per cent in 2000-01, the first annual decline since 1990-91, reflecting the impact of lower than expected growth in domestic demand and the lower exchange rate. The outcome was well below the 2000-01 Budget forecast for import volumes growth of 4 per cent, and 2000-01 MYEFO forecast of 3 per cent growth.

The decline was led by capital goods which fell almost 10 per cent, following a 24 per cent rise in 1999-2000, and reflected the weaker than expected outcomes for business investment. Intermediate and other goods also declined by 2.5 per cent. In contrast, consumption goods imports increased almost 9 per cent.

The terms of trade rose…

The **terms of trade** continued to rise steadily in 2000-01, up around 3 per cent, well above the 2000-01 Budget and MYEFO forecasts of ¼ of a per cent and 1½ of a per cent increase respectively, despite the deteriorating world outlook. The terms of trade had fallen moderately in 1998-99, reflecting the effects of the Asian crisis but recovered in 1999-2000 (Chart 4).

as export prices rose faster…

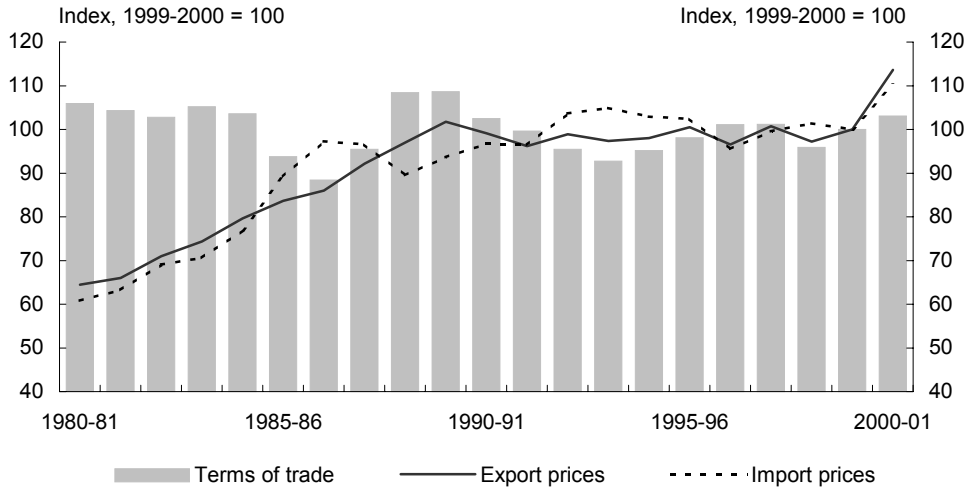
Export prices rose over 13 per cent in 2000-01. Tight supply conditions in some of Australia's export markets

combined with a lower exchange rate boosted prices for rural exports over the year. Non-rural export prices also posted large gains. US dollar commodity prices — as measured by the RBA commodity price index — rose about 3 per cent in 2000-01, reflecting increases in coal, iron ore, beef and wool prices. The Australian dollar index increased almost 21 per cent as the lower Australian dollar further boosted commodity prices in Australian dollar terms.

than import prices.

Import prices increased about 10 per cent over the year. However, the rise in import prices largely reflected the effect of a lower exchange rate, with the world price of imports remaining subdued. In particular, Australia benefited from very competitive prices of ICT equipment (being a key import) in 2000-01, as the world economy weakened. On the other hand, the price of fuels and lubricants rose particularly strongly over the year, up 41 per cent.

Chart 4: Australia's terms of trade



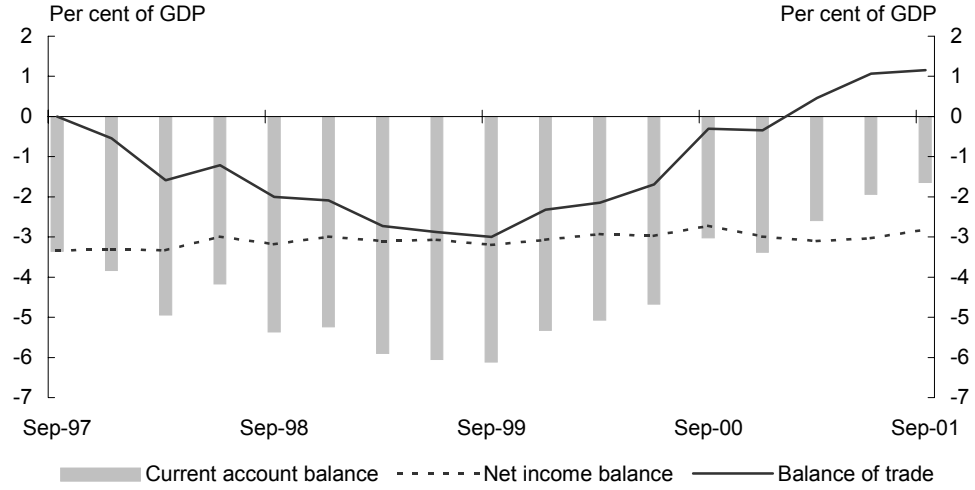
Source: ABS Cat. No. 5302.0.

Leading to a fall in the CAD to 20 year lows.

Supported by the continued rise in the terms of trade, the strong net export contribution and relatively low world and domestic interest rates (which helped to keep the Net Income Deficit (NID) in check), the **current account deficit** (CAD) fell to 2.8 per cent of GDP in

2000-01, from 5.3 per cent of GDP in the previous year. In dollar terms, the deficit fell $15.0 billion to $18.5 billion (Chart 5). As a share of GDP, the CAD was the lowest since 1979-80.

Chart 5: Australia's current account balance as a share of GDP

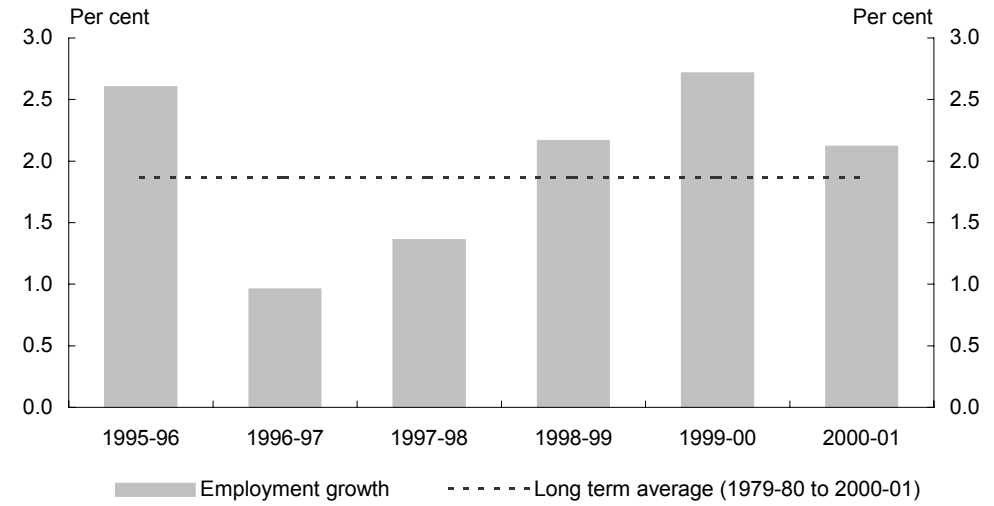


Source: ABS Cat. No. 5302.0.

Labour market

In year-average terms, **employment** was 2.1 per cent higher (around 190 000 persons) in 2000-01, compared with employment growth of 2.7 per cent in 1999-2000. This moderation in employment growth — towards its long-term average — was consistent with the 2000-01 Budget outlook of 2¼ per cent, although well below the upwardly revised 2000-01 MYEFO estimate of 3 per cent.

Chart 6: Year-average employment growth



Source: ABS Cat. No. 6202.0.

Very high employment growth in July and August.

In July and August 2000, employment increased by over 95 000 and employment growth surged to 3.7 per cent through the year to July and August. This increase was very large by historical standards, and although discounted to some extent, was an important factor behind the increase in the official forecasts for employment growth between the Budget and MYEFO.

Employment falls sharply near end-2000.

The brief very strong surge in employment probably reflected in part a stronger than anticipated build up to the Sydney Olympics and strong activity in business services related to the introduction of TNTS. On the other hand, it is now apparent that the surge in employment occurred at a time when the residential construction sector, which is very labour intensive and a major employer, was experiencing a record decline in activity. In that sense, developments in the labour market in the early part of the financial year seemed to mask developments in the residential construction sector at that time. The recorded decline in construction activity did not flow through to falls in employment in that sector until the December 2000 quarter.

As outlined in the 2000-01 MYEFO, some unwinding of this strong employment growth in July and August was expected at the time that the MYEFO forecasts were being finalised in late September. In the event, the downturn in employment in September, October and November was very sharp and largely reversed the exceptional employment growth that had occurred in the first two months of the financial year. The extent of the downturn in key labour intensive sectors such as construction, together with ongoing adjustments in the manufacturing sector proved to be larger and more protracted than expected.

In year-average terms, the unemployment rate was 6.4 per cent — only a little above the 2000-01 MYEFO forecasts (6¼ per cent). Strong employment growth in the early months of the financial year helped the unemployment rate to fall to a decade low of 6 per cent in September and October 2000. However, the subsequent downturn in employment resulted in the unemployment rate rising moderately over the remainder of the year, averaging 6.9 per cent in the June quarter 2001, above the 2000-01 Budget and 2000-01 MYEFO forecasts of 6¼ per cent.

Wages and prices

Growth in **wages** picked up slightly in 2000-01, but the overall rate of growth remained moderate. Average non-farm earnings on a National Accounts (AENA) basis increased by 3.9 per cent in 2000-01, slightly below the 2000-01 Budget and MYEFO forecasts of 4¼ per cent. The increase included around a ½ of a percentage point contribution from the increase in the superannuation guarantee charge on 1 July 2000. Other wage measures also showed a moderate increase in wage growth, such as the wage cost index which increased by 3.4 per cent in 2000-01, up from 2.9 per cent in 1999-2000.

Wages growth picked up slightly, but remained moderate.

More generally, wage outcomes remained in line with medium-term trends. There was no obvious impact on wage outcomes flowing from *TNTS* despite earlier

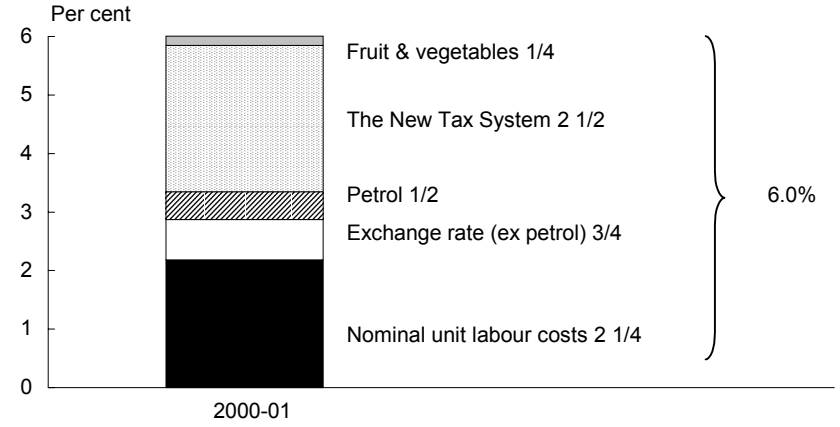
concerns in some quarters that the one-off increase in prices associated with the introduction of the *TNTS* would flow through into higher wages.

The CPI increased by around 6 per cent in 2000-01…

The **headline CPI** increased by 6.0 per cent in year-average and through-the-year terms in 2000-01. This outcome was only slightly higher in year-average terms than the 2000-01 Budget forecast of 5¾ per cent and was consistent with the 2000-01 MYEFO forecast.

Chart 7 provides an indicative breakdown of the major contributors to the increase in the headline CPI through the year to the June quarter 2001. It should be noted that the components of the chart are rounded to the nearest quarter percentage point, and the chart does not show all of the individual influences on the CPI over the year.

Chart 7: Estimated contributions to the 2000-01 through the year CPI increase(a)



(a) Subtotals may not add due to rounding.
Source: Treasury estimates.

The increase in the headline CPI in 2000-01 included the impact of a range of temporary and one-off factors. The most significant of these related to the introduction of *TNTS* on 1 July 2000.

largely due to the one-off effects of TNTS...

TNTS is estimated to have contributed a little less than 3 percentage points to the overall CPI increase of 3.7 per cent in the September quarter 2000, significantly lower than the 3¾ percentage points forecast in the 2000-01 Budget.

Through the year to the June quarter 2001, *TNTS* is estimated to have contributed around 2½ percentage points to the headline CPI increase of 6.0 per cent.

as well as some pass-through of the depreciation in the $A...

The significant decline in the exchange rate (with the $A declining around 15 per cent and 7 per cent against the $US and TWI respectively, over the course of 2000-01) is estimated to have contributed around ¾ of one percentage point to the increase in the CPI over the course of the year.

and several other temporary and seasonal factors.

Various other temporary influences also affected the CPI over 2000-01. Domestic petrol prices rose by around 11 per cent, driven by a 17 per cent increase in world oil prices and the lower exchange rate. Fruit and vegetable prices were also affected by adverse seasonal conditions, including flooding in northern NSW and southern Queensland in late 2000. In through-the-year terms, fuel and fruit and vegetable prices contributed around ½ of one percentage point and ¼ of one percentage point respectively, to the overall rise in the CPI.

Abstracting from these factors, inflation remained well within the target band.

Looking through these one-off and temporary factors, inflation over 2000-01 remained comfortably within the 2-3 per cent medium-term inflation target band.

Fiscal policy

Further reduction of net debt.

During 2000-01, the Government continued to meet its objective of achieving budget balance, on average, over the course of the economic cycle. The Commonwealth general government sector achieved an underlying cash surplus of $5.6 billion (0.8 per cent of GDP) in 2000-01. This was the fourth consecutive underlying cash surplus. The fiscal surplus was $5.9 billion (0.9 per cent of GDP) in 2000-01. The 2000-01 underlying cash surplus,

together with the proceeds from sales of financial assets, allowed for Commonwealth general government net debt to be further reduced from 8.4 per cent of GDP at 30 June 2000, to 5.8 per cent of GDP at 30 June 2001.

The fiscal and underlying cash balances for 2000-01 were respectively $0.5 billion and $2.8 billion larger than was anticipated at the 2000-01 Budget. This mainly reflected strong taxation collections in 2000-01, partially offset by higher than anticipated spending due, in part, to economic parameter variations and new policy decisions.

Monetary policy

Over the course of 2000-01, Australian monetary policy moved from a tightening cycle to an easing cycle.

In August 2000, the Reserve Bank of Australia (RBA) increased official interest rates by 25 basis points to 6.25 per cent to ensure that inflationary pressures remained contained while the economy was allowed to continue growing at a sustainable rate.

In 2001, the RBA moved monetary policy to a more expansionary stance in order to support growth in domestic demand as the international economy deteriorated more quickly than expected and dwelling investment fell temporarily. The RBA lowered official interest rates on three separate occasions in the first half of 2001, by a total of 125 basis points, to 5 per cent.

Most major economies also lowered official interest rates in the first half of 2001 due to the deterioration in international economic conditions. The United States was the most aggressive, lowering rates by 275 basis points in the first half of 2001, while the European Central Bank cut interest rates by 25 basis points in May.

Bond and equity markets

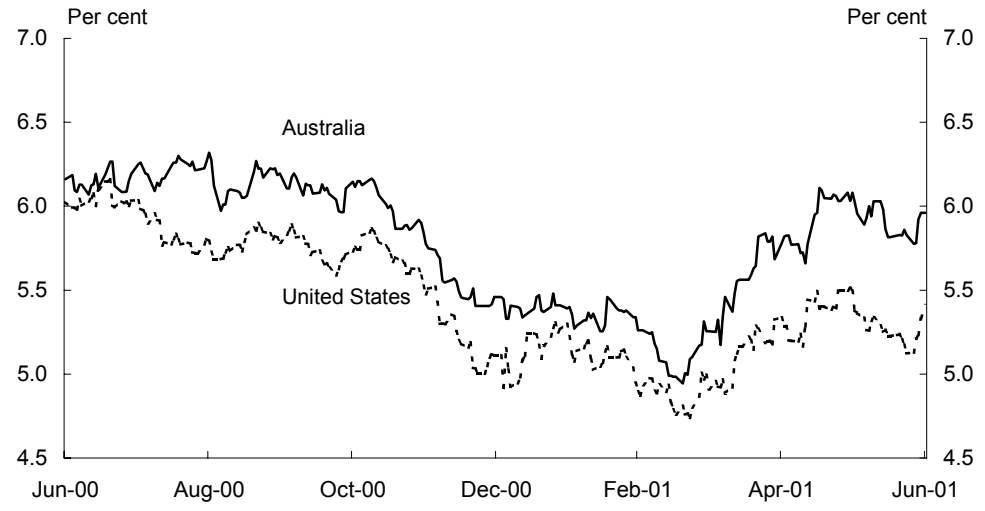
Bond yields fell over most of the year, reaching a low in mid-March.

Australian 10-year bond yields broadly tracked those of the US over 2000-01. The yield on Australian 10-year bonds fell slightly from around 6.2 per cent at the beginning of 2000-01 to around 6.0 per cent at the end (Chart 8). In mid-March 2001, the 10-year bond yield fell to below 5 per cent, reflecting concern over the global economic outlook. Following this, bond yields rose sharply until late May 2001, reflecting improved perceptions of the economic outlook for Australia and the US, and an improvement in equity prices in both countries.

The differential between Australian and US bond yields increased over the last quarter.

The differential between Australian and US bond yields increased a little during this period, from an average of around 30 basis points over the first three quarters to an average of around 60 basis points in the last quarter. This increasing differential is likely to have reflected a stronger short to medium-term outlook for economic growth in Australia than in the US.

Chart 8: 10-Year bond yields — Australia and the US, 2000-01



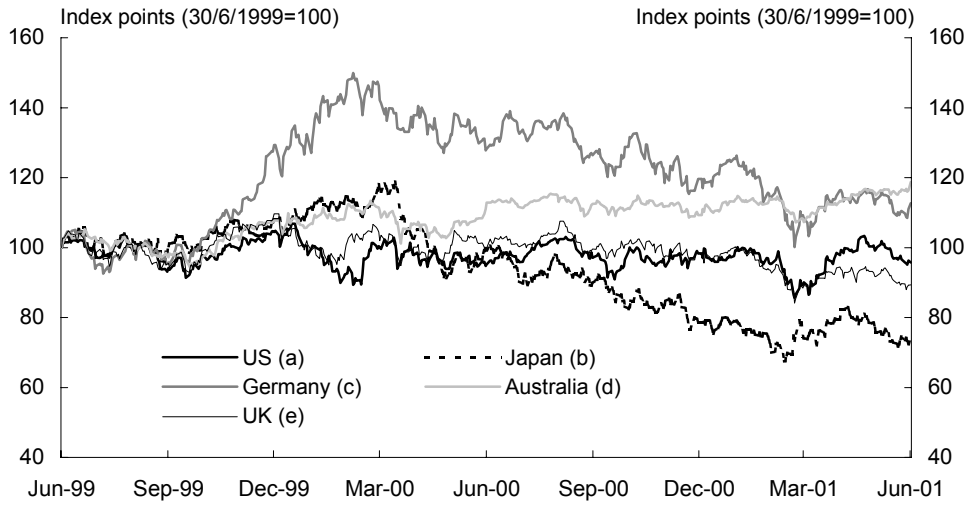
Source: Reuters

US and Australian equity markets finished the year little changed.

US and Australian equity markets finished 2000-01 little changed from their starting points (Chart 9). However, other major world equity markets drifted lower through the year. Australia's benchmark ASX200 index increased by 5.4 per cent over 2000-01, somewhat lower than the average gains seen in recent years.

World equity markets in 2000-01 were affected by the continued unwinding of the earlier boom in information technology shares, the weakening in the US economy that became apparent in the latter part of 2000 and the uncertainty regarding the timing of its recovery. The low point for most markets was in March 2001, followed by some recovery until mid-May 2001, reflecting some improved perceptions of the economic outlook. Japanese equity markets were particularly affected by pessimism surrounding the outlook for the Japanese economy.

Chart 9: Movements in major stock indices 2000-01



(a) Dow Jones Industrials
(b) NIKKEI 225 Stock Average
(c) DAX 30
(d) ASX All Ordinaries
(e) FTSE 100

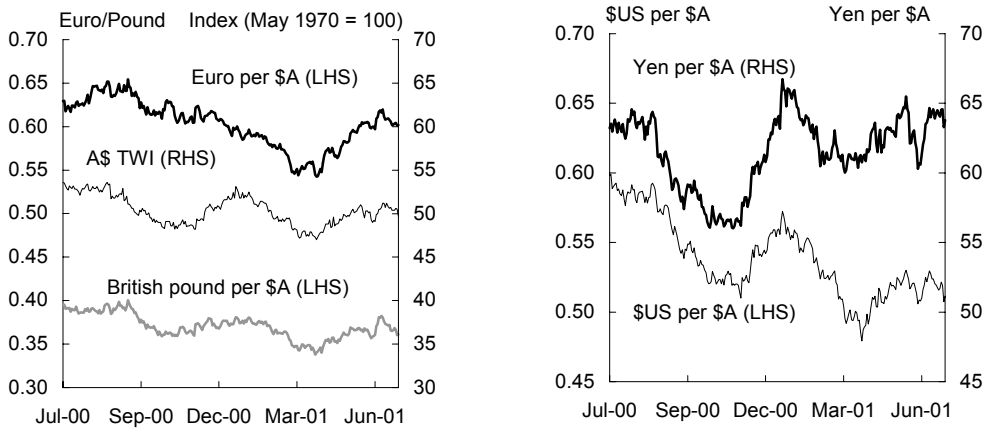
Exchange rates

The $A declined by around 15 per cent against the $US and 7 per cent on a TWI basis over the course of 2000-01 (Chart 10).

The decline in the $A helped support net exports.

The decline in the $A helped support the very strong contribution made by net exports to economic growth in 2000-01, despite the sharp deterioration in the world outlook as the year progressed. The low Australian dollar and subdued inflation converted a nominal depreciation into a real depreciation, and helped the position of exporting and import-competing firms.

Chart 10: The Australian dollar: 2000-01



Source: Reuters

Concluding comments

While Australia's economic growth in 2000-01 of 1.8 per cent was well below recent outcomes, the weakness was highly concentrated in terms of its timing and sectoral composition. In particular, the weakness was concentrated in the first half of the financial year and was driven largely by developments in the residential construction sector.

By the second half of the financial year, the residential construction sector had stabilised, with forward indicators pointing to a period of very strong growth in this sector in 2001-02. The residential construction sector contributed very strongly to growth in the September quarter 2001. The overall economy grew solidly during the second half of the financial year, at annualised rates more in line with longer-term trends.

In contrast, the impact of the international downturn, which became more pronounced as the year progressed, appears to have been muted. Negative reporting of overseas developments is likely to have been a factor impacting on business confidence during the first half of 2001 and may have contributed to a weaker than expected outcome for business investment in 2000-01. Nevertheless, even in the face of the deteriorating world economy, export volumes held up reasonably well buoyed by the Olympics and the lower exchange rate, and net exports made a major contribution to economic growth.

Australia's terms of trade continued to increase steadily through the year and the current account deficit reached 20-year lows, both for the year as a whole and in the September quarter 2001.

As noted in the 2001-02 Budget and 2001-02 MYEFO, the major and largely synchronised slowdown in world economic growth is likely to have a more significant impact on Australia's export performance and terms of trade in 2001-02. This is expected to coincide, however, with much stronger growth in domestic demand in 2001-02, including a sharp upswing in the residential construction sector, with the net outcome expected to be solid economic growth in 2001-02.

Australia's economic development

Address to the Committee for the Economic Development of Australia (CEDA)

40th anniversary annual general meeting dinner
Sydney – 19 November, 2001

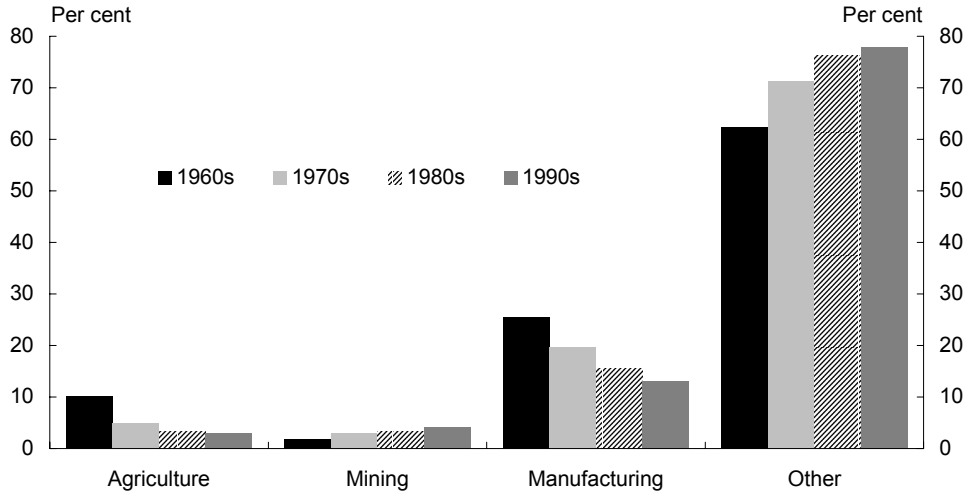
By Dr Ken Henry
Secretary to the Treasury

This year, CEDA celebrates 40 years of very significant contribution to the economic policy debate in Australia. A lot has happened to the Australian economy in the past 40 years. Some of what has happened has been influenced heavily by international events and other forces entirely out of our control. Other events, with 'home grown' origins, involving all sorts of people with all sorts of ideas, have acted also to shape the economy we now have.

Tonight, I am going to offer a brief review of our economic development over the last 40 years, focussing on the contribution of economic policy to development, and on the evolution of policy thinking over that period. I am then going to speculate, briefly, on prospects and challenges over the next 40 years. Clearly, this is an ambitious topic – indeed it is a topic that would challenge several books. Accordingly, my remarks will be abbreviated and my focus necessarily narrow. But hopefully not too abbreviated, and not too narrow, to support some propositions concerning our economic development.

Economic performance

Chart 1: Industry sector shares



Source: ABS Cat. No. 5206.0.

It is often assumed that the Australian economy of the 1960s[5] was dominated by agriculture, mining and manufacturing. In fact, even in the 1960s more than 60 per cent of gross domestic product (GDP) was produced in other sectors – mainly services[6]. Nevertheless, there has been notable change in the industry composition of the economy over the last four decades. Agriculture has declined from about 10 per cent of the economy to about 3 per cent. And manufacturing has declined from more than a quarter of the economy to a little more than an eighth. Interestingly, mining has doubled its share of GDP – but remains at less than 5 per cent. The big growth has, obviously, been in other areas. These developments – excluding the growth in mining – are common to most industrialised economies.

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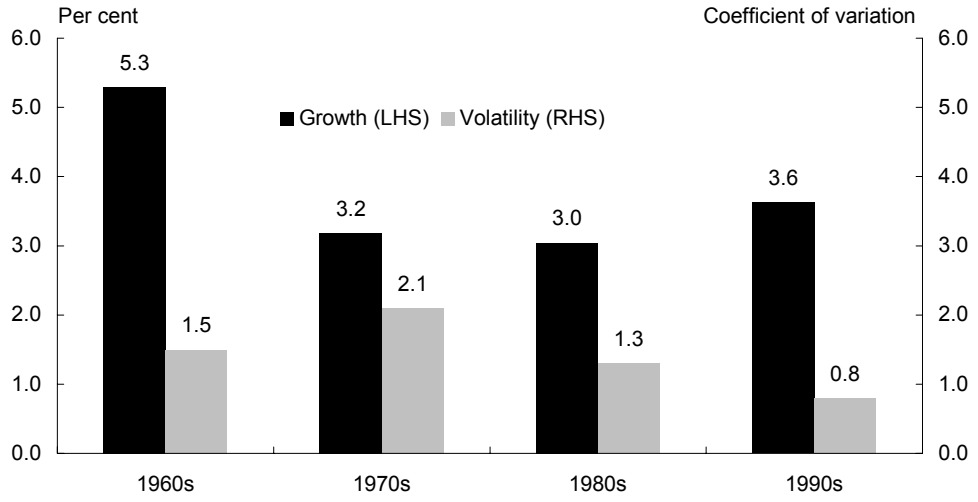
5 For the purposes of this analysis, decades averages are calculated using all financial years that start with the same digit (eg, the 1960s are 1960-61 to 1969-70) and decade average growth is calculated up to the start of the next decade (eg, the 1960s are from 1960-61 to 1970-71).

6 Measuring the precise contribution of the service sector in the 1960s is difficult, but a strong proxy is readily formed from the residual of farming, mining and manufacturing contributions. Although this simple proxy tends to overstate the exact percentage contribution of services to GDP, the overall trends are similar to most research material for this area. See 'Australia's century since Federation at a glance', *Economic Roundup*, Centenary edition, 2001.

It is worth observing that most of the structural change evidenced by industry shares occurred in the 1970s and, to a lesser extent, the 1980s. The 1990s were the years of least change in this crude indicator of economic structure.

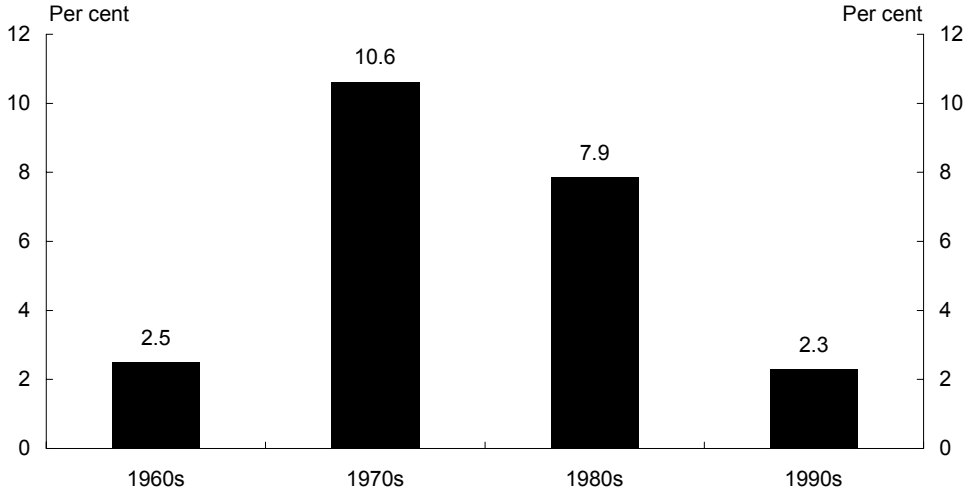
Chart 2: Decade average GDP growth and volatility



Source: ABS Cat. No. 5206.0 and Treasury estimates.

Clearly, different sectors of the economy have experienced rather different rates of growth over the last 40 years. On average, across all sectors of the economy, the 1960s were years of high gross domestic product (GDP) growth – 5.3 per cent a year in real terms. The three decades following showed significantly lower rates of GDP growth. But of these three, the 1990s, stand out also as years of relatively strong growth and, significantly, of considerably less variability in growth performance (volatility) than any of the three earlier decades.

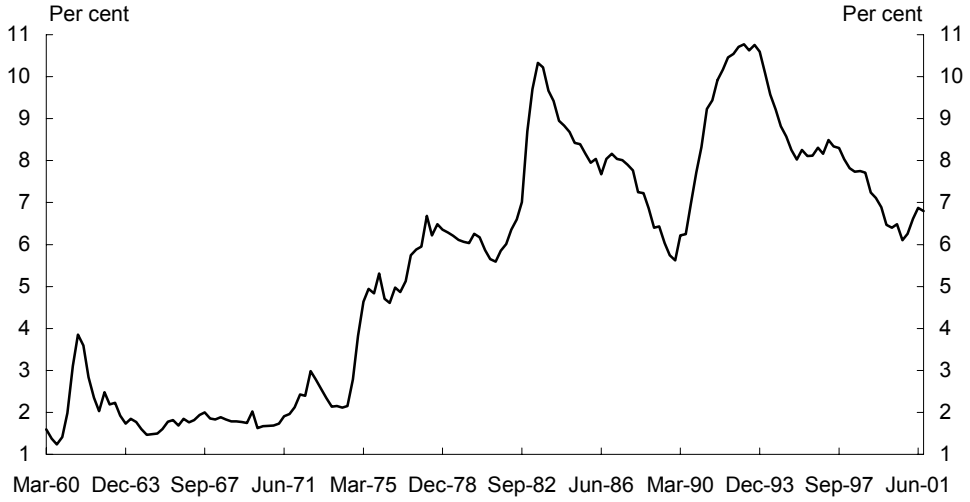
Chart 3: Decade average inflation rate



Source: ABS Cat. No. 6401.0.

The 1960s and 1990s were also years of relatively low inflation, separated by two decades of very high rates.

Chart 4: Unemployment rate



Source: ABS Cat. No. 6202.0.

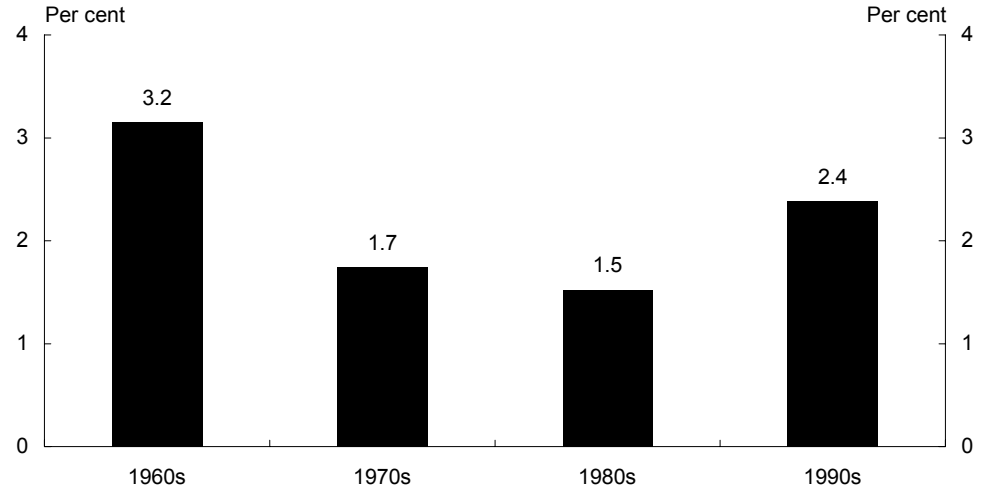
Perhaps the most dramatic macroeconomic story of the last 40 years involves unemployment. In the 1960s the unemployment rate averaged less than 2 per cent. But in the 1970s the unemployment rate increased sharply, barely pausing before the onslaught of the early 1980s recession took it above

10 per cent. With very strong employment growth through the second half of the 1980s the rate of unemployment fell back below 6 per cent, but then increased sharply once more to again peak in excess of 10 per cent in the recession of the early 1990s. The story is one of high cyclical volatility, but with a clear structural break – a structural deterioration – in the 1970s.

The 1970s were difficult years for the Australian economy. The high growth, low inflation and low unemployment of the 1960s encouraged policy complacency. In the benign international environment of the 1960s the costs of an insular, highly regulated policy framework were not apparent. But they became very apparent when the first of two oil price shocks hit in the early 1970s. This was the accident waiting to happen. Inflation and unemployment soared, and – certainly by the time the 1970s had come to an end – the policy orthodoxy was in tatters.

I will return to the evolution of policy in a moment.

Chart 5: Decade average GDP per capita growth

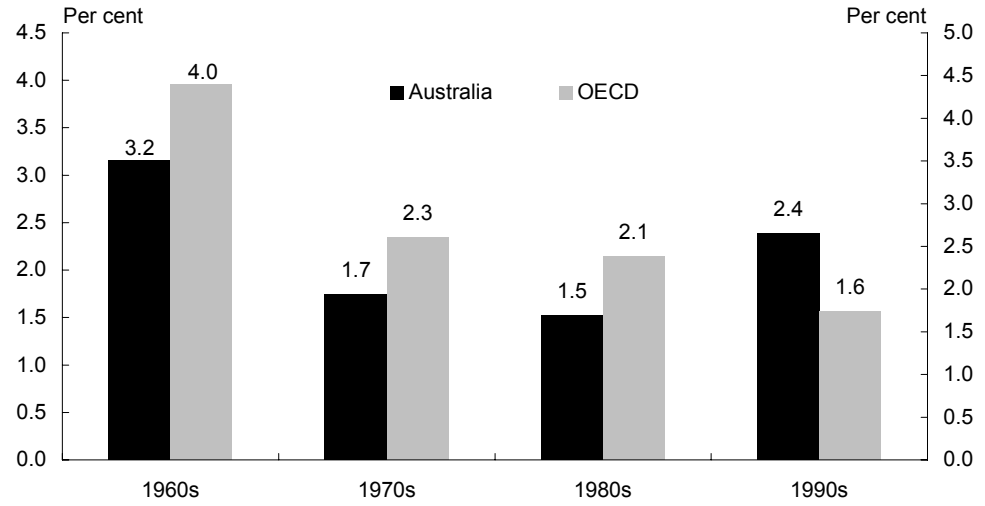


Source: ABS Cat. No. 5204.0.

In the 1960s GDP per capita increased by 3.2 per cent a year on average. In the 1970s and 1980s GDP per capita growth was much lower than in the 1960s. The 1990s, however, were also years of relatively high growth, though not as high as the 1960s.

But this picture of strength in the 1960s is rather misleading. It turns out that the 1960s were years of exceptionally buoyant growth in most of the industrialised world.

Chart 6: Decade average GDP per capita growth — Australia and the OECD



Source: Treasury, OECD.

When we compare ourselves with the average of the OECD we find that, in terms of *relative* performance, the 1960s were our *worst* years.

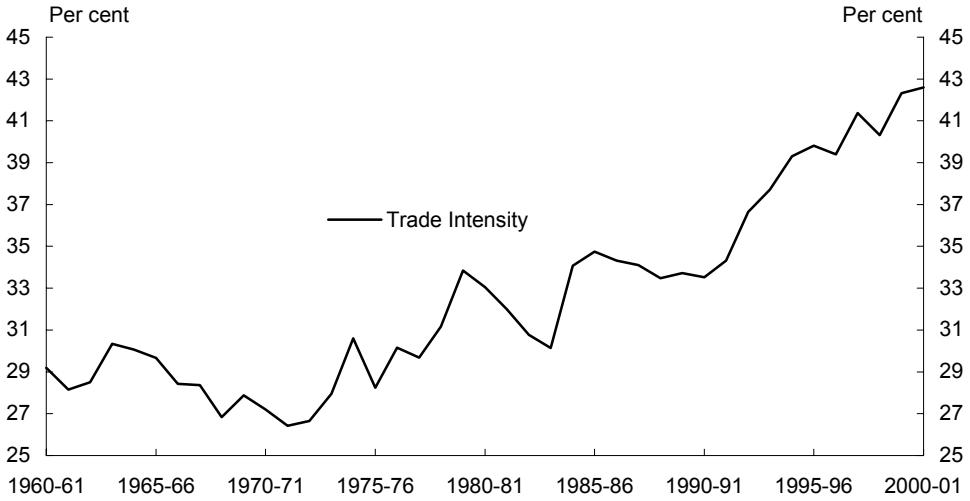
In fact, the last decade was the only one in which our rate of growth of GDP per capita exceeded the OECD average. Against this benchmark, the 1990s were years of substantially better performance than the 1960s.

Before going on, I should note that GDP per capita – though widely used – is not a universally accepted summary indicator of economic performance – far less of living standards. In the Treasury, where (according to our mission statement) we have a focus on 'improving the well being of the Australian people', we recognise the importance of a range of factors: the level and distribution of real income and wealth; the extent of economic and social participation; uncertainty and risk; complexity; and liberty, opportunity and freedom. We rate all of these things as being constituent components of the well being of the Australian people.

Volumes could be written on the evolution of each of these components of well being. But tonight, I am going to concentrate on the evolution of GDP per capita – just one, imperfect but nevertheless revealing, indicator of the factors that contribute to well being.

Policy and its evolution

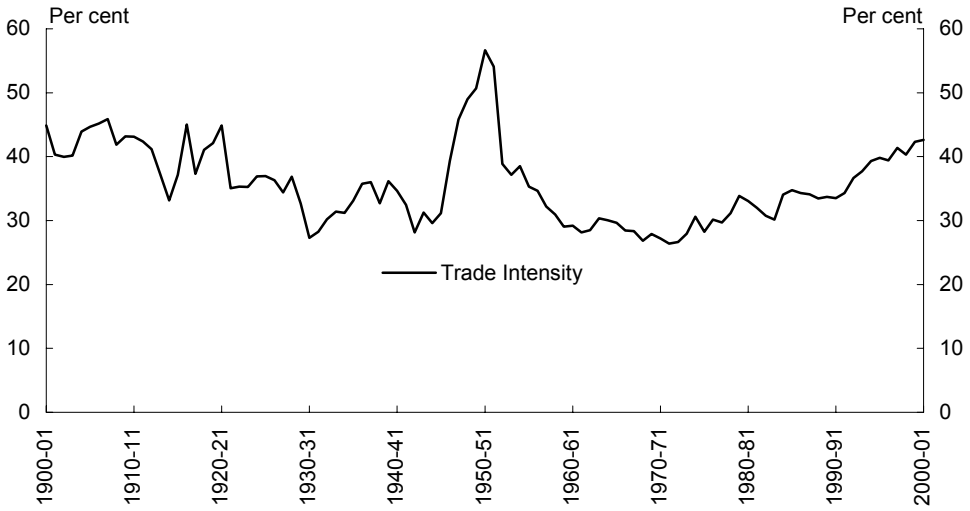
Chart 7: Trade as a share of GDP since 1960



Source: ABS Cat. No. 5302.0.

At the end of the 1960s, exports and imports, together, made up about 28 per cent of GDP, as against 42 per cent at the end of the 1990s. For more than half of the last 40 years, the explosion in world trade – one of the most dynamic forces for development – largely passed us by.

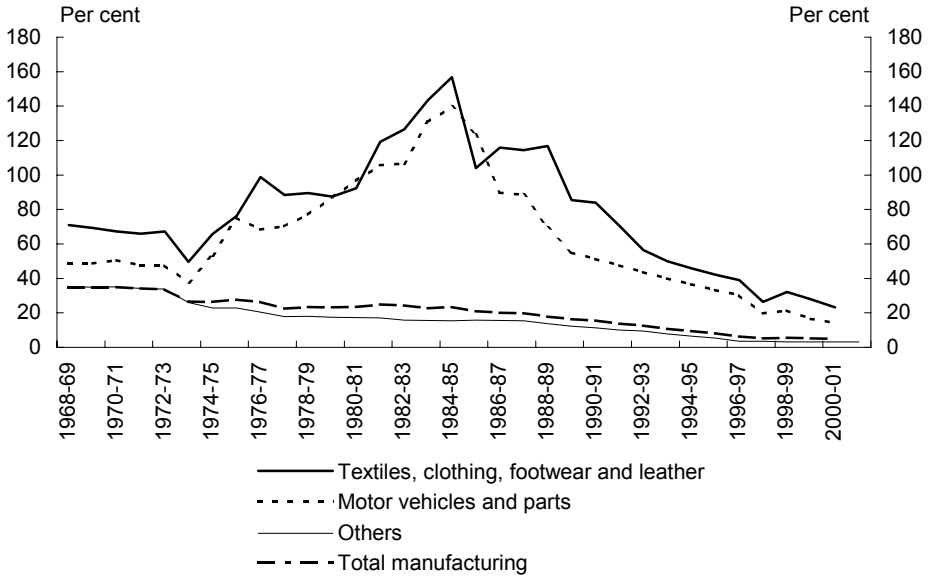
Chart 8: Trade as a share of GDP since 1900



Source: RBA Preliminary Annual Database and ABS Cat. No. 5206.0.

The trade exposure of the Australian economy in the 1960s was low not just by the standards of the succeeding decades. It turns out that, in trade exposure terms, the 1960s marked the low point of the entire century – a century that, in those terms, concluded with a strong trend back to where it had started.[7]

Chart 9: Effective rate of tariff assistance*



* Includes tariff equivalent of quotas.
Source: Productivity Commission.

Trade exposure is heavily influenced by policy – principally by tariffs and quotas. The effective rate of tariff assistance for all products other than motor vehicles, motor vehicle parts, textiles, clothing and footwear fell over the 1970s, 1980s and 1990s. For those specific products, protection peaked in the early 1980s, but has since fallen quite sharply. This latter period exhibits sustained growth in the share of exports in GDP.

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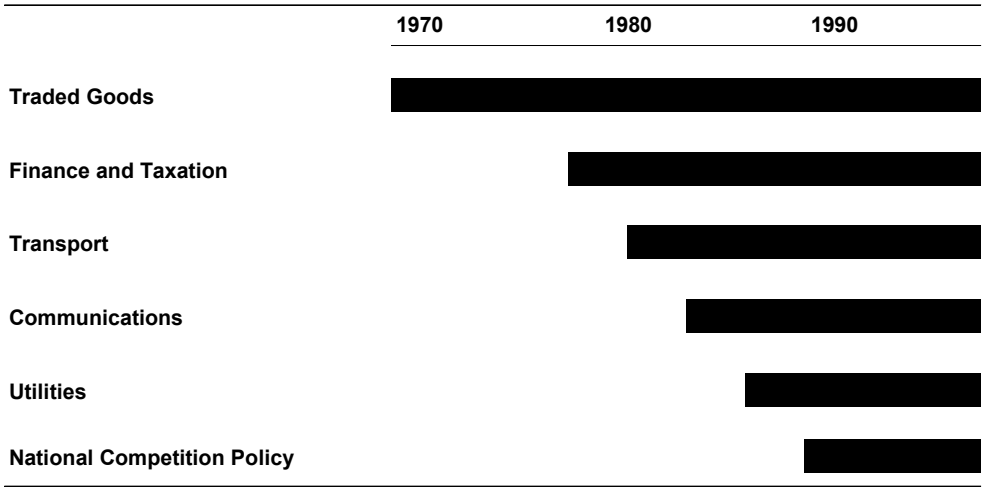
7 Of course, the other fact that stands out in a consideration of our trade performance over the last century is the extraordinary commodities boom associated with the Korean War.

Chart 10: Structural reform timeline



The 25 per cent across-the-board tariff cut of the Whitlam Government marked the beginning of microeconomic reform, impacting most immediately on the agricultural, mining and manufacturing sectors of the economy. Of course, it wasn't conceived as a microeconomic reform at the time; rather, it was designed to cool a rapidly overheating economy. Significantly, the tariff cut was not accompanied by reforms to enhance the competitiveness of product markets and the flexibility of factor markets. It wasn't until the early 1980s that progress began to be made in these areas. As that decade began, few could have anticipated the scale of economic policy reform that would occur over the next 20 years.

The exchange rate was floated at the end of 1983, and capital controls were relaxed. Financial markets were liberalised and taxation arrangements began to be addressed. Both of these areas have been subject to more or less continual reform since the early to mid 1980s – including very substantial reforms in both areas in the last few years. Tariffs on all products have fallen continually since the mid-1980s. In the late 1980s, and continuing in the 1990s, non-traded goods sectors of the economy were targeted for reform, notably in the areas of transport, communication and utilities.

From the late 1980s, labour markets and industrial relations, and education and training were subject to considerable reform also – the former particularly so in the second half of the 1990s.

Significantly, there has been little backsliding on reform, even in difficult macroeconomic circumstances. The fact that, for example, tariffs were allowed

to continue to fall during the recession of the early 1990s is remarkable; it is also extraordinarily important. Nor did we re-regulate the financial sector following the stresses of the late 1980s and early 1990s. Indeed, even as we were in recession, new microeconomic reform initiatives, in transport and communications in particular, were being conceived.

In 1995 the sectoral approach to microeconomic reform was complemented by National Competition Policy – a comprehensive framework for reform in all areas of the economy. National Competition Policy obliges Commonwealth and State governments to review existing legislation, and to assess proposed legislation, against a broad public interest test[8] and to ensure competitive neutrality as between public and private sector providers. It also introduced a national access regime for essential infrastructure services.

The second half of the 1990s was a period of wide-ranging microeconomic reform – embracing:

- the waterfront;
- financial sector reforms, creating a system of prudential regulation that establishes world's best practice;
- a comprehensive program of corporate law reform, implementing a corporate governance framework, and financial reporting and disclosure regimes which are also at world's best practice;
- substantial reform of the industrial relations system; and
- a very major program of tax reform that, in addition to its complete overhaul of the indirect tax system, targeted revenue security and incentives to work and save.

In its most recent survey of Australia, the OECD reports four 'synthetic indicators of strictness of legislation' for the 21 OECD economies in 1997-98. It reports that in respect of 'state control' of product markets, only Ireland, the United States and Great Britain were less interventionist. In respect of 'barriers to entrepreneurship', only Canada and Great Britain were less restrictive. And

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[8] Specifically, the guiding principle in legislative review is that legislation should not restrict competition unless the public benefits of so doing clearly outweigh the costs and there is no other way of achieving the objectives of the legislation.

Australia had the lowest barriers to trade and investment of all OECD countries.[9]

The macroeconomic benefits of Australia's structural reform program took some time in coming. Certainly, the benefits were not much evident in the second half of the 1980s, far less in the recession of the early 1990s. There were many, during those years, who strongly contested the direction of policy change. Significantly, unlike the second half of the 1990s, this contest was not, in general, played out on the field of 'mainstream' politics. The 1980s were years of major structural reform in many countries, with vigorous reform programs being pursued by conservative and labour governments alike.

But even in the 1980s the reform consensus did not extend much beyond the policy and political mainstream. In the early 1990s, coincident with the recession, Australian critics of the reform orthodoxy identified the new enemy in the mainstream in an extraordinary attack on what they chose to label 'economic rationalism'. Advocates of economic nationalist, and resurgent mercantilist, policies continue to attract support – representing a considerable contemporary challenge for those who propose, and seek to implement, economic reform.

The second half of the 1980s was a challenging period for macroeconomic policy advisers. Having made some progress in reducing product market protection in the 1970s, we chose in the early 1980s – albeit in circumstances that made an alternative decision problematic – to embark on substantial capital market liberalisation. Labour markets and the non-traded goods sectors of the economy remained heavily regulated. And, as we were to learn to our cost, corporate governance and the governance of a number of our newly liberated financial institutions would also be found wanting.

Policy advisers were far from convinced that all of the capital flowing into the economy – measured by the capital account surplus, which was averaging some 4 per cent of GDP – would likely produce the sorts of returns anticipated by international investors. There was little confidence that imported capital was being allocated efficiently. Advisers were concerned, that is, that the capital account was vulnerable to adverse shifts in market sentiment that could produce extreme volatility. This volatility might be recorded in capital flows, including the possibility of 'capital flight'; but if not in flows, then in capital market prices – sharp increases in interest rates or sharp currency depreciation, or both. Moreover, there was a concern that capital account

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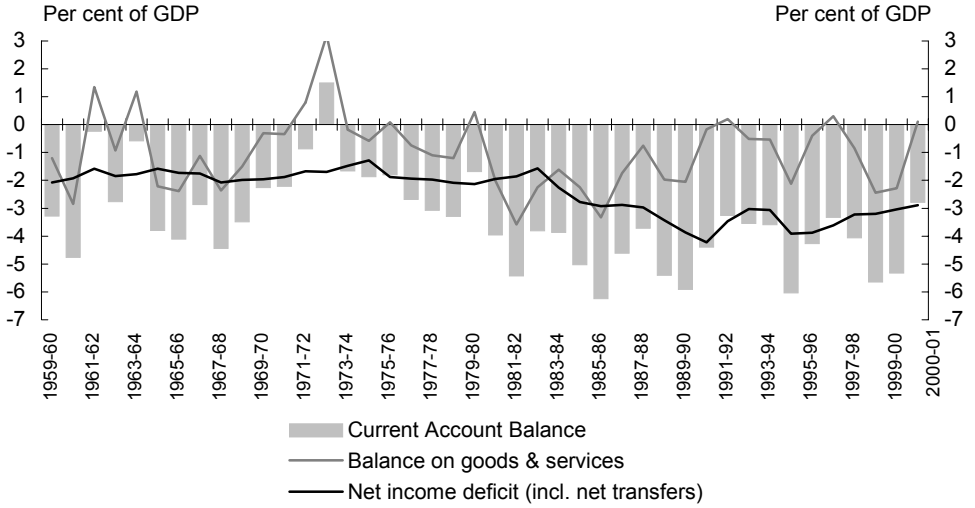
[9] *OECD Economic Surveys: Australia*, August 2001, Figure 30, p118.

volatility would not be easily accommodated in product and labour markets, given the limited impact of reforms to that point.

Chart 11: Current account balance



Source: ABS Cat. No. 5302.0.

Concern about the capital account surplus amounts to a concern with the current account deficit. And it was the latter that occupied the attention of macroeconomic policy advisers throughout the second half of the 1980s.

These days, in analysing the vulnerability of other economies to adverse capital market shocks, we would usually ask whether their degree of capital account liberalisation is well matched with their regulatory and institutional infrastructure – to their economic governance framework – and to the degree of flexibility in their product and factor markets. An analysis of that sort, conducted on Australia in 1986, might have led some to conclude that we should re-impose capital controls – that we had liberalised too early. But the dominant view was, rather, that concerns of this sort could be addressed by fiscal policy.

Policy advisers started with the national accounting identity that the current account deficit represents the excess of domestic investment (by governments, businesses and households) over domestic saving (by governments, businesses and households).[10] A large current account deficit might be evidence of a

[10] The relationship between the current account deficit and net lending is also affected by net capital transfers and net errors and omissions. See ABS (1998) *Balance of Payments and International Investment Position, Australia: Concepts, Sources & Methods*, Cat. No. 5331.0.

chronic national saving problem. More particularly, it might be evidence of a fiscal policy problem – the so-called 'twin deficits' proposition. Thus, a large capital account exposure, reflected in a large current account deficit, meant that we were at risk of a change in international investor sentiment. The way to purchase insurance against this risk was to reduce our call on foreign saving, by enhancing domestic saving. And the place to start was the public sector borrowing requirement. Reduce the public sector deficit and the current account deficit, and the capital account surplus will fall.

A large current account deficit may, indeed, be evidence of a national saving problem. But, then again, it might not. It may, alternatively, be evidence of a robust, rapidly growing economy, with a plenitude of attractive investment opportunities – more opportunities than should be, on any analysis, financed by domestic residents.

Today, the consensus position is that while both national saving and national investment continue to be of policy interest, the size of the gap between them is of essentially residual interest.

To understand why, consider the course of a rather curious debate that took place in Australia in the late 1980s. The question was whether microeconomic reform would add to, or reduce, the size of the current account deficit. Given the focus, at the time, on the current account deficit, and the growing controversy surrounding the microeconomic reform program, this is, perhaps, understandable – perhaps. But looking back from late 2001, the question appears decidedly odd.

The proposition implicit in the question was the following: (1) the current account deficit is 'bad'; and (2) if it can be shown that microeconomic reform makes the current account larger, then microeconomic reform must also be 'bad'. The current account deficit had been so thoroughly demonised – including by policy advisers – as to be beyond salvation. No one, therefore, was buying the argument that microeconomic reform could turn a 'bad' current account deficit into a 'good' one.

Yet that is now the dominant view. At least, there is an acceptance, now, that a highly competitive economy with sound regulatory structures, credible medium-term macroeconomic policy frameworks, and flexible product and labour markets will have less probability of generating the sorts of nasty surprises that produce extreme capital account volatility and will be better able to accommodate any capital market volatility that does occur. Microeconomic reform cannot prevent macroeconomic shocks from occurring, but it can help to contain the economic costs of such shocks.

And, without diminishing the importance of credible macroeconomic policy, this perspective on the current account goes a long way to explaining why policy advisers were much less concerned with its size in the mid-to-late-1990s. In policy circles a view developed that, in part because of the microeconomic reforms of the 1980s and 1990s, the current account should no longer be seen as imposing restrictive 'speed limits' on growth – a view that simply could not have been held in the second half of the 1980s.

The other 'speed limit' on growth in the 1980s – and, indeed, in the second half of the 1970s – was inflation. Again, microeconomic reform had a critical role to play. More competitive, more flexible, product and factor markets, supported by strong productivity growth, were responsible for a substantially reduced risk of exceeding the inflation speed limit to growth. Put another way, for any given rate of inflation the economy could now grow faster.

Macroeconomic policy also influences economic outcomes, and its development is, in turn, influenced by economic outcomes. Thus, fiscal policy, which had been seen predominantly as a tool of counter-cyclical demand management for most of the post-war period, was subject to a so-called 'trilogy' commitment in 1985. From 1987 it was given a twin deficits target, but that was put aside as a consequence of the early 1990s recession. In 1996, with a clear emphasis on fiscal consolidation, the Government successfully adopted a credible medium-term fiscal strategy – of achieving balance, on average over the cycle.

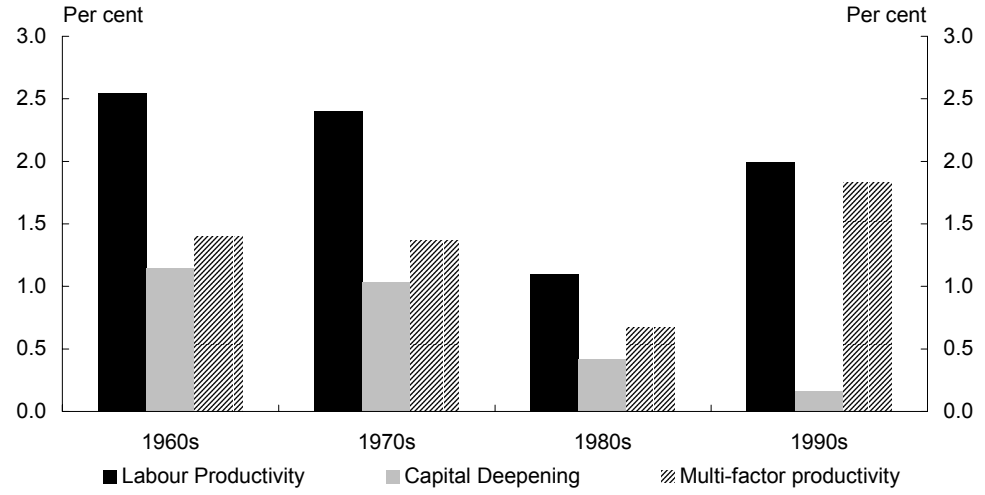
The evolution of monetary policy in Australia has some parallels. Through the 1980s and early 1990s, the Australian monetary authorities searched, without much success, for an enduring operational anchor. Then, in 1993, with inflation low, and with reasonable prospects of its being kept low, the Reserve Bank of Australia began to put emphasis on targeting inflation in a medium-term framework. The Bank's independence, and the medium-term framework, were formalised by an agreement between the Government and the Bank in the *Statement on the Conduct of Monetary Policy* released in 1996.

So we now have medium-term strategies for both monetary and fiscal policy – strategies which command considerable credibility. And the relatively low volatility of both inflation and growth in the 1990s suggests that this medium-term framework has done its job. But I have to say that I doubt that we would have adopted this framework for macroeconomic policy without having had the benefit of many years of microeconomic reform. Moreover, had we done so, I doubt the results would have been nearly so impressive. Microeconomic reform has produced an economy in which a medium-term macroeconomic policy framework can have credibility.

Prospects and challenges

My proposition is that Australia's much-improved economic performance in the 1990s owes much to microeconomic reform, including labour market reform, enhanced considerably by the adoption of a credible medium-term framework for macroeconomic policy. Central to the lift in performance has been a pronounced pick-up in productivity growth, particularly notable in the second half of the 1990s.

Chart 12: Decade average productivity growth



Source: ABS Cat. No. 5206.0 and Treasury estimates.

On that measure, of the four decades, the 1990s stand out as the most impressive by far. Labour productivity has two components[11]. One is due to capital deepening. This is the effect of giving workers more machines to operate. The other component is referred to as multi-factor (or total factor) productivity. This component captures everything else that allows a given number of hours worked to generate higher output. At the level of the firm, multi-factor productivity captures efficiencies in production, including those made possible by enhanced labour market flexibility and industrial relations reforms, and the effect of technological innovation – finding smarter, quicker

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[11] ABS estimates of multi-factor productivity are not available for the economy as a whole (and market sector estimates are only available in the post 1964-65 period). The figures used in this speech are based on an update of Productivity Commission estimates. (See Industry Commission, 1997, *Assessing Australia's Productivity Performance*, Research Paper, AGPS, Canberra, September.)

ways of doing things. At the level of the aggregate economy, multi-factor productivity captures all of these firm-specific effects, but also captures the effect of resources being allocated more efficiently among firms and industries. Among the many things it captures, therefore, are the benefits of microeconomic reform – reform which the OECD, in its most recent survey of Australia, describes as having been 'crucial'. [12]

While labour productivity growth was higher in the 1960s than the 1990s, nearly half of the 1960s growth came from capital deepening. In the 1990s, however, strong labour productivity growth was due almost wholly to historically high multi-factor productivity growth.

Labour productivity growth is one component of growth in GDP per capita, to which I will now return.

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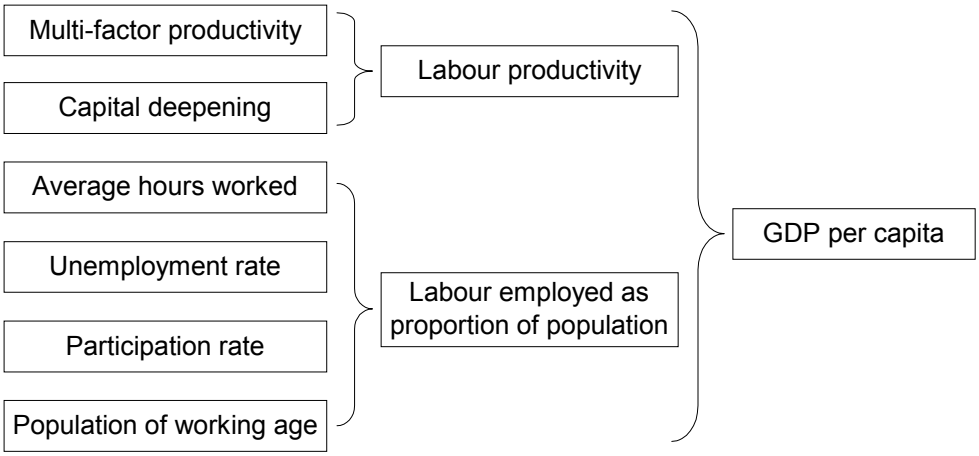
[12] *OECD Economic Surveys: Australia*, August 2001, p119.

Chart 13: Components of GDP per capita growth

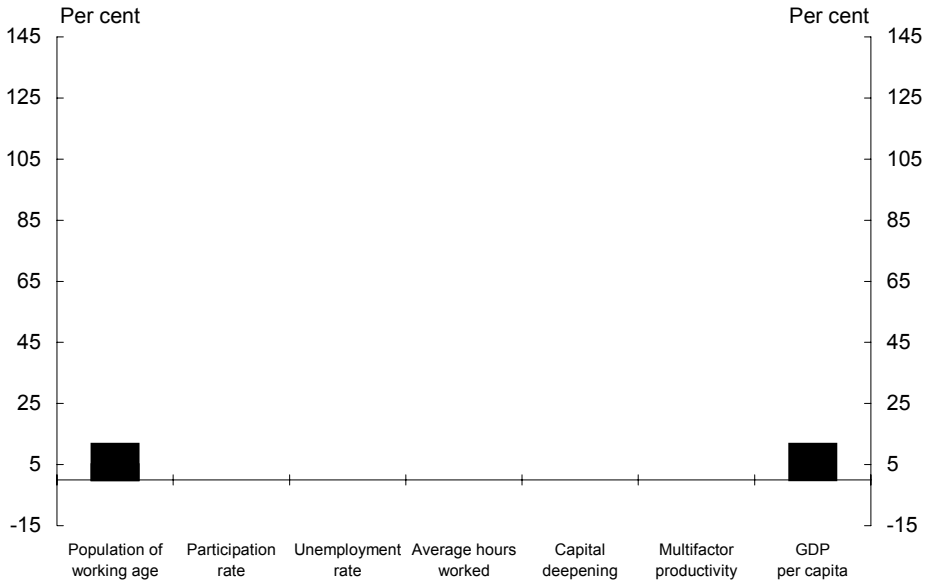


GDP per capita can be built up from a number of components, each of considerable interest: the proportion of the population of working age; the participation rate; the employment (or unemployment) rate; hours worked per employee; capital deepening; and multi-factor productivity. The last two components, together, make up labour productivity.

The following charts show the contribution of each of these components to total GDP per capita growth over the 40 years between 1960-61 and 2000-01. First, a word of caution. This snapshot analysis – involving a comparison of

GDP per capita in 1960-61 with its level 40 years later – ignores the time path of change. Yet what is important to living standards over a 40 year period is the *level* of GDP per capita in each one of those years. Clearly, therefore, the earlier the *growth* in GDP per capita is achieved, the better.

Chart 14a: Components of GDP per capita growth — working age population

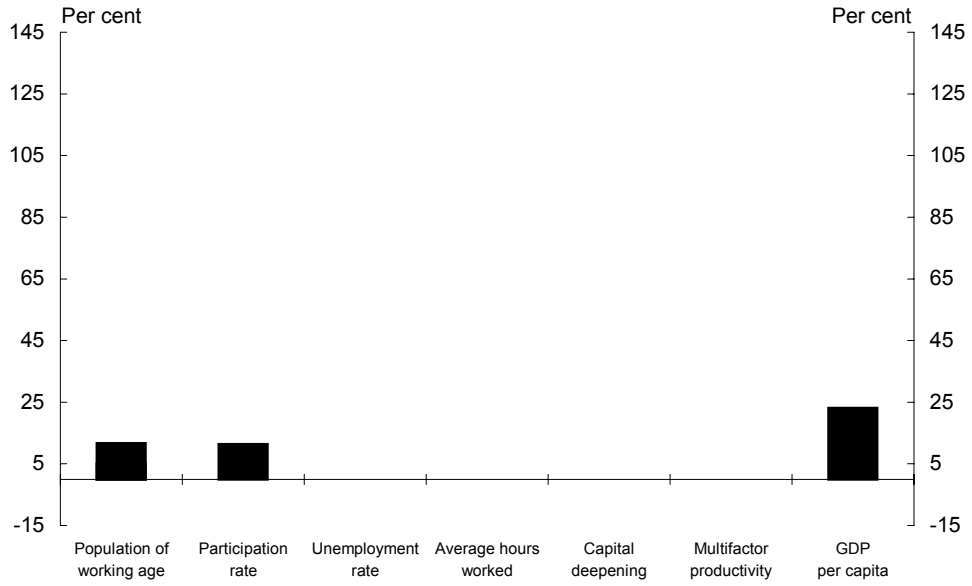


Source: ABS Cat. No. 5206.0 and TRYM database.

Over the last 40 years, the proportion of the population of working age – in this analysis, people aged 15 to 64 – has increased by 11.7 per cent. If all other factors – participation rates, unemployment rates and so on – had not changed, this development – an early expression of the ageing of the population – would have lifted GDP per capita by 11.7 per cent.

Demography – and, in particular, the impact of the post-war baby boom – has been an important positive driver of our economic development.

Chart 14b: Components of GDP per capita growth — participation rate



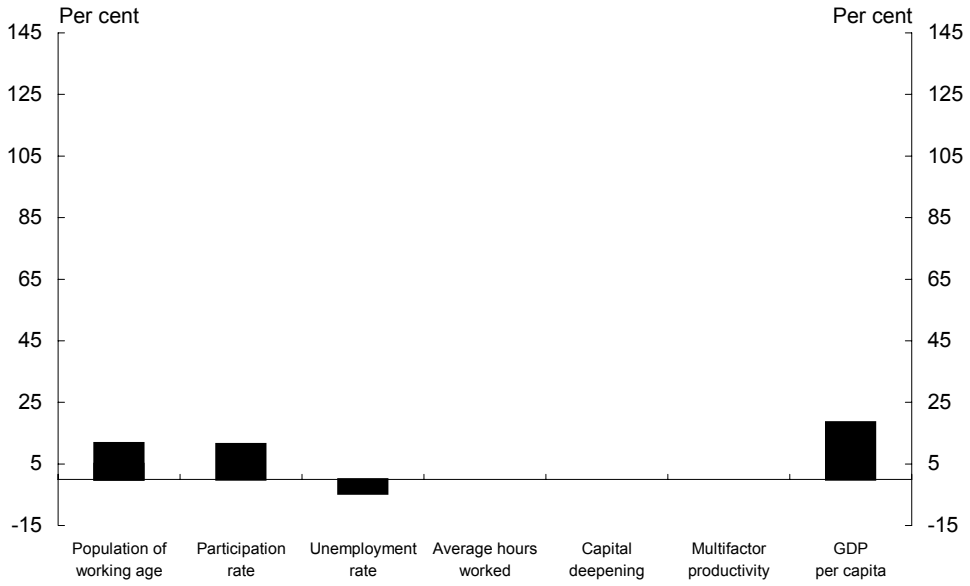
Source: ABS Cat. No. 5206.0 and TRYM database.

But other factors did change. First, the participation rate – the proportion of people of workforce age who are actually seeking work – increased.[13] This factor alone added a further 11.4 percentage points to GDP per capita growth – a cumulative total of 23.1 per cent.

Workforce participation is a complex issue. But over the last 40 years, its evolution has been dominated by three factors: First, the participation rate of males has fallen from 94 per cent to a little over 85 per cent. Second, the participation rate of females has increased from about 43 per cent to 67 per cent. And third, the participation rate of male workers aged 55 to 64 has fallen considerably – from 86 per cent to 61 per cent.

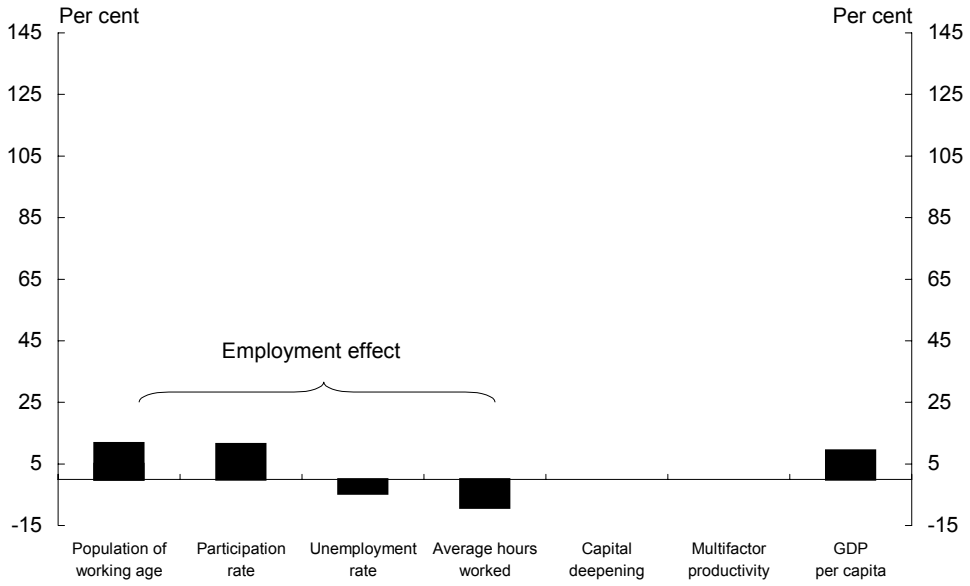
[13] For consistency, the denominator of these participation rates is those aged between 15 and 64.

Chart 14c: Components of GDP per capita growth — unemployment rate



Between 1960-61 and 2000-01, the unemployment rate increased from 1.9 per cent to 6.5 per cent. This effect subtracts 4.6 percentage points from GDP per capita growth, leaving a cumulative total of 18.5 per cent. This, then, is the contribution to GDP per capita growth of the increase in the proportion of the population actually in work. More people of working age and a higher participation rate have acted to increase the proportion of the population in work, while a higher unemployment rate has acted to reduce the proportion. Significantly, however, labour market participation factors dominate, by a very considerable margin, the structural increase in unemployment over the last 40 years.

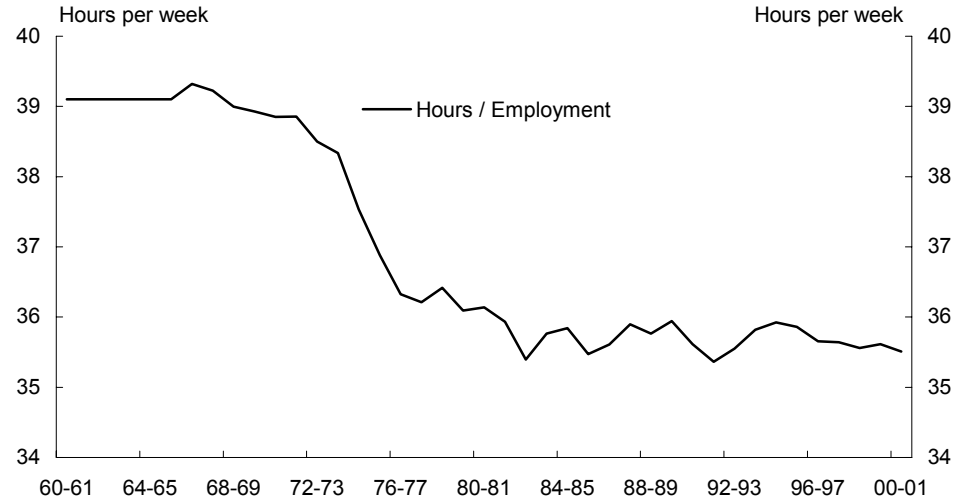
Chart 14d: Components of GDP per capita growth — average hours worked



While a larger share of the population found themselves in work in 2000-01, they were working fewer hours on average. The effect of declining hours of work has been to detract 9.2 percentage points from GDP per capita growth over the last 40 years, leaving a cumulative total of 9.3 per cent.[14] This represents the net contribution to GDP per capita growth of all of the employment effects.

[14] Average hours worked per employed person is assumed to remain constant during the first half of the 1960s, as data for hours worked is not available for the period prior to September 1965.

Chart 15: Average weekly hours worked

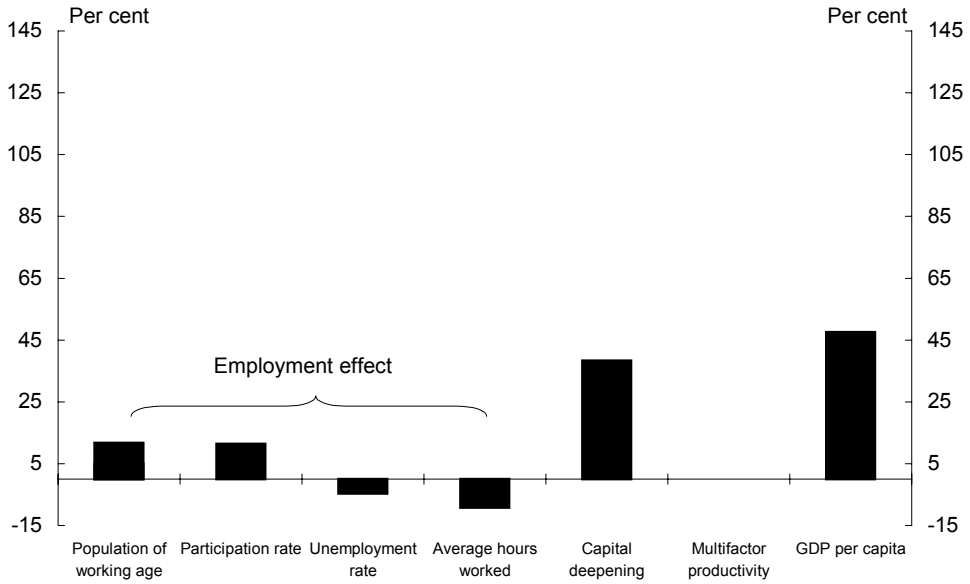


Source: TRYM database.

The big reduction in average hours worked occurred in the 1970s – coincident with the increasing workforce participation of females, many of them undertaking part-time employment, and the 35 hour week campaign. While the series is volatile, there has been no clear trend, in aggregate, in average hours worked since the mid-1980s.

So the total impact, over the last 40 years, of higher labour input on GDP per capita was 9.3 per cent – about one-fifth of one per cent a year. And that is all we would have achieved had we not also benefited from an improvement in labour productivity.

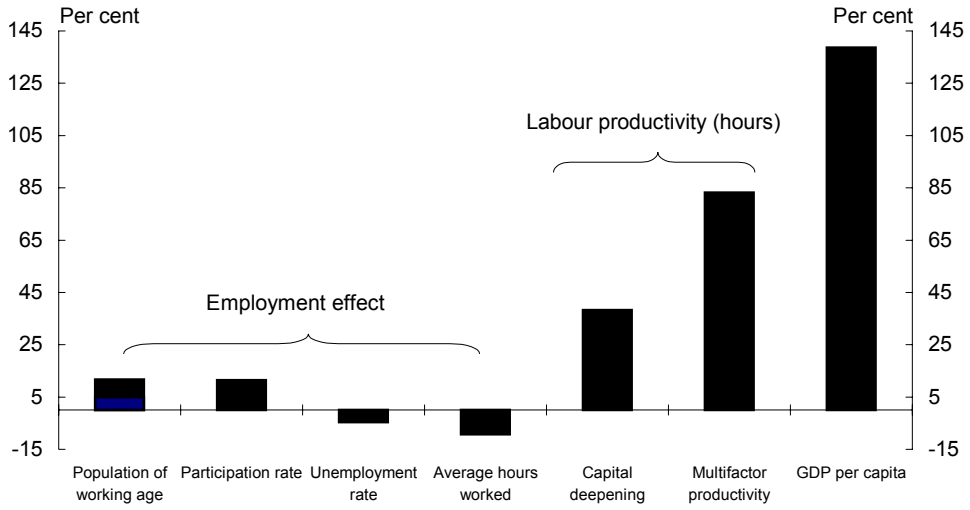
Chart 14e: Components of GDP per capita growth — capital deepening



But labour productivity did improve. Capital deepening – the increasing capital intensity of production – added 38.3 percentage points to GDP per capita growth, producing a cumulative total of 47.6 per cent.

Capital deepening has been influenced heavily by capital inflow. In this respect, and in many others, international integration has been a key driver of our economic development.

Chart 14f: Components of GDP per capita growth — multifactor productivity growth



Finally, multi-factor productivity growth added a further 83.2 per cent, giving a grand total of a 138.6[15] per cent increase in GDP per capita over the 40 year period.

Sixty per cent of the increase in GDP per capita over the last 40 years is due to multi-factor productivity – to which new technologies have made a significant contribution. Along with demography and international integration, technological change has been a key driver of economic development.

But it is in the area of multi-factor productivity growth that the substantial contribution of microeconomic reform may also be found.

So what can we look forward to in the next 40 years?

The three key drivers of the last 40 years – demography, international integration and technology – will continue to be important. But each will present new opportunities and new challenges.

First, population ageing will continue. But whereas in the last 40 years population ageing increased the proportion of the population aged 15 to 64, the reverse will now be true – as the proportion of the population of

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[15] Note that this figure is 7.8 per cent more than the sum of the estimates of the direct contributions. This unallocated growth gap of 7.8 per cent essentially picks up interaction terms between each of the drivers.

retirement age increases. In the last 40 years, the positive contribution of population dynamics might have been responsible for some complacency, in some quarters, in attitudes to labour market reform and policies affecting workforce participation. Over the next 40 years, with population dynamics detracting from growth, these policy areas will, necessarily, be centre-stage.

We can anticipate that the participation rate – that is, of those of working age – will continue to increase, but modestly. On current policy settings it is projected that the total participation rate will increase by only about one-quarter that of the last 40 years.[16]

We can expect a lowering of the unemployment rate. This is an important policy objective. But it will not make a large contribution to the change in GDP per capita over the next 40 years.

On current policy, and assuming no further change in average working hours, the various employment effects, taken together, could be expected to reduce GDP per capita by a small amount over the next 40 years.

As in the last 40 years, labour productivity growth holds the key to improvements in GDP per capita. Over the last 40 years, labour productivity growth averaged 2 per cent a year, and GDP per capita growth averaged 2.2 per cent. In order to repeat that GDP per capita performance, we would need to average labour productivity growth of 2.3 per cent a year. While this is in excess of our long-run average, it is a rate of growth that we have been able to sustain for lengthy periods in the last 40 years.

Repeating the performance of the last 40 years is therefore possible. But it will not be easy. And it will not be achieved without continued adherence to sound policy – both microeconomic and macroeconomic.

Key to policy considerations over the next 40 years will be the factors affecting participation, as already noted, and labour productivity. Population ageing, and changing attitudes to early retirement, will drive employment outcomes. The baby boomers are spilling into the post-55 year age group. But, at the same time, people aged 55 to 64 are less motivated to participate in the workforce, and people are living longer.

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[16] See 'Demographic influences on long-term economic growth in Australia', *Economic Roundup*, Spring 2000.

- In earlier generations a typical life experience might have included 50 years work, from age 15 to 65, followed by 7 years in retirement.

- Today, many people are planning life experiences that include only 30 years work, from, say, age 25 to 55, followed by 25 or 30 years of retirement.

Quite clearly, the economic framework that can support the latter sort of life experience must be very different from the economic framework that supported the life experience of earlier generations. Put simply, if people are going to spend a smaller proportion of their lives in work, then they are going to have to expect their retirement incomes to decline relative to their pre-retirement incomes; that is, unless they reduce, quite dramatically, the proportion of their income that they consume during their working lives.

Part of the transformation in life experience can be explained by a longer period being spent in pre-work education and training – for which there is, presumably, a pay-off in the form of higher remuneration in the years of work – permitting higher saving for retirement. But it is the other end of the life experience that poses the more difficult questions – questions about the factors affecting the labour market participation of older workers.

By the year 2040, the proportion of the population aged 55 or more will have nearly doubled. And, on the basis of the participation rates of people presently aged 55-plus, 76 per cent of these will not be in the workforce. Thus, by 2040, we can expect 28 per cent of the population to be aged 55 or more and not in the workforce. Around one third of these will be in the 55-64 age group, presumably planning to spend the next 20 to 30 years not working.

This is what current projections suggest. But I have to say that I find this scenario implausible. Even if people have the financial means to retire at age 55, I find it difficult to believe that many of them will want to spend the remaining 25 to 30 (or more) years of their lives unemployed. But I also accept that at least some of them would likely be interested in jobs that may not currently exist, and with employment terms not presently on offer.

The participation of older workers raises issues relating to the flexibility of labour markets; job design and flexibility in workplace relations; the attitudes of employers to older workers and to part-time jobs; and issues in the welfare system. Some of these issues – notably the latter – are being tackled. Others have barely rated a mention in public debate. The Prime Minister's address to the National Press Club on 1 August 2001 provides a notable exception.

If, over the next 40 years we could return the labour participation rates of males aged 25 to 64 back to their level of the 1960s, the negative impact on GDP per capita of the ageing of the population would largely be offset.

Capital deepening will be affected by a number of factors, including, at some point, the opposing forces of a declining workforce and a drawdown of retirement savings (dis-saving). But it will also be affected by our ability to continue to attract and retain mobile capital – something that will become increasingly dependent upon the maintenance of sound regulatory and institutional arrangements, competitive product and factor markets and credible macroeconomic policies. The Government's recently announced review of international taxation arrangements goes to one of the difficult policy issues to be resolved in this area.

Multi-factor productivity poses challenges for skills development and retention, including the taxation of human capital; for innovation and technology policy; and for labour market and industrial relations arrangements.

There is much to celebrate in the economic transformation of Australia, and in the transformation of economic policy in Australia, over the last 40 years. The prospects for the next 40 years are promising. But the substantial challenges and opportunities posed by demographic and technological developments, and by increasing international integration, serve to underline the importance of preserving, indeed building on, those achievements.

As in the past four decades, CEDA has much to contribute to the policy debates of the next 40 years.

Treasury's business liaison program

Treasury has conducted a formal business liaison program for nearly a decade. For much of the period this was conducted from regional offices in Sydney and Melbourne. For the last two years this function has been undertaken in Canberra. This article summarises how Treasury undertakes its business liaison program and how the information is used.

Introduction

Treasury's economic forecasting process has for some time involved contact with business and others.[17] In January 1993 Treasury opened small offices in Sydney and Melbourne. These offices were responsible for establishing a structured program of liaison with the business community. In January 2000, Treasury centralised its business liaison program in Canberra.

This article outlines Treasury's approach to the liaison process; how liaison material is incorporated into the forecasting process; and some recent developments in business liaison.

Treasury's approach to business liaison

Treasury conducts two business liaison 'rounds' each year[18], ahead of the Budget and the *Mid-Year Economic and Fiscal Outlook* (MYEFO).[19] Each round involves between 80 and 100 contacts with individual firms and industry groups over a four to six week period. Business liaison contact is predominantly via face-to-face meetings although these can be supplemented

17 For more information on Treasury's contact with business prior to the establishment of the business liaison program see 'Economic Forecasting' in the Autumn 1992 edition of the *Economic Roundup* (pp13-14), and Treasury's 1990-91 Annual Report.

18 As the need arises, Treasury may also approach business liaison contacts on an *ad hoc* basis. In addition, Treasury continues to have a range of contacts with business and the wider community through a range of other fora, including ongoing contact with economic analysts in financial markets.

19 Prior to the closure of the Sydney and Melbourne offices two additional 'rounds' of business liaison were conducted: one to inform the economic parameters for the Expenditure Review Committee and another 'mini-round' in the month before the Budget.

by telephone contacts to clarify particular developments or where the liaison contact is very familiar with the liaison process.

The typical business liaison round involves around two weeks of meetings in both Sydney and Melbourne. It would also involve up to a week of face-to-face meetings in Brisbane, Adelaide or Perth, with the city visited alternating between rounds. A higher proportion of contacts in these cities, compared with Sydney and Melbourne, is via the telephone.

Liaison discussions are conducted by a senior officer located in the area responsible for forecasting and briefing on the Australian economy. Typically, each contact will also involve an analyst assigned with the role of forecasting a sector of the economy. This involvement is rotated within and between rounds, so that all analysts involved in the forecasting process are directly exposed to the views of relevant businesses and industry groups.

Treasury's business liaison unit maintains regular contact with over 500 companies in Australia, covering each of the major industry sectors. Companies also range in size, from large multinationals to smaller localised firms. That said, for practical reasons, smaller firms and the services sector are under-represented relative to their importance to the economy as a whole.

Business liaison meetings typically cover developments in a range of key economic variables: sales, production, stocks, investment, employment, costs, prices, wages, exports, imports and profitability. Depending on the nature of the company concerned, not all of these subject areas would necessarily be covered during a meeting. The focus of meetings is on recent trends in, and the short-term outlook for, these variables, and on gaining an understanding of the factors driving these outcomes.

The key points from each liaison contact are documented as a confidential record of the meeting, with access to information on contacts with individual firms restricted to those directly involved in the forecasting process.

A report summarising the key themes to emerge from the round as a whole is prepared and circulated to those officers within Treasury directly involved in the forecasting process. A summary is also provided to the Treasurer and to the companies interviewed during the round.

Although the principal focus of business liaison is the economic outlook, it also provides an opportunity to seek feedback from business on broader policy issues. The key policy comments that emerge from the round are drawn to the attention of relevant officers within Treasury for their consideration.

Business liaison and the forecasting process

Business liaison is an important part of Treasury's forecasting process.

The principal feature of business liaison is that it involves direct contact with the 'real' economy, rather than the (necessary) abstraction involved in most economic statistics. This allows for a deeper understanding of the economic conditions being faced by individual businesses and how they are likely to respond to expected developments. In some circumstances, it can provide for more timely assessment of current economic conditions than official statistics. For example, the most recent business liaison round included contacts before and after the terrorist attacks on September 11.

These are significant advantages. However, they bring with them some inherent limitations.

In particular, the number of contacts in any liaison round is necessarily limited, and contacts may not be representative of the economy as a whole. As a result, care is needed in interpreting and extrapolating the findings of business liaison. While liaison can produce some useful quantitative data, the most valuable information comes from qualitative insights into the economic outlook.[20]

The nature of Treasury's forecasting timetable can impose some limitations on the timeliness of business liaison material. The traditional approach has been for liaison rounds to be concluded up to two weeks prior to the release of the quarterly national accounts[21], enabling a final summary report to be prepared and presented to forecasters at the start of the forecasting process. However, this can result in a significant lag between the time when liaison is conducted and when the official forecasts are published in the Budget and MYEFO. For example, liaison for the *Mid-Year Economic and Fiscal Outlook 2000-01*, released in November 2000 was conducted in August 2000.[22] As a result, follow-up contacts are often made by telephone to selected firms to verify that there have been no unanticipated developments since the initial discussions.

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20 For more detail on Treasury's forecasting process see 'Macroeconomic forecasts: purpose, methodology and performance' in the Autumn 1996 *Economic Roundup*.

21 More formally, the ABS publication *National Expenditure, Income and Consumption*, Cat. No. 5206.0.

22 For more detail on the forecasting timetable, see 'On Economists, the Economy and Fiscal Policy', Address to the Australian Business Economists by Dr Ken Henry, Secretary to the Treasury, 29 May 2001. This speech is available at www.treasury.gov.au/speeches/2001.

A variation on this approach was employed in the liaison round for the *Mid-Year Economic and Fiscal Outlook 2001-02*, released in mid-October 2001. The liaison round was conducted in September and early October, with progressive and cumulative reporting of findings to forecasters. While this approach has the advantage of timeliness, it is more difficult to fully incorporate liaison findings into the forecasting process which was occurring simultaneously. Not the least of these difficulties is the restricted availability of forecasting analysts to be directly involved in liaison.

The optimal timing of business liaison rounds, including from the perspective of business contacts, is being reviewed by Treasury.

Recent developments in business liaison

As noted above, in January 2000 Treasury's business liaison function was centralised in Canberra. One of the key objectives in doing so was to ensure that all Treasury analysts assigned to the role of forecasting were in regular direct contact with businesses. The liaison program can also be run from Canberra at lower cost than those involved with maintaining stand-alone offices in other cities.

That said, it has taken some time to 'bed down' the centralised liaison process. In calendar 2000 the average number of liaison visits per round was lower than in previous years, before recovering to around pre-centralisation average in calendar 2001. It is expected that in coming years liaison rounds will average between 80 and 100 contacts.

Another significant recent development is the move by the Reserve Bank of Australia (RBA) to commence a very substantial liaison program, having recently opened offices in Melbourne, Brisbane, Perth and Adelaide. The liaison programs conducted by Treasury and the RBA have different focuses. Treasury has discrete liaison rounds to feed into the Budget and MYEFO while the RBA's liaison is more continuous, feeding into meetings of the RBA board.[23] Nevertheless, Treasury and the Reserve Bank are continuing to work together on the interaction between these two liaison programs, including some joint liaison visits.

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23 See 'The Monetary Policy Process at the RBA', Address by Mr G R Stevens, Assistant Governor (Economic), to Economic Society of Australia (Victorian Branch), Forecasting Conference, Melbourne, 10 October 2001. This speech was published in the October 2001 edition of the Reserve Bank of Australia *Bulletin*.

Conclusion

The importance placed in regular contact with businesses is reflected in Treasury's ongoing commitment to business liaison and the role that this information plays in the regular assessment of the economy. Treasury greatly appreciates the commitment of time and effort made by Australian business and industry associations that participate in this program.

The Board of Taxation: its role and current activities

The Board of Taxation was established by the Government in August 2000 to advise the Treasurer on the development and implementation of taxation legislation as well as the ongoing operation of the tax system. In announcing the creation of the Board, the Treasurer emphasised its role in facilitating full and effective community consultation in the implementation of tax policy decisions. This article explores the role of the Board and discusses the activities that it has been undertaking.

The Board's origins, membership and charter

The creation of a Board of Taxation was a recommendation of the Ralph Review of Business Taxation. In endorsing the concept, the Government determined that the Board should have a broader, tax system wide mandate, rather than just a business tax focus, and that it be a non-statutory, rather than statutory, organisation.

The call for a Board of Taxation arose from the perception among businesses and their advisers that their views on the development of tax laws and the operation of the tax system were not being effectively heard by Government, and that improved outcomes could be achieved through better communication with, and input from, the community.

The Board comprises ten members[24]. Seven members, including the Chairman, are drawn from the business and community sector. These members have been appointed for their capacity personally to contribute a broad range of relevant business, practitioner, and broader community knowledge and experience to the development of the tax system. Also on the Board, as *ex-officio* members, are the heads of the three key Government agencies responsible for tax policy, tax administration and legislation – the Secretary to the Treasury, the Commissioner of Taxation and the First Parliamentary Counsel.

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24 The current membership of the Board is Mr Richard Warburton (Chair), Mr Tony D'Aloisio, Mr John Bronger, Mr Michael Carmody (Commissioner of Taxation), Mr John Harvey, Mr Brett Heading, Dr Ken Henry (Secretary to the Treasury), Mr Chris Jordan, Ms Alison McClelland and Ms Hilary Penfold QC (First Parliamentary Counsel).

The Board is supported by a small Secretariat based in the Commonwealth Treasury, presently a team of five that consists of three Treasury personnel, including the Secretary to the Board, a secondee from the Australian Taxation Office and a private sector secondee from the tax accounting profession.

The Board of Taxation's mission, as stated in its Charter, is to:

> '…contribute a business and broader community perspective to improving the design of taxation laws and their operation.'

In pursuing this mission, the Charter states that the Board must have regard to the fact that the Government is responsible for determining taxation policy and that the Commissioner of Taxation has statutory responsibilities for administering Australia's tax laws.

The Charter goes on specifically to provide that the Board shall advise the Treasurer on:

- the quality and effectiveness of tax legislation and the processes for its development, including the processes of community consultation and other aspects of tax design;
- improvements to the general integrity and functioning of the taxation system;
- research and other studies commissioned by the Board on topics approved or referred by the Treasurer; and
- other taxation matters referred to the Board by the Treasurer.

The Board's operations in practice

In translating the Board's Charter to its actual operations, it is important to emphasise that the Board is an advisory body. The Board does not have responsibility, but nor is it accountable, for taxation policy, which of course remains with the Treasurer and the Government. Similarly, the Board has no authority or powers to direct the Commissioner of Taxation on how to run the Australian Tax Office. As noted, the Commissioner's role is a statutory one, for which he is accountable to the Parliament.

Evident from its Charter, nevertheless, is that the Board potentially has a wide-ranging role in advising the Treasurer on the development, implementation and on-going operation of Australia's tax laws.

Advice on tax legislation and its development

As noted, the first of the Board's functions specified in its Charter is to advise the Treasurer on the 'quality and effectiveness of tax legislation and the processes for its development, including the processes of community consultation and other aspects of tax design.' In conjunction with the Mission Statement, this can be interpreted as giving the Board two key roles.

- First, to help facilitate, once a policy direction or intent has been determined by the Government, full and effective community consultation and other relevant input to the ensuing processes of legislative development and implementation.
- Second, to help facilitate and/or undertake evaluation of the 'quality and effectiveness' of the resulting legislative product and implementation procedures, etc.

The objective is to achieve better legislative and implementation outcomes, ensuring they correctly reflect the Government's policy intent, are compatible with commercial realities and the circumstances of individuals, minimise complexities and associated compliance costs, and avoiding unintended consequences.

As is the case with any board, the Board of Taxation's main focus in performing its role of facilitating community consultation is on seeking to ensure that the right processes and procedures are established and maintained to deliver the outcomes sought. It will continue to be the role of the relevant Government agencies, the Treasury, the ATO and the Office of Parliamentary Counsel, to manage these processes, with appropriate accountability to Government Ministers and the Parliament. Above all, the Board's role in this respect is to engender trust in the process among all parties concerned.

Similarly, the Board is considering processes that can be adopted to evaluate the quality and effectiveness of significant legislative measures after an appropriate period (say, two years) of experience with their operation. Here the emphasis will be on both identifying any needed changes to the legislation and related administrative arrangements, and on identifying issues that might inform the consideration of better legislative development and implementation processes in the future.

Advice on improvements to the integrity and operation of the tax system

The second function of the Board noted earlier is to advise the Treasurer on 'improvements to the general integrity and operation of the Taxation system.' There are two key and related elements to the Board's strategy for formulating such advice to the Treasurer.

- Understanding stakeholders' main concerns and priorities for the tax system, including of an immediate and forward-looking nature.
- Undertaking research on issues, at the request or with the approval of the Treasurer — with the selection of issues to be researched in part informed by the above.

The critical issue for the Board is ensuring that it is effectively and continually apprised of the community's views on the operation of the tax system, including through:

- general submissions and representations to it;
- inquiries the Board may itself undertake; and
- being informed of the Government's own priorities and objectives.

It is a matter for the Board, of course, to determine the issues it may wish to pursue. Where the Board decides to take up an issue, the process generally requires that it be referred to the Treasurer in the first instance. It would then be for the Treasurer to decide whether or not it is a matter that should be considered further, and whether the Board should have any role in that process.

Clearly, there will be a significant element of judgement involved in deciding matters to be pursued by the Board. The overriding criterion, nevertheless, is whether, in its view, the Board is in a position to 'add value' to the consideration of an issue. In essence, this requires a judgement as to whether the Board can provide or facilitate better insights or emphasis to an issue than what would already be available to the Government.

An important implication to be drawn from this is that the Board should not be seen as some 'white knight,' willing to champion causes all and sundry with the Treasurer and the Government. The Board's starting point for any consideration of an issue is to ask, 'where or how can it add value?'

In continuously harnessing the community's views on tax matters, the Board also is well-placed to regularly advise the Treasurer of community concerns and priorities in respect of the ongoing operation and development of the tax system.

Activities of the Board

Review of consultation arrangements

The Board in its initial 12 months of operation has been focussing heavily on discerning possible best practice arrangements for gaining effective community input to the processes of tax law design, which it could recommend for adoption by the Government. As a key input to its consideration of this issue, the Board commissioned a report from KPMG Consulting. KPMG's report draws together ideas gleaned from, inter alia, a community survey of views about current consultative arrangements and suggestions for the future, analysis of processes employed in other comparable countries and from processes employed in developing other areas of law. On the basis of this report and other information, the Board currently is considering what recommendations to put to the Government on consultation arrangements.

Tax Value Method

A further area of major focus by the Board has been on developing and evaluating the so-called 'Tax Value Method' (TVM) for calculating taxable incomes. This task was assigned to the Board by the Treasurer at the time of its establishment in August last year and arises from a recommendation of the Ralph Review of Business Taxation.

The Board's strategy for progressing this exercise is to develop a body of draft legislation and associated products sufficient to comprehensively demonstrate and test the idea, and at the same time to progressively commission and otherwise promote thorough testing and evaluation of it. A unique feature of this strategy is its transparency and the degree to which it allows for open input from key stakeholders and the community more generally. As such, and aside from whatever the ultimate judgement might be about the TVM's relative merits, the Board's strategy represents a fresh approach to a more open and inclusive tax design process.

Tax reform

Increasingly, the Board also has become involved in aspects of the Government's tax reform agenda; proffering advice to the Treasurer, for example, on community concerns detected with some proposed initiatives. The Treasurer, moreover, has signaled a specific role for the Board in some areas, for example, in facilitating further consideration of the appropriate taxation treatment of trusts.

Consultation

The Board has instituted, in conjunction with its regular monthly meetings, a program of meetings with key stakeholder representatives. These meetings are intended to give the Board some early indication of community concerns with, and priorities for, the tax system. So far it has met with representatives of the accounting profession, welfare groups and large and small business organisations. The meetings have become an integral part of Board meetings and are intended to give the Board some early indication of community concerns with, and priorities for, the tax system. They also provide the Board with an avenue for disseminating information about its activities.

Members of the Board have been very active in participating in conferences and seminars and in consulting through their networks on tax issues. Members and staff of the Board Secretariat also separately visited or hosted meetings with representatives of a number of organisations.

In October 2000, the Chairman of the Board accepted an invitation from the ATO to join the Sponsor's Group for the ATO's Integrated Tax Design (ITD) project. The ITD project was established in response to a further recommendation by the Review of Business Taxation that there be a continuation and further development of the integrated tax design processes that were employed during the Review. These processes were aimed at overhauling the essentially sequential working arrangements between the Treasury, the ATO and the Office of Parliamentary Counsel for the development of tax legislation and administrative systems into a far more integrated process that facilitated greater collaboration among themselves and with other stakeholders in the tax system.

Prospectively, the Board will be looking to further enhance its processes and channels for communicating with its community stakeholders to ensure that it remains fully and effectively informed and can access specialist knowledge on a timely basis.

The household balance sheet in Australia

Australian household wealth has increased in recent years, despite higher debt levels. In other words, the value of household assets has risen substantially more than household debt. The higher debt levels partly reflect the benefits of low inflation in contributing to improved housing affordability and access to finance. Household debt increases do not appear to have resulted in enhanced financial difficulties at an aggregate level.

Introduction

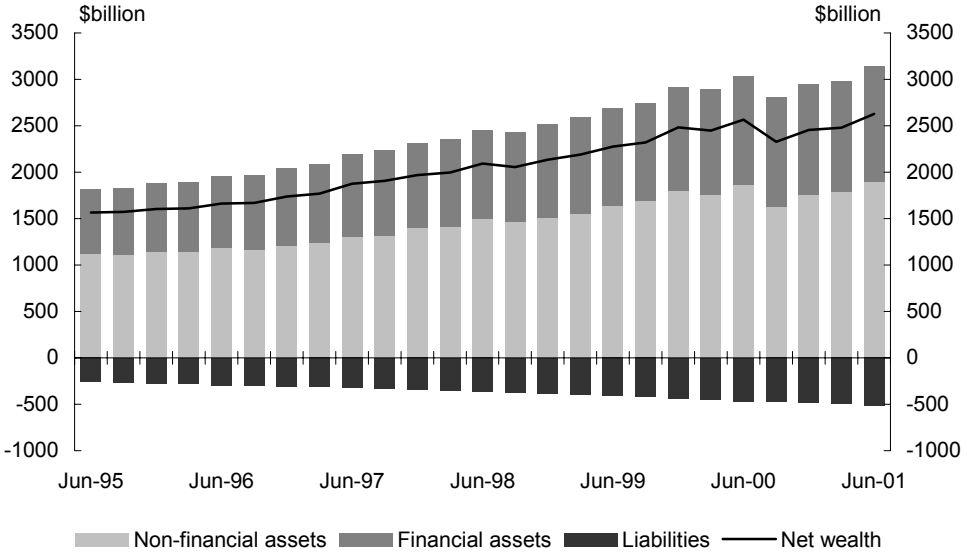
This article outlines some key developments in household wealth in recent years and examines whether the household sector is having financial difficulty as a result of increased debt levels.[25]

Household wealth

Over the past decade, increases in the aggregate value of household financial and non-financial assets have coincided with rises in household debt (see Chart 1). Some commentators have suggested that the rising debt levels of households are a concern. However, considering household debt in isolation is misleading: the higher debt levels are more than offset by the growth on the asset side of the household balance sheet – a phenomenon seen in a number of other developed countries. Over the past five years, the net wealth of households has grown by an average of 10 per cent annually in nominal terms.

25 In this article, data from ABS Cat. Nos. 5206.0 and 5232.0 are taken from the June quarter 2001 releases of those publications. The household sector includes both individuals and unincorporated enterprises (such as sole traders and partnerships) consistent with Australian Bureau of Statistics treatment.

Chart 1: Household sector balance sheet(a)



(a) Consistent data are not available prior to the June quarter 1995.
Source: ABS Cat. No. 5232.0 and RBA Statement on Monetary Policy.

Household assets

Chart 2 shows an alternative break-down of the value of assets held by the household sector. Dwellings comprise over half the value of household assets, while superannuation and life policies account for a further 20 per cent. The nominal value of both dwellings and superannuation has grown by around 10 per cent per annum, on average, over the past five years.[26]

Directly-held equities and unit trusts comprise a smaller proportion of assets, accounting for around 9 per cent of household assets. A combination of greater share ownership and rising share prices has led to an average 24 per cent annual increase in the value of direct equities and unit trusts held by households over the past five years.

Putting these asset classes together, the nominal value of household assets has grown by 10 per cent per year, on average, for the past five years.

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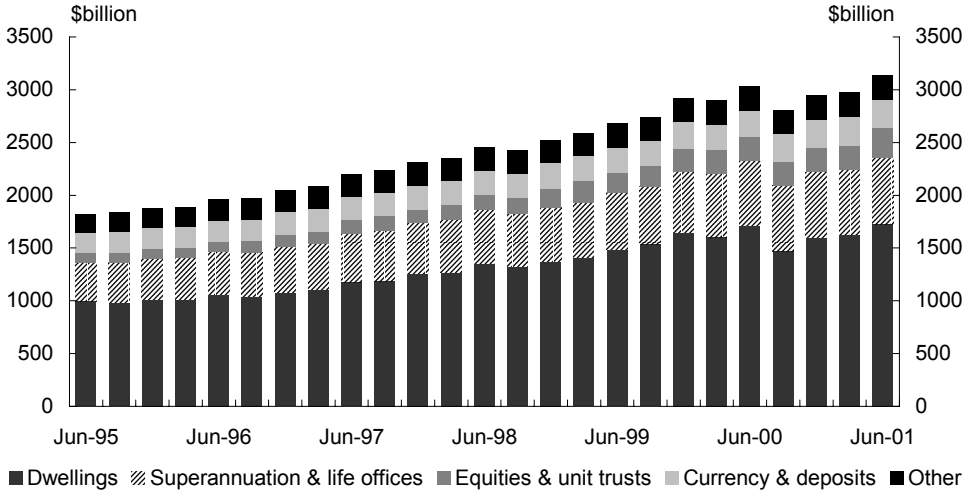
26 Over the past year, estimates of the value of dwellings have been affected by compositional changes in the housing market associated with the introduction of *The New Tax System*, particularly the introduction of the First Home Owners Scheme. Refer to the Reserve Bank of Australia's *Statement on Monetary Policy* February 2001 for more information.

Chart 2: Household assets



Source: ABS Cat. No. 5232.0 and RBA Statement on Monetary Policy.

These household assets provide a support base for the debt held by households. Total household liabilities, mostly debt, are around 40 per cent of the value of household financial assets, or around 15 per cent of total assets. That is, for every dollar in debt, households have, on average, about $2.50 in financial assets and between $6 and $7 in total assets.[27]

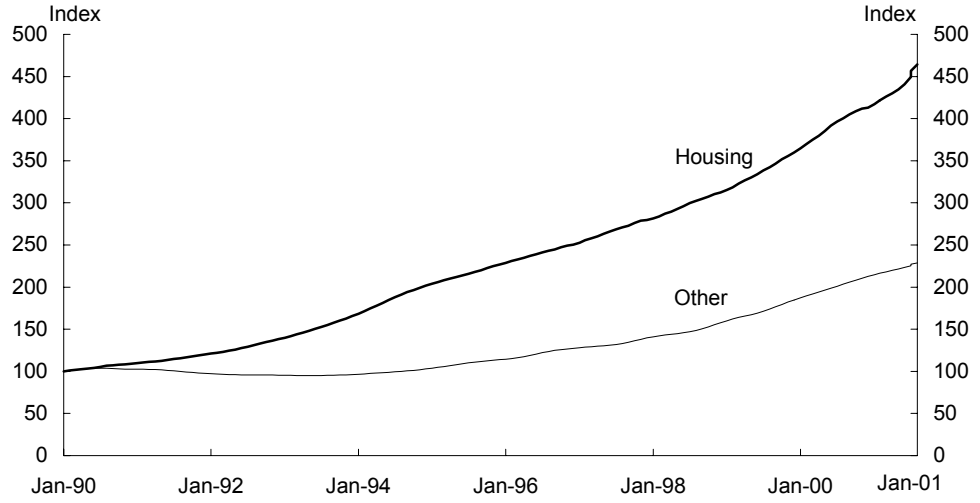
Household liabilities

The increases in both household assets and liabilities have their origins in the financial deregulation and new lending practices that commenced in the early to mid 1980s. In particular, quantitative controls on interest rates and portfolios were largely removed in 1982, although a cap on pre-existing housing loans continued until 1986.

Together, these changes enabled many credit-worthy households to access finance for the first time. Chart 3 shows the contribution of housing to total personal credit growth over the past decade.

27 There may, of course, be wide variations in the relative positions of individual households within this average.

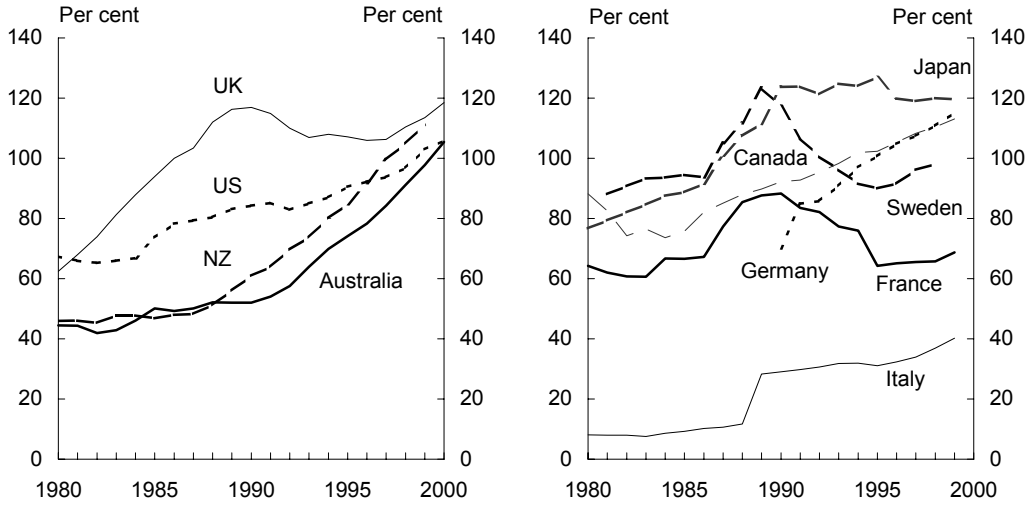
Chart 3: Growth in personal credit
Break adjusted index, Jan 1990=100



Source: RBA Bulletin Statistical Database.

As shown in Chart 4, Australian households had a relatively low debt to disposable income ratio in the early 1990s compared with some other OECD countries. However, this ratio has increased since then and is now broadly comparable to other OECD countries.

Chart 4: International comparisons
Household debt to disposable income(a)



(a) Data for Australia, UK, Germany and New Zealand exclude unincorporated enterprises.
Source: Reserve Bank of Australia.

The benefits of low inflation

While access to finance has been an important factor behind the growth in household debt, other factors have also made a significant contribution. In particular, the effectiveness of monetary policy in achieving low and stable inflation has benefited both lenders and borrowers.

Some households, such as self-funded retirees, are net lenders relying on income flows from investments. Although higher interest rates increase nominal returns, if these higher interest rates are associated with higher inflation, then there is more rapid erosion of an investor's capital base. For example, at an inflation rate of 5 per cent, it takes 4½ years for investors to lose 20 per cent of their capital base in real terms. By contrast, it takes 9 years for the same amount of capital to be eroded at an inflation rate of 2½ per cent.[28]

Borrowers can also benefit from a low interest rate, low inflation environment. In a high interest rate, high inflation environment, home loans have very high repayment burdens early in the term of the loan.[29] This can exclude many low-income households from accessing finance. In contrast, low inflation and low interest rates result in lower repayments thus enabling a wider range of households to access finance.

This argument is, perhaps, best illustrated by highlighting some changes in the affordability of housing over the past five years:

- The standard variable mortgage rate fell from 10.5 per cent in late 1995 and early 1996 to 6.3 per cent in October 2001 (and has subsequently fallen to around 6.05 per cent). The annual rate of inflation has fallen from around 5 per cent in the December quarter 1995 to around 2½ per cent currently.[30]

- House prices and average loans have increased over this time. The average loan taken out by first homebuyers has increased from around $91,000 in December 1995 to around $144,000 in October 2001. Despite this increase, the interest bill for first home buyers has actually fallen over this period –

28 It should also be noted that this example does not take account of the effect of the tax system. Income tax applies to the full value of the nominal interest payment.

29 This issue is discussed in more detail later in this article.

30 The implementation of *The New Tax System* had a one-off impact on the price level in 2000-01. Abstracting from these effects, 'ongoing' inflation remained at moderate levels.

total interest in the first year of these loans has fallen from $9,526 to $8,986.[31]

- Taking rising disposable income into account, the repayment burden is considerably lower. For example, a first home owner taking out an average loan and earning the average household disposable income would have faced a total repayment burden (principal and interest) of 17.3 per cent of disposable income in October 2001 compared with 19.4 per cent in December 1995.[32]

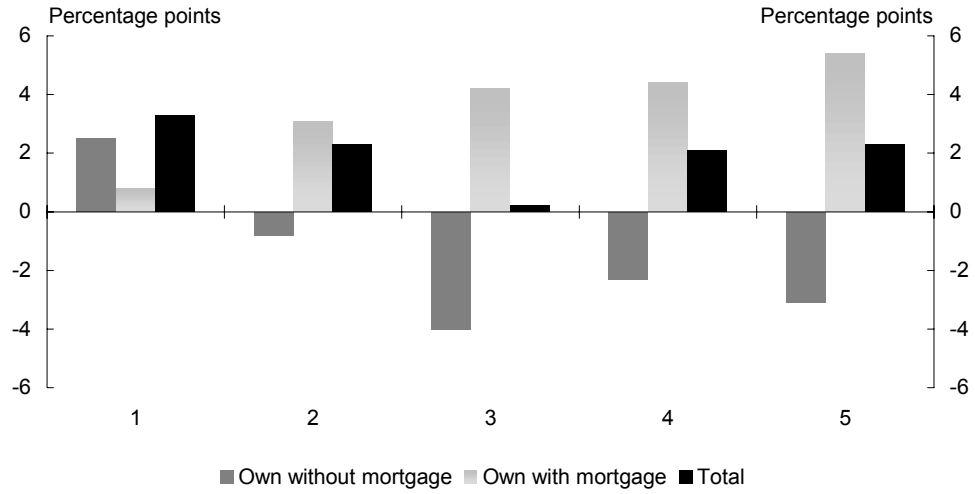
The distribution of assets and liabilities

The increased housing affordability and access to finance – along with reduced interest margins due to increased lending competition – have resulted in a wider range of households purchasing their home. Changes in the pattern of home ownership and financing are apparent over the three years to 1999-2000, as shown in Chart 5 where the numbers 1 to 5 on the x-axis denote the respective quintile. A feature is that all income quintiles had higher rates of home ownership over this period.

31 However, given the higher borrowings, the annual repayments of principal are larger.

32 Household disposable income is defined as gross income less secondary income payable (including income tax payable and net non-life insurance premiums). Source: ABS Cat. No. 5206.0.

Chart 5: Change in home ownership between 1996-97 and 1999-2000
Distribution by gross income quintile



Source: ABS Cat. No. 6523.0.

Despite the increasing penetration of home ownership, households in the upper income quintiles remain the most likely to own their own home. In 1999-2000, the three lowest quintiles had home ownership rates between around 40 and 50 per cent[33]. In contrast, the fourth and fifth quintiles had ownership rates of 60 and 80 per cent respectively. That said, the prevalence of mortgages also increases across the income distribution; that is, higher income households are more likely to have a mortgage than low-income households.

The Australian Stock Exchange Shareownership Survey paints a similar picture. Share ownership has increased across all income groups in recent years – at least 14 per cent more households in each income group had direct shareholdings in 2000 compared with 1997 – largely reflecting several high profile privatisations and demutualisations. However, households with incomes above $70,000 had share ownership rates above 60 per cent, compared with 45 per cent or below for households with lower incomes.

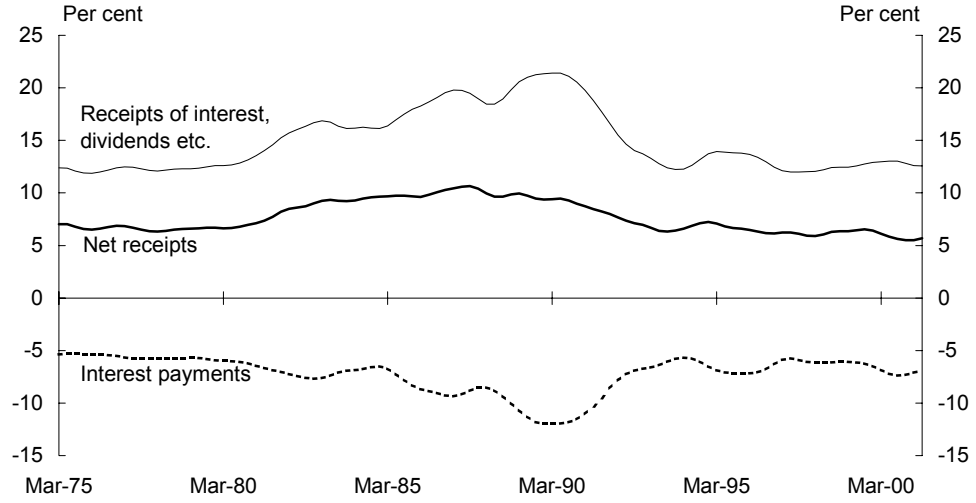
Financial returns and debt servicing

Some households are net recipients of income from financial assets (including interest[34] and dividends), while others are net interest payers. In aggregate, the household sector is a net recipient of income from these sources, as shown in Chart 6.

33 It is worth noting that analysis of trends in the first income quintile should generally be treated with caution, as it contains many self-funded retirees with low incomes but significant accumulated assets.

34 Interest receipts include some items that may not be received immediately, such as investment income from insurance policies and superannuation funds.

Chart 6: Returns on financial assets and interest payments (proportion of household disposable income)

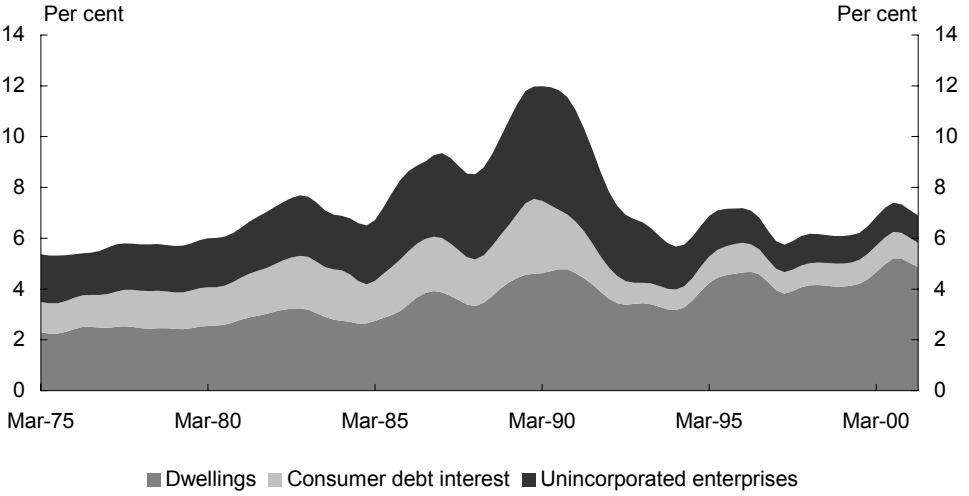


Source: ABS Cat. No. 5206.0.

A common measure of the interest burden on the household sector is the debt servicing ratio. As shown in Chart 7, this debt servicing ratio is significantly below its peaks — interest payments for the household sector as a whole are around 6½ per cent of disposable income, well below the ratio of 10½ per cent reached in 1989-90.[35]

35 This does not take into account changes in interest rates, incomes or debt levels in the second half of 2001.

Chart 7: Household debt servicing ratio
(proportion of household disposable income)



Source: ABS Cat. No. 5206.0.

Economic impact of interest payments

In the short term, households are generally concerned with the total interest payments they make. However, the longer-term economic consequences for households depend on the extent to which these payments reflect inflation, as the inflation premium built into nominal interest rates reflects the declining real value of outstanding debt.[36] This can be taken into account by separating the debt servicing ratio into its inflation and real components[37].

Higher nominal interest rates do not result in higher real debt servicing costs for households if real interest rates are unchanged. As a result, any increases in nominal interest rates that are not associated with higher real interest rates do not adversely affect the real net wealth of households. Further, without any impact on net wealth, such interest rate changes should not have a sustained impact on household expenditure for any given real income.

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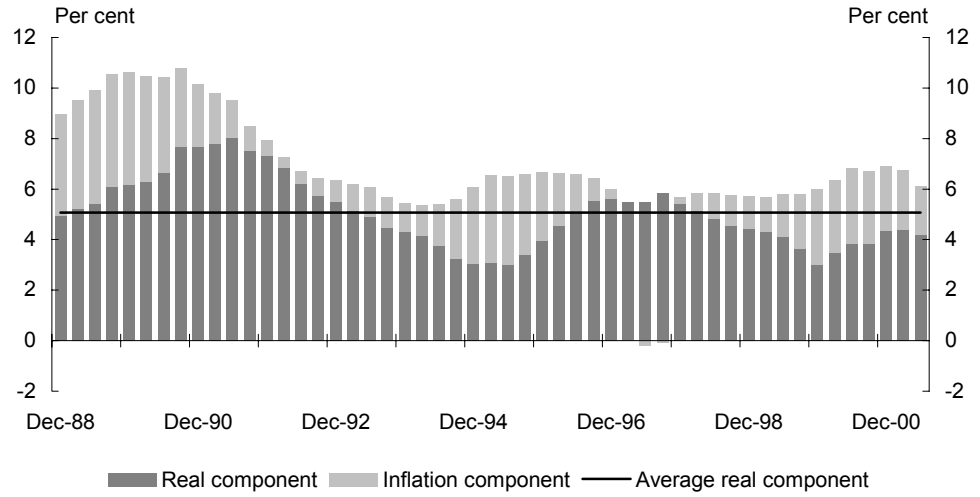
36 For households who are not liquidity constrained and are forward looking, it is more difficult to separate the short and longer term consequences of interest payments as they will primarily be concerned with real changes in their net wealth.

37 The real component of the debt servicing ratio was derived from the equation $R=D(r+\Pi+r\Pi)$, where R is total interest payments, D is household debt, r is the implied real interest rate and Π is the trend historical quarterly rate of inflation.

As shown in Chart 8, the real component of the debt servicing ratio in the June quarter 2001 was below the long run average, and below the peaks in 1990-91 and 1996-97.[38]

Chart 8: Decomposition of total debt servicing ratio (proportion of household disposable income)



Source: ABS Cat. Nos. 6401.0, 5206.0 and 5232.0

This is not to say that nominal rates are irrelevant or have no impact on household expenditure. High nominal rates may prevent some households from borrowing to finance a home. This is a result of the fact that most loans require constant nominal repayments over the life of the loan. The first loan repayment must cover the interest cost of the loan plus some amount to cover repayment of the principal. With higher nominal interest rates the initial interest payment is higher. This higher interest payment must be paid out of current nominal income. However, provided the household is able to take out the loan in the first place, the household is no worse off in the long run (for a constant real interest rate) as the real value of the fixed repayments fall over time and the nominal value of the house typically rises over time.

38 Household debt data are unavailable prior to 1988.

Conclusion

While household debt is increasing, it is misleading to consider it in isolation from the complete household balance sheet. It is important to consider the debt position in the context of sustained growth in assets and resulting improvements in the financial position of households. Moreover, the increases in debt are partly a reflection of improvements in housing affordability and access to finance flowing from low inflation and the restructuring of financial markets.

Low inflation provides benefits to a wide range of households. These include potential first home owners whose repayments are lower in the early stages of new loans and self funded retirees whose capital base is eroded rapidly with high inflation. These conditions contribute to improvements in the ability of the household sector, as a whole, to service the higher debt levels.

These structural changes have given many more households the opportunity to purchase housing compared with a decade ago. Many low-income households have taken advantage of this opportunity, as part of a broader trend to increased home ownership in recent years. The penetration of mortgage finance is greater amongst higher income households, which broadly coincides with the distribution of assets.

Statistical appendix

List of charts and tables

Charts

International economy

National accounts

Tables

National accounts

Incomes, Costs and Prices

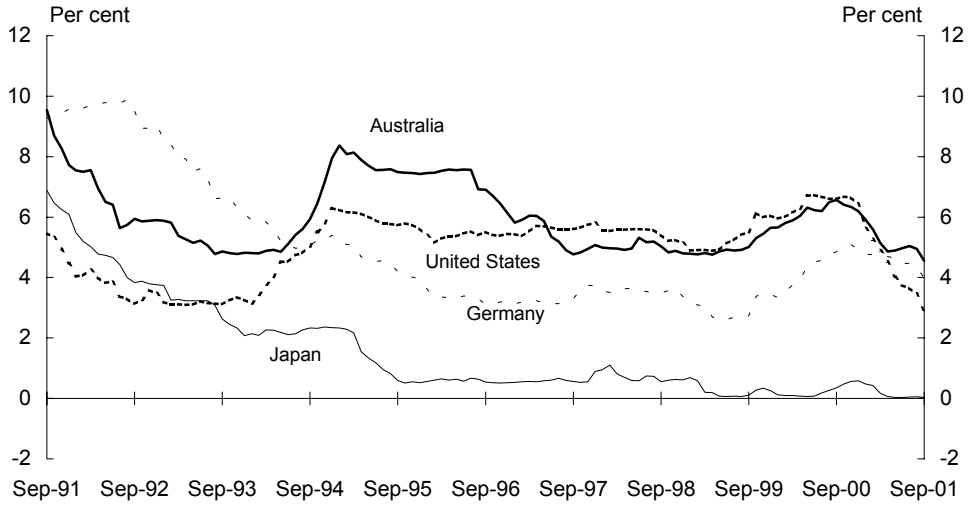
External sector

Key to tables

n.a. not available
n.y.a. not yet available
.. change less than 0.05 per cent

Chart 1: Selected international indicators

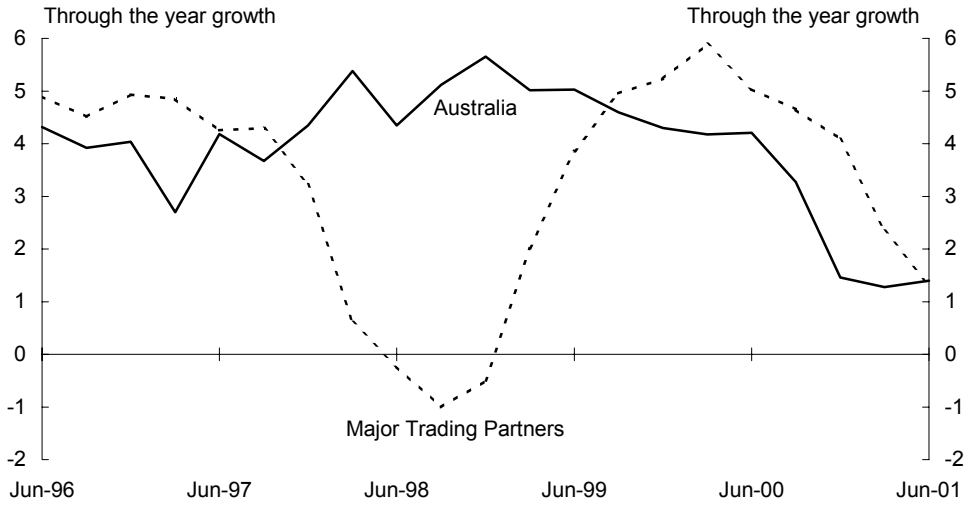
Panel A: Short-term interest rates[(a)]



(a) Short-term interest rates are monthly averages and are defined as follows: US — 3 month certificates of deposits, Japan — 3-month certificates of deposit, Australia — 90 day bank accepted bills and Germany — 3 month FIBOR.

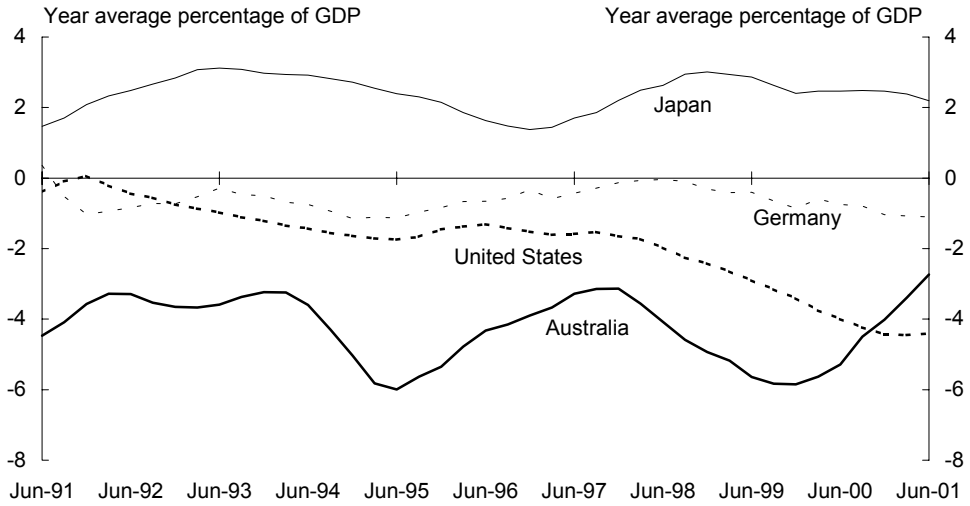
Source: OECD Main Economic Indicators.

Panel B: Real output[(a)]



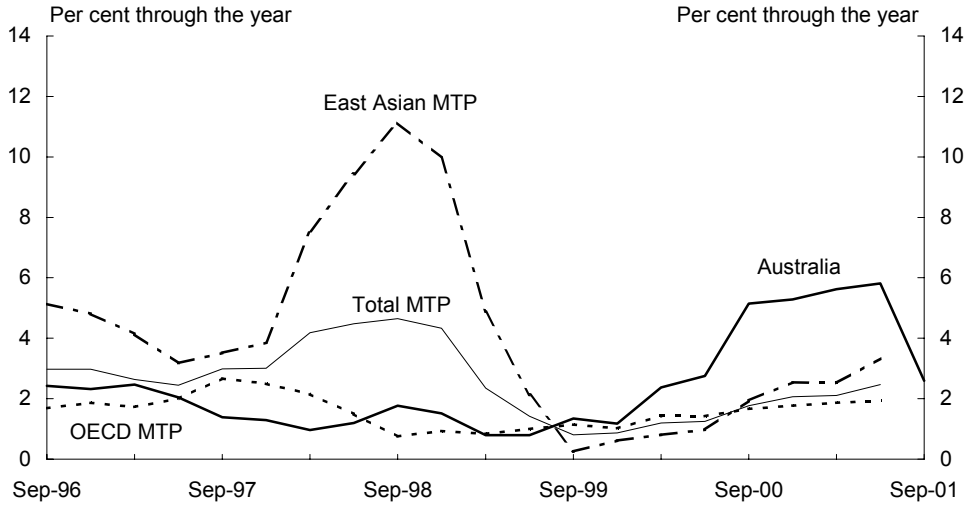
(a) Seasonally adjusted real GDP growth for each major trading partner is weighted by their respective shares of total Australian merchandise exports averaging from 1998-99 to 2000-01. Major trading partners from the OECD comprise the G7 (US, Japan, Germany, France, UK, Italy and Canada) and New Zealand. Asian major trading partners consist of South Korea, Taiwan, Hong Kong, Singapore, China, Malaysia, Indonesia, Thailand and the Philippines.

Panel C: Current account balances[(a)]



(a) Data are seasonally adjusted.
Source: Data are from statistical agencies of respective countries, except for Germany which is from the OECD Main Economic Indicators.

Panel D: Consumer price inflation[(a)]



(a) The aggregate inflation rates are derived from the weighted average of inflation rates of individual trading partners, with the weights being their respective shares of Australian total merchandise trade from 1998-99 to 2000-01. Major trading partners consist of US, Japan, Germany, UK, New Zealand, Canada, South Korea, Singapore, Indonesia, Taiwan, Hong Kong, France, Italy, China, Malaysia, Thailand and the Philippines.
Source: Data for US, Japan, Germany, UK, New Zealand, Canada, South Korea, Singapore, Indonesia, Taiwan and Hong Kong are from the ABS All Groups CPI (excluding housing) measure. For the rest of Australia's MTP (France, Italy, China, Malaysia, Thailand and the Philippines), the CPI are from each country's respective all groups CPI series which exclude the effects of mortgage interest rate changes.

Chart 2: Contributions to trend quarterly GDP growth

(Average 1999-2000 prices)

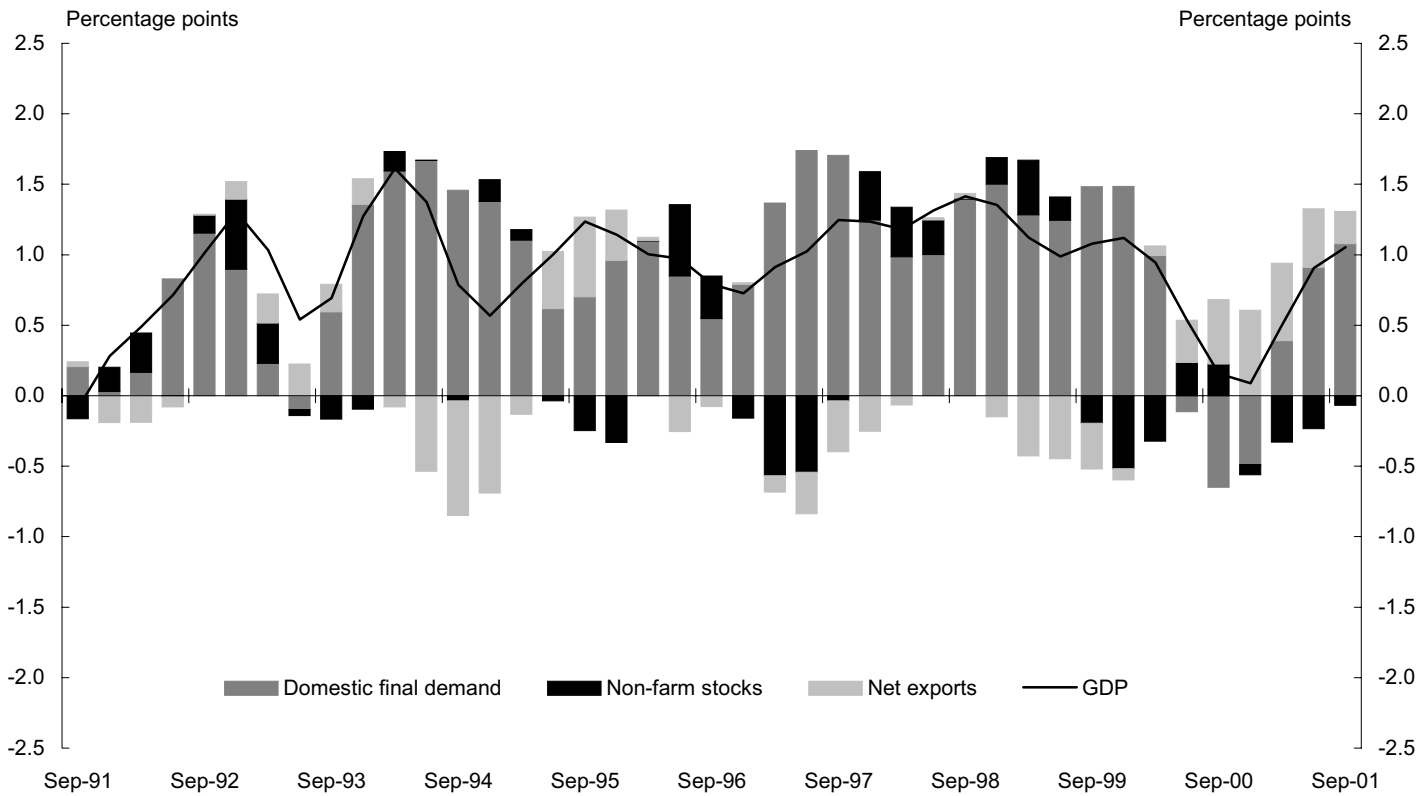


Table 1: Components of Gross Domestic Product (chain volume measures)

	Final domestic demand								
	Household consumption	Private investment in dwellings	Private business fixed investment	Private final demand	Public final demand	Total final demand	Exports	Imports	GDP
Year	(Percentage change on preceding year)								
1998-99	5.1	7.6	1.6	4.6	6.7	5.1	2.0	4.8	5.3
1999-00	4.1	13.7	6.8	5.3	4.7	5.2	9.3	12.5	4.3
2000-01	2.5	-20.6	-5.5	-0.7	1.9	-0.1	7.0	-1.7	1.8
Quarter	(Percentage change on preceding quarter - Trend)								
2000 Sep	0.4	-10.2	0.7	-0.9	-0.2	-0.6	1.2	-1.0	0.2
Dec	0.7	-13.1	-1.9	-0.4	-0.1	-0.5	0.7	-2.1	0.1
2001 Mar	1.0	-4.0	-1.1	0.4	0.1	0.4	0.6	-2.0	0.5
Jun	1.1	4.7	-1.1	1.0	0.3	0.9	0.5	-1.5	0.9
Sep	1.0	6.8	0.4	1.4	0.6	1.1	0.2	-0.9	1.1
Quarter	(Percentage change on preceding quarter - Seasonally adjusted)								
2000 Sep	0.5	-20.6	3.9	-1.0	-0.2	-0.8	4.6	0.0	0.3
Dec	0.1	-13.3	-8.9	-2.2	2.1	-1.2	-2.3	-2.9	-0.5
2001 Mar	1.6	-0.1	2.5	1.7	0.0	1.3	0.5	-2.3	0.6
Jun	0.9	2.4	-3.5	0.4	0.3	0.4	1.0	-0.8	1.2
Sep	0.8	13.7	0.0	1.7	1.4	1.6	-1.6	-1.0	1.1
Quarter	(Percentage change on a year earlier - Trend)								
2000 Sep	2.4	0.3	-0.6	1.4	2.3	1.7	9.9	5.3	2.8
Dec	2.1	-18.8	-3.1	-0.3	0.4	-0.3	6.9	-0.3	1.7
2001 Mar	2.4	-26.6	-4.4	-1.1	-0.4	-0.8	4.6	-4.4	1.3
Jun	3.1	-21.6	-3.4	0.1	0.0	0.2	2.9	-6.4	1.7
Sep	3.8	-6.7	-3.7	2.5	0.8	1.9	1.9	-6.4	2.6

Source: ABS Cat. No. 5206.0.

Table 2: Contributions to change in Gross Domestic Product (chain volume measures)

	Final domestic demand						Change in inventories			
	Household consumption	Private investment in dwellings	Private business fixed investment	Private final demand	Public final demand	Total final demand	Private non-farm	Farm & public authority	Net exports	GDP
Year	(Contribution to change in GDP)									
1998-99	3.1	0.4	0.2	3.7	1.5	5.2	0.9	-0.1	-0.6	5.3
1999-00	2.5	0.7	0.8	4.2	1.1	5.2	-0.4	0.0	-0.8	4.3
2000-01	1.5	-1.2	-0.7	-0.5	0.4	-0.1	0.1	-0.1	1.8	1.8
Quarter	(Contribution to change in GDP - Trend)									
2000 Jun	0.2	-0.1	-0.3	-0.2	0.0	-0.1	0.2	-0.2	0.3	0.5
Sep	0.2	-0.6	0.1	-0.7	-0.1	-0.6	0.2	0.0	0.5	0.2
Dec	0.4	-0.7	-0.2	-0.3	0.0	-0.5	-0.1	0.1	0.6	0.1
2001 Mar	0.6	-0.2	-0.1	0.3	0.0	0.4	-0.3	0.1	0.5	0.5
Jun	0.6	0.2	-0.1	0.8	0.1	0.9	-0.2	0.0	0.4	0.9
Sep	0.6	0.3	0.0	1.1	0.1	1.1	-0.1	-0.1	0.2	1.1
Quarter	(Contribution to change in GDP - Seasonally adjusted)									
2000 Jun	0.3	0.5	0.1	0.8	-0.8	0.0	-0.1	0.4	0.6	0.8
Sep	0.3	-1.3	0.5	-0.8	0.0	-0.8	1.3	-1.0	0.9	0.3
Dec	0.1	-0.7	-1.1	-1.7	0.5	-1.2	-0.4	1.1	0.2	-0.5
2001 Mar	1.0	0.0	0.3	1.3	0.0	1.3	-1.4	-0.4	0.6	0.6
Jun	0.6	0.1	-0.4	0.3	0.1	0.4	1.1	0.0	0.4	1.2
Sep	0.5	0.6	0.0	1.3	0.3	1.6	-0.7	-0.2	-0.1	1.1

Source: ABS Cat. No. 5206.0.

Table 3: Gross value-added by industry (chain volume measures)

	Agriculture, forestry & fishing	Mining	Manu-fact-uring	Electr-icity, gas & water	Cons-truction	Whole-sale trade	Retail trade	Accomm-odation, cafes & restaurants	Transport & storage	Commun-ication services	Finance & insurance services	Property & business services	Gov. administ-ration & defence	Edu-cation	Health & community services	Cultural & recre-ational services	Personal & other services
Year	(Percentage change on preceding year)																
1998-99	4.8	0.5	3.9	1.4	7.2	4.2	5.3	7.8	1.8	10.4	12.7	10.0	4.5	2.0	2.6	2.4	4.0
1999-00	6.9	10.4	2.8	2.8	6.2	6.2	4.4	6.6	3.9	10.5	2.8	4.8	0.2	1.6	2.4	3.8	9.6
2000-01	-3.6	5.4	0.1	2.9	-17.4	-0.2	0.8	2.9	0.9	10.3	4.6	9.7	2.9	1.8	2.8	11.1	3.3
Quarter	(Change on previous quarter - Trend)																
2000 Jun	-1.3	1.7	1.1	1.4	-3.7	0.4	-0.4	0.1	0.1	2.8	0.9	2.6	0.8	0.5	-0.4	5.6	-0.2
Sep	-1.8	1.1	-0.7	0.9	-8.3	-0.9	-0.1	0.2	-0.3	3.0	1.4	2.9	1.1	0.5	0.3	3.7	0.6
Dec	-1.7	0.8	-1.6	0.2	-8.5	-1.1	0.7	0.9	-0.1	2.8	1.5	2.6	0.8	0.5	1.9	0.3	1.6
2001 Mar	1.4	0.6	-0.4	-0.5	-1.6	-0.2	1.0	1.6	0.8	1.2	1.3	1.8	0.4	0.4	2.0	-1.6	1.7
Jun	2.4	0.2	0.8	-0.8	3.6	0.7	1.0	1.8	1.3	-0.1	1.3	1.6	0.3	0.4	1.0	-0.7	1.1
Sep	1.8	-0.1	1.4	-0.8	4.3	1.1	0.7	1.7	1.1	-0.9	1.3	1.5	0.2	0.4	0.0	1.1	0.7
Quarter	(Change on previous quarter - Seasonally adjusted)																
2000 Jun	-1.7	1.9	1.1	0.9	2.9	0.2	1.9	-0.2	1.8	2.8	0.7	2.7	1.2	0.4	0.0	1.5	-1.6
Sep	-3.4	-0.1	-0.9	1.3	-14.6	-0.2	-2.5	0.9	-1.1	2.6	2.6	4.4	1.1	0.5	-1.1	16.5	0.3
Dec	-3.2	0.8	-1.4	-0.5	-9.7	-2.4	2.1	-0.1	-1.0	2.1	0.5	1.6	0.2	0.5	1.7	-10.1	3.3
2001 Mar	4.5	2.6	-2.4	0.8	0.6	0.0	1.2	2.6	1.3	4.5	1.9	1.4	2.0	0.4	5.0	1.0	0.9
Jun	1.1	-1.9	3.1	-2.2	5.5	1.2	0.3	1.6	2.2	-3.2	0.6	2.3	-1.7	0.4	-0.6	1.2	1.3
Sep	3.0	0.7	1.5	-0.2	4.6	1.3	1.2	1.8	0.2	-0.7	2.0	1.1	1.4	0.4	-1.4	0.0	0.5
Quarter	(Change on year earlier - Trend)																
2000 Mar	3.8	11.6	3.4	3.3	7.0	7.0	3.7	5.8	4.2	10.1	1.4	3.8	-0.1	1.5	2.4	5.2	9.5
Jun	1.0	10.9	5.0	4.6	1.8	6.1	1.8	3.4	3.3	10.3	1.4	5.1	1.0	1.6	1.2	10.8	5.4
Sep	-1.7	9.3	4.2	5.1	-8.3	3.4	0.7	1.7	1.6	11.4	2.6	7.5	2.5	1.7	0.7	14.3	2.4
Dec	-4.6	7.0	0.9	4.2	-18.3	0.0	0.4	1.7	0.4	11.9	4.2	9.7	3.3	1.8	1.9	13.9	2.1
2001 Mar	-3.4	4.4	-1.6	2.0	-20.5	-1.9	1.1	2.9	0.5	10.1	5.2	10.2	3.2	1.8	3.8	8.0	3.7
Jun	0.3	2.9	-1.8	-0.2	-14.5	-1.6	2.6	4.7	1.7	7.0	5.5	9.1	2.6	1.8	5.2	1.6	5.2
Sep	4.0	1.6	0.2	-1.8	-2.7	0.4	3.4	6.2	3.1	3.0	5.5	7.7	1.7	1.7	4.9	-1.0	5.3

Source: ABS Cat. No. 5206.0.

Table 4: Real household income[(a)]

	Non-farm employees	Non-farm average earnings	Non-farm compensation employees	Gross mixed income	Household income	Household disposable income
Year	(Percentage change on preceding year)					
1998-99	2.7	3.2	5.9	4.4	5.5	5.4
1999-00	2.2	1.7	3.9	6.1	4.5	4.0
2000-01	2.7	-0.7	2.0	-1.5	2.8	4.7
Quarter	(Percentage change on preceding quarter - Seasonally adjusted)					
2000 Sep	0.6	-0.8	-0.2	-1.3	0.5	3.1
Dec	0.4	-0.2	0.2	-4.5	0.0	-0.2
2001 Mar	0.1	0.8	0.9	1.4	0.3	-0.4
Jun	-0.4	0.3	0.0	1.7	0.9	2.1
Sep	0.7	0.6	1.3	5.7	0.3	-0.6
Quarter	(Percentage change on year earlier - Seasonally adjusted)					
2000 Sep	4.4	-1.3	3.1	3.6	4.1	5.8
Dec	3.4	-1.7	1.6	-1.6	2.8	4.5
2001 Mar	2.4	-0.7	1.7	-5.6	1.7	2.8
Jun	0.8	0.1	0.9	-2.8	1.7	4.6
Sep	0.8	1.6	2.4	4.1	1.4	0.8

(a) Deflated by the chain price index for private final consumption expenditure.
Source: ABS Cat. No. 5206.0.

Table 5: Wages, labour costs and company income

	Average weekly earnings (survey basis)			Unit labour costs		Factor shares	
	Full-time adult ordinary time earnings[a]	All persons total earnings[a]	Non-farm average earnings (national accounts basis)[a]	Nominal[b]	Real[c]	Wage share[d]	Profit share[e]
Year	(Percentage change on preceding year)				(Index)	(per cent)	(per cent)
1998-99	3.7	2.4	4.0	0.6	96.5	55.0	22.8
1999-00	3.3	2.2	3.1	1.2	95.7	54.4	23.4
2000-01	5.3	5.5	3.9	4.0	96.1	54.8	23.3
Quarter	(Percentage change on preceding quarter - Seasonally adjusted)						
2000 Sep	1.7	1.7	1.8	1.6	94.3	54.0	24.1
Dec	0.6	-0.2	0.5	1.8	97.2	55.4	22.7
2001 Mar	0.8	1.7	1.7	1.0	96.2	54.9	23.4
Jun	2.2	1.1	1.1	-0.2	96.8	55.0	23.0
Sep	1.4	1.3	0.6	-0.9	95.6	54.7	22.9
Quarter	(Percentage change on year earlier - Seasonally adjusted)						
2000 Sep	6.1	6.8	3.1	2.3			
Dec	5.1	5.1	3.0	4.9			
2001 Mar	4.6	5.6	4.2	4.6			
Jun	5.3	4.4	5.1	4.3			
Sep	5.0	4.0	3.9	1.7			

(a) All numbers derived from seasonally adjusted data.
(b) Ratio of nominal hourly labour costs (non-farm compensation of employees, plus payroll tax and fringe benefits tax less employment subsidies, per hour worked by non-farm wage and salary earners) to average hourly productivity (real gross non-farm product per hour worked by all employed persons).
(c) Nominal unit labour costs (base for index: 1986-87 = 100.0) as defined in footnote (b) deflated by the derived chain price index for gross non-farm product.
(d) Compensation of employees as a share of total factor income.
(e) Gross operating surplus of corporations as a share of total factor income.
Sources: ABS Cat. Nos. 5206.0 and 6302.0.

Table 6: Prices

	Consumer price index[a]		Implicit price deflators[b]	
	All groups	All groups excl housing	Gross non-farm product	Household final consumption expenditure
Year	(Percentage change on preceding year)			
1997-98	0.0	1.2	1.5	1.7
1998-99	1.2	1.2	0.4	0.8
1999-00	2.4	2.0	2.0	1.4
2000-01	6.0	5.4	4.4	4.6
Quarter	(Percentage change on preceding quarter)			
1999 Sep	0.9	0.8	0.7	0.2
Dec	0.6	0.2	0.4	0.3
2000 Mar	0.9	0.9	1.3	0.8
Jun	0.8	0.8	0.8	0.7
Sep	3.7	3.1	2.2	2.6
Dec	0.3	0.4	-0.1	0.6
2001 Mar	1.1	1.2	1.7	0.9
Jun	0.8	1.0	0.4	0.7
Sep	0.3	0.0	-0.1	0.0
Quarter	(Percentage change on a year earlier)			
1999 Sep	1.7	1.3	1.2	0.8
Dec	1.8	1.2	1.0	0.9
2000 Mar	2.8	2.4	2.0	1.3
Jun	3.2	2.7	3.3	1.9
Sep	6.1	5.1	4.8	4.4
Dec	5.8	5.3	4.3	4.8
2001 Mar	6.0	5.6	4.7	4.9
Jun	6.0	5.8	4.2	5.0
Sep	2.5	2.6	1.8	2.3

(a) Based on the weighted average of eight capital cities consumer price index.
(b) Quarterly figures are derived from seasonally adjusted data.
Sources: ABS Cat. Nos. 6401.0 and 5206.0.

Table 7: Labour market

	ANZ Bank job advertisements series	Employed persons			Unemployment		Participation rate
		Full-time	Part-time	Total	Rate (per cent)	Persons ('000)	(per cent)
Year [(a)]	(Percentage change on preceding year)						
1997-98	13.2	0.8	2.9	1.4	8.0	737.8	63.1
1998-99	15.2	1.6	3.7	2.2	7.4	691.7	63.1
1999-00	15.9	2.5	3.4	2.7	6.6	634.5	63.4
2000-01	-22.5	1.5	3.8	2.1	6.4	625.5	63.7
Quarter [(a)]	(Percentage change on preceding quarter - Seasonally adjusted)						
2000 Dec	-8.4	-0.3	-0.6	-0.4	6.2	602.8	63.5
2001 Mar	-8.6	-0.2	1.2	0.2	6.5	631.7	63.6
Jun	-11.6	-0.5	2.6	0.3	6.9	675.7	63.9
Sep	1.3	-0.5	2.2	0.2	6.8	666.8	63.7
Quarter [(a)]	(Percentage change on a year earlier - Seasonally adjusted)						
2000 Dec	-20.2	2.0	2.9	2.2			
2001 Mar	-25.2	1.2	2.9	1.6			
Jun	-34.8	-0.3	5.1	1.1			
Sep	-25.0	-1.5	5.4	0.3			
Month	(Percentage change on preceding month - Seasonally adjusted)						
2000 Oct	11.6	-0.3	0.6	-0.1	6.0	587.5	63.6
Nov	-7.6	-0.1	-1.7	-0.5	6.3	606.0	63.4
Dec	1.4	-0.3	1.8	0.2	6.3	614.8	63.5
2001 Jan	2.2	-0.2	1.6	0.3	6.3	616.9	63.6
Feb	-10.0	0.3	-1.3	-0.1	6.6	645.7	63.6
Mar	-7.9	0.2	-0.7	0.0	6.5	632.6	63.5
Apr	-3.2	-0.6	3.3	0.4	6.8	670.8	63.9
May	1.1	0.1	-0.6	0.0	6.9	675.7	63.9
Jun	-1.7	-0.6	1.5	0.0	6.9	680.5	63.8
Jul	2.0	-1.2	2.6	-0.1	6.9	674.0	63.6
Aug	0.9	1.1	0.2	0.8	6.8	668.9	64.0
Sep	-1.6	0.8	-4.0	-0.5	6.7	657.5	63.5
Oct	-2.2	-0.9	3.0	0.2	7.1	696.9	63.8

(a) All figures refer to period averages.
Sources: ANZ Bank and ABS Cat. No. 6202.0.

Table 8: Current account

					Current account balance		Net income balance		Volume of		
	Balance on merchandise trade	Balance on goods & services	Net income balance	Net current transfers		Percentage of GDP	Percentage of current account balance	Percentage of GDP	Exports of goods & services	Imports of goods & services	Terms of trade[(a)]
Year		($ million)			($ million)	(per cent)	(per cent)	(per cent)	($ million)		
1998-99	-12644	-14428	-18189	-749	-33366	-5.6	54.5	-3.1	115256	-124752	95.9
1999-00	-12955	-14351	-19346	218	-33479	-5.3	57.8	-3.1	125972	-140323	100.0
2000-01	182	1209	-19750	45	-18496	-2.8	106.8	-2.9	134805	-137892	103.1
Quarter					(Seasonally adjusted)						
2000 Sep	-1824	-510	-4513	6	-5017	-3.0	90.0	-2.7	34128	-35710	103.2
Dec	-654	-568	-4943	-77	-5588	-3.4	88.5	-3.0	33346	-34685	102.5
2001 Mar	1010	778	-5240	76	-4386	-2.6	119.5	-3.1	33514	-33890	103.2
Jun	1923	1837	-5203	38	-3328	-1.9	156.3	-3.0	33842	-33607	104.1
Sep	2081	2014	-4904	25	-2865	-1.6	171.2	-2.8	33290	-33266	105.3
Month					(Seasonally adjusted)						
2000 Nov	-131	-114									
Dec	-555	-578									
2001 Jan	-29	-78									
Feb	955	897									
Mar	492	410									
Apr	199	104									
May	529	529									
Jun	674	674									
Jul	989	1127									
Aug	189	23									
Sep	481	376									
Oct	404	275									

(a) The ratio of the implicit price deflator for exports of goods and services to the implicit price deflator for imports of goods and services, 1999-2000 = 100, calculated on a National Accounts basis.

Sources: ABS Cat. Nos. 5368.0, 5302.0 and 5206.0.

Table 9: Australia's external liabilities

	Public sector gross debt	Private sector gross debt	Total gross debt	Net debt	Net external liabilities
	(Levels of Australian foreign liabilities)				
As at end			($A million)		
1999 Jun	75279	277335	352615	225577	325371
2000 Jun	63445	346468	409913	272071	342144
2001 Jun	71980	417715	489695	317040	392249
2000 Sep	68672	380042	448714	300081	357282
Dec	67445	394588	462033	300624	375479
2001 Mar	71680	444308	515988	331796	392670
Jun	71980	417715	489695	317040	392249
Sep	n.y.a.	n.y.a.	n.y.a.	330942	410919
As at end			(Percentage of GDP)		
1999 Jun	12.7	46.9	59.6	38.1	55.0
2000 Jun	10.1	55.1	65.1	43.2	54.4
2001 Jun	10.7	62.2	72.9	47.2	58.4
2000 Sep	10.7	59.2	69.9	46.7	55.6
Dec	10.3	60.5	70.8	46.1	57.5
2001 Mar	10.8	67.2	78.0	50.1	59.3
Jun	10.7	62.2	72.9	47.2	58.4
Sep	n.y.a.	n.y.a.	n.y.a.	48.7	60.5

Source: ABS Cat. Nos. 5302.0 and 5206.0.

Table 10: Australia's income flows

	Public sector gross debt	Private sector gross debt	Total gross debt	Net debt	Net external liabilities
	(Gross and net interest payable, and net investment income)				
Year ended	($A million)				
1999 Jun	3513	9956	13469	10347	18132
2000 Jun	3434	12921	16355	12841	19209
2001 Jun	3117	15566	18683	14478	19581
Quarter ended					
2000 Sep	809	3619	4428	3472	4991
Dec	829	3718	4547	3468	4454
2001 Mar	695	4275	4970	3842	5100
Jun	784	3954	4738	3696	5036
Sep	n.y.a.	n.y.a.	n.y.a.	3565	5417
Year ended	(Percentage of exports of goods and services)				
1999 Jun	3.1	8.9	12.0	9.2	16.2
2000 Jun	2.7	10.3	13.0	10.2	15.2
2001 Jun	2.0	10.2	12.2	9.5	12.8
Quarter ended					
2000 Jun	2.5	10.4	12.9	10.0	13.7
Sep	2.2	9.7	11.8	9.3	13.3
Dec	2.1	9.4	11.5	8.8	11.3
2001 Mar	1.9	11.5	13.3	10.3	13.7
Jun	2.0	10.1	12.2	9.5	12.9
Sep	n.y.a.	n.y.a.	n.y.a.	9.0	13.6

Source: ABS Cat. No. 5302.0.

Table 11: Selected economic indicators

	Indices of unit labour costs & prices adjusted for exchange rate changes [b][c] (1999-2000=100)								
			Price based		Unit labour cost based[f]				
						Components of unit labour cost index			
	Inventories to total sales [a]	Imports to domestic sales[a]	CPI based[d]	GDP deflator based[e]		Nominal unit cost index	Nominal exchange rate	Saving ratio[g]	Trade weighted index[i]
Year									
1998-99	0.874	0.362	101.3	100.8	102.1	100.1	102.0	2.6	56.0
1999-00	0.884	0.386	100.0	100.0	100.0	100.0	100.0	2.4	55.2
2000-01	0.881	0.416	90.3	92.9	92.2	103.4	89.2	4.3	50.3
Quarter[h]				(Seasonally Adjusted)					
2000 Sep	0.877	0.412	94.1	96.5	95.8	102.6	93.3	5.4	52.1
Dec	0.897	0.431	88.3	90.5	90.9	103.7	87.6	4.9	49.6
2001 Mar	0.876	0.405	90.0	93.0	92.5	104.2	88.7	2.9	50.0
Jun	0.873	0.414	88.9	91.7	89.9	102.9	87.3	4.0	49.6
Sep	0.861	0.393	88.9	91.3	89.3	102.7	87.0	2.4	49.3

(a) ABS National Accounts measure. All numbers derived from seasonally adjusted data.
(b) A discussion of these indices and detailed figures covering the period from the September quarter 1970 to the March quarter 1983 may be found in a supplement to the July 1983 Roundup of Economic Statistics titled 'International Comparisons of Relative Price and Cost Levels'.
(c) The weights used are based on a 3 year moving average of Australia's imports from the US, Japan, UK and Germany. The four countries are the source of about 45 per cent of Australia's merchandise imports. Observations are quarterly averages. A rise (fall) implies a deterioration (improvement) in Australian costs and prices relative to the four countries above after adjusting for exchange rate changes.
(d) The CPI based index is the ratio of the Australian Consumer Price Index to the weighted geometric average of the exchange rate adjusted consumer price indices of Australia's four major import sources.
(e) The GDP deflator based index is the ratio of the GDP deflator for Australia to the weighted geometric average of the exchange rate adjusted GDP deflator of Australia's four major import sources.
(f) The unit labour cost based index is the ratio of unit labour costs in the non-farm sector of the Australian economy to the weighted geometric average of the exchange rate adjusted unit labour costs in the business sector for Australia's four major import sources.
(g) Ratio of household net saving to household net disposable income.
(h) Quarterly data are seasonally adjusted except for the trade weighted index and the nominal exchange rate.
(i) Period average, May 1970 = 100.
Sources: ABS Cat. Nos. 5206.0 and 5302.0.

Articles in the Economic Roundup

Details of articles published in the past two editions of the Economic Roundup are listed below:

Winter 2001	Economic outlook
	A more productive Australia – policy and technology
	The growing dependence of East Asian economies on exports
	Financial capital and taxation policy: the way forward
Centenary Edition	Global poverty and inequality in the 20th century: turning the corner?
	Australia's century since Federation at a glance
	Towards higher retirement incomes for Australians: a history of the Australian retirement income system since Federation
	Public good conservation and the impact of environmental measures imposed on landholders
	The net income deficit over the past two decades
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