AMP

Price$ these days!

The cost of living in Australia

NATSEM at the University of Canberra

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Foreword

In recent times, hours of air time have been devoted to the cost of living and how it affects us as individuals and families. It's a subject that's important to almost all of us, which is why media stories considering the price of everyday items like electricity, petrol and food and their impact on the family budget appear so frequently.

Every year the perception seems to be that it gets harder to afford the basics. But are prices really outpacing our incomes? While some prices such as electricity and petrol have certainly shot up in recent years, many other prices have fallen such as televisions or clothing. Could it be that we're placing greater expectations on ourselves and what our standard of living should be?

The latest AMP.NATSEM report *Prices these days!* explores how the cost of living has changed since 1984. The report reveals that overall the average family is ahead by $224 per week and the benefits have spread to both high and low income families. Low income households are ahead by $93 a week since 1984 while high income households are $429 per week better off.

Australians earning income from investments - typically self-funded retirees - did particularly well, experiencing income growth of $547 per week above their living costs over the same period, largely due to strong dividend growth from shares, superannuation income, and property income.

So where are we spending our money?

Not unexpectedly we are paying more on mortgages and rent today than we did 20 years ago. We're spending more of our disposable income on discretionary expenses, such as restaurant meals, holidays and private education.

Around 40 per cent of household spending is discretionary spending, up from 38 per cent in 1984. Low income households devote around one in three dollars on discretionary spending while high income households devote around 45 per cent.

Does this mean Australians have re-defined 'luxury' and do our spending habits represent a larger lifestyle? And why do Australians feel as though the struggle to make ends meet is getting increasingly tougher?

Today it's not uncommon to expect to eat at good restaurants, buy the latest technology and enjoy holidays which don't involve camping or staying with relatives. And child care has become a life necessity for people of all income levels rather than a luxury enjoyed by only the wealthy.

So maybe it's not the cost of living that's soaring out of control, but rather our aspirational selves telling us we need more. Or because our lives have become so fast paced we need to spend more to keep up, be it on child care or education or other services.

So what is the new normal? Has the line between basic necessities and luxury items blurred? It seems the more we earn, the more things we want to buy, or have, or use.

Some could argue that as a nation we've never had it so good. Australians have it better than most, especially in comparison to recession-hit countries in Europe. On an international comparison the report shows that while our prices are higher than most other countries, our incomes and general standard of living are also very high.

While there is no doubt many families continue to struggle to make ends meet it is heartening to see incomes have been rising more than living costs, and this has been spread across all income groups.

Debate around the cost of living is unlikely to abate anytime soon but it's reassuring to know that a lot of what we are spending our money on are things that allow us to spend more time with our friends and families.

If spending money on a holiday means quality time with our family, eating out means sharing a meal with friends and the latest smartphone means improved communication with those that matter to us then we are almost certainly living richer lives.

Craig Meller

Craig Meller
Managing Director
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Introduction

In this report we investigate the cost of living in Australia, an issue that dominates political and social debate. It is often said that the cost of living is spiralling out of control, with families at breaking point and struggling to make ends meet.

> "The No.1 concern for put-upon families is the cost of living"
>
> **The Daily Telegraph**

For many groups such as the unemployed, students, pensioners, the disabled and low income working families, making ends meet is often a daily battle. Even for higher income families making ends meet can often be a struggle. This report doesn't attempt to argue against this, but rather considers just what these cost of living pressures are and whether they are getting worse. Could it be that these cost of living pressures are driven by greater expectations or societal changes or is it that prices really are out of control and family incomes are not keeping up?

Most political debate on the topic of cost of living pressures focuses on a narrow range of easily identifiable prices such as petrol, electricity, or the price of bananas and other fruits and vegetables. These prices are viewed as being of such importance that the Federal Government looked into setting up 'watchdog' websites such as FuelWatch and GroceryWatch. This report provides a comprehensive analysis of all prices faced by households across a range of household types at different ends of the socio-economic spectrum.

The reality is of course that prices almost always rise, so it's inevitable this would cause concern in the community. As prices rise, a family's purchasing power declines and standards of living fall. Key factors that tend to be overlooked are the fact that family incomes also tend to rise as wages grow, working hours increase or families have more than one income earner.

Another element often overlooked is that many prices have actually fallen. The price of many high technology goods, such as large screen televisions, have fallen dramatically in recent times. The price of clothing has barely altered since the 1980s as import tariffs were removed. The much stronger Australian dollar has also acted as a barrier to inflation for imported goods, such as cars and computers.

Do these factors more than compensate for the inevitable price increases? Are cost of living pressures more the outcome of that innate human trait to keep up with our neighbours by buying bigger cars, televisions or houses? Are cost of living pressures related to changes in expectations or societal changes? Or are price increases driving cost of living pressures? AMP and NATSEM have undertaken a comprehensive investigation of prices, household expenditure and income patterns over time to help answer these questions.

Measuring the cost of living

A curious element of the cost of living debate is that official statistics rarely back up the claim prices are out of control.

Australian inflation rates, as measured by the Consumer Price Index (CPI), have remained at stable and very low rates for 20 years, ever since wages were brought under control via the Prices and Incomes Accord in the 1980s and the Reserve Bank became independent of government in the 1990s and targeted low inflation. So what's all the fuss about? How can it be that we've had 20 years of uninterrupted economic prosperity with very low inflation yet the cost of living remains a hot topic?

Australia's official measure of price change for households is the Australian Bureau of Statistics' (ABS) CPI, however it is not a measure specifically designed to measure the cost of living. The CPI, a measure of price movements in Australia, with around 100,000 price observations made every three months, is one of the most controversial and closely watched economic statistics in Australia. The measure itself focuses on price inflation of a fixed basket of goods and services and does not take into account changes in consumer behaviour. The measure is not designed to specifically measure the cost of living but is considered by most economists and statisticians as a good indicator of both price change and the cost of living or household purchasing power.

For practical and theoretical reasons, a true cost of living index is very difficult to measure and no such index is compiled within Australia or internationally. It may surprise many to know that the CPI naturally overstates price inflation compared to a true cost of living index. This is called the 'CPI bias' and has been estimated by the ABS to be around 0.2 of a percentage point per annum on average (ABS 2010).

Another common concern with the ABS CPI is the treatment of house prices. The current index does not include house prices or mortgage repayments as they are not considered to be 'consumption' items. Instead the ABS uses a usually less volatile component called new house purchase.

From a cost of living perspective one would expect that the family mortgage is an important element of a family budget and should be included in any cost of living analysis. The ABS included mortgage interest in their Living Cost Index from 1998 to overcome this limitation and this series is published alongside the CPI publication (ABS 2011a).

A further concern of the ABS' CPI is that the basket of goods may not reflect the true expenditure patterns of lower income households (SACOSS 2012) who typically spend a larger share of income on household necessities such as electricity, rent or petrol. These prices have risen sharply in recent years and for low income households, would take on greater importance in the ABS basket of goods.

The ABS largely overcomes these concerns by providing separate Living Cost Indexes for pensioners and employees in their suite of Living Cost Indexes.

This AMP.NATSEM report greatly expands upon the ABS' Living Cost Indexes by providing indexes for a number of typical Australian households, defined by their income levels, family type, age group, employment and tenure status and main source of income.

To develop Living Cost Indexes for each of these household types we considered the spending patterns of each group separately. We know that families with children spend on items such as child care or children's clothing compared to singles, so their respective Living Cost Index reflects these important differences in spending patterns.

By comparing changes in each group's disposable income and living costs we can determine which groups are suffering the most from cost of living pressures and which groups are well ahead of price changes and experiencing improving standards of living.

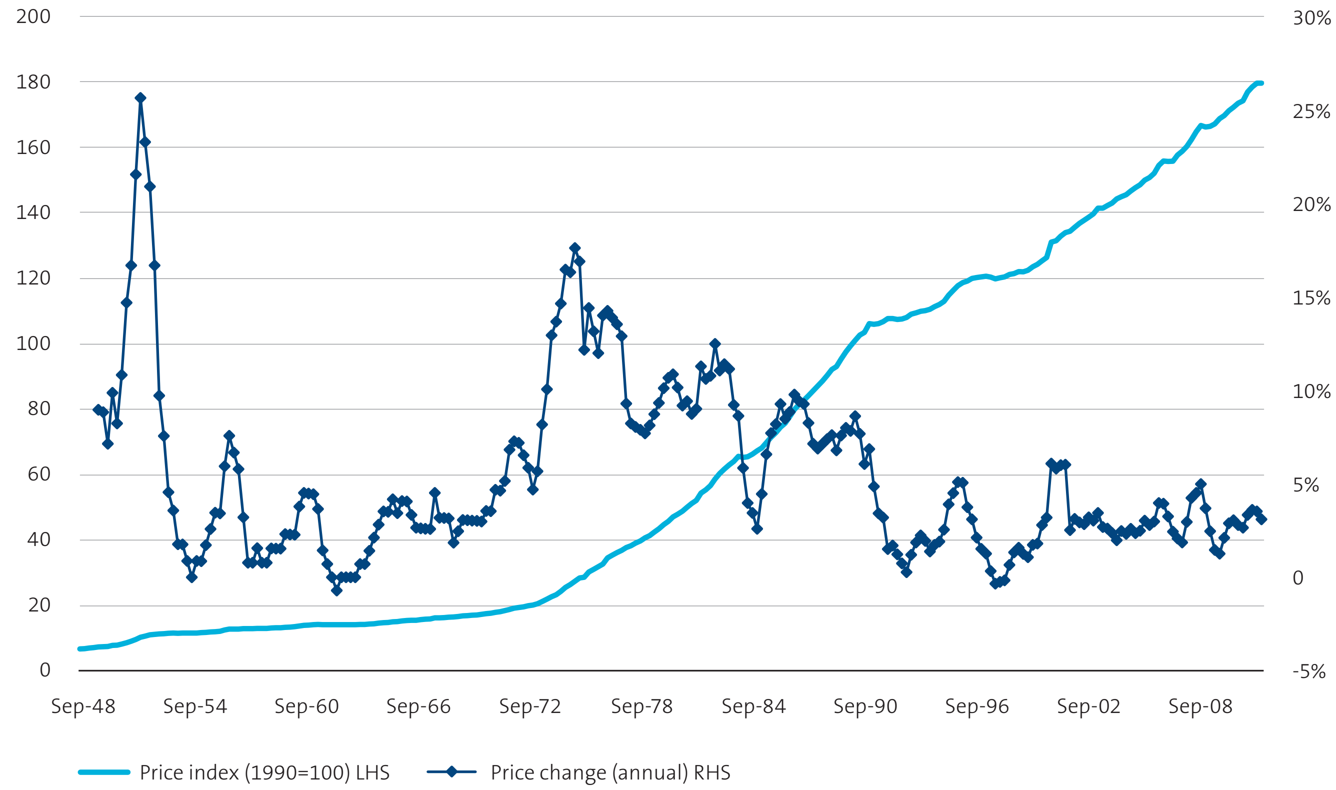
If it is found that household incomes are outpacing their cost of living, then perhaps the driver of this debate is not so much prices, but greater expectations pushing families to demand more or better goods and services. The lift in expectations may relate to keeping up with our neighbours or it may relate to a changed, more complicated world where families are time poor and face altered and larger societal demands.

For example, a time poor family may have both parents working, which often necessitates out-sourcing of services that were not paid for in the past, such as child care, food preparation, gardening and housekeeping. We also face greater demands in terms of increased educational requirements, changed communication channels and more sophisticated technology. All these factors push families to increase their spending beyond what was required in past decades.

Comparing aggregate prices and household incomes

There are various ways to compare incomes and living costs. The ABS provides a number of measures that can be used to make broad observations on households. As a simple starting point, consider the history of prices in Australia as measured by the CPI (Figure 1).

Figure 1 - Australian CPI (All Groups)



Source: ABS Consumer Price Index, 6401.0, 2011.

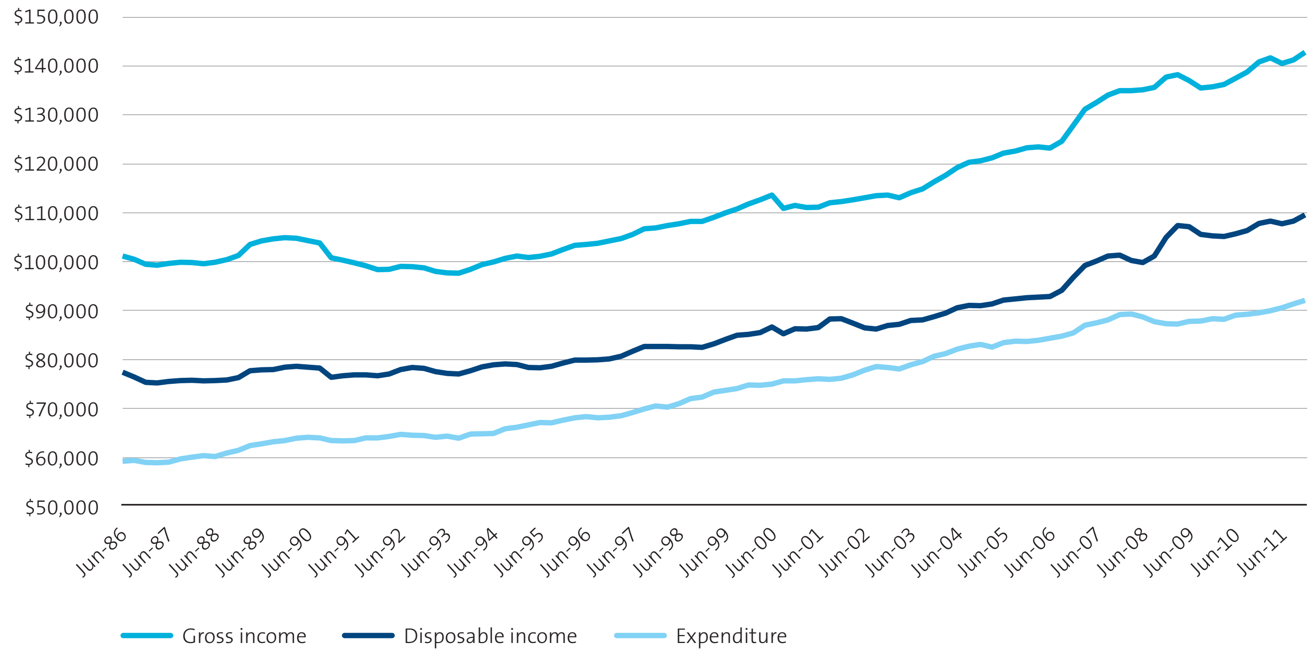
There are three distinct inflationary periods evident in the post-WWII years. Between 1950 and 1972 Australian inflation was relatively benign. In the 1950s and 1960s inflation averaged 4.3 per cent per annum and overall prices increased by 131 per cent. A period of high inflation occurred between 1972 until the recession in 1990. During the 70s and 80s, prices increased by nearly 480 per cent, with an average annual rate of inflation of 9.2 per cent. Through the 1990s and 2000s, prices increased by only 71 per cent, for an average annual inflation of just 2.7 per cent. Through the first two years of this decade prices grew at an average rate of 2.9 per cent.

Inflation in the 70s and 80s was brought on initially by sky-rocketing oil prices which jacked up petrol prices and increased production costs for business. It was not until the recession in 1990 and government policies such as the Incomes and Prices Accord and inflationary targeting by the Reserve Bank of Australia that price inflation was brought under control. So with such low inflation in Australia it is indeed surprising that prices are blamed for cost of living pressures.

While much of the political and media attention focuses on price increases, of greater importance is how incomes change relative to prices. This is what determines the financial standard of living for households. If all prices rise by 5 per cent but a household's income increases by 10 per cent then clearly the household is better off than if incomes and prices were both flat – even though this might be considered a good inflation outcome.

Figure 2 displays a time series of income and expenditure for all Australian households where all measures are deflated (CPI growth removed) and averaged across households. The figure clearly shows that incomes and expenditure have out-paced inflation. In fact, after-tax (disposable) income grew over the last 25 years by 45 per cent, which may give rise to the conclusion that living standards in Australia have improved tremendously.

Figure 2 - Real household income and expenditure (December 2011 $)



Source: ABS Australian National Accounts, ABS Cat No. 6401, 2011.

However, these calculations focus on aggregate outcomes. These numbers alone don't reveal if the spoils of 20 years of sustained economic growth have been shared throughout the community. It may be that income growth has been concentrated amongst high income households or that low income households are faced with higher energy bills or ever-increasing petrol costs which take up a larger portion of their disposable incomes.

Subsequent sections of this report consider these questions and seeks to explain whether or not different groups in the community truly are, in spite of this rosy aggregate story, struggling to make ends meet.

Luxuries and necessities

The big price movers

The basket of goods used for the CPI is an average for all households. It is not intended that the basket should represent low income groups, or pensioners, or just the items that might be described as necessities. It is often suggested that the CPI understates inflation for low income families, working families with kids or pensioner households, as they devote a higher proportion of their income to the necessities of life compared to the average households. Popular discussion on the topic also suggests that these families are forced to spend ever-increasing amounts on the essentials of life with precious little else to spare for luxuries.

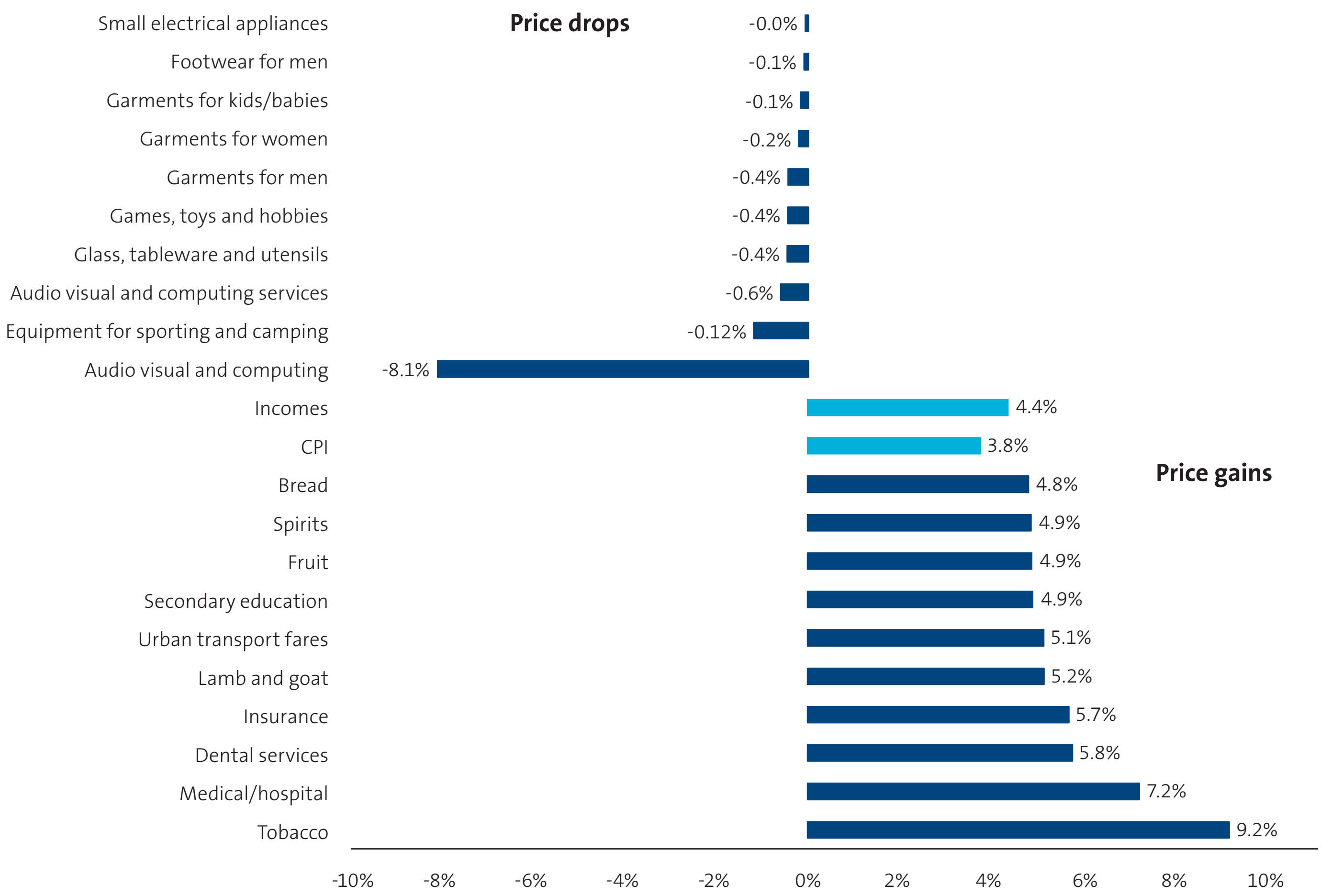
To better understand the cost of living pressures issue, it is useful to consider which items in the CPI basket of goods are increasing in price the most and which, if any, are declining.

Figure 3 shows some prices have grown very strongly. Tobacco is a case-in-point, increasing in price by 9.2 per cent per annum, or 978 per cent over the past 27 years. This growth is dramatic compared to the overall CPI growth for this period of 171 per cent or 3.8 per cent per annum and mostly due to successive governments increasing tobacco taxation. Some health related and insurance costs have also increased quite strongly. Education expenses for secondary students increased by 4.9 per cent per annum or 264 per cent. These costs mostly relate to private school education fees. Some other basics of living such as fruit and bread have also seen very strong price growth.

However, not all prices have risen, with audio visual and computing equipment now only one tenth of prices in 1984[1] helping to offset these price increases. Another significant area of price deflation is for clothing and footwear where average prices are little changed, and often lower today than 27 years ago. This change reflects a move to imported clothing and reductions in tariffs on these imported goods.

1. Caution should be taken in interpreting this price change as the ABS applies a considerable 'quality change' factor. This price change could be considered unrealistic as the price change effectively relates to the price change of a similar item in 1984 which could now be considered irrelevant given technological change in this category of goods.

Figure 3 - Top 10 and bottom 10 price movers (ABS Expenditure Class) Average annual change 1984–2011 %



Source: ABS CPI.

Other items not listed in Figure 3 but of particular note include electricity (+253 per cent), rent (+223 per cent) and mortgages (+256 per cent) (see Table A1). All these items grew more sharply than the 171 per cent increase in CPI since 1984. At the other end of the scale, cars increased by only 19 per cent and major household appliances have not changed in price over the past 27 years.[2]

If ever there was a single item that represents the cost of living for families it is petrol. Petrol is the one price that people can identify since most people fill up their petrol tanks on a regular basis. Petrol has increased in price by 208 per cent since 1984. Yet this is only around 14 per cent more than the aggregate CPI over the same period. Furthermore, across the developed world Australia's petrol prices are among the lowest with only Canada, USA and Mexico cheaper.[3] Compared with Australia's current average unleaded petrol price of around A$1.40 per litre, most European countries face petrol prices that are well over the equivalent of A$2 per litre because of significantly higher taxation.

While it is true that the price of some items, often the necessities of life, have increased significantly more than the CPI, there is also a range of other items that help to offset these price increases including clothing, sporting and camping and children's toys.

The CPI is a complex assortment of goods and services with each item having its own relative importance in the so called 'basket of goods'. However, considering only a few items and ascribing broad statements about the cost of living is not appropriate. In the section below we investigate the expenditure patterns of the full range of items and place them in categories that help identify shifts in household expenditure.

Discretionary and necessary expenditure

We use the ABS Household Expenditure Survey (HES) to investigate household spending and the relative share devoted to discretionary versus necessity expenditure. The HES is the most comprehensive expenditure survey in Australia with the latest 2009–10 survey asking nearly 10,000 households to report on over 600 expenditure categories. This allows detailed analysis of the spending habits of different households. We also analyse all HESs back to 1984, which allows us to investigate trends and better understand cost of living pressures.

To investigate the question of discretionary and necessity spending, we split the detailed categories of expenditure into three separate categories:

1. Basic necessities
2. Relative necessities
3. Discretionary

This is a far from simple exercise and requires some subjectivity. As a starting point, Table 1 offers examples of items in each category. The basic necessities describe items that households cannot do without. These items are for basic survival such as shelter, food and clothing.

Relative necessities, while not items for basic survival, are usually considered essential for modern day living. These items include those used for modern social communication, while items such as computers may be considered aspirational items as they are important for education or employment.

Discretionary items are the dollars we spend with what is leftover after these necessary expenses.

2. The ABS applies a significant quality adjustment to cars which would mean that actual prices of new cars increased by a larger factor than the CPI suggests.

3. Source: Australian Petroleum Statistics, Department of Resources, Energy & Tourism.

Table 1 - Commodity categories (selected examples)

Basic necessity	Relative necessity	Discretionary
Rent	Television	Alcohol and tobacco
Mortgage (interest payments)	Mobile phone	Prepared foods
Basic foods (bread, meat, cereal, etc)	Computer	Restaurant meals
Electricity	Child care	Household services
Clothing	CD player	Airfares
Public transport	Suits	Holidays

The grouping is subjective and may change through time. For example, mobile phones were a luxury item in the 1980s but, today, verge on being a basic necessity. In the HES we only know the category of purchase - we do not know anything about the brand or price paid for the purchase. As such, some items could span any of the three categories above. As an example, a mortgage for a penthouse on the Gold Coast has a clear discretionary element, while a first home buyer's mortgage in outer suburban Melbourne is a basic necessity.

In spite of the complexities, the 600 plus commodities in the HES were grouped according to the three categories and expenditures tallied for various household types. We found that overall, households devote around 40 per cent of expenditure to discretionary items, 38 per cent to basic necessities and 22 per cent to relative necessities. Over time, this relationship has been quite stable with a small shift towards discretionary items and necessities and away from relative necessities.

For Australian households on the whole, we therefore find little evidence that households are spending a greater proportion on basic necessities. Given the prosperity of Australia and strong growth in income relative to price levels depicted in Figure 2 the shift to discretionary items should not surprise. Economists generally expect that as income levels rise so too would expenditure on discretionary items. The next section delves into a more detailed story to investigate whether this is the case for all household types or whether this is just a story that holds for certain groups that help drag up the average.

Income levels

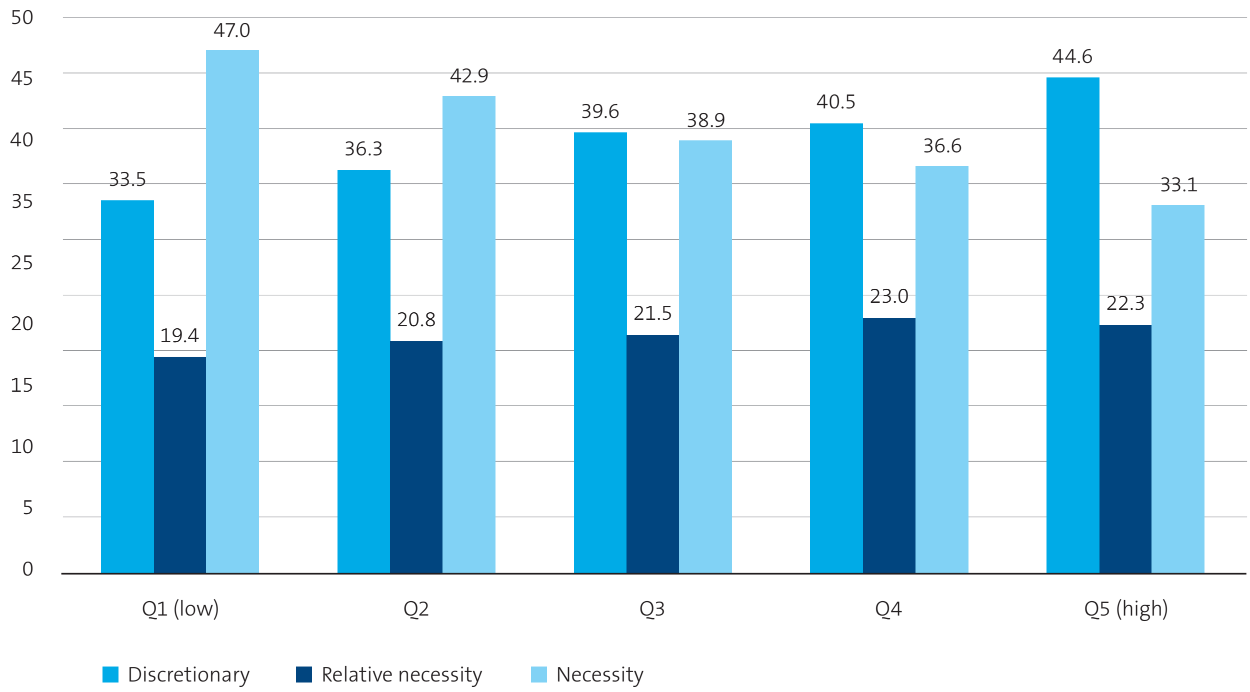
Figure 4 demonstrates the proportions of expenditure devoted to discretionary income and basic/relative necessities by income level. Unsurprisingly, we find that low income households (quintile one or the bottom 20 per cent) spend a smaller fraction of expenditure on discretionary items. However, we still find that low income households devote around one in three dollars to discretionary items. Those households in the top quintile of income devote 45 per cent of expenditure to discretionary items and one dollar in three on basic necessities.[4]

The numbers in Figure 5 to Figure 7 show the trends through time since 1984 in discretionary, necessary and relative necessity spending. Both high and low income households are increasingly spending more on discretionary items, while expenditure on basic necessities is relatively unchanged as a proportion of total spend. Figure 7 demonstrates that all income groups are spending proportionately less on life's necessities. The main driver of this change is that most of these items have significantly reduced in price so it's not that households are buying less, they are just cheaper.[5]

4. The OECD 'modified' equivalised income adjustment is applied to income to account for different household sizes and structures. See technical notes for further information.

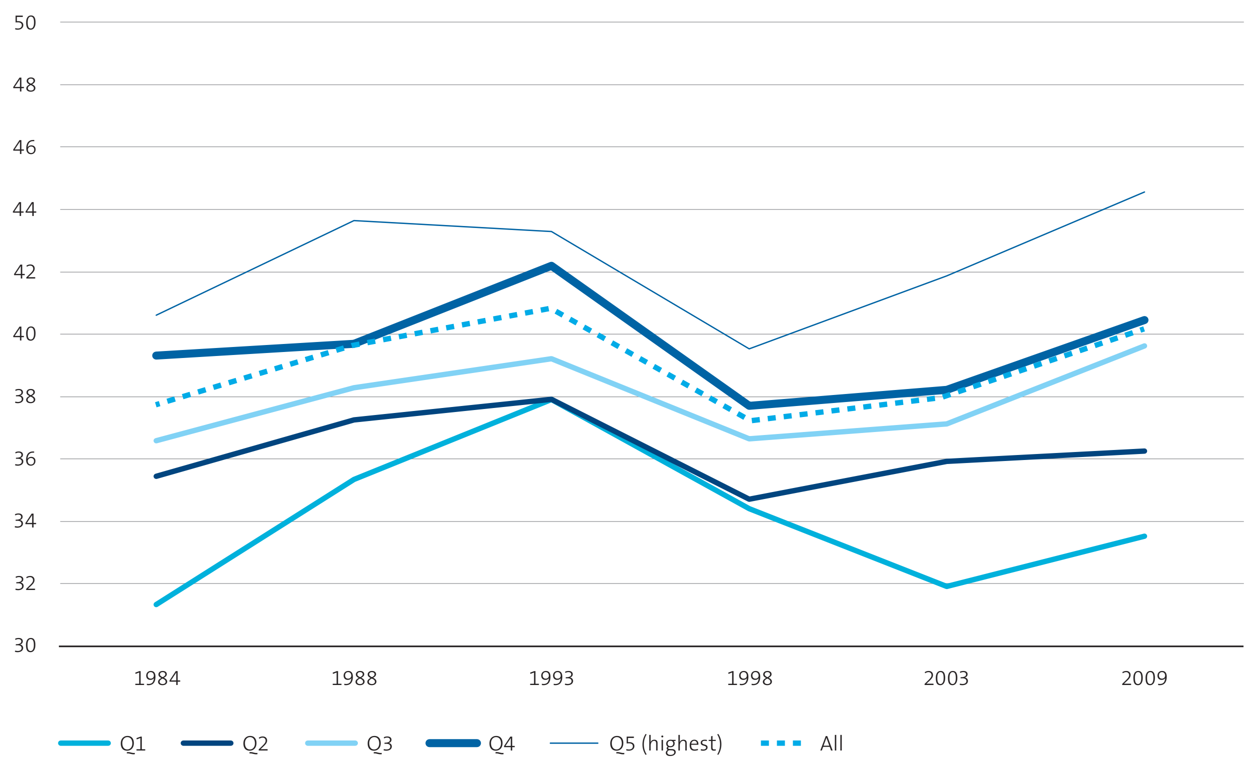
5. The actual figures behind Figure 5 to Figure 7 and results for other household types are displayed in Appendix B.

Figure 4 - Discretionary vs necessary expenditure by Income Level, households 2009–10 %



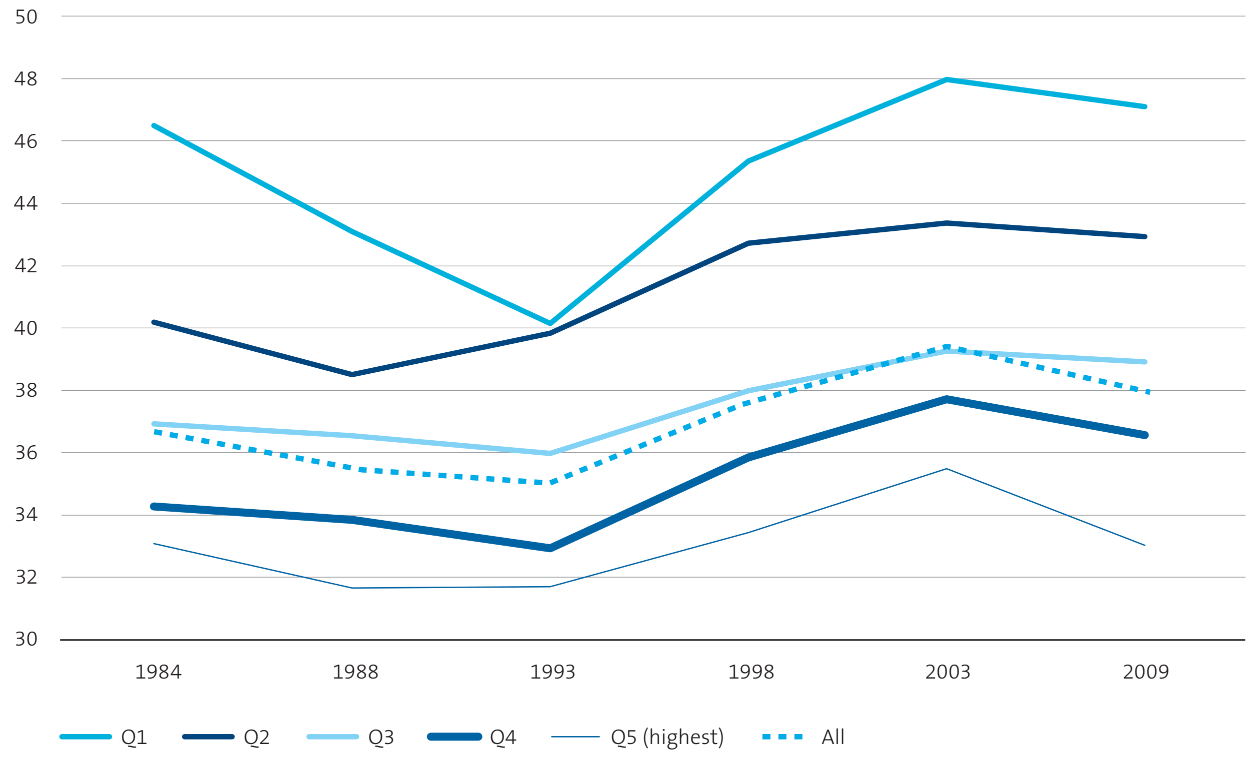
Source: Author's calculations from ABS Household Expenditure Survey 2009–10.

Figure 5 - Household income quintile discretionary purchase %



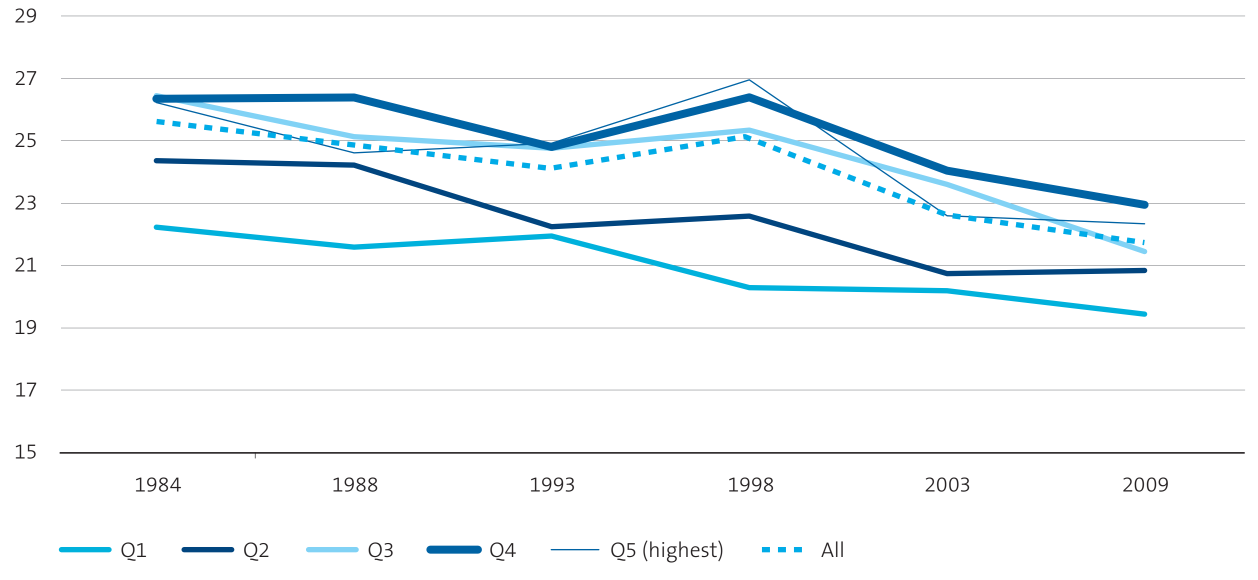
Source: Author's calculations from ABS Household Expenditure Survey 2009–10.

Figure 6 - Household income quintile basic necessity purchase %



Source: Author's calculations from ABS Household Expenditure Survey 2009–10.

Figure 7 - Household income quintile relative necessity purchase %



Source: Author's calculations from ABS Household Expenditure Surveys, 1984–2009.

Source of income

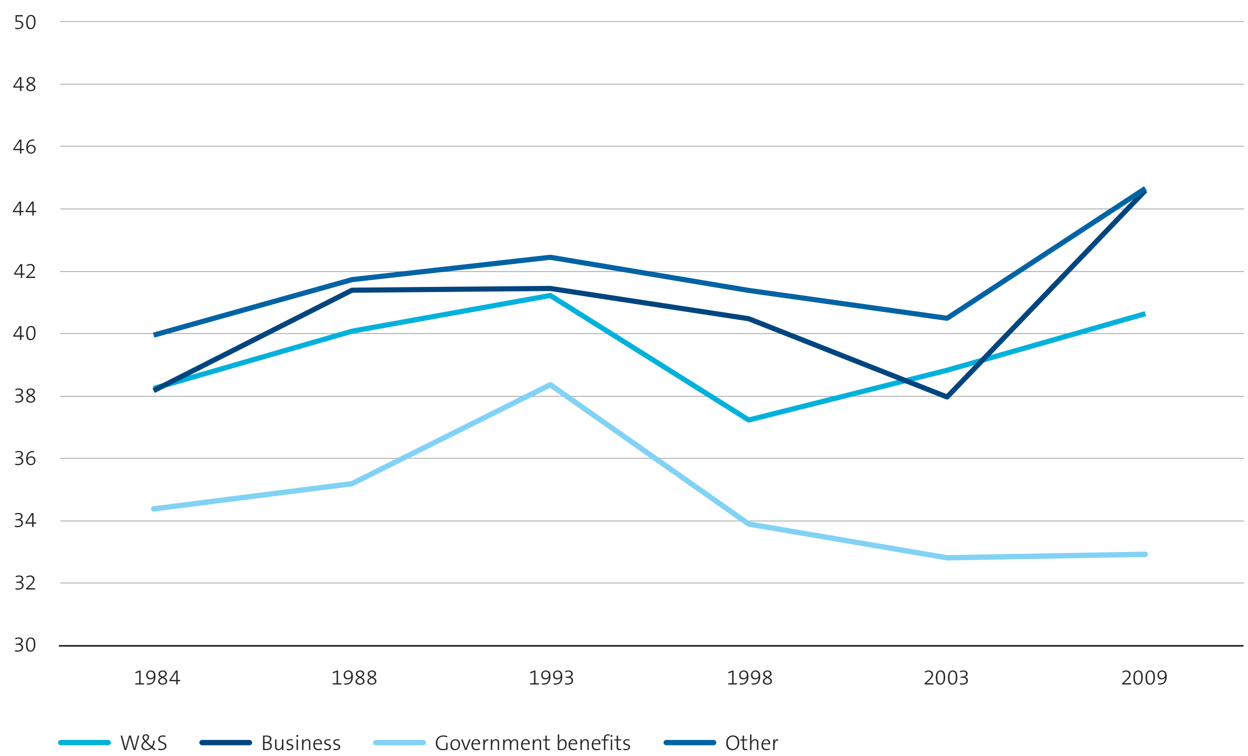
It would be expected those households whose main source of income comes from government benefits, such as pensions and allowances, would devote the bulk of their expenditure to basic necessities. Figure 8 demonstrates this is not necessarily the case, with these households devoting around one in three dollars to discretionary items. This share has barely changed between 1984 and 2009–10.

Figure 9 demonstrates the share of expenditure on basic necessities in government beneficiary households has increased from around 43 per cent to 48 per cent during this period although there has been statistically no change since 1998 (see Figure 8).

A group that has increased spending dramatically on discretionary items are business owners. In 2009–10, discretionary items made up around 44 per cent, well up on 1984 levels of 38 per cent.

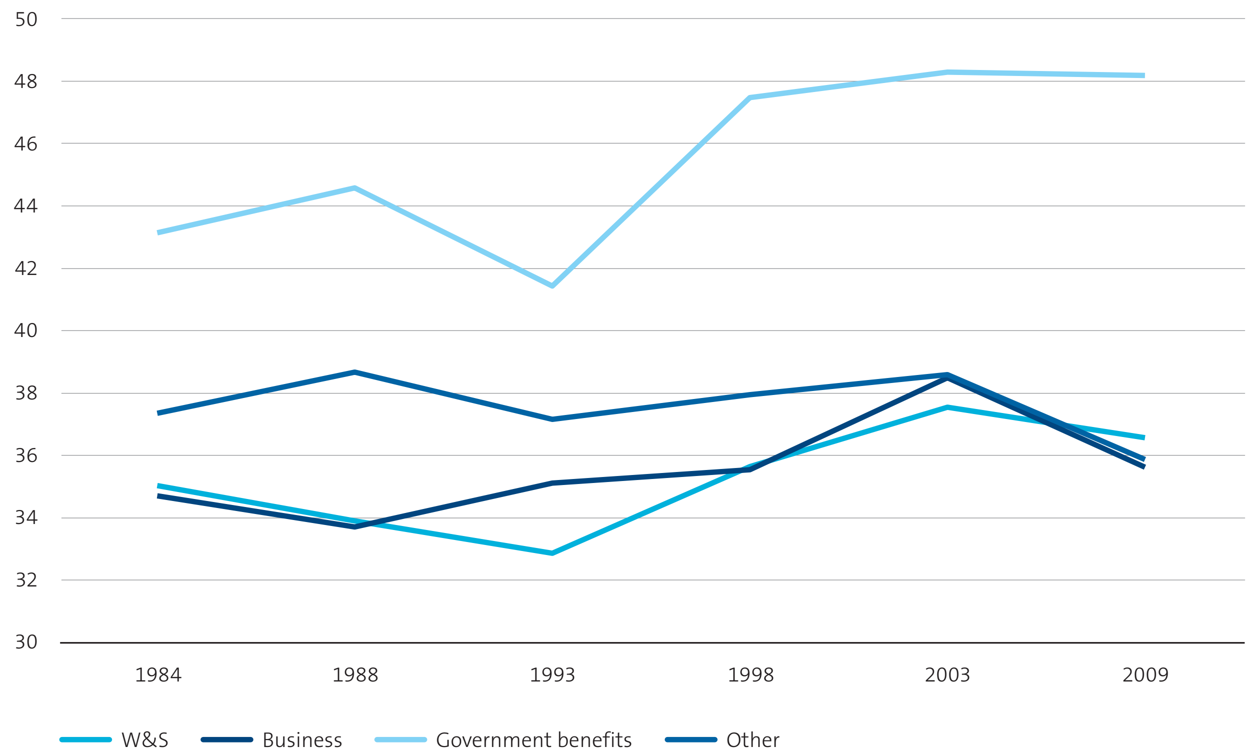
Wage and salary earners follow the general trend and are increasingly spending more money on discretionary items but also a moderately larger share on basic necessities.

Figure 8 - Household main source of income, discretionary purchase %



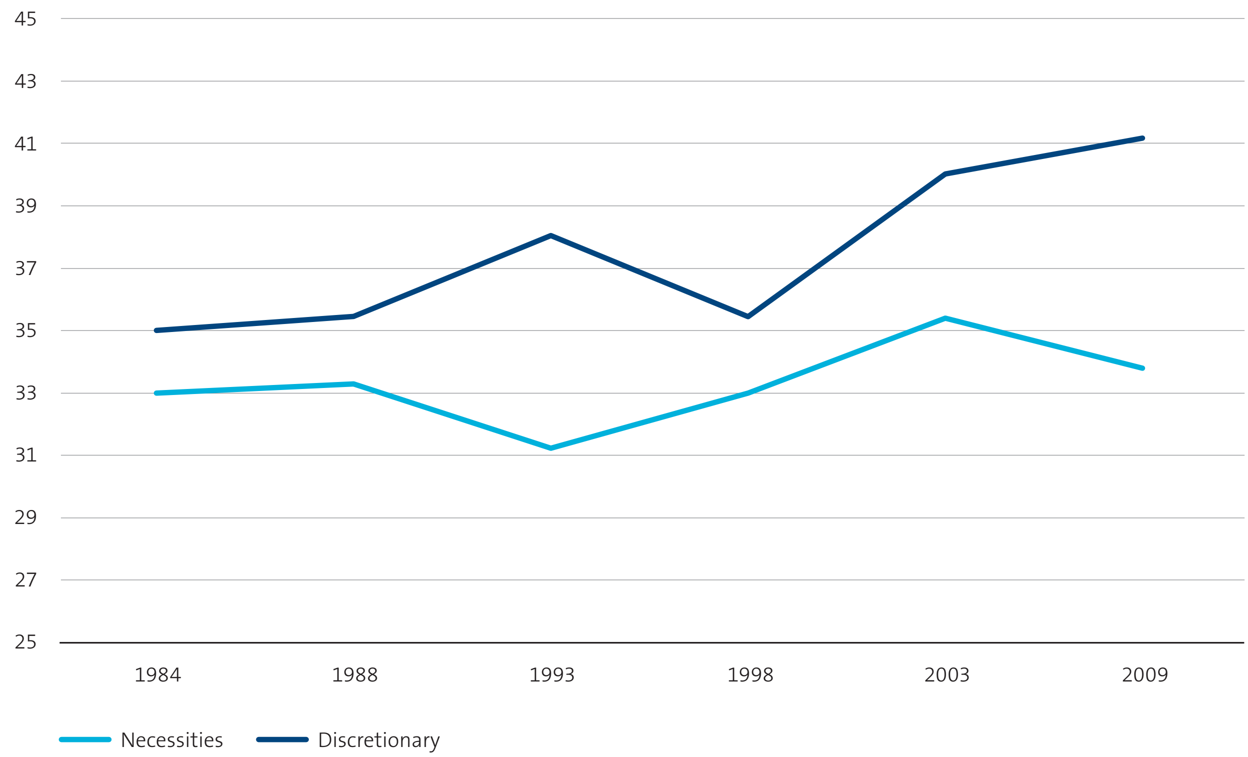
Source: Author's calculations from ABS Household Expenditure Surveys, 1984–2009.

Figure 9 - Household main source of income, basic necessities %



Source: ABS Household Expenditure Survey, 1984–2009.

Figure 10 - Working families, necessities vs discretionary expenditure %



Source: Authors calculations from ABS Household Expenditure Surveys, 1984–2009.

This split between necessary and discretionary items is somewhat limited in that it does not detail the overall expenditure levels, only relative levels of spending. The analysis does suggest that there has been no large increase in the relative expenditure devoted to the basic necessities of life as might be commonly perceived. The shares devoted to these categories have been stable over the past 25 years and that stability appears to extend throughout income levels and sources of household income.

The table in Appendix B shows the full set of results for the necessities and discretionary expenditure analysis. We find that households who own a house outright or have a mortgage spend a much larger portion on discretionary items compared to renters and this percentage has increased sharply over time despite known mortgage stress issues and 'mortgage belt' cost of living pressures.[6] Between 1984 and 2009, renters spent proportionately less (32 per cent, down from 37 per cent) on discretionary items and more on necessities (47 per cent, up from 42 per cent).

Cost of living pressures are also often associated with 'working families'. These families typically have a mortgage and children where at least one of the parents works full-time. The historical data in Figure 10 shows that this group, more than any other, has increased spending towards discretionary items while maintaining a steady proportion of basic necessities.

This suggests that in spite of known price rises in many highly visible commodities such as petrol, electricity, rents and mortgages and fruit and vegetables, which are often lumped together as life essentials, households are not devoting an increasing share of expenditure to the basics. It could be that other essentials are cheaper or households are purchasing smaller quantities of these higher priced essentials. While there was some increase in the proportion of expenditure allocated to the necessities in the 1990s for low income and government beneficiary households, this trend flattened out during the last decade.

Cost of living pressures are also often associated with 'working families'

6. The AMP.NATSEM Report 29 on housing affordability showed that mortgage pressures are felt most strongly by recent purchasers, such as first home buyers, rather than the vast bulk of households with a mortgage who purchased their first house prior to the housing boom since 2000 who often have quite small mortgages.

Living costs

In the first section we discussed the relationship between household incomes and the CPI. Figure 2 (on page 6) shows clearly that households are earning more and spending more than ever, even after inflation is taken into account.

This section takes a detailed look at the incomes of different household types and compares those incomes with living costs to see if the prosperity of our nation has been spread evenly or is disproportionately falling into the laps of the wealthy.

Living costs index

As previously discussed, the CPI measure is not designed as a cost of living index. So we have modified the CPI data to better inform the cost of living discussion. To do this we have used a similar methodology to that of the ABS with their Living Cost Indexes.

The major difference between the Living Cost Indexes and the CPI is the inclusion of mortgage interest payments; this difference is incorporated in our living cost measure. We also recalculate the Living Cost Indexes to suit the household expenditure patterns of a wide range of household types.[7]

Analysing these household types overcomes the concern that the CPI does not adequately mirror the expenditure patterns of certain groups in society. For example, many argue that pensioners and other low income households have much higher cost of living pressures than other groups in society. By developing separate indexes that reflect the expenditure patterns of each of these groups we can test this argument. Our analysis provides Living Cost Indexes for the following household categories:

– Income quintiles
– Family type
– 'Working' families
– Main source of income
– Tenure type, and
– Age

Before detailing each household type it is worth considering how these Living Cost Indexes compare with the CPI historically for all households in aggregate. Figure 11 shows that the Living Cost Index did increase more sharply than the CPI over the last decade.

Between 2003 and 2009 living costs increased by 3.5 per cent each year, while the CPI increased by only 2.9 per cent. The difference between the two can be linked to the strong growth in mortgage interest repayments.

A particularly interesting comparison can be made through time regarding which government was most successful in containing cost of living pressures. During the Hawke years (1983 to 1991) the cost of living index grew by an annual rate of 6.2 per cent while mortgage interest rates increased to 17 per cent and the country was still in the grip of the legacy of many years of high inflation.

The Keating Government (1991 to 1996) managed the lowest living cost increases with an average annual growth rate of just 2.7 per cent. The Keating years were no doubt boosted by interest rates coming off near record highs and a recession that stymied inflation.

Such has been the stability of living costs since 1996, that each of the Howard, Rudd and Gillard governments averaged annual growth in living costs of 2.9 per cent.

In reality the inflation story is a complex one and, while politically interesting, it is difficult to ascribe inflationary pressures to any one government. By their very nature, inflationary pressures are dynamic and impacted by a range of factors largely out of a government's control, such as exchange rates or the state of the global economy.

The overall story for living costs in Australia over the past two decades has been one of being in control, not out of control. With the exception of the late 1980s, when inflation was still a serious matter for the Australian economy, living costs in aggregate have remained relatively subdued.

Living costs by income

Conventional wisdom suggests that living cost pressures are becoming a greater issue for low income households. These households spend proportionately more of their income on items such as petrol and energy and price inflation for these goods has been strong.

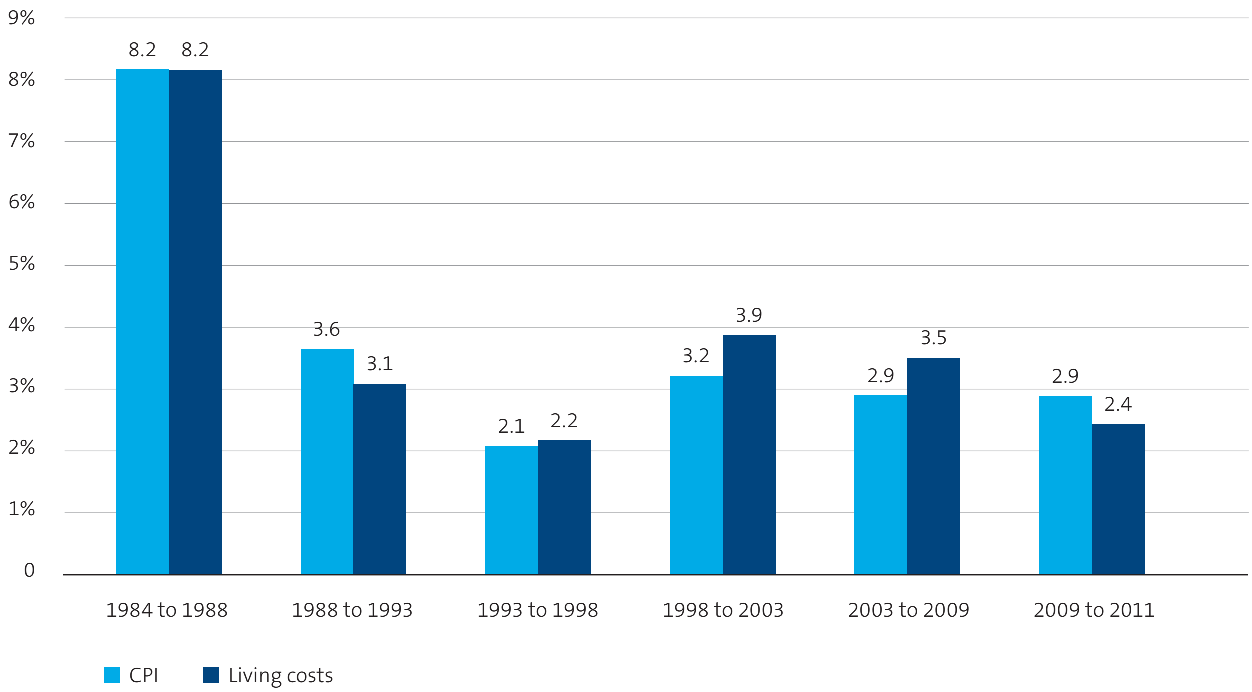
Earlier, we showed that since 1984, low income households have in fact not increased their expenditure share on the basics of living which suggests that while these households do devote their expenditures to certain items that are increasing strongly in price, such as energy, health costs or fresh fruit, they also devote an equally large portion of expenditure to items that are now relatively cheaper such as clothing and audio visual and computing equipment.

To better understand the living costs of households with different incomes, Figure 12 shows the living costs as they relate to different income levels. The graph shows that overall, changes in living costs do not diverge greatly based on income.

Throughout the entire 27 years analysed, the gap in the growth of prices faced between the bottom quintile households and the top quintile is only 4.9 per cent. Since 2003, the lowest income households have experienced annual living cost increases of 3.4 per cent, moderately higher than the highest income groups living cost increases of 3.1 per cent.

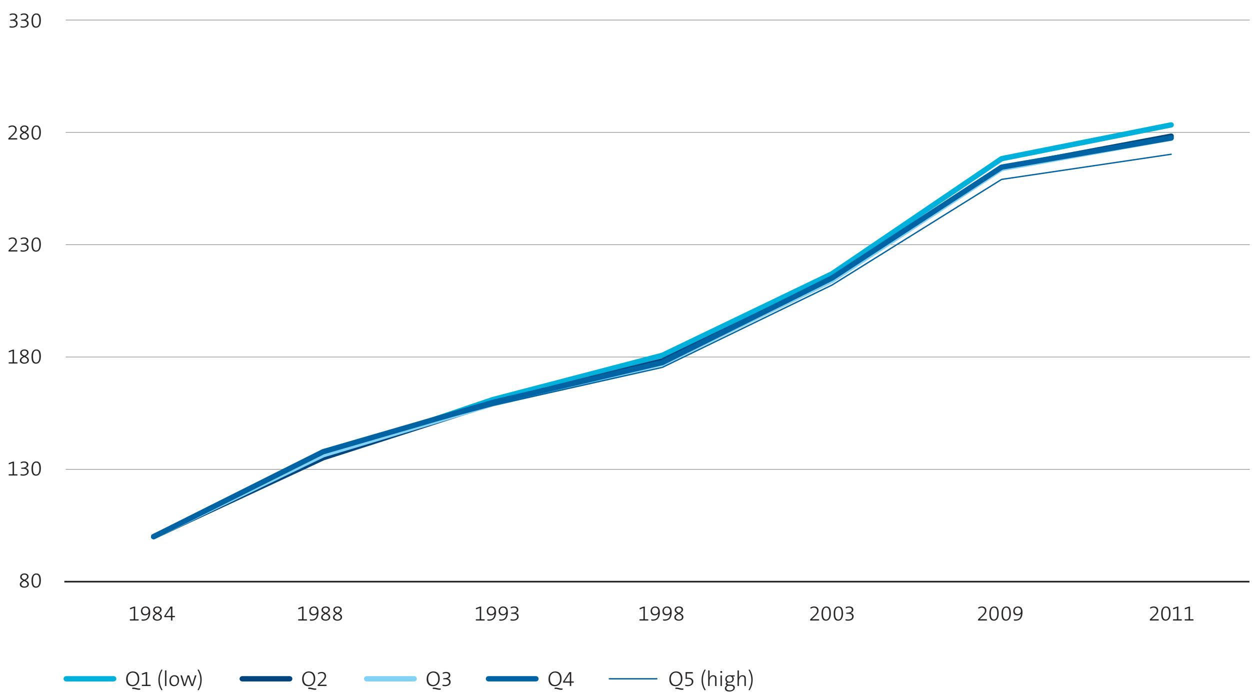
7. The ABS' PBLCI (Pensioner and Beneficiary Living Cost Index) provides the Living Cost Index specifically for pensioners, self-funded retirees, and employees.

Figure 11 - CPI and Living Cost Indexes - annual growth %



Source: ABS and NATSEM.

Figure 12 - Living Cost Index by income quintile, 1984 = 100



Source: ABS and NATSEM.

Living costs by household types

Table 2 provides a detailed profile of living cost changes between 1984 and 2011 and the more recent period following 2003. It is the more recent period where media and political attention intensified so it is instructive to consider both the longer term picture and the more recent history of living costs for different household groups.

We can see in Table 2 that the lower income groups experienced larger cost of living increases than higher income households over both the short and longer term.

Considerable attention is also given to the cost of living pressures facing pensioner households. Pensioners are often considered to spend large portions of income on electricity and essential food items, both of which have grown sharply in price in recent years, however Table 2 shows that in terms of changes in living costs there is very little difference between government beneficiaries (mostly pensioners) and other households.

The figures in Table 2 suggest that since 2003 working families faced moderately higher increases in living costs than other households. These moderately higher costs are likely to be linked to mortgage costs which, as identified earlier, have increased sharply over recent years. Over the longer term, we do not find any difference in changes between their living cost pressures and any other group.

We find very little difference to changes in living costs between age groups. Recently, households headed by younger persons have experienced mildly heavier living cost increases. This is likely to be related to stronger expenditure share in mortgages, rent and education, all of which have inflated heavily in recent times.[8]

Households with a mortgage or who rent (about 70 per cent of all households) tend to have experienced higher cost of living pressures over the past decade as housing costs have increased substantially.[9]

Summarising all these results, we generally find that cost of living pressures have altered little between the different household types since 1984. However, cost of living pressures tended to be greatest for low income singles.

It should be noted that the analysis above relates to pressures as they relate to living cost changes. There is no doubt that many families are currently 'doing it tough'. The point of this report is to consider whether or not it's getting tougher, which is what the cost of living discussion generally focuses on. The results above show that there are no real standout groups that are facing cost of living pressures that have accelerated beyond that of other households either recently or over the longer term.

Table 2 - Average change in the Living Cost Index

	% change per year	
	1984 to 2011	2003 to 2011
Income level		
Q1 (low)	3.95%	3.40%
Q2	3.88%	3.31%
Q3	3.87%	3.30%
Q4	3.87%	3.24%
Q5 (high)	3.77%	3.09%
Source of income		
Wage and Salary	3.85%	3.25%
Business	3.92%	3.39%
Government	3.93%	3.34%
Other	3.66%	2.84%
Family type		
Couple and kids	3.84%	3.30%
Single parents	3.88%	3.29%
Couple only	3.82%	3.11%
Lone person	3.92%	2.32%
Other	3.87%	3.21%
Age of head		
15 to 34	3.87%	3.30%
35 to 49	3.87%	3.31%
50 to 64	3.81%	3.13%
65 plus	3.84%	3.15%
Tenure		
Own outright	3.76%	3.01%
Mortgage	3.88%	3.34%
Renter	3.90%	3.30%
65 plus	3.84%	3.15%
Working families	3.89%	3.39%
ALL HOUSEHOLDS	3.85%	3.24%

Source: ABS and NATSEM.

8. The increase in education costs for younger households mostly relates to higher education costs.
9. The remaining 30 per cent of households own their house outright.

Standard of living

As alerted to earlier in this report, prices are only one part of the picture when it comes to measuring the financial standard of living. What really matters is how well incomes cover costs. If incomes are growing more quickly than the cost of living, this indicates households are able to expand their purchases and increase their standard of living. This section considers how well the groups in the previous section have fared in this regard.

Again, the focus is on changes in standard of living, or whether living standards are improving or deteriorating for different groups in society, not levels of standard of living. Clearly there are groups in society that enjoy a substantially higher financial standard of living than others. For example, the average income of the top 20 per cent of Australian households is more than five times that of the bottom 20 per cent and government beneficiary household incomes are less than half average household incomes.

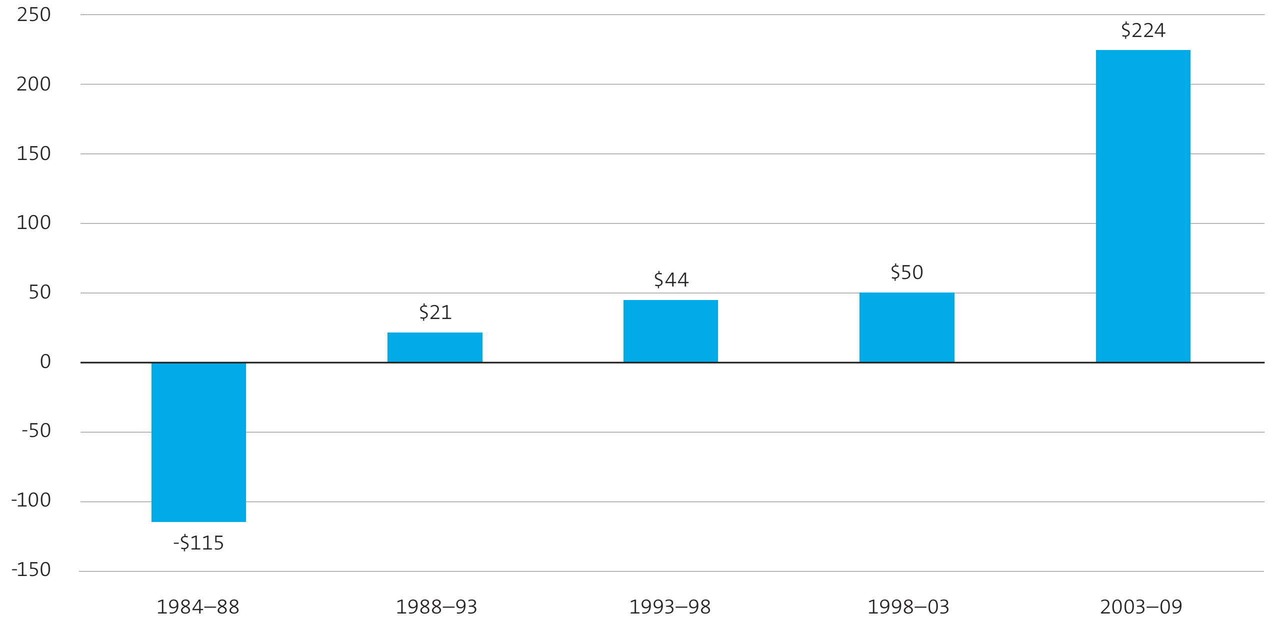
We already know from Figure 2 that household incomes at the aggregate level have grown more quickly than the CPI. This should come as no surprise as the economy in Australia has prospered in the last 20 years. Has this income growth been spread evenly? How well are our households covering their living costs?

Our previous section suggested that living costs between 1984 and 2009–10 increased 164 per cent, or 4 per cent per annum while since 2003 living costs increased 23 per cent or 3.5 per cent per annum.

Using the same data sources (the HES) dating back to 1984, average disposable incomes increased by 217 per cent showing that, on average, household incomes have grown by around 20 per cent beyond the cost of living in aggregate since 1984. In dollars per week, this means that on average, in the financial year 2009–10, households have around $224 per week extra spending money than was the case in 1984.

Figure 13 shows the strongest gains in household living standards were from 2003–04 to 2009–10. The gains during the previous 15 years were balanced out by the fall in the late 1980s where mortgage and inflationary pressures ate into family budgets. Figure 12 shows that cost of living pressures in Australia were most acute in the late 1980s. Even during the difficult economic times of 1988 to 1993 households were, on average, better off.

Figure 13 - Income gains above the cost of living, $0 pw, households



Source: ABS and NATSEM.

Table 3 shows that both the lowest and highest income households gained relative to their living costs. The highest quintile income households experienced very strong income growth particularly in the late 2000s, likely due to the mining boom and its domino effect.

Since 1984 the average income of the highest income households grew by $429 per week or $61 a day. Low income earners have also done well with gains of $93 a week since 1984.

A particularly surprising result is that in terms of percentage gain over the cost of living we find the lowest income households have actually managed a small claw back compared to the highest income group. Quintile 1 income growth exceeded the cost of living over the past 27 years by 27 per cent, while the top income quintile outpaced by only 19 per cent. While a small step in the right direction, the low income group's growth is coming off a significantly lower income base than the higher income group as suggested by the absolute dollar increases mentioned above.

When we split households into their main source of income we find that all households, on average, easily cover their cost of living increases. Increased government payments to pensioners are likely to have contributed to the strong gains in government beneficiary households with incomes of $69 a week beyond their living costs over the six years to 2009–10. Over the longer term they are $61 a week better off, albeit this is coming off a low base.

Wage and salaried and business income households have also fared well with income gains between 2003–04 and 2009–10 of $228 and $208 per week respectively.

Both made their largest gains in this period and were, on balance, worse off during the period prior to 2003–04. Households with 'other' income, typically self-funded retirees and those earning income predominantly from investments, experienced tremendous growth in income beyond their living costs during both the previous six years ($426 per week) and since 1984 ($547 per week). This group was boosted by very strong growth in dividends flowing from shares, superannuation income, and property income.

Couples with children and single parent household incomes have grown by 37 per cent and 34 per cent more than their respective living costs since 1984. Couples with children households did particularly well in recent years with income growth of 21.2 per cent beyond their living costs. The strong growth in income of single parents occurred prior to the welfare-to-work reforms and their income growth since was the poorest of any group in Table 3 with a moderate 6.6 per cent growth since 2003–04.

Of different tenure type households, the big winners were households who own their house outright. This was expected given the higher weighting the Living Cost Indexes place on mortgage repayments and rent. Through the period 2003–04 and 2009–10 their incomes grew by 25 per cent more than their living costs, compared to around 17 per cent for both renters and those with a mortgage. Over the longer term, renter households experienced the smaller gains, being ahead by just under 11 per cent over the past 27 years.

The much discussed working family outpaced their cost of living pressures by a handy 22.1 per cent over the longer period and 16.4 per cent since 2003–04.

A new pressure on household budgets will be carbon pricing that the Federal Government will introduce on July 1, 2012. For households, the impact will be felt most directly on utility bills such as electricity and gas. The carbon price is expected to lift electricity and gas bills by around 10 per cent, or about $200 per annum on average, for households. For around seven in 10 households the associated income tax cuts and/or increased government payments will more than compensate for the increased utility bills and other price increases associated with the carbon price (Phillips et al 2011).

The carbon price package would not appear to alter the cost of living picture in Australia greatly. For those families most exposed to such pressures (low and middle income) it is likely to leave them better off while at the same time providing an incentive to reduce their emissions.

Table 3 - Incomes gains after living cost changes

	1984 to 2009–10		2003–04 to 2009–10	
	$ pw**	% gain*	$ pw	% gain
Income quintile				
Q1 (low)	$93	27.1%	$42	10.7%
Q2	$191	30.5%	$105	14.7%
Q3	$200	19.5%	$153	14.2%
Q4	$211	14.6%	$250	17.8%
Q5 (high)	$429	19.1%	$576	27.4%
Source of income				
Wages and salaries	$170	11.3%	$228	15.9%
Business	$175	15.6%	$208	19.1%
Government benefits	$61	11.9%	$69	13.7%
Other	$547	64.8%	$426	44.1%
Family type				
Couple and children	$475	34.0%	$328	21.2%
Single parents	$257	37.4%	$59	6.6%
Couple only	$181	16.0%	$220	20.0%
Lone person	$86	14.0%	$115	19.8%
Other family/group	-$74	-4.0%	$266	17.4%
Tenure type				
Outright owner	$241	27.0%	$228	25.2%
Purchaser	$254	16.8%	$254	16.9%
Renter	$112	10.7%	$173	17.5%
Other	$199	23.9%	$197	23.7%
Working families	$306	22.1%	$238	16.4%
ALL	$199	19.9%	$224	19.9%

* Equivalised income (see technical notes).

** Actual income.

Source: ABS and NATSEM.

Bigger lifestyles

The obvious question that remains is if we are all doing so well, how can it be that cost of living pressures remain so front of mind? This section explores household patterns. We look at the types of goods and services purchased and compare with earlier times. Perhaps it is all this spending that makes us stress about the cost of living? Keeping up with our reference group (often named ‘the Joneses’) may be a source of stress to some. Friends purchasing that new plasma screen television, a five bedroom house with a home theatre room or a shiny new SUV can all lead to feelings of envy. For others it may be that the world today demands more from us in terms of educational requirements, more high technology equipment or leaner spare time means outsourcing child care and chores (AMP.NATSEM 2011b).

Figure 14 compares broad expenditure patterns in 1984 with 2003–04 and 2009–10. Since 2003–04 households devote greater expenditure to housing, recreation, holidays and airfares, health, education and audio visual equipment. We spend less on alcohol and tobacco, food, clothing and footwear, and household items. Over the longer term (1984–2009), these patterns persist. We spend much less on clothing and footwear and household items. These trends are driven mainly by much lower prices. We spend more on transport, recreation, health, education and communication and moderately more on audio visual and computing equipment. A significant change we observe here is the move to a services based economy.

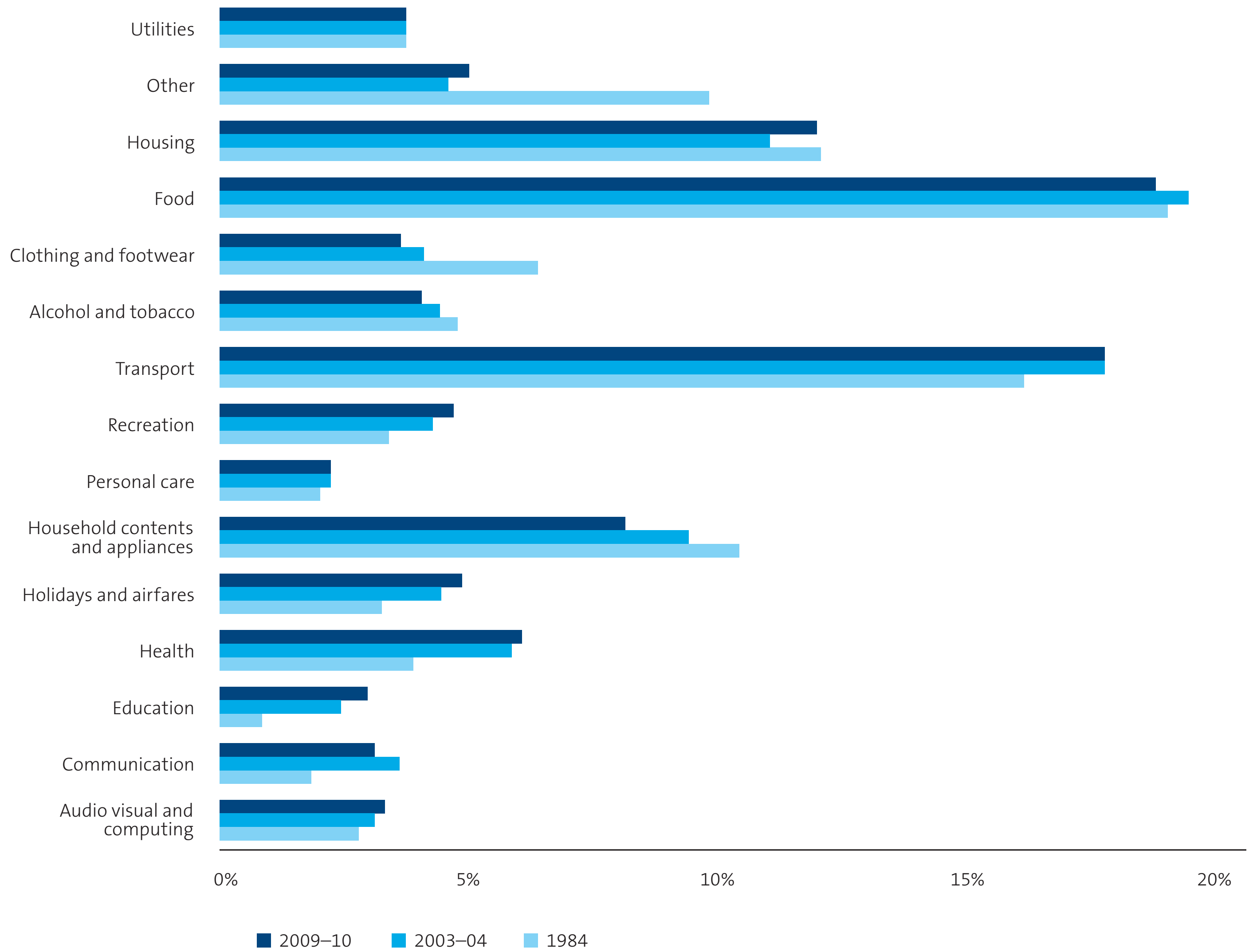
The HES provides comprehensive expenditure details allowing us to identify more clearly the products that are being demanded in the high expenditure environment that has been created in Australia since 2003.

Table 4 lists the classes of goods and services that have increased (decreased) the most in terms of expenditure growth. The table also provides the price change element of this growth and, by subtracting the price change, the volume, or quantity change of each class. It is important to distinguish between price and volume change. A cost of living impact would usually relate to the component of increased expenditure that relates to prices increasing while the volume change denotes households choosing to demand a greater quantity of some good or service, irrespective of price.

The items that have increased most strongly include car parts and accessories, baby shoes, sport participation, child care, various services, mortgages and education (private schooling). Expenditure growth on most of these items has more than doubled. By removing the price change element we can deduce the actual volume change – or how much more of each item we are buying. We are more than doubling up on baby shoes, car parts and child care. We are also holidaying and participating in sport like never before. A notable omission from the table below is audio visual and computing equipment. Due to massive price declines this category does not feature in top expenditure items in Table 4. In volume terms, this is the highest growth expenditure class.

10. For more details on this finding see RBA (2011).

Figure 14 - Expenditure shares (1984, 2003–04, 2009–10), % total expenditure



Source: ABS and Household Expenditure Survey and NATSEM.

Table 4 - Expenditure growth detailed expenditure classes (2003–04 to 2009–10)

	% change		
Top 15 expenditure classes	**Expenditure**	**Volume**	**Price**
Car parts/accessories	154%	102%	26%
Footwear for babies	129%	132%	-2%
Sport participation	123%	75%	28%
Other services - cars	122%	59%	40%
Child care	106%	131%	-11%
Other household services	105%	59%	29%
Secondary education	101%	34%	50%
Holiday travel and accommodation	91%	73%	11%
Preschool/primary education	79%	28%	40%
Mortgage interest	75%	22%	43%
Restaurant meals	68%	35%	25%
Rents	68%	27%	32%
Hair/personal grooming	61%	32%	22%
Games/toys/hobbies	57%	56%	1%
Pharmaceutical products	57%	37%	15%
Bottom 15 expenditure classes	% change		
Alterations and additions (housing)	-29%	-52%	-48%
Carpets and other floor coverings	-20%	-31%	16%
Tools - house and garden	-9%	-14%	6%
Footwear for men	-7%	-1%	-6%
Cars	-5%	1%	-6%
Major household appliances	8%	10%	-2%
Tobacco	8%	-15%	27%
Furniture	11%	7%	4%
Garments for baby/children	11%	13%	-1%
Papers/magazines/stationery	14%	1%	12%
Milk	14%	-9%	25%
Garments for men	14%	16%	-1%
Veterinary services	17%	-6%	25%
Small household electrical appliances	18%	25%	-6%
Pork	18%	4%	14%

Source: ABS and NATSEM.

At the other end of the scale households spend less on average, both in actual dollars and after inflation, on and around the house with lower expenditure on renovations, carpets and other flooring and tools. We also spend less on new car purchases and have had only moderately increased expenditure on men's clothing and footwear, major household appliances, tobacco, milk and furniture.

Over the longer term, Table 5 shows a similar pattern to the shorter term data in Table 4. Services again dominate with education, child care and sport participation all experiencing significant increases in expenditure reflecting social changes and reactions to government policy (such as higher HECS fees) occurring as Australia's standard of living increases. An item like child care is a classic example of the real nature of cost of living pressures. Child care prices (after government assistance) have been benign with net prices actually falling between 2003 and 2009.[11] It is demand (or volume) for child care that has shot up with households spending more than double on these services in just six years.

Table 5 - Expenditure growth detailed expenditure classes (1984 to 2009–10)

Top 10 items	Expenditure multiple
1. Tertiary education	18.7
2. Child care	11.9
3. Restaurant meals	9.7
4. Preschool/primary education	9.6
5. Sport participation	8.1
6. Secondary education	7.7
7. Other services - cars	6.8
8. Pharmaceutical products	6.3
9. Veterinary services	5.5
10. Mortgage interest	5.3

Source: ABS and NATSEM.

While caution needs to be taken with these numbers due to the often small sample sizes, general trends are apparent. We are spending big on services such as education, child care, holidays, restaurant meals and sports participation. We are devoting a smaller portion of expenditure to some of the big ticket goods items such as cars, renovations, major household appliances and furniture. And we spend less on tobacco. Compared to 1984, household's volume of tobacco expenditure has dropped back 75 per cent with education programs and higher taxes paying a healthy dividend.

With the exception of housing, the items most likely to be covered by cost of living stories, such as petrol, energy prices and fresh food, are not the main story. None of these items are notable areas of real expenditure growth. It is services - outsourcing such as child care or restaurant meals or investing in education through university or private school education that are the real pinch points of cost of living pressure. Some of this expenditure growth is through personal choice, such as private schools while some is through necessity, such as child care to facilitate labour force participation of women. Housing costs are a genuine cost of living pressure point with strong growth in rents and very high house prices pushing up interest repayments for households who recently purchased either their first house or an upgraded house.

11. The main driver of lower net child care costs is the increase in the Federal Government child care tax rebate from 30 per cent to 50 per cent on out-of-pocket expenses in 2008.

Capital city cost of living comparison

The CPI and Living Cost indexes provide information on the change of prices within cities, but don't describe the actual price level.

The ABS provided a comparison of price levels in an experimental piece of research in 2003 (ABS 2007). Table 6 updates this research by including additional information on housing costs (excluded in the ABS work) and updating the price changes to December 2011.

The table provides the cost of a fixed basket of goods for Sydney and compares the cost of that same basket in each other capital city. The table breaks these costs into expenditure categories.

In aggregate, Sydney is the most expensive capital city to live in, costing on average, $71,426 for the standard basket of goods. Adelaide is the cheapest capital city where the average household would spend $4,442 per year less relative to Sydney. Brisbane and Melbourne also rate as considerably cheaper cities to live in than Sydney spending less than $2,439 and $3,228 per year respectively of their Sydney counterparts. The vast majority of reduced spending relates to rent and mortgage costs. Beyond those two elements the costs are quite similar. Two exceptions are Brisbane and Adelaide where non-housing costs are $1,365 and $938 per year less than Sydney respectively.

Of the state capitals Perth is the second most expensive city, however, due to higher incomes than other state capitals, Perth has the highest financial standard of living. The mining boom has no doubt played an important role in boosting the incomes of Perth households.

This standard of living story is impacted by differing average incomes. While Sydney has higher costs, it is also likely that incomes are somewhat higher assisting to make up for the cost differential. The standard of living comparison in Table 6 compares the index of cost and the index of income for households in each state capital city to form a financial standard of living comparison.[12] This comparison changes the ranking of capital cities compared to the cost Index with Sydney ranking ahead of Adelaide and Hobart. Canberra has the highest standard of living in Australia taking into account both average costs and income, followed by Darwin and then Perth. Brisbane has the highest standard of living of our three largest cities. In spite of having relatively low costs, once we account for the lower average incomes, Hobart has easily the lowest financial standard of living of Australia's capital cities.

12. Both the index for cost and income are based on average households and take into account household size differences.

Table 6 - Cost of Sydney 'basket of goods' - capital city comparison

December 2011 per annum	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
Food	$11,074	$11,285	$10,745	$10,592	$11,281	$11,515	$12,247	$10,931
Alcohol and tobacco	$4,515	$4,626	$4,580	$4,556	$4,981	$5,067	$5,141	$4,758
Clothing and footwear	$2,673	$2,816	$3,040	$2,879	$2,848	$2,910	$2,652	$2,793
Housing								
Rent	$4,769	$3,598	$4,132	$2,936	$3,628	$2,660	$3,950	$4,981
Electricity	$1,166	$1,018	$1,050	$1,077	$846	$946	$794	$963
Other utilities	$801	$872	$890	$793	$820	$722	$712	$881
Other housing	$2,357	$2,643	$2,271	$2,409	$2,594	$2,447	$2,321	$2,494
Mortgage interest	$4,086	$2,952	$2,860	$2,415	$3,046	$2,087	$4,024	$3,344
Household contents and services	$6,793	$6,493	$6,422	$6,444	$6,651	$6,838	$6,136	$6,826
Health	$3,559	$3,829	$3,378	$3,734	$3,439	$3,619	$3,582	$3,671
Transportation	$9,356	$8,701	$8,633	$8,855	$8,793	$8,557	$8,905	$9,296
Communication	$2,362	$2,355	$2,357	$2,339	$2,356	$2,375	$2,375	$2380
Recreation	$8,475	$8,412	$8,460	$8,315	$8,355	$8,419	$8,075	$8,442
Education	$1,970	$1,961	$1,885	$2,078	$1,988	$1,850	$1,539	$1,668
Financial and insurance services	$7,471	$7,425	$7,493	$7,561	$7,603	$7,381	$7,727	$7,598
Total cost	**$71,426**	**$68,968**	**$68,198**	**$66,983**	**$69,227**	**$67,391**	**$70,178**	**$71,024**
Cost index	1	0.966	0.955	0.938	0.969	0.944	0.983	0.994
Income index	1	0.973	0.994	0.895	1.040	0.829	1.060	1.230
Standard of living comparison	1.000	1.008	1.041	0.954	1.073	0.879	1.079	1.237
2011 comparison with Sydney								
Food		212	-329	-482	207	441	1,173	-143
Alcohol and tobacco		111	65	41	466	552	626	243
Clothing and footwear		143	366	206	174	236	-22	119
Housing								
Rent		-1,170	-636	-1,832	-1,140	-2,109	-818	212
Electricity		-148	-116	-89	-320	-220	-372	-203
Other utilities		71	90	-7	20	-79	-88	80
Other housing		286	-85	52	237	90	-36	138
Mortgage interest		-1,135	-1,227	-1,672	-1,040	-1,999	-63	-743
Household contents and services		-300	-371	-349	-142	45	-657	33
Health		271	-180	175	-120	60	23	112
Transportation		-655	-723	-501	-563	-799	-451	-60
Communication		-7	-4	-22	-5	14	13	18
Recreation		-63	-15	-160	-120	-56	-400	-33
Education		-9	-84	108	18	-120	-431	-302
Financial and insurance services		-46	22	90	132	-90	256	127
Total		**-2,439**	**-3,228**	**-4,442**	**-2,198**	**-4,034**	**-1,247**	**-401**
Rent and mortgage		-2,305	-1,863	-3,504	-2,181	-4,108	-881	-531
Other		-135	-1,365	-938	-17	74	-366	129

Source: ABS and NATSEM calculations.

International cost of living comparison

International cost of living comparisons are more difficult to estimate than a comparison of Australian state capitals. Large differences exist between the quality of products and the task of appropriately dealing with these differences and obtaining a broad selection of goods that truly represent the purchasing patterns in different countries is prohibitively expensive. Comparing a fixed basket of goods between countries also makes little sense as what is important in one country may be irrelevant in another.

In spite of these difficulties indexes do exist that attempt to compare international costs of living. For example, the Economic Intelligence Unit (EIU) has developed an index that prices a representative basket of goods in terms of a single currency (EIU 2012).

As the EIU points out, this index is designed for those in the international job market to compare relative costs of living. The most important driver of change in this index is the exchange rate of individual countries as exchange rates usually deviate far more than domestic prices. For Australia, this means that in recent years as our currency appreciated our cost of living position in the index also increased.

Since Australians purchase goods with Australian dollars, the fact that our dollar has appreciated against most currencies does not mean that Australian households are disadvantaged – in fact quite the opposite. For an American travelling to Australia to work, their purchasing power of their $US in local currency terms certainly does shrink, however their cost of living in Australia also declines.

With these concerns in mind, Table 7 shows that Sydney and Melbourne are two of the most expensive cities in the world for the international worker. According to the index, the cost of living in Sydney is 45 per cent more than New York, 183 per cent more than Mumbai but 14 per cent less than Zurich.

In any comparison of price levels it is also important to consider relative incomes. Figure 16 provides the GDP per person for the 25 richest nations (out of 183 measured). Australia ranks 11th in this table outranking other wealthy countries such as Sweden, Canada, Germany, and the United Kingdom.

While Table 7 suggests that Australian cities are nearly three times more expensive than a city such as Mumbai, this hides the fact that Australian incomes are also more than 10 times higher than India. One could move to countries with a lower cost of living but you'll soon notice your standard of living drop when you look at your pay packet.

Table 7 - Cost of living international city comparison

Top 10 most expensive cities				
Rank	**Country**	**City**	**Index (New York=100)**	
1	Switzerland	Zurich	170	1
2	Japan	Tokyo	166	2
3	Switzerland	Geneva	157	=3
4	Japan	Osaka, Kobe	157	=3
5	Norway	Oslo	156	5
6	France	Paris	150	6
7	**Australia**	**Sydney**	**147**	**7**
8	**Australia**	**Melbourne**	**145**	**8**
9	Singapore	Singapore	142	9
10	Germany	Frankfurt	137	10

Top 10 least expensive cities				
1	Amman	Muscat	63	120=
2	Bangladesh	Dhaka	**61**	**123**
3	Algeria	Algiers	**59**	**124**
4	Nepal	Kathmandu	**58**	**125=**
5	Panama	Panama City	**58**	**125=**
6	Saudi Arabia	Jeddah	**57**	**127**
7	India	New Delhi	**56**	**128**
8	Iran	Tehran	**54**	**129**
9	India	Mumbai	**52**	**130**
10	Pakistan	Karachi	46	131

Source: Economic Intelligence Unit 2012.

Figure 16 - Top 25 (out of 183) GDP per capita countries, IMF (2011), $ per year

Source: International Monetary Fund - World Economic Outlook Database, September 2011.

GDP measures are generally considered to correlate well with a country's standard of living. The drawback of GDP measures are that they take a narrow economic perspective and do not necessarily take into account other important measures of standard of living such as education levels, quality of life, life expectancy and inequality.

The Human Development Index developed by The United Nations helps to overcome these problems by including such measures (United Nations 2011). With this index Australia performs particularly well ranking second out of the 188 countries measured. Only resource-rich Norway outranks Australia.[13]

While our prices are higher than most other nations, our incomes and general standard of living are exceptionally high.

13. Australia ranks second on both the raw HDI and the inequality-adjusted HDI.

Conclusion

Cost of living pressures dominate political debate. However, the evidence of household budgets examined in this report shows that the pressures are less to do with the politically sensitive prices of petrol, energy or fresh fruit and more to do with changes in our spending habits and expectations and outsourcing to the services industry.

In spite of cost of living pressures, price inflation in Australia and living costs appear to be relatively benign and have been for the past two decades. With incomes rising more sharply than living costs Australian families have a higher standard of living. The average family is ahead by $224 per week and this growth in average incomes has been spread across all ends of the income and socio-economic spectrum.

Households are spending more money on discretionary expenditure and we find that even low income and pensioner households spend one in three dollars on discretionary items. The proportion of household expenditure on the basic essentials of life remain virtually unchanged since 1984 at around 38 per cent of household budgets, approaching 50 per cent for lower income households.

The stability of expenses or living costs over-time uncovered in this report are consistently demonstrated in spite of some items experiencing strong price inflation such as health, tobacco and education. Other items compensate with much lower or negative price inflation, such as audio visual and computing equipment and clothing and footwear.

Indexes developed specifically for measuring the living costs for different household types show that almost without exception, regardless of the type or socio-economic position of households, incomes have grown well beyond living costs.

Australian households now devote a greater share of expenditure to services and items of a discretionary nature than in the past. Some of this expenditure represents aspirational purchases such as private education and higher education, some relate to expenditure on services that were more commonly performed in-house such as child care or food preparation.

Housing is one area of necessary expenditure where prices have impacted on the cost of living, but even here there are distinctions between different groups. Those with recent mortgages or who rent are paying a much higher price than in decades past.

If you want to escape these so called cost of living pressures, Adelaide and Hobart are the least expensive options, but average incomes are also much lower here. Very high housing costs mean that Sydney, in spite of higher incomes, has a lower financial standard of living than other large capital cities. Canberra offers the best financial standard of living in Australia with incomes 23 per cent higher than Sydney but with a comparable price level.

The carbon price is not expected to alter the cost of living picture with price increases met with compensation in the form of reduced income tax and higher government payments adequately compensating low and middle income families – the families most at risk of cost of living pressures.

On a global comparison of a representative basket of goods and services, Australian cities rank among the most expensive. The strong Australian dollar in recent years has made Australia a more expensive destination for international travellers and workers but this does not translate to Australian citizens paid in Australian dollars. Australia remains one of the richest nations and enjoys a standard of living higher than most of the world.

Cost of living pressures are perhaps a fact of life for many households but they aren't primarily sourced from petrol prices or electricity bills or the price of bananas. In fact, they mostly do not relate to 'prices these days' at all. Instead, they relate to households having larger incomes and spending more money on a whole range of new goods and, in particular, services that are either aspirational in nature or necessary in dealing with the demands of a modern society.

Focussing policy on a narrow cost of living debate around the price of electricity or petrol misses the real pressure points facing Australian households such as work/life balance and takes the spotlight off other more pressing matters that will actually help to maintain Australia's enviable standard of living for years to come.

Appendix A

Table A1 - CPI price inflation by expenditure class

Rank (out of 86)	Top 10 inflation	1984 to 2011 %	Rank	Top 10 deflation	1984 to 2011 %
1	Tobacco	978	1	Audio visual and computing	-90
2	Medical/hospital	560	2	Equipment for sporting and camping	-27
3	Dental services	356	3	Audio visual and computing services	-15
4	Insurance	346	4	Glass, tableware and utensils	-11
5	Lamb and goat	289	5	Games, toys and hobbies	-11
6	Urban transport fares	288	6	Garments for men	-11
7	Secondary education	264	7	Garments for women	-5
8	Fruit	262	8	Garments for kids/babies	-4
9	Spirits	261	9	Footwear for men	-2
10	Bread	256	10	Small electrical appliances	-1
Notable others					
11	Mortgage interest	256	12	Major household appliances	**0**
13	Electricity	253	13	Footwear for babies/kids	0
17	Rents	223	16	Footwear for women	11
23	Petrol	208	18	Books	16
	Household income	217			

Source: ABS CPI December 2011 and NATSEM.

Appendix B

Table B1 - Discretionary and necessary expenditure shares %

	Outright owner	Purchaser	Renter	Other	All
Discretionary					
1984	39.5	36.4	36.5	44.0	37.7
1988	42.1	37.4	38.5	41.3	39.7
1993	43.1	39.2	38.7	47.7	40.8
1998	41.3	36.3	32.7	40.3	37.2
2003	40.2	40.3	31.5	38.1	38.0
2009	43.1	43.1	32.3	42.3	40.1
Basic necessity					
1984	38.2	32.2	42.9	29.8	36.7
1988	36.4	31.8	40.7	37.4	35.6
1993	35.2	31.0	40.6	30.6	35.1
1998	36.6	32.2	47.4	33.8	37.6
2003	38.2	35.4	47.8	35.3	39.4
2009	36.9	33.1	47.3	35.0	38.1
Relative necessity					
1984	22.3	31.5	20.7	26.2	25.6
1988	21.5	30.8	20.9	21.3	24.8
1993	21.7	29.8	20.6	21.6	24.1
1998	22.1	31.5	19.9	25.9	25.1
2003	21.7	24.2	20.8	26.6	22.6
2009	20.0	23.8	23.8	22.4	21.8

	Wage and salary	Business	Government benefits	Other
Discretionary				
1988	40.1	41.4	35.2	41.7
1993	41.2	41.4	38.4	42.4
1998	37.2	40.5	33.9	41.4
2003	38.8	38.0	32.8	40.5
2009	40.6	44.6	32.9	44.6

	Wage and salary	Business	Government benefits	Other
Basic necessity				
1988	34.0	33.8	44.7	38.8
1993	32.9	35.2	41.5	37.2
1998	35.7	35.6	47.6	38.0
2003	37.6	38.6	48.4	38.7
2009	36.6	35.7	48.3	35.9
Relative necessity				
1988	26.0	24.9	20.1	19.5
1993	25.9	23.4	20.1	20.4
1998	27.1	23.9	18.5	20.6
2003	23.6	23.5	18.7	20.9
2009	22.8	19.8	18.7	19.5

	Other households	Working families
Discretionary		
1984	38.1	35.0
1988	40.2	35.4
1993	41.2	38.0
1998	37.5	35.4
2003	37.7	40.0
2009	40.0	41.2
Basic necessity		
1984	37.3	33.0
1988	35.9	33.3
1993	35.5	31.2
1998	38.4	33.0
2003	40.0	35.4
2009	38.8	33.8
Relative necessity		
1984	24.6	32.0
1988	23.9	31.3
1993	23.3	30.8
1998	24.1	31.6
2003	22.3	24.6
2009	21.2	25.1

	Couple and children	Single parents	Couple only	Singles	Other households
Discretionary					
1984	36.4	33.7	39.1	38.1	39.8
1988	38.1	35.2	40.6	42.9	40.8
1993	40.5	38.8	41.9	38.8	42.6
1998	38.1	33.8	38.2	35.6	36.0
2003	39.0	33.2	39.4	33.9	38.4
2009	41.1	34.2	42.1	35.8	40.2
Basic necessity					
1984	36.1	44.7	35.9	40.3	35.1
1988	35.5	41.8	35.0	31.9	36.3
1993	33.5	38.1	35.5	39.3	34.2
1998	34.9	43.0	37.8	43.2	38.3
2003	37.4	45.8	38.9	46.4	36.7
2009	36.0	45.2	37.3	44.6	37.1
Relative necessity					
1984	27.6	21.6	25.0	21.6	25.1
1988	26.5	23.0	24.4	25.3	22.9
1993	26.0	23.1	22.5	21.9	23.2
1998	27	23.3	24.1	21.2	25.7
2003	23.6	21.0	21.7	19.7	24.9
2009	23.0	20.6	20.6	19.7	22.7

	Quintile 1 (low)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (high)
Discretionary					
1984	31.3	35.4	36.6	39.3	40.6
1988	35.3	37.3	38.3	39.7	43.6
1993	37.9	37.9	39.2	42.2	43.6
1998	34.4	34.7	36.6	37.7	39.5
2003	31.9	35.9	37.1	38.2	41.9
2009	33.5	36.3	39.6	40.5	44.6
Basic necessity					
1984	46.4	40.2	37.0	34.3	33.2
1988	43.1	38.5	36.6	33.9	31.7
1993	40.2	39.8	36.0	33.0	31.8
1998	45.3	42.7	38.0	35.9	33.5
2003	47.9	43.3	39.3	37.7	35.5
2009	47.0	42.9	38.9	36.6	33.1
Relative necessity					
1984	22.2	24.4	26.5	26.4	26.2
1988	21.6	24.2	25.1	26.4	24.6
1993	22.0	22.3	24.8	24.8	24.9
1998	20.3	22.6	25.4	26.4	27.0
2003	20.2	20.7	23.6	24.1	22.6
2009	19.4	20.8	21.5	23.0	22.3

Source: ABS Household Expenditure Survey and NATSEM.

Technical notes

Data

ABS Survey Data

Much of the data in this report comes from the Australian Bureau of Statistics (ABS) Household Expenditure Survey. This survey is performed by the ABS about every five years. The survey has a survey sample size of between 5,000 and 10,000 households depending upon the survey year chosen. The survey years in this report range from 1984 to 2009–10.

The detail of expenditure classifications allows around 600 different classes (commodity codes) in each survey. The classifications are subject to minor alterations from between surveys. NATSEM has used ABS concordances to match the classes as accurately as possible. NATSEM aggregated the commodity codes to the ABS CPI expenditure class using an ABS concordance and added classes where no matching was possible – for example, there is no ABS expenditure class for mortgage interest repayments as such expenditure is not included in the CPI.

Living Cost Index

The Living Cost Index was developed in broadly the same manner as the ABS Living Cost Index. For each household type we calculate the importance (expenditure shares) of each ABS expenditure class (as defined by the ABS CPI) through time using the relevant ABS Household Expenditure Survey. We apply the known CPI price movements at a national level for each of these expenditure classes using the expenditure shares as weights. The main difference between the CPI and the Living Cost Index is the removal of the expenditure class 'house purchase' and the inclusion of mortgage interest payments on owner occupier housing. To measure price change in this component we used the growth in repayments required for the average housing loan in Australia as measured by the ABS' Housing Finance publication. The interest repayment used the RBA's standard variable loan interest rate and a one per cent per annum factor was applied to account for quality change in the stock of housing.

ABS CPI Data

The ABS Consumer Price Index (CPI) shows how consumer prices have changed for a fixed basket of goods and services since 1948. The ABS produces the CPI every three months and compiles the index using around 100,000 price observations collected in capital cities around the country each quarter. The ABS averages these price changes taking into account the relative importance of each item in the 'average' Australian household's budget. Great care is taken to remove the impacts of quality or volume change. This quality change involves checking each sampled item for changes from the previous quarterly price observation for factors such as size, weight or more complex features such as memory or speed of a computer. For a more detailed explanation of the ABS publication *Consumer Price Index* (ABS 2011b).

The ABS' CPI has a known upward bias that is caused by the ABS only updating the relative importance of items in the basket of goods roughly every five years. Cyclone Yasi on the North Coast of Queensland provides the best recent example. Banana prices increased wildly from a normal price of around $3 a kilogram to $15 a kilogram. The ABS CPI assumes that people are still buying the normal quantities of bananas as prescribed in the ABS basket of goods. Of course, people sensibly stop buying bananas and switch to another fruit such as apples. So, since the ABS has no information on the decline in banana sales their CPI overstates the real impact of goods and services that increase in price relative to other goods.

Equivalised Income

Throughout the report the household income measure used removes the household size – this is often called equivalising income. NATSEM uses the OECD modified method which divides household income by an equivalising factor such that the first adult receives a weight of one, subsequent adults a weight of 0.5 and children under 15 a weight of 0.3. Equivalised income is considered 'equivalent' to a lone person household income.

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