



**Australian Social Trends
2007**

Article: Purchasing power

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Article: Purchasing power

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SYMBOLS AND USAGES

billion	1,000 million
kg	kilogram
m	metre
n.a.	not available
n.e.c	not elsewhere classified
n.p.	not published
n.y.a.	not yet available
no.	number
'000	thousand
'000m	thousand million
\$	dollar
\$m	million dollars
\$b	billion dollars
\$US	American dollar
%	per cent
*	estimate has a relative standard error of 25% to 50% and should be used with caution
**	estimate has a relative standard error of greater than 50% and is considered too unreliable for general use
. .	not applicable
—	nil or rounded to zero (including null cells)

Where figures have been rounded, discrepancies may occur between the sums of the component items and totals.

Purchasing power

Australia's purchasing power has increased appreciably as real net national disposable income per capita rose by 50% between 1991–92 and 2005–06 and real national net worth per capita grew by 10% between mid 1992 and mid 2006.

Material living standards rise when income and wealth increase more rapidly than prices (i.e. when income and wealth increase in real terms). This increases people's capacity to borrow, consume goods and services, save and invest. In other words, it increases their purchasing power. However, not all prices change at the same rate, or even in the same direction. For this reason, some items of expenditure can become more affordable while at the same time others can become less affordable.

This article presents and analyses trends in overall purchasing power. It also analyses how and why prices of particular goods and services have changed relative to average income and wealth. This indicates whether our capacity to acquire particular goods and services has increased or decreased over time.

Expanded capacity to spend

Overall purchasing power has increased over recent decades, although not continuously. After rising by an average of 2.5% per year between 1985–86 and 1989–90, real net national disposable income per capita fell by 3.1% per year between 1989–90 and 1991–92. Since then (i.e. between 1991–92 and 2005–06) net national disposable income per capita has increased each year in real terms at the relatively strong average annual rate of 3.0%.

Real national net worth (wealth) has also trended higher, albeit at a slower rate, during the current period of sustained economic growth since the last recession in 1990–91. From mid 1992 (the earliest data available) to mid 2006, real national net worth per capita grew at an average annual rate of 0.7%.

Data sources and definitions

Statistics presented in this article are derived from the Australian System of National Accounts, ABS estimates of Australia's population, the ABS Labour Force Survey, a suite of consumer price indexes, and the Organisation for Economic Co-Operation and Development (OECD).

Real net national disposable income is the capacity of the Australian community to buy goods and services, save and invest. It is the value of total production in Australia (less that needed to replace depreciated capital) plus primary income received from overseas (less primary income generated in Australia but paid overseas) plus current transfers received from overseas (less current transfers paid overseas). It can be spent on goods and services by households or governments, or saved and used by households, governments or businesses to add to the stock of machinery, buildings and other produced capital.

Real national net worth is the amount by which Australia's assets exceed its liabilities to the rest of the world.

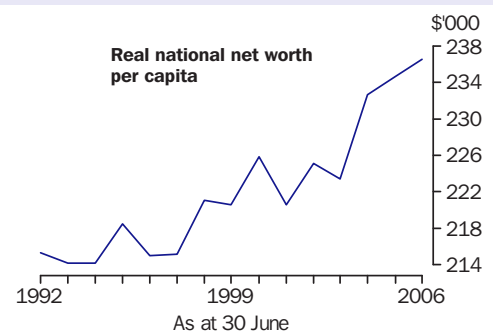
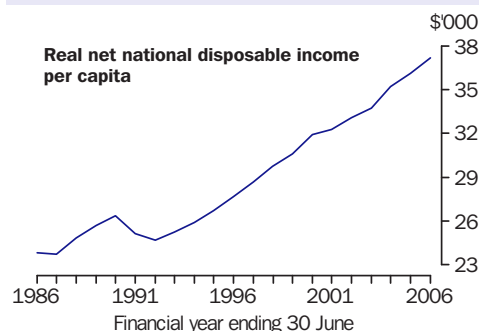
A *real* measure removes the effect of price inflation or deflation so that the extent of change over time in purchasing power can be quantified.

Household adjusted disposable income is income households receive from all sources (including the value of goods, services and reimbursements (e.g. Medicare rebates) from governments) less the income tax and interest payments paid by households.

Household net worth is the value of household assets such as land, dwellings, machinery, livestock, standing timber, computer software, superannuation, shares, bonds and bank deposits less the value of household liabilities such as borrowings and unpaid bills.

A *per capita* measure is obtained by dividing an aggregate total (e.g. real national net worth) by the estimated resident population of Australia. It is the amount attributed to each person assuming perfect equality of distribution among Australian residents.

Measures of change in purchasing power (reference year = 2004–05)



Source: 2005–06 Australian System of National Accounts (ABS cat. no. 5204.0); Australian Historical Population Statistics, 2006 (ABS cat. no. 3105.0.65.001); Australian Demographic Statistics, September Quarter 2006 (ABS cat. no. 3101.0).

Wealth and income are very closely related as wealth can be used to generate income. In turn, receipt of income creates the potential to save and invest, thereby increasing wealth. In addition to its income generating possibility, wealth confers purchasing power because cash reserves can be drawn upon, assets sold, and money borrowed against the value of assets to fund the purchase of goods and services.

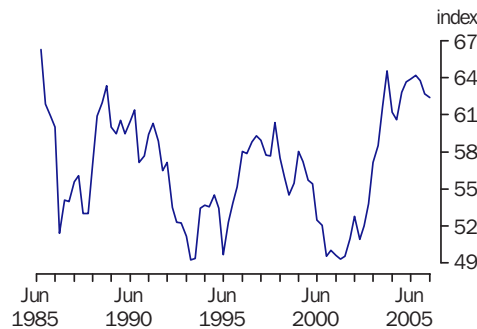
... from improved terms of trade

One of the main reasons for the real increase in income and wealth has been the improvement in our terms of trade with other countries. The terms of trade index represents the relationship between the prices we receive for our exports and the prices we pay for our imports. A rise in the index means that export prices are increasing more rapidly than import prices (or are falling at a slower rate).¹

Although the volume of our imports has been growing faster than the volume of our exports, the prices we have received for our exports have risen more strongly than the prices we have paid for our imports. Between 1991–92 and 2005–06, our terms of trade improved by 40%, with export prices up 41% and import prices barely up (1%).²

In particular, our terms of trade have been boosted by rising coal, gold and mineral ore prices, and falling prices for audio, visual and computing equipment. A rise in the value of our currency against the average value of the currencies we use when selling exports and buying imports also improves our terms of trade. Some of the improvement in our terms of trade since 1991–92 can be attributed to a 9% rise in the trade-weighted index value of the Australian dollar between 1991–92 (58.2) and 2005–06 (63.3).

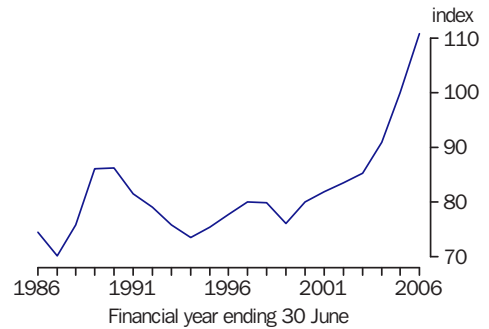
Trade-weighted index(a) of the value of the Australian dollar



(a) May 1970 = 100.

Source: *International Trade in Goods and Services, Australia, December 2006* (ABS cat. no. 5368.0).

Australia's terms of trade(a)



(a) 2004–05 = 100.

Source: *2005–06 Australian System of National Accounts* (ABS cat. no. 5204.0).

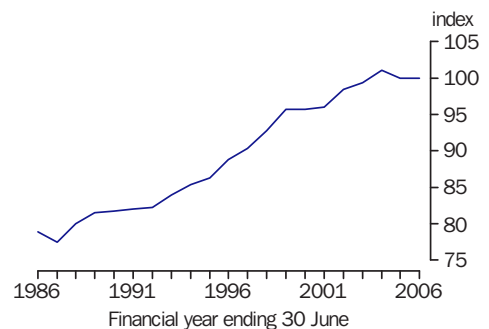
... productivity gains

Productivity is a measure of the efficiency of resource use. Productivity improvement has been another major driver of rising real income and real wealth, and thus of rising purchasing power. Productivity increases when growth in the output volume of goods and services exceeds growth in the inputs (capital, labour, energy, materials and services) used to produce them.

Multifactor productivity for the market sector of the economy is the most comprehensive measure available of Australia's productivity. There was an appreciable improvement (27%) in multifactor productivity between 1985–86 and 2005–06. Shaped by a series of productivity growth cycles, the index of multifactor productivity lifted most sharply throughout the 1993–94 to 1998–99 cycle.

Key determinants of strong productivity growth include innovation, the development and application of new technologies, and the quality of workers, management practices and working arrangements. Productivity can also

Multifactor productivity(a)



(a) 2004–05 = 100.

Source: *2005–06 Australian System of National Accounts* (ABS cat. no. 5204.0).

improve if inputs such as labour and capital are shifted from less productive activities to more productive ones.¹

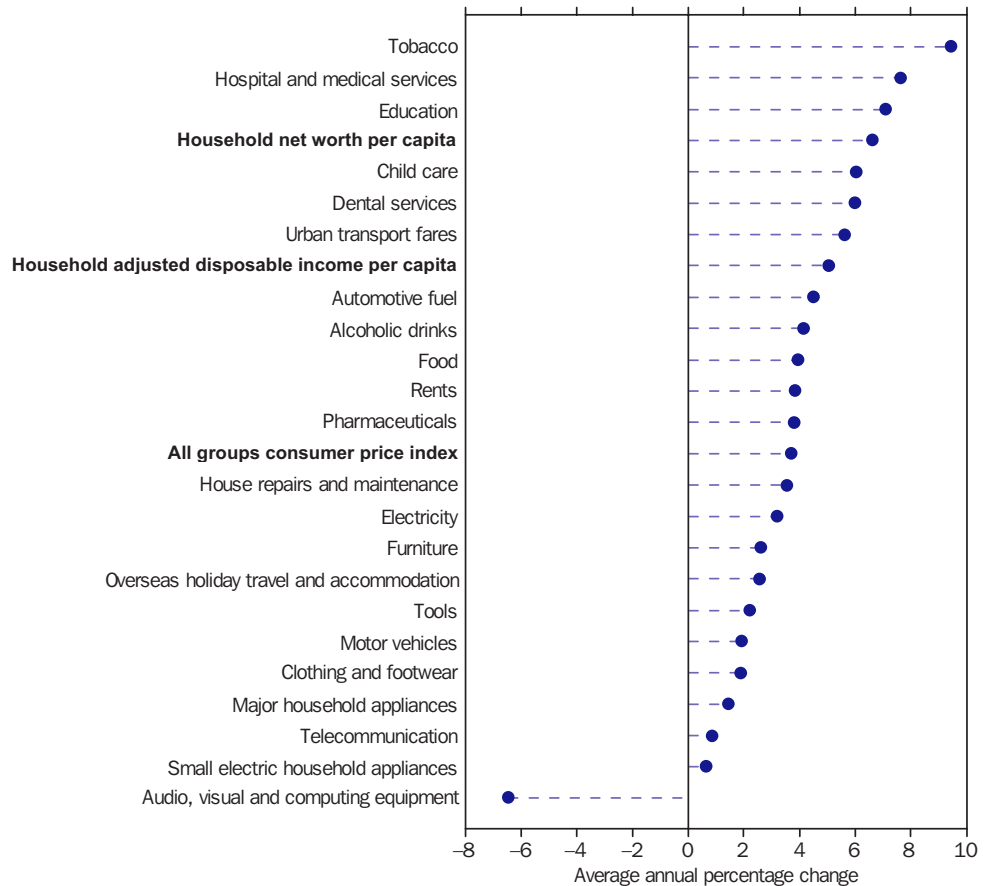
... and increased employment

Another reason for the real rise in our income and wealth, and therefore our purchasing power, is that we are more likely to be in paid work. In June 2006, 62% of civilians aged 15 years or older were employed, up from 56% in June 1985. The increase in this employment to population ratio raised the average number of hours actually worked per civilian aged 15 years or older by 5% between June 1985 (19 hours per week) and June 2006 (20 hours per week).

Purchasing power of households

From a social perspective, interest tends to focus on change to purchasing power in the household sector of the national economy. Like overall purchasing power at the national level, household purchasing power has increased over recent decades. Between 1985–86 and 2005–06, household adjusted disposable income per capita rose by 1.3% a year in real terms. Also, household net worth per capita increased at an average of 3.7% a year in real terms between June 1989 (the earliest data available) and June 2006.

Comparative change in income, wealth and selected consumer prices between 1985–86 and 2005–06(a)



(a) Average annual increase between 30 June 1989 and 30 June 2006 for household net worth per capita. Income and net worth averages were calculated using current prices (i.e. underlying dollar values had not been adjusted to remove the effect of price inflation prior to calculating the average annual percentage increase).

Source: Consumer Price Index, Australia, September 2006 (ABS cat. no. 6401.0); 2005–06 Australian System of National Accounts (ABS cat. no. 5204.0); Australian Historical Population Statistics, 2006 (ABS cat. no. 3105.0.65.001); Australian Demographic Statistics, September Quarter 2006 (ABS cat. no. 3101.0).

Measuring change in consumer prices

The All groups Consumer Price Index (commonly known and referred to as the CPI) measures change over time in the price of a wide-ranging 'basket' of goods and services which account for a high proportion of expenditure by households living in Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Darwin and Canberra.³

In addition to the All groups CPI, there are many consumer price indexes which measure price inflation for particular expenditure items and groups of items. Some consumer price indexes have been operating for several decades (e.g. the Pork index since September 1972) while others commenced recently (e.g. the Financial services index in June 2005).⁴

The prices of goods and services used to derive price index values are those that any member of the public would have to pay to purchase an item. Prices include any taxes levied (e.g. GST) and any subsidies or assistance provided directly by government (e.g. Child Care Benefit and Medicare). When possible and practical, prices are adjusted for any improvement or degradation in product quality, thereby providing a measure of pure price change. In other words, consumer price indexes attempt to measure price change on a constant quality basis.³

Change in prices relative to growth in household income and wealth

On a current prices basis (i.e. without removing the effect of inflation) household adjusted disposable income per capita rose at an average annual rate of 5.1% between 1985–86 and 2005–06 and household net worth per capita increased by an average 6.6% per year between June 1989 and June 2006. In general, goods and services became more affordable between 1985–86 and 2005–06 because average annual price inflation (as measured by the All groups CPI) was lower at 3.7%.

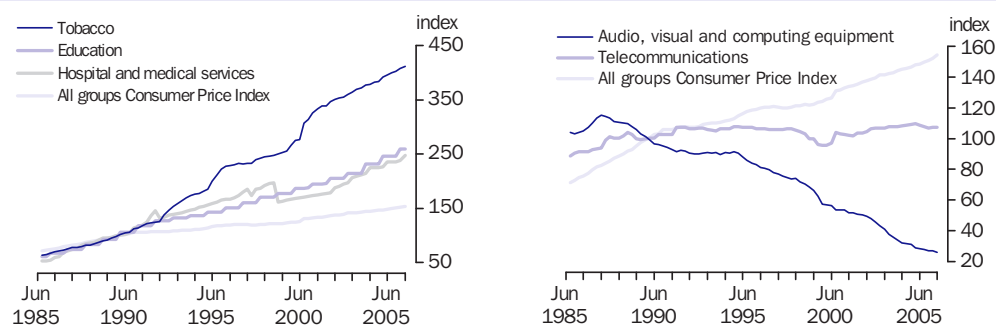
Not all goods and services became more affordable though. Some goods and services became generally less affordable between 1985–86 and 2005–06, as their average annual inflation rates outpaced average annual growth in both household adjusted disposable income per capita and household net worth per capita. Education prices rose by 7.1% each year on average while hospital and medical services prices increased by 7.6% each year. Relatively high price inflation was not confined to services. Tobacco, which is subject to excise tax, was considerably less affordable in 2006 than it had been in 1985.

The affordability of some services remained similar over the period with prices rising at a rate between per capita growth in household adjusted disposable income (5.1%) and household net worth (6.6%). For example, urban transport fares rose by an average of 5.6% each year between 1985–86 and 2005–06. There were comparable increases in the price of dental services and child care (both 6.0%).

Consumer price inflation was marginally above average (i.e. above the All groups CPI) for pharmaceuticals (3.8%), housing rent (3.8%) and food (3.9), and was a little higher for alcoholic drinks (4.2%) and automotive fuel (4.5%). Still, all of these items became generally more affordable between 1985–86 and 2005–06 as they increased in price at a slower average annual rate than both household adjusted disposable income per capita and household net worth per capita.

There was relatively low average annual price inflation between 1985–86 and 2005–06 on a range of manufactured goods such as small electric household appliances (0.7%), major household appliances (1.4%), clothing and footwear (1.9%), motor vehicles (1.9%), tools (2.2%) and furniture (2.6%). On average, an Australian's purchasing power over these items increased substantially over the period.

Indices of price change at constant quality for selected goods and services(a)



(a) 1989–90=100.

Source: Consumer Price Index, Australia, September 2006 (ABS cat. no. 6401.0).

In general, low rates of price inflation between 1985–86 and 2005–06 prevailed for goods and services supplied by markets exposed to increased international and domestic competition. Reduction of import tariffs contributed to relatively low rates of price inflation for many manufactured goods, with the trade-weighted average tariff applied by Australia to imports falling from 15.6% in 1988 to 5.0% in 1998.⁵

Telecommunication services also became much more affordable, with price inflation averaging 0.9% a year between 1985–86 and 2005–06. Within this 20 year period, a 10% price reduction on telecommunication services between the March quarter of 1998 and the December quarter of 1999 followed enactment of the *Telecommunications Act*

1997 and a related package of legislation which created open competition in the telecommunications industry.⁶

Endnotes

- 1 Australian Bureau of Statistics 2006, *Measures of Australia's Progress 2006*, cat. no. 1370.0, ABS, Canberra.
- 2 Australian Bureau of Statistics 2006, *Australian System of National Accounts 2005–06*, cat. no. 5204.0, ABS, Canberra.
- 3 Australian Bureau of Statistics 2005, *A Guide to the Consumer Price Index: 15th Series*, cat. no. 6440.0, ABS, Canberra.
- 4 Australian Bureau of Statistics 2006, *Consumer Price Index September Quarter 2006*, cat. no. 6401.0, ABS, Canberra.
- 5 Department of Foreign Affairs and Trade 1999, *Regional trends in tariffs*, viewed 28 May 2007, <http://www.dfat.gov.au/apec/meetings/apec1999/regional_trends.html>.
- 6 Department of Communications, Information Technology and the Arts, *Liberalisation of the telecommunications sector - Australia's experience*, viewed 28 May 2007, <http://www.dcita.gov.au/communications_and_technology/policy_and_legislation/telstra_shareholder_role/telstra_shareholder_-_history/liberalisation_of_the_telecommunications_sector_-_australias_experience#9>.

Comparative price levels

Comparative price levels provide measures of the differences in price levels between countries. In June 2006, the same representative basket of consumer goods and services which could have been purchased for A\$100 in Australia would have cost A\$147 to purchase in Norway and A\$58 to purchase in Hungary.

This table indicates the purchasing power of the Australian dollar overseas. It shows how many Australian dollars would have been needed in June 2006 (at the then prevailing currency exchange rates) to purchase in each listed country what could have been purchased in Australia for A\$100.

Selected OECD countries	\$A
Norway	147
Denmark	140
Ireland	133
Japan	121
Sweden	121
France	111
United Kingdom	110
Canada	107
Italy	103
United States	96
Greece	91
New Zealand	91
Korea	87
Portugal	82
Mexico	63
Turkey	60
Poland	59
Hungary	58

Source: OECD Main Economic Indicators, August 2006.

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