AMP.NATSEM Income and Wealth Report

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Household debt in Australia

NATSEM
at the University of Canberra

Issue 38 – December 2015

This report explores key questions about Australia's household debt...

- What is our debt profile?
- How have debt levels changed?
- How does our household debt compare internationally?
- Are we under debt stress?
- What would the picture look like with changed economic conditions?

Contents

Foreword

Debt.

It's a fact of life for the overwhelming majority of modern day Australian households.

We need debt, and increasingly more of it, to fund what is colloquially referred to as the Australian dream. *Our own home. A roof over our head. A place where we can raise our kids.*

Over the last 20 or so years the debt profile of the everyday Australian household has ballooned considerably, largely in pursuit of this dream.

Rising house prices, supported by declining interest rates (and lower interest repayments), have fuelled our burgeoning appetite and tolerance for debt. Taking into account inflation, the average Australian household now has four times more debt than it did 27 years ago.

Is this debt a good thing? There is a strong argument that in most cases the answer is yes. It has helped generate considerable wealth for many Australians as the value of their homes and investments have headed north. And, of course, risk of loan default is in part mitigated by the rigorous lending criteria that our banking system has in place.

But the reality for many Australian households is that while debt has undeniably helped build wealth, the debt isn't going away quickly. As this report shows, it's an increasingly large financial sum relative to incomes.

The natural optimism of Australians, supported by an unrivalled period of economic growth, low unemployment and resilience through the GFC, rationalises the case that we'll be ok... *My property is now worth this much. Interest rates are low. My job is safe. My salary will progressively increase and relieve the burden. Our monthly cashflow balance is above water. I'll deal with that large sum later.*

But if we're going to enjoy the retirement we aspire to, we need to think more about how we manage our debt now.

Debt is a powerful way to build wealth but only if managed well. Good debt builds wealth, bad debt diminishes it.

Falling on the wrong side of this ledger largely comes down to how we manage our finances, especially our day to day and month to month cashflow.

We must have visibility and control of our finances as part of a clear long-term plan to pay down debt. In doing so, it's imperative to factor in the impact if interest rates start creeping back up from their current historic lows and contingency plan in the event we lose our job or if an unforeseen health event prevents us from working.

Crucially, we must also look ahead to a retirement in which we are living longer. Do we want to carry significant debt into our later years, hampering our ability to live the way we want?

There's no question we should continue to recognise the wealth creating vehicle that debt has been and can continue to be for many Australian households. But we also need to understand the very stark difference between good and bad debt.

The question is, are we doing enough now to manage our debt in a way that will allow for a prosperous future?

Paul Sainsbury
Chief Customer Officer
AMP

Introduction

In the 1980s, countless Australian businesses rose to prominence on large stockpiles of debt. Many still thrive today but a large number suffered undignified collapses in the public's glare as debt repayments tightened their suffocating grip.

These high profile collapses illustrated the risks of high debt to ordinary Australians, who, at the time, were less reliant on debt and less prepared to take it on.

As interest rates headed south, however, and property prices rose, the average Australian household's reliance on debt grew. A competitive and deregulated financial sector also encouraged more Australians to take on debt.

Adjusting for inflation, Australia's average household debt is four times what it was 27 years ago.

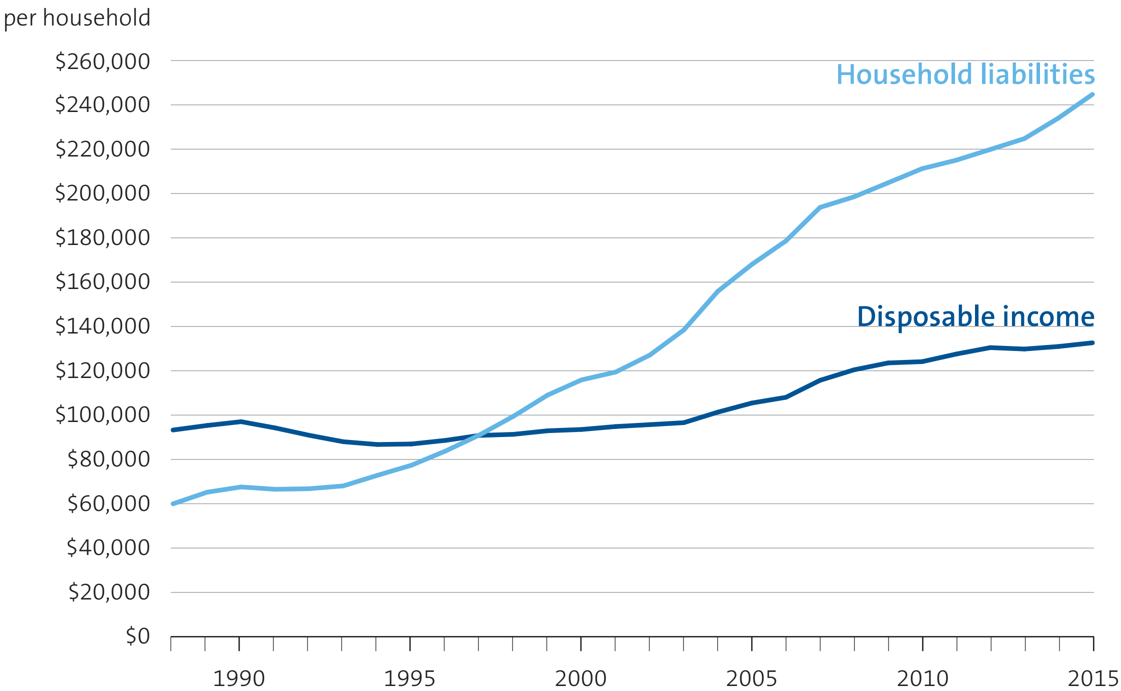
Australian average household debt is now four times what it was 27 years ago[1], rising from $60,000 to $245,000, reflecting an annual growth rate of 5.3 per cent above inflation and leaving our income growth rate of 1.3 per cent trailing in its wake (Figure 1).

In 1988 the average Australian household could have paid off all its debt with the after-tax income it earned in eight months. In 2015, this would take the average Australian household 22 months.

Buy now, pay later focuses on household debt in Australia. The report considers how debt levels have changed, particularly during the past 10 years. We explore whether the increase in household debt is cause for concern for both households and the economy as a whole. We do this by considering the extent of debt and repayments relative to income and examining financial stress measures. We also examine the implications for household debt of a change in economic conditions, including an increase in interest rates and unemployment.

Figure 1

Average household liabilities and average household disposable income (1988–2015), $ 2015



Source: RBA (2015) *Household and Business Finances: Household and Business Balance Sheets* and RBA (2015) *Household Finances: Selected Ratios*, ABS (1986) Census of Population and Housing, ABS (1991) Census of Population and Housing and ABS Survey of Income and Housing selected years.

1 In today's dollars, after inflation.

Australia's debt profile

Debt is a reality for most Australians wanting to put a roof over their family's head and to build longer-term wealth. The staggering increase in debt is not necessarily of concern if invested wisely and it produces an even greater increase in household wealth. Debt becomes a dirty word when the burden of repayment puts households under financial stress.

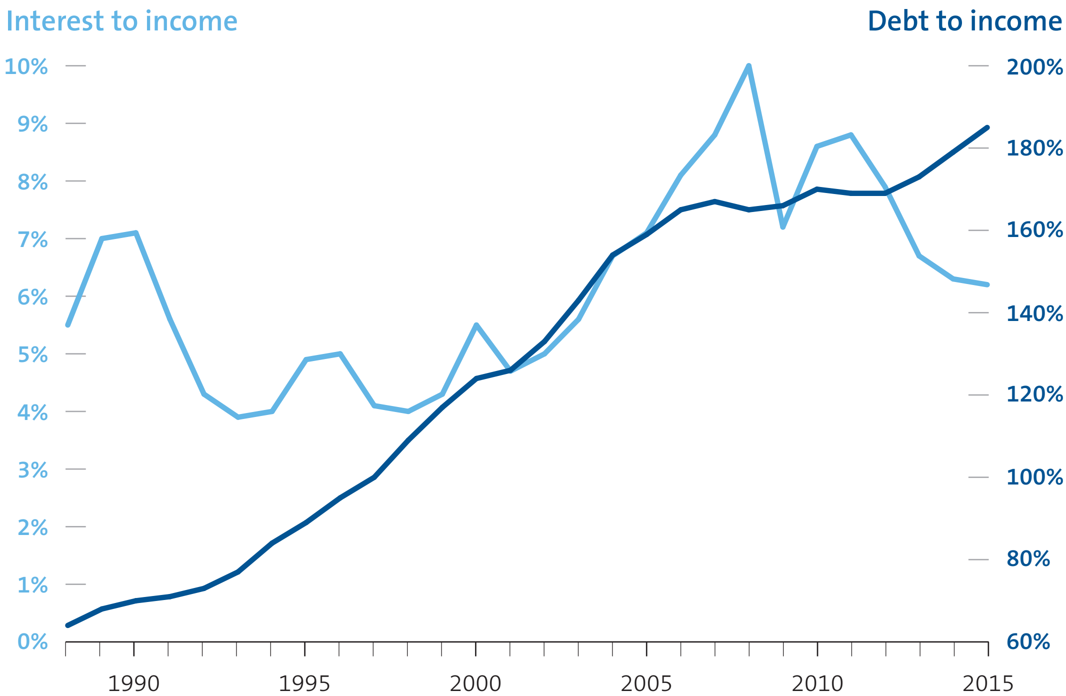
The ratio of household debt to disposable income has almost tripled since 1988, from
64% to 185%.

The ratio of household debt to disposable income has almost tripled since 1988, from 64 per cent to 185 per cent (Figure 2). During the same period, interest payments as a percentage of household income increased from a low of 3.9 per cent in the aftermath of the 1990s recession to a peak of 10 per cent during the Global Financial Crisis (GFC). This is now down to a more typical share of around 6 per cent.

Australia has seen a massive expansion in household debt that continued unabated right up until the GFC but low interest rates have softened the Australian repayment burden.

Figure 2

Household interest payments and total household liabilities as a percentage of household disposable income (1988–2015)



Source: ABS (2015) *Australian National Accounts National Income Expenditure and Product Household Income Account Current prices* and RBA (2015) *Household Finances: Selected Ratios.*

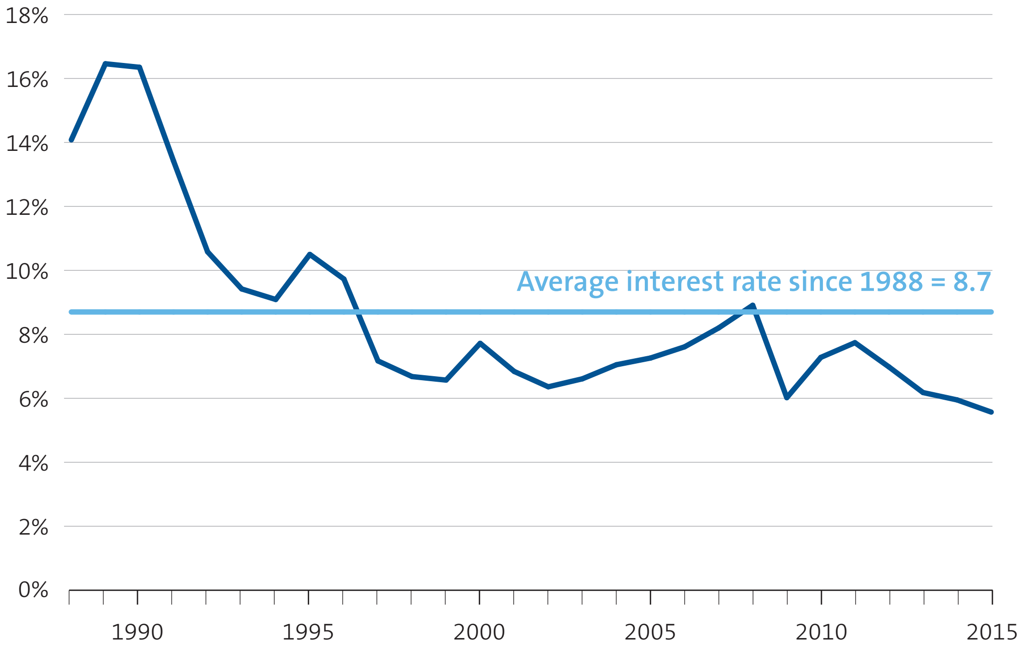
The burden of debt repayment is not just influenced by the amount a household borrows but also by the interest that must be paid on the debt. For most Australians, the mortgage on their home is the largest debt they will have in their lifetime and mortgage interest rates have fallen from a peak of 16.5 per cent in 1989 to their current level of 5 to 6 per cent.

Aside from just prior to the GFC, the overall trend in mortgage interest rates has been downward (Figure 3) and this has reduced the cost of servicing mortgage debt. Not only are interest rates low, compared to the long-run average of 8.7 per cent since 1988, they have been consistently low for 20 years. These historically low interest rates have given investors and homebuyers the confidence to invest on the assumption interest rates will remain reasonably low for much of the course of their loan.

Of real concern is what could happen if interest rates increase sharply, or if there was a substantial increase in the unemployment rate, given the increased debt position of many households.

Figure 3

Owner occupier variable mortgage interest rates (1988–2015)



Source: RBA (2015) *Interest Rates: Indicator Lending Rates.*

The expansion in household debt that came with an environment of low interest rates, financial deregulation and continued economic prosperity has put Australia near the top of the international league table of household debt relative to household disposable income.

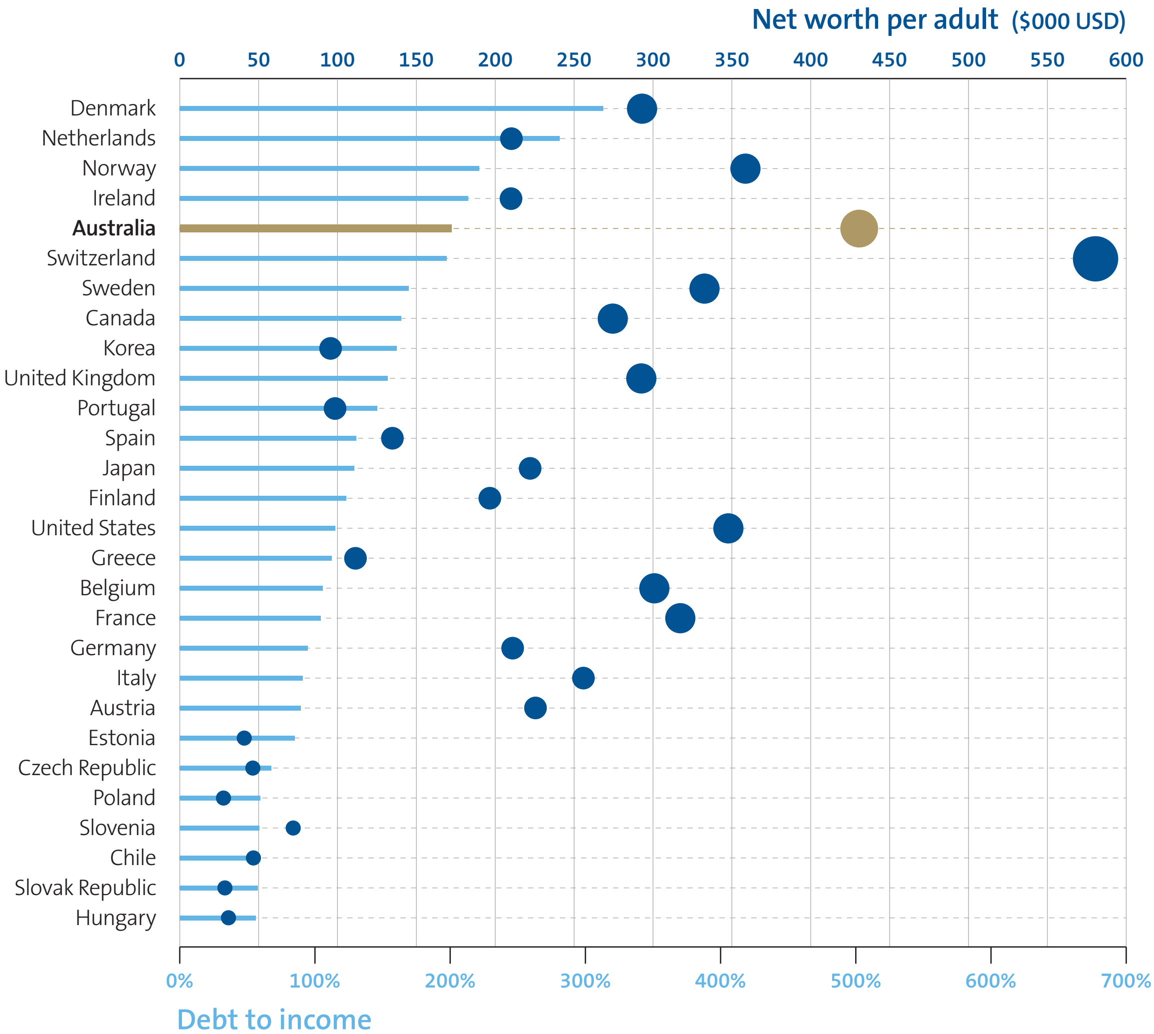
An international study by the Organisation for Economic Cooperation and Development (OECD) estimates Australians' average debt stands at 201 per cent of disposable income ranking Australia fifth in the world behind Denmark, the Netherlands, Norway and Ireland (Figure 4). Australian households hold more debt than comparable economies such as Canada where the ratio of debt to household disposable income is 164 per cent in 2013 compared to Australia's 201 per cent[2].

Australia ranks 5th in the world for debt to income.

While Australian households have very large amounts of debt relative to income, they are also some of the wealthiest households in the world. Amongst OECD countries, Australia's net worth per adult is second only to Switzerland. Australians are, on average, wealthier than Americans; in 2014, our per adult net worth was US$431,000 compared to America's per adult net worth of US$348,000.

Figure 4

Total household liabilities as a percentage of household disposable income (2013) and household net worth per adult (2014)



Source: OECD (2014) *National Accounts at a Glance 2014: Household Debt* and Davies, Lluberas and Shorrocks (2014) *Credit Suisse Global Wealth Databook 2014.*

2 The OECD estimate differs moderately from the NATSEM estimate of 185 per cent. This is due to minor definitional differences.

Types of debt

More than 90 per cent of Australian household debt is spent on building wealth or buying a home to live in rather than purchasing consumables.

Mortgage debt on owner-occupier housing represents the lion's share of Australian household liabilities at 56.3 per cent while debt associated with investments (such as rental properties or shares) makes up 36.5 per cent (Table 1).

Not surprisingly, mortgage debt makes up the greatest proportion of overall household debt. This report investigated the debt levels of Australian households across five groups, or quintiles, of disposable income[3].

The highest income households have the lowest percentage of mortgage debt (49.5 per cent) and the highest percentage of investor debt (44.8 per cent), which reflects the greater range of investment opportunities taken by high-income households.

The percentage of student debt across age groups reflects the time it takes to repay Higher Education Loan Program loans and to some extent differences in higher education fees. Student debt represents 8.3 per cent of all household debt for those households headed by a person under 30.

Mortgage debt is, as expected, lowest among older households. They have had a longer period to reduce this debt and many would also have access to a superannuation lump sum, which may have been used to help pay off a mortgage. However, mortgage debt still makes up almost 30 per cent of debt for households headed by a person aged 65 or older. This is up significantly from 19.6 per cent in 2004.

Mortgages account for 62.8 per cent of debt for households headed by a person aged 30 to 50.

Investor debt increases with age. Older households have had more time to build wealth and many will have used debt to do this. Investor debt is highest among people aged 65 and over at almost 60 per cent, compared to a little over a quarter of total debt for households aged under 30 (26.6 per cent) and just over 46 per cent for 50 to 65 years olds.

Mortgage debt is highest in Tasmania, with 65.7 per cent of total household debt tied to mortgages. New South Wales has the second highest share of mortgage debt at 58.2 per cent. The combined territories (the Northern Territory and the Australian Capital Territory, which have been combined for this report) have the lowest share of mortgage debt at 49.8 per cent. Investor debt is highest in Australia's territories, at 44 per cent, followed by Queensland and Western Australia at around 38 per cent each.

Personal loans make up only around 3 per cent of total debt. This kind of debt is often used to purchase consumer items, cars or holidays and is used more heavily by lower income and younger households.

3 The report uses 'equivalised' income of households, which adjusts household income to a 'per-adult' basis. NATSEM uses the OECD modified method, which gives a weight of one to the first adult, 0.5 to subsequent adults and 0.3 to dependent children.

Table 1

Composition of household debt (2013–14)

	Student (%)	Mortgage (%)	Credit card (%)	Investor (%)	Personal (%)
Income quintile					
Q1 (lowest 20%)	2.3	54.3	2.2	37.6	3.6
Q2	3.3	63.4	3.1	26.0	4.3
Q3	2.7	62.8	2.2	28.9	3.3
Q4	2.3	61.1	1.8	31.8	3.0
Q5 (highest 20%)	1.5	49.5	1.5	44.8	2.8
Age					
<30	8.3	58.3	1.5	26.6	5.4
30 to 50	1.3	62.8	1.6	31.7	2.6
50 to 65	2.2	45.9	2.2	46.3	3.4
65 plus	2.0	28.2	5.0	59.7	5.1
State					
NSW	2.1	58.2	1.9	35.0	2.8
VIC	2.6	55.7	2.1	36.2	3.4
QLD	2.1	54.0	1.8	38.2	3.8
SA	2.5	57.6	2.0	35.4	2.5
WA	1.2	56.7	1.6	38.0	2.5
TAS	2.2	65.7	2.1	25.8	4.2
NT/ACT	1.7	49.8	1.4	44.0	3.0
All	**2.1**	**56.3**	**1.9**	**36.5**	**3.1**

Source: ABS (2015) *Survey of Income and Housing 2013–14*.

Mortgage debt makes up almost 30% of debt for households headed by a person aged 65 or older.

Trends in household debt

The strong growth in total per capita household debt between 2004 and 2014 reflects a significant increase in the amount of debt Australian households are taking on rather than an increase in the percentage of households with debt. About the same number of households have debt but those that do have significantly more debt than ever.

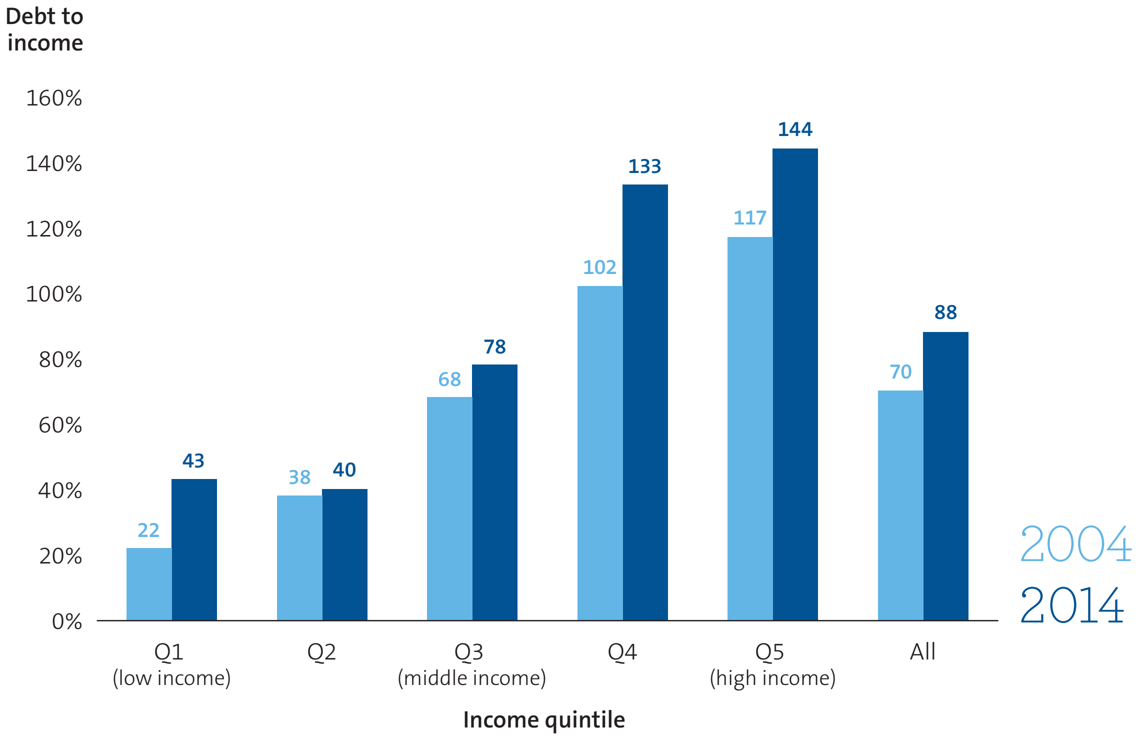
The percentage of Australian households with debt fell marginally during the past 10 years from 73.2 per cent to 72.1 per cent while the median amount of household debt increased by 63.3 per cent or $35,800 in 2014 dollars (Table 2). The increase in debt outstripped income growth, pushing the overall debt to income ratio of a typical Australian household with debt up from 70 per cent to 88 per cent[4].

This significant increase in household debt has not led to repayment stress as a decline in interest rates has meant the typical ratio of debt interest repayments to disposable household income has remained reasonably low at just above 6 per cent (Table 2).

The increase in debt to income has been most significant among high-income (27 percentage points) and upper-middle income households (31 percentage points) (Figure 5). Lower income households have also taken on significantly more debt relative to household income, increasing their median debt ratio by 21 percentage points, nearly twice that of 2004 rates.

Figure 5

Median ratio of debt to household disposable income (2004 and 2014)



Source: ABS (2015) *Survey of Income and Housing 2013–14* and ABS (2005) *Survey of Income and Housing 2003–04.*

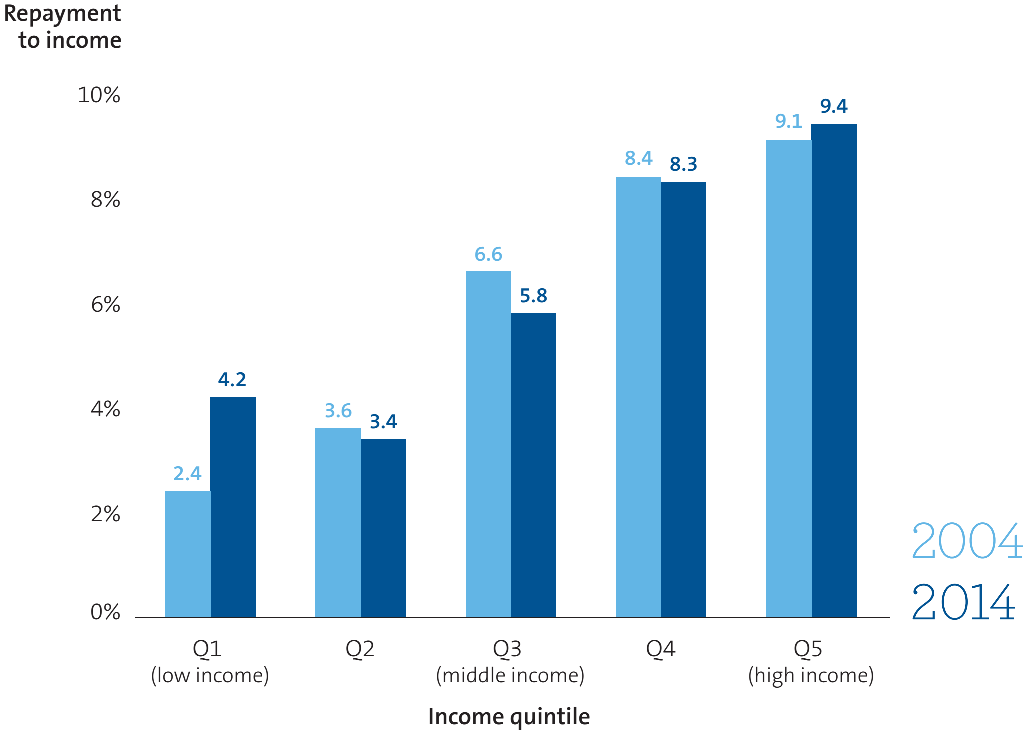
For low-income households, debt is 43 per cent of their disposable income, which is almost double its 2004 value of 22 per cent.

4 Note that median figures for debt to income are significantly lower than averages, which were discussed in the introduction, since the distribution is significantly skewed towards larger debts.

The typical household in the lowest quintile of household income has experienced an increase in repayments, relative to income, from 2.4 per cent to 4.2 per cent (Figure 6). There has been little change for the households in the other quintiles. This illustrates the importance of considering household debt within the context of the prevailing interest rate environment.

Figure 6

Repayments as a percentage of household disposable income (2004 vs 2014)



Source: ABS (2015) *Survey of Income and Housing 2013–14* and ABS (2005) *Survey of Income and Housing 2003–04.*

Table 2 shows a detailed picture of the debt position for a range of household types in Australia.

Higher income households have both the most debt and the highest ratio of debt to income. Between 2004 and 2014, their median ratio of debt to income increased from 117 per cent to 144 per cent. The debt to income ratio for middle-income households is 78 per cent, up from 68 per cent 10 years ago.

The greatest increase in typical (median) household debt to income has been among households headed by a 30 to 50 year old, moving from 149 per cent to 209 per cent. Households headed by a person aged 50 to 65 have gone from 44 per cent to an 80 per cent debt to income ratio during the past 10 years. This is in contrast to younger households, which have lowered their debt to income during this period. These households have reduced their debt to income ratio by 22 percentage points, from 65 per cent to 43 per cent.

Table 2

Trends in median household debt (2004 vs 2014)

	2004				2014			
	Proportion with debt (%)	Debt $000s	Debt/ income (%)	Repayment/ income (%)	Proportion with debt (%)	Debt $000s	Debt/ income (%)	Repayment/ income (%)
Income quintile								
Q1 (lowest 20%)	42.5	5.1	22	2.4	44.2	13.6	43	4.2
Q2	60.3	15.8	38	3.6	59.8	20.5	40	3.4
Q3 (middle income)	81.0	42.2	68	6.6	79.1	56.5	78	5.8
Q4	88.6	83.1	102	8.4	85.9	137.6	133	8.3
Q5 (highest 20%)	91.7	132.5	117	9.1	89.0	227.3	144	9.4
Age								
<30	81.5	37.0	65	5.8	73.8	31.0	43	2.8
30 to 50	86.4	107.6	149	11.1	83.7	201.4	209	12.8
50 to 65	74.6	27.7	44	4.2	78.3	68.5	80	5.8
65 plus	37.9	1.3	4	0.7	44.1	2.8	5	0.9
Sex								
Male	77.5	63.4	85	7.2	75.8	113.1	115	7.9
Female	66.5	27.9	53	4.9	66.6	39.7	58	4.5
Tenure (type of residence)								
Own outright	55.3	3.4	7	0.9	53.0	3.7	6	0.9
House with mortgage	99.7	151.6	211	15.2	99.1	250.5	269	16.4
First home buyer	97.9	209.0	311	21.9	97.5	323.1	362	21.2
Renter	62.1	10.5	20	2.1	60.2	15.0	19	1.8
State								
NSW	73.1	39.5	60	5.6	70.8	65.5	80	6.3
VIC	72.5	51.9	77	6.3	73.8	70.0	85	6.1
QLD	73.8	46.6	80	6.7	72.5	65.1	82	6.1
SA	73.4	46.4	73	6.6	67.1	78.1	106	7.1
WA	74.9	67.9	101	8.5	73.7	141.5	139	9.3
TAS	69.4	29.2	51	4.6	67.5	64.3	90	6.6
NT/ACT	73.1	86.7	102	8.1	81.1	100.0	98	7.2
All	**73.2**	**56.6**	**70**	**6.1**	**72.1**	**92.4**	**88**	**6.3**

Source: ABS (2015) *Survey of Income and Housing 2013–14*.
Notes: 2004 values presented in 2014 dollars.

Strong growth in house prices and the continued trend of delaying family formation has had a big impact on younger people's debt levels. Their debt to income ratio has dropped from 65 per cent to 43 per cent. The increase in leverage among older households may, at least in part, reflect a lengthening of the time it takes to pay off a typical mortgage due to rising property prices and people using home equity to purchase other goods or make home improvements.

For first home buyers debt to income has increased by 51 percentage points.

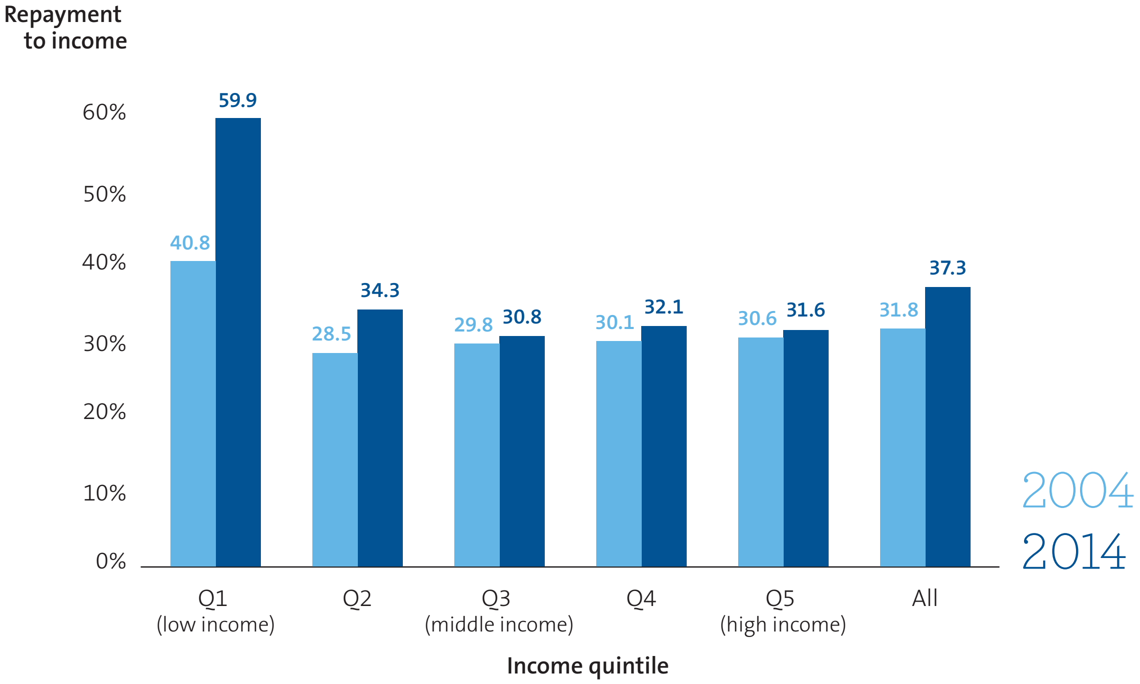
In fact, the same reasons drive the increased ratio of debt to income for homeowners. This ratio for households with mortgages increased by 58 percentage points during the past 10 years. For first home buyers, the increase in debt compared to disposable income was also significant at 51 percentage points.

Typical debt levels and debt repayments relative to income are highest amongst the high-income states of Western Australia and the combined territories. Victoria and Queensland have the lowest debt repayment to income ratios.

All states and territories experienced increases in debt but repayment ratios to income are not substantially altered by state. The exception to this is Tasmania, which has increased typical repayment ratios from 4.6 per cent to 6.6 per cent. Western Australia had particularly strong increases in debt between 2004 and 2014, with debt to income increasing from 101 per cent to 139 per cent for the typical household. Western Australia's repayment to income ratio was only modestly higher between 2004 and 2014 thanks to strong income growth.

Figure 7

Repayments as a percentage of household disposable income for the top 10 per cent most indebted households (2004 vs 2014)



Source: ABS (2015) *Survey of Income and Housing 2013–14* and ABS (2005) *Survey of Income and Housing 2003–04.*

The debt picture starts to look more serious for the most leveraged households, which have alarming levels of debt both in terms of debt to income and repayments to income (Figure 7).

This report not only considers the debt position of households with typical levels of debt and moderate debt to income ratios, it shines a light on households with the highest debt levels in the country – the top 10 per cent of indebted households for a range of different household types.

Among the top 10 per cent of indebted households, low-income households are in the most precarious position. Their debt interest repayments to income have increased from 40.8 per cent to a staggering 59.9 per cent during the past 10 years.[5]

Households in the top 10 per cent of debt to household disposable income have six times as much debt as annual disposable income.

This is in stark contrast to the typical household, which has less debt than their annual income, at 88 per cent of income. These extremely high amounts of debt place these households under significant repayment burden, with 37.3 per cent of the top 10 per cent of indebted households' disposable income going towards debt, compared to 6.3 per cent overall.

Debt to income among these households has increased by an enormous 160 percentage points during the past decade, from 440 per cent to 600 per cent, compared to the overall increase of just 18 percentage points (70 to 88 per cent). While the increase in the burden of repayment has barely moved overall (6.1 to 6.3 per cent), among the most indebted households, the percentage of repayments to income has increased from 31.8 to 37.3 per cent.

The level of debt among low-income households is concerning. The top 10 per cent of most indebted low-income households now has a ratio of debt to income of 10 compared to just 5.5 in 2004. The burden of repayment for these households is very high with repayments taking up almost 60 per cent of household disposable income, an increase of 19.1 percentage points during the past 10 years[6].

Looking at trends in household debt for the top 10 per cent most indebted households (Table 3), it is the older households (aged 65 and over) that have increased their ratio of debt to income the most (180 percentage points). They have also increased repayments to income by 8.2 percentage points (almost doubling from 9 to 17.2 per cent), which is the largest increase of any age group. This may reflect a lengthening of the time it takes to pay off a mortgage, felt more profoundly by the most indebted households, resulting in older households with lower incomes facing higher repayments than they did a decade ago.

For the top 10 per cent most indebted households, those who own their own home with a mortgage and first home buyers have the highest percentage of debt to income. Within this group, the increase in debt to income for homes owned with a mortgage has been more than twice that of first home buyers. In fact, the most indebted first home buyers are the only household type to have experienced a decline in their burden of repayments. These declined by 2.4 percentage points[7].

5 These calculations are based on the 90th percentile (top 10 per cent) of indebted households within each category. All related figures in this report can be interpreted as a minimum or 'at least' for the top 10 per cent households.

6 Caution should be used in interpreting the debt numbers for the bottom 20 per cent income category. While NATSEM modelling excludes households with disposable incomes below $200 per week this category can be affected by volatile incomes from business or investment that may not be reflective of a household's true standard of living. Table 2 also shows that low income households are roughly half as likely to have debt meaning that small sample sizes are more of an issue.

7 Given the relatively small sample size for first home buyers caution should be taken in interpreting movements in the 90th percentile result for this category.

Despite recent commentary on Sydney's growing house price bubble, the most highly leveraged households in New South Wales did not have the highest debt ratios in 2014. While the most indebted households in New South Wales had debt to income ratios of 540 per cent, these households were behind households in Western Australia (610 per cent), the combined Australian Capital Territory and Northern Territory (570 per cent) and Queensland (550 per cent). During the past 10 years, households in Western Australia increased their debt to income by 200 percentage points and experienced the greatest increase in interest repayments to income of just under 8 percentage points[8].

Table 3

Trends in household debt for the top 10 per cent most indebted households (2004 vs 2014)

	2004			2014		
	Debt $000s	Debt/income (%)	Repayment/ Income (%)	Debt $000s	Debt/income (%)	Repayment/ Income (%)
Quintile						
Q1 (low income)	153.9	550	40.8	300.0	1000	59.9
Q2	181.5	400	28.5	328.2	550	34.3
Q3 (middle income)	261.1	410	29.8	388.8	490	30.8
Q4	335.6	420	30.1	534.3	530	32.1
Q5 (high income)	518.6	420	30.6	820.0	490	31.6
Age						
<30	309.6	410	29.5	391.0	450	26.1
30 to 50	371.7	470	34.3	618.0	610	37.9
50 to 65	300.3	370	27.7	534.3	500	32.0
65 plus	34.4	100	9.0	146.2	280	17.2
Sex						
Male	355.6	420	30.4	560.0	550	34.3
Female	287.8	420	30.8	450.2	510	31.6
Tenure						
Own outright	139.7	180	14.6	297.0	280	19.7
House with mortgage	432.3	520	38.4	685.0	670	42.3
First home buyer	415.7	620	42.4	504.2	690	40.1
Renter	82.0	120	11.0	138.0	170	12.5
State						
NSW	400.4	470	34.4	533.3	540	33.3
VIC	329.5	420	30.2	474.6	520	32.6
QLD	284.7	390	28.9	513.1	550	34.4
SA	239.3	360	26.0	434.2	480	30.3
WA	307.9	410	30.9	654.5	610	38.7
TAS	173.1	260	19.0	319.2	390	24.0
NT/ACT	380.6	410	29.9	609.2	570	35.4
All	**292.5**	**440**	**31.8**	**477.3**	**600**	**37.3**

Source: ABS (2015) *Survey of Income and Housing 2013–14*.
Notes: 2004 values presented in 2014 dollars.

8 Since the 2013–14 survey of income and housing, NSW loans for owner-occupiers have grown by 34 per cent – well ahead of all other states. While significant in terms of growth this is not likely to materially change the 'stock' of debt results for NSW in this report, which are as of 2013–14.

Financial stress and household debt

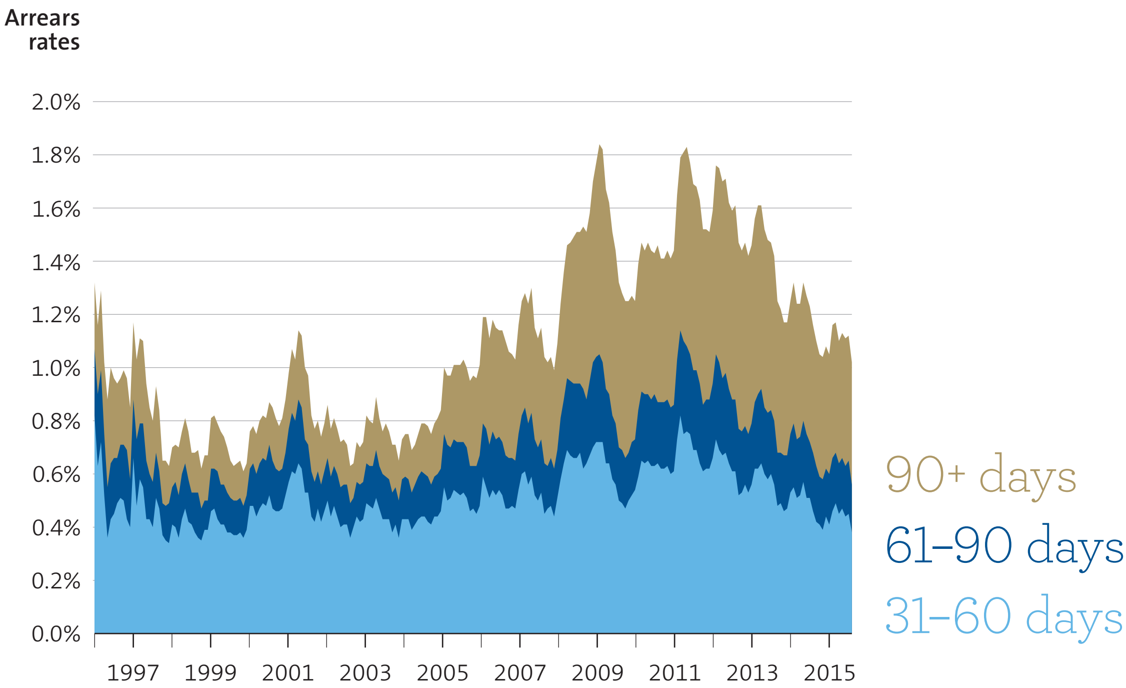
Australians have embraced debt during the past decade, taking on record debt levels relative to their incomes, but is this actually a problem?

Debt helps households smooth their expenditure and living standards and allows people to purchase things they could not afford upfront. Some families can, for example, purchase a house in their 20s or 30s rather than having to save for decades. There is of course a price attached to this convenience: interest.

Debt becomes a severe problem for households when they cannot afford to repay the debt and, in the case of a mortgage, the asset becomes a forced sale. This has a ripple effect throughout the economy when it happens on a large scale and people and businesses lose confidence in the economy and the financial sector, house prices tumble, jobs are lost and the economy heads into a tailspin.

Figure 8

Arrears rates for residential mortgage backed securities (1996–2014)



Source: Standard and Poor's Ratings Services.

The current rate of mortgages that are behind in repayments is very small in Australia (Figure 8) and this has been a consistent story for many years including through the GFC. Loans more than 90 days in arrears make up only around 0.5 per cent of all loans. Around 1 per cent are at least 30 days in arrears.

While households appear not to be at risk of default in great numbers, what sort of financial stress are these households under in order to meet their loan obligations and what is the relationship between debt and financial stress?

Around a quarter (24 per cent) of households currently experience financial stress, often associated with paying bills, raising emergency money or having to ask friends or community organisations for financial assistance (Table 4).[9] Seven per cent of households experience at least three financial stress touch points.

9 See technical notes for a full list of financial stress measures as defined by the ABS Household Expenditure Survey.

Table 4

Household financial stress rates

	At least one form of stress (%)	Three or more (%)
Repayment/Income		
No debt	28	9
<20%	23	6
20 to 40%	26	7
>40%	16	5
All	**24**	**7**
Income level		
Q1 (low 20%)	39	13
Q2	32	11
Q3	27	6
Q4	18	4
Q5 (high 20%)	7	2
Family type		
Couple with children	13	3
Couple only	22	5
Single parent	65	30
Lone person	25	7
Tenure type		
Own outright	9	1
House with mortgage	20	4
First home buyer	25	7
Renting	46	16

	At least one form of stress (%)	Three or more (%)
Main source of income		
Wages	21	5
Business	15	3
Government (<65)	67	29
Government (65+)	15	2
Other	13	2

Source: ABS, *Household Expenditure Survey 2009–10.*

Low-income families experience six times more financial stress than high-income families.

Low-income families experience significantly more financial stress than high-income families: nearly six times the rate of stress with 39 per cent compared to 7 per cent experiencing at least one form of financial stress.

Single parents are particularly prone to financial stress with nearly two in three suffering at least one financial stress, compared to just 13 per cent of couples who have children. Single parents are 10 times more likely to suffer at least three forms of financial stress compared to couples with children.

Renter households experience far more stress than families with a mortgage.

Households with high repayment to income rates face a very large financial burden, however, due to their often higher level of income and wealth this does not necessarily translate into higher rates of financial stress.

Household repayments under alternative economic scenarios

The Reserve Bank of Australia has followed the trend of other central banks around the world by lowering interest rates in response to weak economic conditions, leaving Australia with record low interest rates on top of low unemployment.

These low interest rates and unemployment have kept financial stress in check for most Australian households but they will rise eventually. We have looked at what might happen if interest rates increase by 2.5 percentage points from current historic lows.

Table 5

Impact of interest rate increase (2.5 percentage points)

	2013–14 interest rates				Plus 2.5 percentage points				Increased repayments	
Note: repay = repayment %ile = percentile	**Repay/ income median (%)**	**Repay median ($)**	**90th %ile (%)**	**Repay 90th %ile ($)**	**Repay/ income median (%)**	**Repay median ($)**	**90th %ile (%)**	**Repay 90th %ile ($)**	**Median pa ($)**	**90th %ile pa ($)**
Income quintile										
Q1 (lowest 20%)	4.2	1,274	59.9	18,890	5.1	1,547	84.4	26,616	273	7,726
Q2	3.4	1,791	34.3	20,062	4.1	2,160	47.8	27,958	369	7,896
Q3	5.8	4,252	30.8	24,920	7.2	5,278	42.9	34,710	1,026	9,790
Q4	8.3	8,641	32.1	32,913	11.4	11,868	45.2	46,344	3,227	13,432
Q5 (highest 20%)	9.4	14,437	31.6	53,160	12.7	19,506	43.4	73,011	5,068	19,851
All	6.3	6,549	37.3	29,989	8.1	8,480	52.7	42,347	1,931	12,358
Age										
<30	2.8	2,177	26.1	23,370	3.1	2,410	37.0	33,130	233	9,760
30 to 50	12.8	12,209	37.9	39,197	17.9	17,073	52.8	54,607	4,864	15,410
50 to 65	5.8	5,004	32.0	34,294	7.7	6,643	43.9	47,047	1,639	12,753
65 plus	0.9	473	17.2	10,689	0.9	473	23.7	14,729	0	4,040
Sex										
Male	7.9	7,738	34.3	35,510	10.5	10,285	47.7	49,383	2,547	13,873
Female	4.5	2,984	31.6	28,133	5.4	3,581	43.8	38,994	597	10,861
Tenure										
Own outright	0.9	588	19.7	19,510	0.9	588	26.4	26,145	0	6,635
House with mortgage	16.4	15,464	42.3	43,926	23.0	21,687	58.3	60,541	6,223	16,615
First home buyer	21.2	18,955	40.1	29,222	30.2	27,002	56.1	40,881	8,047	11,659
Renter	1.8	1,359	12.5	10,994	2.0	1,510	15.1	13,280	151	2,287

Source: ABS (2015) *Survey of Income and Housing 2013–14*, NATSEM modelling.

If interest rates were to rise by 2.5 percentage points, typical household debt repayments would increase from 6.3 per cent of disposable income to 8.1 per cent (Table 5). The most indebted households, or households with the top 10 per cent of debt, would see their repayments rise from 37.3 per cent of their disposable income to 52.7 per cent. This would increase their annual interest repayments by $12,358, from $29,989 to $42,347 per year.

First homebuyers would feel the greatest impact from rising interest rates. A 2.5 percentage point rise in rates would increase interest repayments as a percentage of disposable income from 21.2 per cent to 30.2 per cent or an extra $8,047 a year.

For Australian households with mortgages, a 2.5 percentage point rise in rates would increase repayments as a percentage of disposable income from 16.4 per cent to 23 per cent, taking annual interest payments from $15,464 to $21,687.

For the most indebted households with mortgages, this rise in interest rates would mean debt repayments would balloon from 42.3 per cent to 58.3 per cent of income, increasing annual interest payments from $43,926 to $60,541. This is an increase of $16,615 per year.

For households headed by a 30 to 50 year old with typical levels of debt, a 2.5 percentage point increase in rates would mean interest payments increase from a 12.8 per cent share of income to 17.9 per cent. This increases their typical repayments from $12,209 to $17,073 per year – an additional annual interest payment of $4,864.

For the most indebted households headed by a 30 to 50 year old, a 2.5 percentage point increase in rates would shift their share of income from 37.9 per cent to 52.8 per cent and they would have to find an extra $15,410 per year to cover their mortgage repayments[10]. This increase would see their repayments increase from at least $39,197 to $54,607 per year.

If interest rates were to rise by 2.5 percentage points, households with the top 10% of debt would see their repayments rise from 37.3% of their disposable income to 52.7%.

10 Mortgage repayment estimates are based only on the interest component. The principal component is not included here.

Table 6

Debt by region and impact of interest rate increase, top 10 regions by debt, as ranked by repayments to income

Region	Debt $000s	Repayment $000s pa	Repayment/Income (%)	2.5 percentage point increase $000s pa
Median				
Northern Perth	255	15.1	14	6.4
Sydney – Outer North West	254	14.9	14	6.1
Western Sydney	157	9.8	11	3.9
Perth South	163	10.7	11	4.3
Melbourne West	131	8.4	11	2.6
Central Queensland	129	8.4	9	3.1
Adelaide North	113	7.3	9	2.4
SW West Australia	103	6.4	8	2.5
Brisbane South	93	6.3	8	1.5
Melbourne North	85	6.2	8	2.6
Top 10 per cent				
Brisbane Inner/West	893	59.4	47	18.7
Inner West Sydney	504	30.9	43	13.0
Gold Coast	538	34.0	43	12.9
Northern Perth	704	47.2	41	16.4
Perth Inner	700	42.0	41	17.1
Inner and East Sydney	754	48.2	40	16.3
Sydney – Outer North	671	41.0	39	17.1
Brisbane South	627	37.5	38	16.3
SW West Australia	526	32.6	38	12.5
Parramatta/Ryde	533	30.3	38	12.1

Source: ABS, *Survey of Income and Housing*, 2013–14 Customised tables.

Table 6 shows the regions of Australia with the highest median level of debt and also explores households with the highest 10 per cent of debt in each region. The analysis ranks regions in Australia by their typical, or median, repayment to income level and by the more extreme version of repayment to income (the top 10 per cent of indebted households in each region).

Regions with the highest typical repayment burden are typically found in the outer ring suburbs of the major capital cities.

Northern Perth (including Stirling and Joondalup), Sydney Outer North (including Blacktown and Baulkham Hills) and Western Sydney (including Campbelltown and Penrith) make up the most burdened regions in Australia. The typical annual interest repayment in Northern Perth is $15,100 or 14 per cent of disposable income. Sydney Outer North is very similar while Western Sydney is a little lower at $9,800 or 11 per cent of disposable income. A 2.5 percentage point increase in interest rates would push up interest repayments by $6,400 each year in Northern Perth and $6,100 in Sydney Outer North.

Many households with debt are managing but it's the households with the highest levels of debt that are most at risk from rising interest rates.

The second half of Table 6 shows the regions with the highest interest repayments relative to income at the extreme end of debt – those households whose interest repayments place them in the top 10 per cent of their region.

Of these households, the most indebted households are generally in inner city locations in the major capital cities.

Inner city suburban households would face the greatest impact should interest rates increase substantially from current levels.

The top 10 per cent of indebted Brisbane Inner West households pay $59,400 in interest repayments each year, which is the equivalent of 47 per cent of their disposable income. An increase in the interest rate by 2.5 percentage points would increase their repayments by $18,700 each year.

The inner west of Sydney, the Gold Coast, Northern Perth and inner Perth and inner Sydney also feature prominently in the top 10 list of our most heavily indebted regions in Australia. On the Gold Coast, for example, the most indebted 10 per cent have at least $538,000 in debt. Their interest repayments would increase from $34,000 per year to $46,900 per year if interest rates were to increase by 2.5 percentage points. This increase would also see their interest repayments alone account for 59.4 per cent of their disposable income.

Inner and East Sydney's most indebted households have a typical debt of $754,000. A 2.5 per cent increase in interest rates would push their repayments from $48,200 per year to $64,500, forcing their repayments as a share of disposable income from 40 per cent to 53 per cent.

It is the lower income households in outer suburban regions, such as Northern Perth, the outer northern and western suburbs of Sydney and Melbourne, that have the highest 'typical' debt levels and interest repayment rates compared to incomes.

At the more extreme end of debt, it's the inner city suburban households who are most loaded up with debt and would face the greatest impact should interest rates increase substantially from current levels.

Looking at actual debt levels, Sydney's most indebted households are in the inner north and have at least $910,000 in debt. The most indebted households in Brisbane's inner west have debt of around $893,000. This compares to only around $300,000 to $400,000 for the most indebted households in regional areas of Australia (Appendix A).

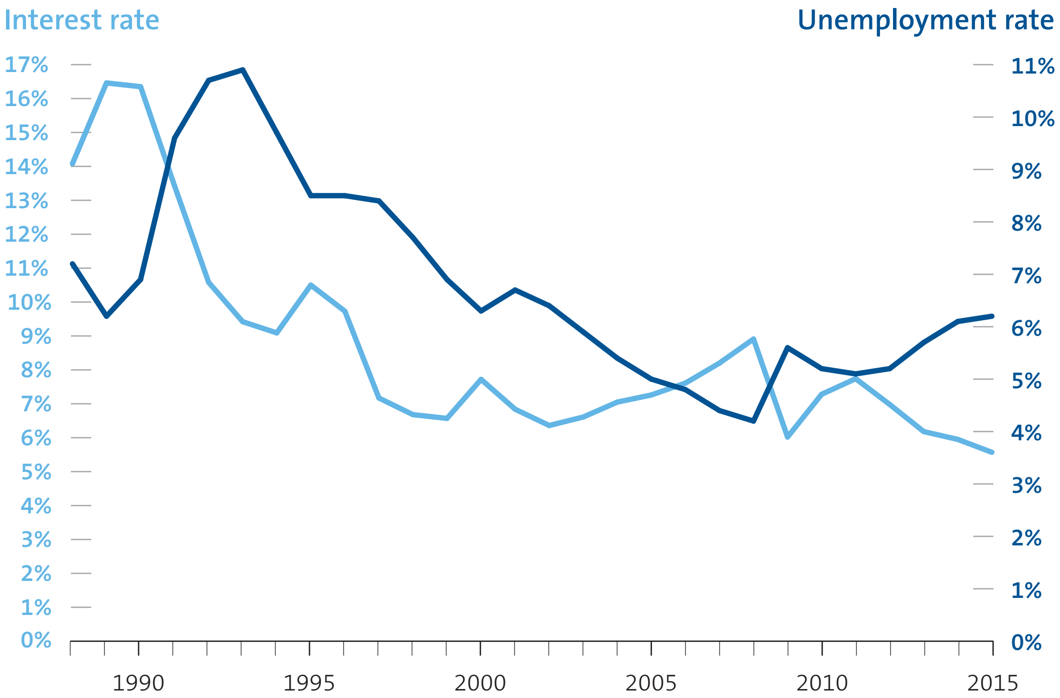
Employment

Although not modelled in this report, another equally important consideration for the stability of debt levels in Australia is the impact of the jobs market. Income security is vitally important for a safer ride through changing economic conditions.

Australia has enjoyed low unemployment since the early 2000s and low interest rates since the late 1990s (Figure 9). While recent years have seen a slight rise in unemployment, levels have remained significantly lower than the highs of the 1990s.

Figure 9

Owner occupier variable mortgage interest rates and unemployment rates (1988 to 2015)



Source: RBA (2015) *Interest Rates: Indicator Lending Rates*, ABS (2015) *Labour force Status*.

Further increases in unemployment or rising interest rates will have a significant influence on the ability of households to make debt repayments and would in turn ratchet up the nation's level of debt stress.

Conclusion

Australian households have embraced debt in recent years, most of which has been used to finance the purchase of a house either as an owner-occupier or as a rental property.

Lower interest rates have fuelled debt appetites and helped cushion the cash flow impact of repayments.

Households with high levels of debt have loaded up with even more during the past 10 years. Debt levels for households with the top 10 per cent of debt are six times higher than their annual income, up from four times 10 years ago.

Despite rising debt and repayments, most households appear in a good financial position following many years of strong economic growth and low interest rates. For many of these families, however, there could be storm clouds on the horizon if Australia's record low interest rates or unemployment rates head north.

Australian households, particularly those with high debt relative to income or those looking to take on debt, must plan for future financial shocks. This includes increased interest rates, which are currently at record lows. Our research indicates that a 2.5 percentage point increase in interest rates would lift repayments for Australia's most leveraged households to an alarming 52.7 per cent of disposable income, up from 37.3 per cent.

The most financially stressed households in Australia are not necessarily those with the highest debt but are more likely to be low income families, in particular single parent households.

The financial stability of Australian households will ultimately rest in their own hands. They must take on appropriate levels of debt relative to their incomes.

They will also need to look ahead and plan for alternate interest rate and economic scenarios to ensure they don't fall victim to the burden of debt repayments.

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Appendix

Regional debt (sorted by debt level) 2014

Region	Debt median $000s	Debt P90 $000s	Repay median $000s pa	Repay P90 $000s pa	Repay/ income median (%)	Repay/ income P90 (%)	2.5 ppt increase $ pa increase	
							Median	P90
Sydney – Inner North	64	910	4.7	56.4	4	33	0.7	21.2
Brisbane Inner/West	40	893	2.6	59.4	3	47	0.3	18.7
Inner and East Sydney	80	754	5.9	48.2	7	40	2.1	16.3
Perth North	255	704	15.1	47.2	14	41	6.4	16.4
Perth Inner	63	700	4.9	42.0	4	41	0.3	17.1
Melbourne Inner	54	683	3.2	42.9	4	31	0.3	17.0
Sydney – Outer North	254	671	14.9	41.0	14	39	6.1	17.1
Brisbane South	93	627	6.3	37.5	8	38	1.5	16.3
Northern Territory	109	623	6.9	39.7	7	35	2.6	14.3
Melbourne Middle East/South	64	613	4.1	37.7	4	36	0.7	15.9
ACT	98	606	7.6	39.4	7	36	2.4	14.9
Perth South	163	600	10.7	37.8	11	36	4.3	14.3
Inner/West Adelaide	59	564	4.0	36.2	7	32	1.4	15.4
Melbourne West	131	540	8.4	35.6	11	35	2.6	13.4
Gold Coast	52	538	3.9	34.0	5	43	0.6	12.9
Parramatta/Ryde	46	533	3.4	30.3	4	38	1.1	12.1
SW West Australia	103	526	6.4	32.6	8	38	2.5	12.5
Sunshine Coast	39	526	3.4	32.7	5	33	0.9	12.6
Adelaide South	70	517	4.6	31.4	6	33	1.5	12.8
Central Queensland	129	510	8.4	32.2	9	34	3.1	12.8
Inner West Sydney	53	504	4.8	30.9	7	43	0.9	13.0
WA Country	65	494	4.5	34.6	6	33	1.6	12.9
Western Sydney	157	471	9.8	29.8	11	37	3.9	12.9
Melbourne Outer East	71	443	5.2	29.7	7	34	1.6	12.2
Brisbane North	67	430	4.8	27.4	6	30	0.8	11.2
South Coast/Illawarra	60	425	4.3	27.6	5	28	1.0	10.4
Hunter/Central Coast	86	423	5.7	27.4	7	30	1.9	11.0
Newcastle	49	417	2.8	25.2	5	29	0.9	10.5
Melbourne North	85	417	6.2	24.7	8	36	2.6	9.9
Coffs Harbour/North Coast	58	400	4.1	26.5	6	30	1.0	10.4
West Moreton	65	395	4.7	26.0	7	30	1.7	10.0
North Queensland	28	374	2.5	27.1	5	28	0.6	8.1
Adelaide North	113	372	7.3	22.7	9	31	2.4	8.9
Hobart	78	355	5.4	22.7	7	26	1.5	9.1
NSW – Country	36	345	2.8	21.7	5	26	0.8	9.0
Victorian Urban Towns	35	304	2.6	19.9	5	27	0.7	6.8
Tasmania Ex Hobart	51	303	3.4	18.3	5	24	1.2	7.9
Victoria Country	48	301	3.6	18.7	6	25	0.9	6.8
South Australia Ex Adelaide	50	289	4.0	18.3	6	24	1.1	6.6

Source: ABS, *Survey of Income and Housing*, 2013–14 Customised tables.

Technical Notes

Interest rate increase assumptions: We have only applied the increased interest rates to home loans, investor loans and personal loans. Credit card rates and student loans (mostly HELP) are not altered. Credit card rates tend to be high regardless of the interest rate cycle and student loans are generally set to the prices level – the Consumer Price Index.

Financial stress information: The ABS Household Expenditure Survey 2009–10 asks households if any of the following financial stress measures applied to their households:

1. Could not raise more than $2,000 within a week
2. Could not pay electricity bill on time
3. Could not pay registration/insurance on time
4. Pawned or sold something
5. Went without meals
6. Could not afford to heat the home
7. Sought financial assistance from welfare or community groups
8. Sought financial assistance from friends or family

Regional definitions: The regions are based on aggregations of ABS SA3 regions. The regions have been chosen to ensure sample sizes are at least 100 households with debt. The typical region has around 400 households in the ABS sample.

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