

3283 2523 7564 4857
7564 2734 3165 2791
0288 3534 8110 3372

NATSEM
at the University of Canberra



Research Note R13/1 – February 2013

Working Australia: What the Government Gives and Takes Away

BEN PHILLIPS AND MATTHEW TOOHEY, NATSEM, UNIVERSITY OF CANBERRA

What do typical Australian low and middle income families receive in government benefits, what do they pay in taxes and where does this leave their relative financial position?

Public discourse in Australia often refers to terms such as ‘middle Australia’, ‘middle class’, ‘working families’, ‘working Australian’s’, or ‘modern families’. A problem with such terms is that there is not a consistent understanding of what they mean (and who they include) and, in any case, it would seem most people think these terms include them.

What does it mean to be middle income? Using survey data or Census figures provides a statistically reliable view of the income distribution in Australia. A simple income distribution can hide the complex reality of different households in Australia. For example, a single person clearly requires fewer resources to live comfortably than a couple family with children.

In this research note we develop a number of ‘hypothetical’ families using STINMOD, NATSEM’s model of the Australian tax and transfer system to determine the cash benefits received and personal income taxation paid by such families and their position within the income distribution. From this distribution we can gauge their relative financial position, financial incentives to work and better assess the appropriateness of how the government taxes and compensates families.

The hypotheticals consider single persons, single parent families and couple with children families. For each of these family types we develop different working hours and wage rates for primary income earners and secondary income earners to consider their relative financial positions as well as the financial incentives to work.

To develop realistic hypothetical families let’s investigate the income distribution for different families.

Australian Income Distribution

Table 1. Working Age Population Household Income Distribution (STINMOD, December 2012)

Family type	Poverty Line All Households	Low Income	Middle Income			High Income	Top 5%
		20th	lower 33rd	Median 50th	Upper 66th	80th	95th
Couple with Children	\$39,600	\$54,700	\$71,300	\$90,500	\$111,900	\$134,100	\$198,700
Couple Only	\$28,300	\$39,100	\$50,900	\$64,700	\$80,000	\$95,800	\$142,000
Single Parent	\$30,200	\$41,700	\$54,300	\$69,000	\$85,300	\$102,200	\$151,400
Single Person	\$18,900	\$26,100	\$34,000	\$43,100	\$53,300	\$63,900	\$94,600

Comparing the disposable (after-tax) income of a single person with a couple with children is problematic. The couple with children require significantly more resources to attain the same standard of living as the single person. Social and economic analysts get around this problem by applying equivalence scales. A simple and well understood equivalence scale is the modified-OECD equivalence scale. The scale gives a score of 1 to the first adult in a household, 0.5 to subsequent adults and 0.3 to each child in the household. The sum of these scores is the equivalence scale. The scale implies a degree of economies of scale with a household in terms of the resources required for larger households.

By dividing disposable incomes by this scale we develop a measure of income that is *equivalent* to a single adult household. The measure is not perfect but is generally accepted to be a reasonable guide to adjusting incomes for household size and household composition.

The results in Table 1 are based on the equivalised disposable income for the working age population of Australia. We have therefore excluded a large part of the

population where the head of the household is aged over 65. These excluded households are largely made up of aged pensioners and self-funded retirees.

Using the equivalised disposable income distribution we firstly split Australian households into percentiles (1 to 100 per cent). Defining low, middle and high incomes is a somewhat arbitrary process. We have chosen the middle as the middle third of the income distribution. We then define low incomes as the bottom 20 per cent and high incomes as the top 20 per cent. This leaves some households not clearly defined, these households could be categorized as lower-middle and upper-middle income households.

For interests sake we include the top five per cent and the poverty line. The poverty line used in Table 1 is half the median disposable income of *all* households including those headed by persons aged over 65 (without deducting housing costs as is used later in this research to compare relative standard of living).

As an example, for an average couple with kids, families with incomes below \$39,600 per annum are in poverty. Families with

incomes under \$54,700 are low income households while middle income families range between \$71,300 and \$111,900. High incomes families start from \$134,100 while entry to the top five per cent is at \$198,700¹.

Hypothetical Australian Families (cameos)

NATSEM has developed 16 hypothetical families that are typical of low and middle income, working age singles and families. The specifications of these hypotheticals are provided in Table 2. A detailed summary of results is provided in the appendix.

Table 2 STINMOD Hypothetical Families

Single Persons
NSA
Minimum Wage
Aged Pensioners
Single Parents (2 primary school aged children)
Single Parent, NSA
Single Parent NSA, Min Wage half time
Single Parent, NSA, Min Wage
Single Parent, PPS
Single Parent, PPS, Min Wage half time
Single Parent PPS, Min Wage
Single Parent, Fem AWE
Couples with Children (2 primary school aged children)
Couple, no private income
Couple, Min Wage one earner
Couple, 1.5 min wages
Couple, Male AWE
Couple, Male AWE + Fem 1/2 AWE
Couple, Male AWE + Fem AWE

Single Persons

The first hypothetical case is an unemployed single person with no private income who pays \$150 per week in rent². This person receives \$16,172 per annum in Newstart Allowance (NSA) and rent assistance. After housing costs, this person's disposable income reduces to

\$8,372 per annum or around \$23 per day. The single adult poverty line disposable income (after housing) is nearly twice this amount at \$15,665 per annum.

The second hypothetical transitions this single person from the previous hypothetical to full-time employment on the minimum wage (\$606 per week or \$31,500 per annum). Their benefits drop to zero and personal income taxation increases to \$2,557 per annum. By working full time on the minimum wage this person keeps around 41 cents in the dollar and in doing so works for an effective wage rate of \$6.47 per hour.

While this may be a relatively low effective wage, their disposable income after housing costs is now well above the poverty line by around \$5,500 per annum. The net saving to the government from a single person transitioning off NSA to the minimum wage is around \$18,700 per annum.

While the single persons NSA without a job example is quite clearly not only a low income household but they also fall well below the poverty line. To lift this person out of after-housing poverty a weekly increase to the NSA of \$140 per week is required. The single person on the minimum wage is in a much better financial position, well above the poverty line and between low and middle income.

Single Parents

The hypothetical cases for single parents assume that they have two children. In one case, their children are aged 6 and 8, which means they are eligible for Parenting Payment Single (PPS). In the other case, their children are aged 8 and 10, which means they would receive NSA. The choice of the age of the youngest child and the age of children affects the family payments

¹ These figures are based on the equivalised disposable income distribution but converted back to a disposable income basis. All figures relate to December 2012.

² \$150 is around the 25th percentile of the rent distribution for single persons in STINMOD12.

received and the payment received by the single parent. Once the youngest child turns 8, the parent is no longer eligible for PPS and instead receives the less generous NSA payment. In this research note we have assumed the children are all school aged. For simplicity, we assume that the parent does not need paid child care. By selecting school aged children we are, to some extent, reducing the likely call upon childcare by parents. Effectively, this is a simplifying assumption³.

Figure 1, displays for each hypothetical single person and single parent family their respective private income, government cash benefits and income taxation. Figure 2, displays their relative financial position using an equivalised version of after-housing disposable income.

Our first hypothetical single parent has no private income and in receives Parenting Payment Single (PPS). For single parents we assume a private rent of \$200 per week. In this case, the parenting payment, rent assistance, family payments and some other smaller supplements provide the single parent with an income of \$35,820 per annum. After rent payments and adjustment for household size (equivalising) this family is left just above the poverty line with an after-housing equivalised income of \$15,888 per annum. The single parent on parenting payment is a low income household but not below the poverty line.

If the single parent takes a half-time minimum wage job (\$15,756 per annum) they keep around 73 cents in the dollar of this private income as their pension is reduced and their equivalised income increases to \$23,104, implying a financial standard of living increase of around 45 per

cent compared not having a job. In terms of the disposable income distribution table they move just outside of the low income bracket.

Moving to a full-time minimum wage position is less attractive in terms of the marginal incentive with only 47 cents in the dollar of earned income kept with a further reduced pension and \$2,070 in income tax to pay. Compared to the half-time position this family's standard of living is around 20 per cent higher. A full time position may require childcare for the two children which would make the full-time position less attractive.

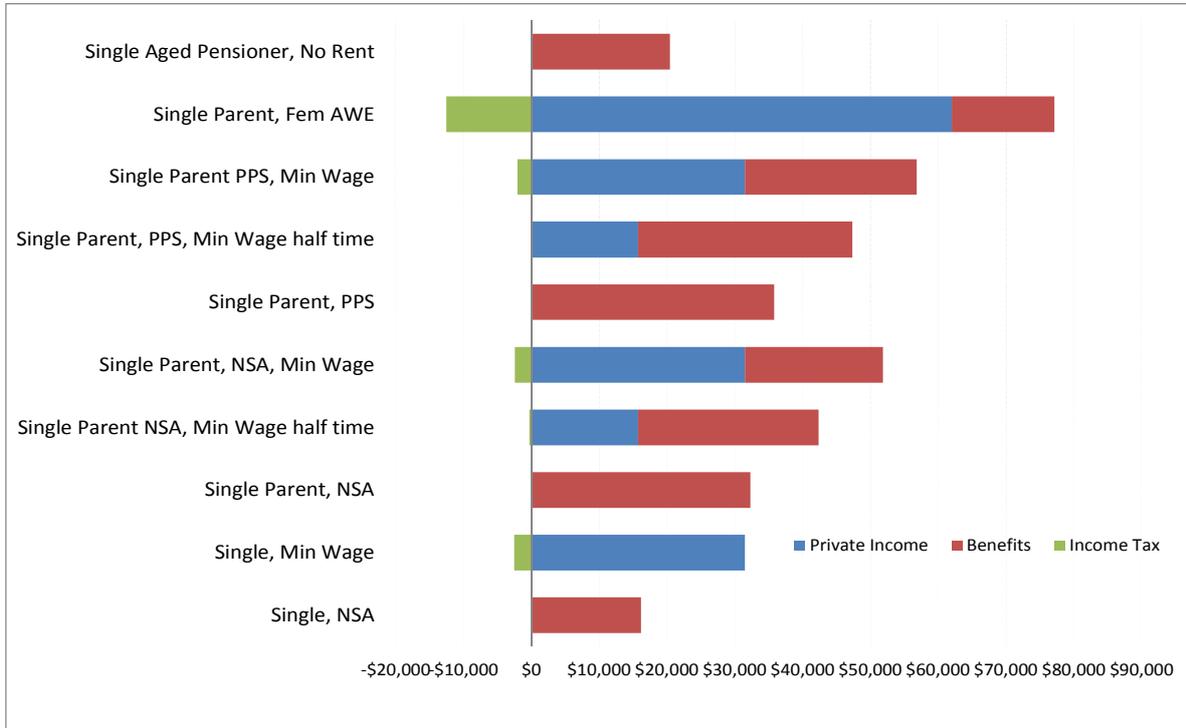
Once the youngest child turns 8 the single parent is moved on to NSA. This brings about a reduction in government payments of \$3,542 per annum and shifts this family below the after-housing poverty line. In terms of their raw disposable income they are slightly above the poverty line but well below the low income threshold as defined in Table 1 for single parents.

Recent changes to the taper rate for NSA single parents have improved the workforce incentives. These parents, like those on the more generous parenting payment lose 40 cents in the dollar as their private income increases rather than 50 or 60 cents (prior to policy change in 2013) depending on their income level. The NSA income test applies earlier than the parenting payment meaning that their financial incentives are lower than those faced by parenting payment recipients.

As the single parent moves to a half-time minimum wage position they keep 62 cents in the dollar and work for an effective \$9.90 per hour. Their financial position improves significantly (45 per cent higher than the no job alternative), shifting them out of poverty and even beyond low income status.

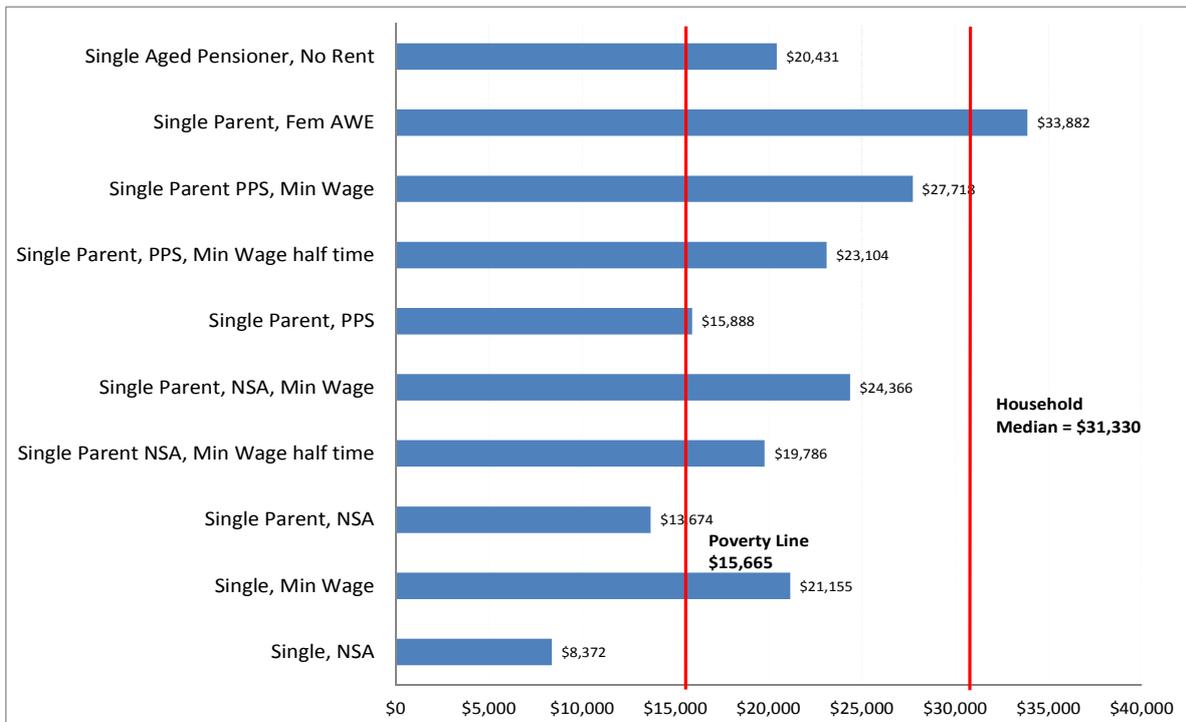
³ STINMOD does model both the childcare benefit and the childcare rebate but for simplicity and ease of comparison we have chosen not to include hypotheticals with childcare.

Figure 1, Single person and single parent hypotheticals, disposable Income components



Source: NATSEM, STINMOD12 Hypothetical Model

Figure 2, Equivalised after-housing disposable income (financial standard of living)



Source: NATSEM, STINMOD12 Hypothetical Model, STINMOD12 Distributional Model

The financial incentives deteriorate in moving from a half-time position to a full-time minimum wage position. The single parent keeps only 47 cents in the dollar as they start to pay income tax and lose much of their allowance. Compared to the half-time minimum wage cameo this family's standard of living is 23 per cent higher and the parent's wage is effectively \$7.42 per hour for the transitional hours to full-time work. The attractiveness of these extra hours will likely diminish further where childcare is required.

For comparison we also include a cameo for single aged pensioners. As most pensioners own their own home we have not included rent payments and therefore no Rent Assistance is paid. The single aged pensioner receives \$20,431 per annum in Aged Pension and other supplements. Pensioners are significantly above the after-housing poverty line and, to a lesser extent, the raw-disposable income poverty line. Their financial standard of living is much higher than either the NSA or the parenting payment families where the parent is not employed. Had we included rent of \$150 per week, the single aged pensioner would have dropped below the poverty line and their financial standard of living would also have dropped below that of NSA single parents. This demonstrates the important role that family payments make in improving the financial position of single parents.

Couple Families

Recent research by Phillips and Nepal (2012) found that couple families are less likely to experience financial stress and poverty than other household types. For example, poverty rates amongst couples with children are about half those of lone

persons and a third that of single parents (Phillips and Nepal 2012).

A couple with two children (aged 6 and 8) with neither parent working and both receiving NSA would receive \$40,242 per annum in government cash benefits. After paying a modest rent of \$250 per week and adjusting for household size, their disposable income of \$12,972 places them nearly \$3,000 below the after-housing poverty line. They are in a better financial position than the single person on NSA discussed above, due to the very low ratio of the single NSA to couple NSA payments and substantial Family Tax Benefit payments.

When one member of the couple moves into full-time employment at the minimum wage, the family's financial position is boosted significantly (48 per cent higher standard of living), although they remain a 'low-income' family. In the transition to full-time employment this family faces a steep effective tax rate of 59 cents in the dollar. If the other member of the couple works half-time at the minimum wage rate, the family keeps around 47 cents in the dollar of those earnings and their financial standard of living improves by around 18 per cent compared to the couple family with one full time (minimum wage) wage case.

In the single income case above, the transition from no private income to an average weekly earner income significantly improves the financial position relative to the unemployed household. 61 cents in the dollar are retained and the financial position improves by more than double. The family could now be considered 'middle income'. This family is now pays just over \$4,000 per year more in income tax than they receive in government cash benefits.

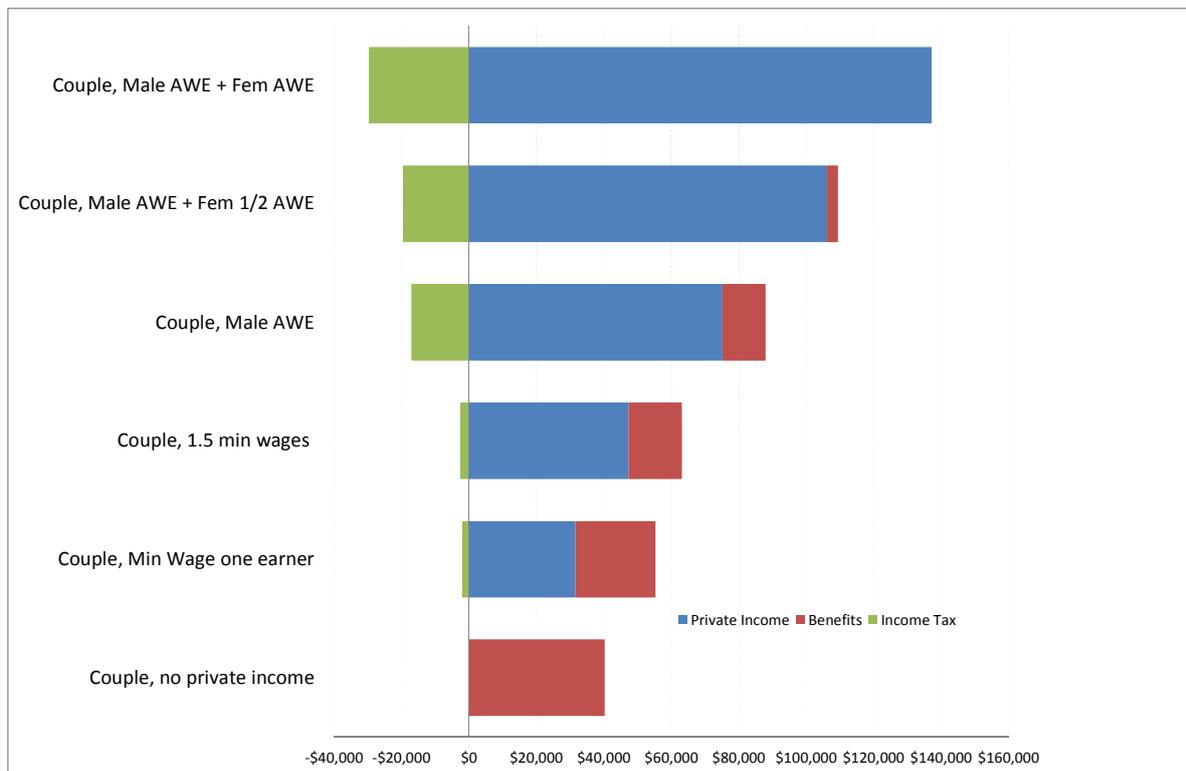
If the other member of the couple moves into part-time work (19 hours per week) at average wages, the family's financial

position improves by more than a third relative to the situation where they have one full-time AWE earner. This family keeps 61 cents in the dollar of the second earner's income. The gains are somewhat less as the second earner moves to full-time work, where the secondary earner keeps only 57 cents in the dollar due to higher personal income tax rates and the loss of some family benefits. When both members of the couple work full time at average earnings, their family is at the upper end of the middle-income bracket. They receive no

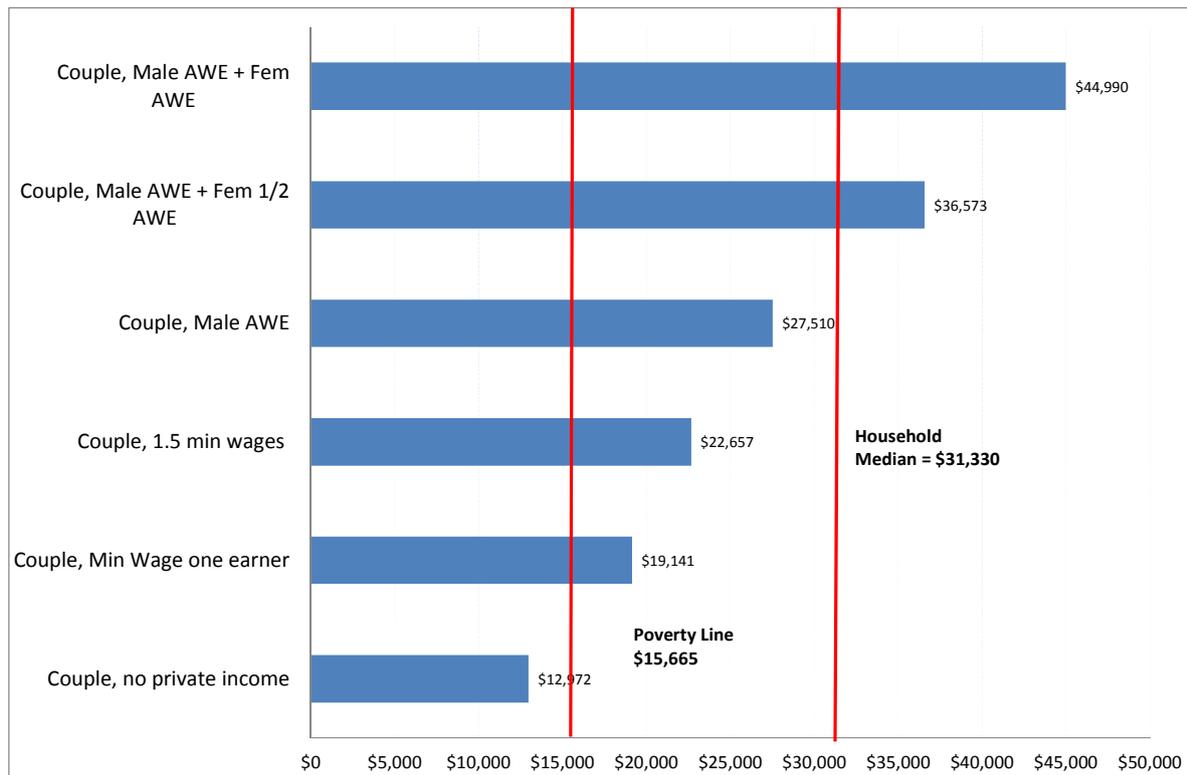
government cash benefits but pay \$29,646 in personal income tax.

Figure 3, displays for each hypothetical couple with two children their respective private income, government cash benefits and income taxation. Figure 4, displays their relative financial position using an equivalised version of after-housing disposable income.

Figure 3, Couple Family hypotheticals, disposable Income components



Source: NATSEM, STINMOD12 Hypothetical Model

Figure 4, Equivalised after-housing disposable income (financial standard of living)

Source: NATSEM, STINMOD12 Hypothetical Model, STINMOD12 Distributional Model

Conclusion

This analysis examines a number of hypothetical families to consider their relative financial position, government benefits and personal income tax liability and incentives to increase their workforce participation.

The analysis is relatively simple and does not account for childcare costs which may be applicable to some of these families particularly for longer hour working single parents and dual income couple families. The use of a simple relative poverty measure is somewhat arbitrary, however, the results provide a robust point of comparison between families of their relative financial position.

The analysis shows that the hypothetical single person/family with by far the worst financial position is the single person on

NSA. NSA would need to increase by \$140 per week to lift them out of after-housing poverty.

The analysis also finds that singles and couples with children where the parent/s are on NSA are also under the poverty line. With slightly more generous NSA payments and the help of family payments these families are much closer to the poverty line than the NSA singles without children.

While recent policy change has improved the effective tax rates for those families on NSA they still face steep average tax rates in moving to part-time or full-time work. The balance between providing a decent safety net to families and having effective incentives to work is a difficult one but one where further investigation is warranted.

One finding of particular note is that families on NSA face higher average tax rates in moving to part-time work (19 hours

per week on the minimum wage) than those on the more generous parenting payment and similar effective tax rates in moving to full-time work even though the NSA payment is supposed to be a temporary payment encouraging a return to work while the parenting payment is more long-term.

The aged pension is shown to be quite generous compared to NSA recipients or parenting payment recipients. The aged pension affords a higher standard of living than a single parent on NSA who works half-time on the minimum wage. A partial

explanation for this is the construction of the hypothetical where we assumed the pensioner had no housing costs which may not always be the case.

The distribution of family benefits provides a significant boost to the disposable incomes of low income families. The payment does taper off strongly for middle income families. The hypothetical couple family with a combined disposable income of around \$90,000 receive only \$2,324 in family payments compared to the lower income family hypothetical families who receive the maximum amount of \$16,966.

Appendix

Transitional Wages/Tax Rates	Effective Hourly Rate	Effective Tax Rate
Single - Min Wage	\$6.47	59%
Single Parent NSA - Min Wage half time	\$9.90	38%
Single Parent NSA - Min Wage	\$7.42	54%
Single Parent - 1/2 Min Wage	\$11.69	27%
Single Parent - Min Wage	\$7.47	53%
Couple - min wage	\$6.56	59%
Couple - min wage + 1/2 min wage	\$7.47	53%
Couple - Male AWE, Fem 1/2 AWE	\$19.26	39%
Couple - Male AWE, Fem AWE	\$17.89	53%

** calculations are based on a comparison with the cameo in the row above or in the case of Single – Min Wage or Couple – Min wage, no employment.

Family Type	Primary Income Earner (annual)	Secondary Income Earner (annual)	Household Private Income (annual)	Government Benefits (annual)	Income Tax (annual)	Rent (pw)	Disposable After-Housing Income (annual)	Equivalised Income (annual)
Single Persons								
NSA	\$0	na	\$0	\$16,172	\$0	\$150	\$8,372	\$8,372
Minimum Wage	\$31,512	na	\$31,512	\$0	\$2,557	\$150	\$21,155	\$21,155
Aged Pensioners	\$0	na	\$0	\$20,431	\$0	\$150	\$20,431	\$20,431
Single Parents (2 primary school aged children)								
Single Parent, NSA	\$0	na	\$0	\$32,278	\$0	\$200	\$21,878	\$13,674
Single Parent NSA, Min Wage half time	\$15,756	na	\$15,756	\$26,620	\$319	\$200	\$31,658	\$19,786
Single Parent, NSA, Min Wage	\$31,512	na	\$31,512	\$20,318	\$2,445	\$200	\$38,985	\$24,366
Single Parent, PPS	\$0	na	\$0	\$35,820	\$0	\$200	\$25,420	\$15,888
Single Parent, PPS, Min Wage half time	\$15,756	na	\$15,756	\$31,610	\$0	\$200	\$36,966	\$23,104
Single Parent PPS, Min Wage	\$31,512	na	\$31,512	\$25,308	\$2,071	\$200	\$44,349	\$27,718
Single Parent, Fem AWE	\$61,984	na	\$61,984	\$15,178	\$12,551	\$200	\$54,211	\$33,882
Couples with Children (2 primary school aged children)								
Couple, no private income	\$0	\$0	\$0	\$40,242	\$0	\$250	\$27,242	\$12,972
Couple, Min Wage one earner	\$31,512	\$0	\$31,512	\$23,769	\$2,084	\$250	\$40,197	\$19,141
Couple, 1.5 min wages	\$31,512	\$15,756	\$47,268	\$15,868	\$2,557	\$250	\$47,579	\$22,657
Couple, Male AWE	\$75,140	\$0	\$75,140	\$12,725	\$17,095	\$250	\$57,771	\$27,510
Couple, Male AWE + Fem 1/2 AWE	\$75,140	\$30,992	\$106,132	\$3,217	\$19,545	\$250	\$76,804	\$36,573
Couple, Male AWE + Fem AWE	\$75,140	\$61,984	\$137,124	\$0	\$29,646	\$250	\$94,478	\$44,990

Source: STINMOD12, NATSEM, ABS

*AWE relates to ABS Average Weekly Earnings May 2012 estimates for male or female full-time ordinary earnings, cat number 6302.0

References

ABS (2012), *Average Weekly Earnings, Australia, May 2012*, 6302.0.

ABS (2011), *Household Income and Income Distribution, Australia, 2009-10*, 6523.0.

Phillips, B, Nepal, B (2012) *Going Without: Financial Hardship in Australia*.

MORE INFORMATION

Further publications relating to this programme of research on income can be found on NATSEM's website at www.natsem.canberra.edu.au.

To learn more about Income, wealth and housing research at NATSEM, contact:

Ben Phillips: Ph. +61 2 6201 2760
ben.phillips@natsem.canberra.edu.au