

**Lone Mothers Work and Welfare:
An Assessment of the Impact of Taper Rate Reduction and Related
Reforms**

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Paper prepared for the Social Policy Evaluation and Analysis Centre, Research School of Social Sciences, Australian National University. The Centre is largely funded by the Department of Family and Community Services (FaCS). We have received useful comments from seminar presentations at the Australian Defense Force Academy, the University of Melbourne, Macquarie University, the Research School of Social Sciences at the Australian National University and the Department for Family and Community Services. The views expressed are those of the authors and may not be those of the Minister for Family of Community Services, FaCS or the Australian Government.

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Abstract

This paper documents some of the financial outcomes for lone mothers from the Australian tax and welfare reforms of July 2000. It shows, despite the wide ranging nature of the changes and the expressed government desire for significant reforms, that the income and work incentive effects of income tax and pension taper reductions were trivial for lone mothers. The two most important components of the reform were more generous family allowances and the extension of income support to a significant group of lone mothers whose high private incomes had previously excluded them from a lone parent pension. The reforms not only drew better off lone mothers back into pension support but also delivered the largest income increases to them. Ninety per cent of the better off group had a long history of welfare support. These aspects of the July 2000 reforms appear to encourage lone mothers to stay on income support for longer periods of time.

Key-words; Welfare Reform, Lone Parents, Pension Tapers, Work Incentives

JEL Classification: H55, I38, J19

I Introduction

Access to the Australian income support system is tightly targeted by the application of income testing. The level of payments for income support and family allowance for dependent children is also income tested and the resultant withdrawal tapers applied as private income increases are substantial.¹ When these withdrawal tapers are added to income taxes they produce high effective marginal tax rates (EMTR's). Those who combine income support and employment income usually face EMTR's in the range of 60 to 90 per cent. (Beer, 2003).

It is commonly believed that withdrawal tapers, and the high EMTR's they produce, discourage employment by welfare recipients, and this discouragement lengthens income support spells, leads to lower income and fosters poverty. There is little direct Australian evidence, however, as to the impact of these tapers on the actual behaviour of welfare recipients. In July 2000, the Australian government introduced "A New Tax System for Australians" (ANTS) and the outcomes from these reforms can now be used to throw some light on these matters.² As a result of ANTS, income taxes were reduced,

¹ The Australian system applies income and asset testing to establish entitlement and payment levels; but among our population of interest it is overwhelmingly the income test that matters.

² The reforms were an outcome of three different sets of forces. The primary thrust was the introduction of the goods and services tax and the general desire to reduce income taxes and increase work incentives throughout the community. The second was a desire to increase assistance to middle income families

tax-free thresholds were increased for low income earners and withdrawal tapers were adjusted downwards for all welfare recipients. This paper uses these reforms to assess the effectiveness of taper changes in terms of the welfare dependency, employment and income outcomes for lone mothers with dependent children.

In many ways a focus on lone mothers with dependent children is ideal as they were subject to the most significant taper reductions. Their income support withdrawal taper was reduced from 50 to 40 per cent of each additional dollar of private income. In addition, the withdrawal taper for family allowances for dependent children was reduced from 50 to 30 per cent.

Lone mothers are also a large group among welfare recipients and their numbers have been growing substantially. In March 2000, just before the July reforms, 363,500 lone mothers (more than 80 per cent of all lone mothers with dependent children aged under 16 years) were accessing the Parenting Payment Single pension (PPS) for income support. Their dependent offspring, supported primarily by Family Allowances, accounted for 15 per cent of the nation's children under 16 years of age.

Another feature of this group is that a significant proportion combine employment and income support and thus changes in income support tapers are likely to be

with more generous allowances for children, particularly for one income families. The third objective was to simplify the welfare system (Treasurer, 1998).

particularly important.³ Twenty-five per cent of lone mothers on income support were involved in the labour market at March 2000 and, on average, they earned \$219 per week. After the application of the income support withdrawal taper this only added \$144 per week to taxable income. Of course, after the additional costs of going to work and childcare, the increase in disposable income from employment would be much less (Beer, 1998 and 2002; Dawkins, 2002).

Finally, recent research, which takes into account all income support programs and multiple income support spells, indicates that lone mothers access income support for substantial periods, perhaps for twelve or more years over the time they are responsible for dependent children (Gregory and Klug, 2001, Yi-Ping Tseng and Wilkins, 2003). There is some evidence that after the youngest child turns 16 years of age, a substantial proportion of lone mothers, who no longer qualify for a lone parent pension, move to another income support program such as the Disability Support Pension and continue their dependency on the income support system (Chalmers, 1999). Concern is also beginning to emerge about the inter-generational transfer of welfare dependency as children of lone mothers dependent on income support for long periods may exhibit a

³ It is sometimes suggested that those who combine employment and income support are more likely to terminate an income support spell (Flatau and Dockery, 2001; Barrett, 2002). Of course, increasing the amount of employment income consistent with income support could have the opposite effect and increase the period of time on welfare, as pension and additional private income could provide a more satisfactory long run outcome for individuals.

higher propensity to move onto income support when they become adults (Pech and McCoull, 2000). In such an environment it is particularly important to understand the effects of high taper rates and to evaluate the effectiveness of welfare taper reductions.

Our analysis of the effects of the taper reforms embedded in ANTS on lone mothers proceeds as follows. The next section, Part II, provides a descriptive background of the welfare and tax system for lone mothers before the major policy changes. Part III documents the policy reforms and explores the change in income and employment incentives. Part IV investigates the extent to which employment may have responded to changed incentives and the extent to which combining income support and employment may have increased. Part V offers concluding remarks.

II The Pre-Reform Background

The pre-reform welfare system was extremely complex so we spend some time discussing the system at March 2000, just before the July 2000 reforms. The system can be simplified and presented as three modules: the determination of taxable income, income taxes and rebates, and then family allowances. This is presented in Table 1 which is constructed for a lone parent with no child maintenance, childcare or rent assistance, and having one child aged under five years.⁴ Each row lists various income

⁴ Lone parent families with one dependent child under five years of age account for 19 per cent of pension recipients, but our key findings do not significantly differ across family compositions. Rent

sources and tax obligations. Each column represents different levels of private income.

Part A: Taxable income

Part A of Table 1 describes the derivation of taxable income.⁵ The first row lists private income, which we treat as though it is derived from employment. The second row lists pension income. The sum of these two income sources is taxable income.

Three key parameters determine pension income. The first parameter is the base pension entitlement when private income is zero (Row 2, Column 1). For some time now this has been set at 25 per cent of average total male weekly earnings. The second parameter determines the range of employment income allowed without affecting the pension amount (Row 1, Column 2). This is called the taper free area or the earnings disregard. The third parameter is the pension taper applied to pension income if private income exceeds the earnings disregard. In March 2000, the pension taper was set at 50 per cent so that each additional \$1 of private income in excess of the earnings disregard of \$63 per week reduced pension income by 50 cents.

These three policy parameters play two important roles. First, in conjunction with private income, they determine taxable income (Row 3). Second, they determine the pension cut-off point which is the private income level above which government no

assistance, child maintenance and child care assistance present a new range of issues and questions that are put aside in this paper.

⁵ These calculations are taken from welfare entitlement calculators provided by the Department of Family and Community Services.

longer provides pension income (Column 6). In March 2000, the pension cut-off point for a lone parent with one child under five years of age was \$440.40 per week (Column 6). Increasing the base pension income, extending the free area, and reducing the pension taper, all move the pension cut-off point upwards to higher income levels.

Part B: Income taxes and rebates

Part B of Table 1 lists income tax obligations and tax rebates. The community wide income tax schedule is applied to taxable income (Row 3) to generate tax payable (Row 4). However, lone mothers were entitled to three tax rebates – the Sole Parent Rebate, the Pension Rebate and the Low Income Rebate. The Pension and Low Income Rebate were also subject to tapers. These three rebates, which are aggregated in Row 5, are deducted from tax payable to calculate the tax liability (Row 6).

The impact of these rebates was considerable. For example, at March 2000, the community wide tax-free threshold was \$5,400 per annum. But a lone mother, with one child under five years of age, did not pay income tax until total taxable income exceeded \$16,640 per year. As a result, income tax obligations of lone parent pensioners were relatively unimportant. The important “tax” element was the 50 per cent taper on the pension amount as private income increases which is imposed at a higher rate than the marginal income tax rate of 20 per cent, and triggered at a lower level of taxable income, \$12,948 per annum, rather than the \$16,640 for income tax.⁶

⁶ Once the lone parent is liable for income tax, in our example at a taxable income level of \$16,640 and private income of \$10,660, the tax rate applied is more than the marginal rate on the income tax schedule

Table 1
The Calculation of Weekly Disposable Income for Lone Parent Pensioners*
March 2000

	1	2	3	4	5	6	7	8	9	10
Part A										
1 Private Income	0.00	63.00	200.00	300.00	400.00	440.00	556.00	600.00	700.00	800.00
2 Pension Income	186.00	186.00	117.50	67.50	17.50	0.00	0.00	0.00	0.00	0.00
3 Taxable Income	186.00	249.00	317.50	367.50	417.50	440.00	556.00	600.00	700.00	800.00
Part B										
4 Tax Payable	16.43	29.03	42.73	52.73	65.45	73.10	96.66	114.04	148.04	188.27
5 Rebates**	53.71	52.21	43.64	37.39	30.37	25.40	24.19	24.19	24.19	24.19
6 Tax Liability	0.00	0.00	0.00	15.34	35.08	47.70	73.29	98.84	134.34	176.08
Part C										
7 Family Allowances	85.66	85.66	85.66	85.66	85.66	85.66	33.84	12.00	12.00	12.00
8 Disposable Income	271.66	334.66	403.16	437.83	468.08	477.96	493.11	513.16	577.66	635.92
9 EMTR***	0.0	0.0	50.0	65.3	69.7	75.3	86.9	54.4	35.5	41.7
# AETR****	0.0	0.0	34.3	44.6	50.9	53.1	60.2	59.8	56.3	54.5

Notes:

* Lone mother and one dependent child under 5 years of age, no rent assistance, no child maintenance or childcare assistance.

** Pension Rebate	26.63	25.13	16.57	10.32	4.07	0.00	0.00	0.00	0.00	0.00
Sole Parent Rebate	24.19	24.19	24.19	24.19	24.19	24.19	24.19	24.19	24.19	24.19
Low Income Rebate	2.88	2.88	2.88	2.88	2.11	1.21	0.00	0.00	0.00	0.00

*** EMTR is effective marginal tax rate.

**** AETR is average effective tax rate (relative to no private income).

Part C: Family Assistance

Part C of Table 1 aggregates income from all family allowances. There were ten different types of family allowances for lone mothers, some of which varied by the age and number of children. Family allowances, which are quite substantial, are not subject to income taxes but are subject to various family allowance tapers that become

because two of the tax rebates are still subject to tapers in this income range. But, it is clear from Row 5 of Table 1 that the rebate taper effect is quite small since the large taper effects occur at income levels before income tax is paid.

operative at income levels above the pension cut-off point. For a lone parent with one child under five years of age, the total family allowance was about 45 per cent of the base pension entitlement. For two children, the total family allowance was about 80 per cent of the pension. The sum of after tax income and family allowances is listed in Row 8 as disposable income.

A comparison of disposable income (Row 8) with private income (Row 1) indicates that a lone parent, with one dependent child under five years, did not become a net tax payer – in the sense that disposable income is less than private income - until their total income exceeds \$25,000 per year.

The Effective Tax Rate

It is usual to summarise work incentive effects of income support by calculating the effective tax rate. To the left of the pension cut-off point the effective tax rate has two tax elements – the pension taper and the income tax liability after allowance for the various rebates. The effective tax rate is the income loss from these two “tax” sources generated by a given level of private income.

There are two effective tax rates included in Table 1. Row 9 measures the effective marginal tax rate (EMTR) which is derived by moving across columns and comparing the net addition to disposable income with the increment in private income that generates it, and then subtracting this ratio from unity. Thus, for the first \$63 of private income, the marginal effective tax rate is zero because the tax-free area does not attract the pension taper and there is no income tax liability because of the rebates. From the free area until income tax liabilities are incurred at \$205 private income per week, the

marginal effective tax rate for each additional dollar earned is 50 per cent, the amount of the pension taper. After this the EMTR is approximately 70 per cent as income tax which is paid at a marginal rate of around 20 per cent is added to the pension taper.

Row 10 measures the average effective tax rate (AETR) which is the average tax paid in response to increases in private income relative to the base case of zero private income. It is measured as one minus the ratio of the change in disposable income, calculated from moving from no employment income to a positive gross private income, divided by that gross private income. The average effective tax rate peaked at 60.2 per cent at a gross private income of \$556 per week.

After the pension cut-off point the pension taper is no longer operative but family allowance tapers begin to operate and their effects largely replace that of the pension taper. For example, the EMTR for the last \$100 of private income just below the pension cut-off point, is much the same as that of the first \$100 of private income just above the pension cut-off point. The failure of the EMTR to change significantly when income moves across the pension cut-off point is particularly interesting. It suggests that adverse work incentives for lone mothers operate with similar force both inside and outside the income area of pension entitlement. That is the combination of the family allowance taper and income tax is very similar to the combination of the pension taper and income tax. The slightly higher taper rate for the pension relative to family allowances is being offset by the slightly lower marginal tax rate in the pension income range. This might suggest from a behavioural viewpoint there may be no special

significance of the pension cut-off point. But there is one further complication to be considered.

The Pensioner Concession Card

Lone parent pensioners are entitled to a pensioner concession card that brings a range of potential non-taxable concessions that vary by state and territory. These concessions can be quite extensive and include for example land rate reductions, reduced car registration fees, subsidised public transport and medical subsidies. These benefits, which can be quite valuable, are lost once the lone parent is no longer entitled to a pension.⁷ The loss, which effectively operates as a one-off lump sum tax when private income passes the pension cut-off point, suggests that there are substantial penalties involved to being employed at income levels just to the right of the pension cut-off point. Once the value of the pensioner concession card is included in the calculation of disposable income, the loss of these concessions probably produce an EMTR in excess of 100 per cent. As a result, there should be a substantial employment shadow just to the right of the pension cut-off point in which employment of lone mothers is quite low.

III The Reforms

The July 2000 tax and welfare reforms accompanying the introduction of the Goods and Services Tax (GST) appeared to be quite extensive and for lone mothers affected each of the three modules presented above. The government continually

⁷ The pensioner concession card entitlement has other complexities. The entitlement also often extends for a limited period after leaving income support.

referred to the need to adopt the tax and welfare reforms to “provide more incentives to work” and to “deliver lower taxes” (Costello, 1998, p4). To explore the extent to which the reforms provided lower taxes, higher incomes and better work incentives, Table 2 lists the income differences between the pre and post reform periods at March and July 2000 for each of the three key parts of the welfare and tax system.

Table 2
The July 2000 TAX Reforms
Income and Work Incentive Changes for Lone Mothers*

Private Income (Per Week)	March 2000 Proportion of Lone Mother Pensioners 1	Changes in \$ between March 2000 and July 2000						Net Total Effect 8	Additional Employment Income 9
		Part A		Part B			Part C		
		Pension Increase 2	Gross Taper Effect 3	Net Taper Effect 4	Tax Effect 5	Net Taper/Tax Effect 6	Children Effect 7		
0.00	74.8	7.45	0.00	0.00	0.00	0.00	25.15	32.60	0.00
63.00	3.1	7.45	0.00	0.00	0.00	0.00	25.15	32.60	0.00
200.00	8.6	8.69	13.70	10.16	-12.52	-2.86	25.15	30.98	-1.62
300.00	5.7	7.54	23.70	16.00	-11.93	3.92	25.15	36.61	4.01
400.00	6.0	7.27	33.70	16.83	-11.99	6.04	25.15	38.45	5.85
440.00	1.4	6.84	35.20	21.93	-13.48	9.87	25.15	41.95	9.35
556.00	0.4	0.00	0.00	0.00	-8.84	-8.84	70.08	61.24	28.64
600.00	0.0	0.00	0.00	0.00	-20.54	-20.54	78.70	58.16	25.56
700.00	0.0	0.00	0.00	0.00	-16.54	-16.54	56.60	40.06	7.46
800.00	0.0	0.00	0.00	0.00	-6.31	-6.31	56.60	50.29	17.69

* Lone mother and one dependent child under 5 years of age, no rent assistance, no child maintenance or childcare assistance.

Part A: Taxable Income and the Taper Reduction

Two tax reform changes affected taxable income. Column 2 of Table 2 lists the effective addition to the base pension of sole parents (offered as part compensation for increased

prices generated by the GST).⁸ Column 3 lists the effect of the more important change, which was the reduction in the pension taper from 50 to 40 per cent. To measure the income effect of the pension taper reduction we take the March 2000 welfare and income tax system and adjust the taper rate from 50 to 40 per cent. We then compare March gross income levels (with a 50 per cent taper) with July gross income levels (with a 40 per cent taper) at each level of private income. At this point no allowance is made for any interactions with the tax system. There are two effects of this taper reduction (see Figure 1 and Table 2).

First, the taper reduction produces an income effect. Taxable income is increased at each income level where the taper applies, beginning immediately outside the earnings disregard and reaching a maximum at the old pension cut-off point where taxable income is increased by \$35.20 a week (Column 3 of Table 2).

Second, there is an entitlement effect. The taper reduction extended the pension entitlement range from \$440 to \$556 employment income per week. This entitlement change is substantial, moving the income cut-off point for the pension from the 76th to 87th percentile of the female weekly part-time earnings distribution, and from the 14th to 34th percentile of the female full-time weekly earnings distribution. In this new income range the gross income effect of the taper reduction quickly falls from the maximum effect of \$35.20 at the old pension cut-off point to zero at the new pension cut-off point.

⁸ The pension increase was \$7.45 at zero earnings. The numbers in Column 2 are also affected by the marginal adjustment made to the free area for those who have earnings.

It is apparent from Column 3 that the taper reduction was a policy change that especially favoured lone mothers with high levels of earned income. It does this in both the ways listed above. Among the old eligible group, OE of Figure 1 - those to the left of the pre-reform \$440 pension cut-off point - the *income* effect delivers the largest increases in weekly income to those with the highest income. In addition, the taper reduction extends the pension *entitlement* to a new eligible (NE) group of lone mothers whose previous income was sufficiently high that it excluded them.

When a taper reduction increases gross income it may increase tax obligations. Column 4 lists the net taper effect, which is the additional net income generated by the taper reduction when the March 2000 tax schedule is applied to the income increases. Where tax obligations apply, the tax effect is substantial and, as a result, the 10 percentage point taper reduction is not as effective at increasing work incentives as might have first been thought. Among the old eligible group, OE, the maximum net income effect, which occurs at the old pension cut-off point, is marginally over four per cent of total income, or \$21.93 per week. The taper reduction on average adds \$3 to \$4 net income for all lone parent pensioners, and \$12 to \$13 per week for the 25 per cent of lone mothers who are employed.

Part B: The Tax Reforms

We measure the tax reform effects after controlling for the taper reduction. All other parameters except tax changes are kept constant at March 2000 levels and the results are presented in Column 5. When we first encountered the results of this calculation we were quite surprised. Despite government rhetoric as to the extent of tax reductions and

how they would advantage all groups, the tax obligations of lone mothers were increased by the income tax component of the ANTS changes.

At first it had seemed obvious to us that disposable income and work incentives would be increased by the tax reforms. For the general taxpayer the tax-free threshold was extended from \$5,400 to \$6,000 and the lowest marginal tax rate was reduced from 20 to 17 per cent. Despite these changes the income tax obligations of lone mothers increased all the way through the income range to \$800 per week. For example, for a lone parent with private earnings of \$200 a week, income taxes increased by \$12.52 per week. How did this happen? The mechanical answer is that the tax reform process removed the substantial Sole Parent Rebate. The loss of this tax rebate moved the tax threshold for lone mothers downwards from \$16,640 to \$14,787 and this adjustment dominated marginal income tax reductions and the increase in the general tax free threshold.

**Figure 1 Parenting Payment Single with One Child under 5 years of age
Taper and Entitlement, March and July 2000**

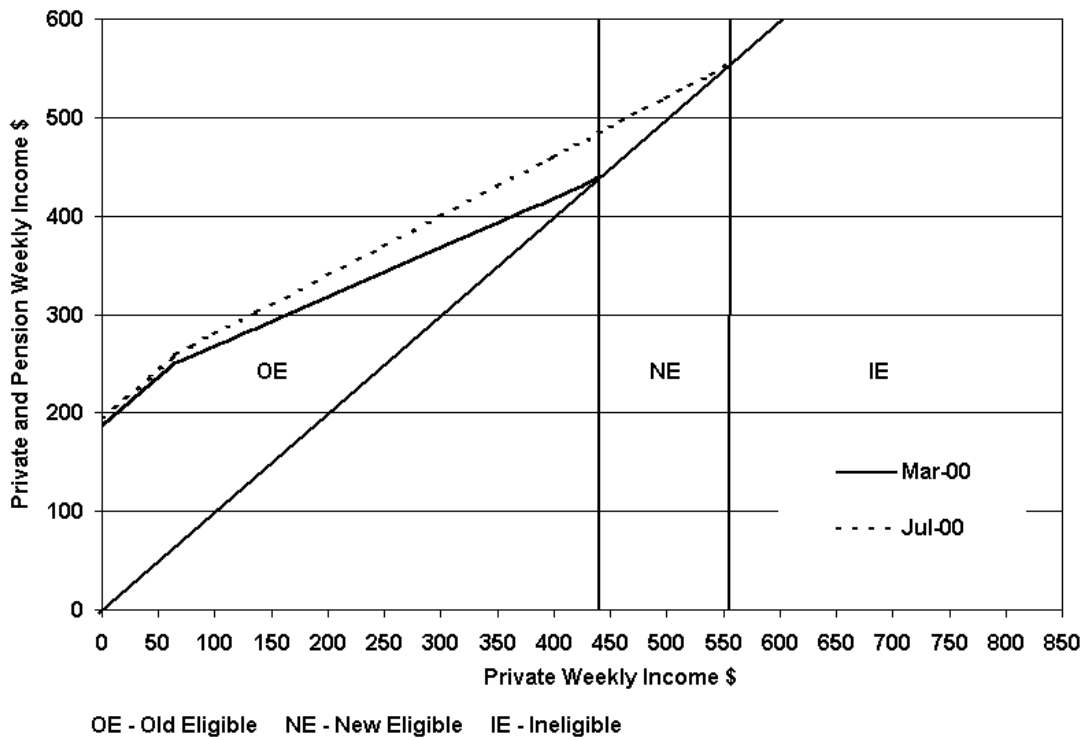
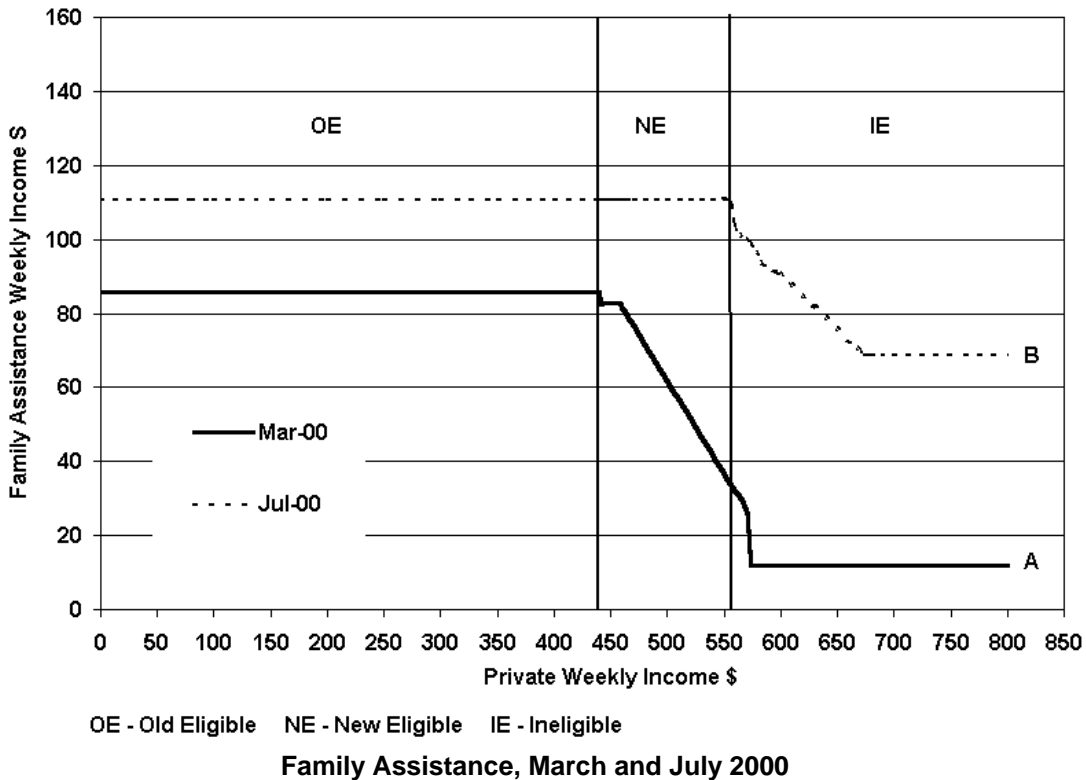


Figure 2 Parenting Payment Single with One Child under 5 years of age



Column 6 of Table 2 lists the net effect of taper and tax changes by comparing after tax income in March and July 2000 but keeping the entitlement fixed at March levels. It is obvious that very little has changed. For income levels less than \$300 a week there was no increase in after tax income as the increased tax effect offset the reduced taper effect. For earned income levels between \$300 a week and the old pension cut-off point of \$440.40, after tax income increased by an average of \$5 as the positive taper effect dominated the negative tax effect. Above the old pension cut-off, the July 2000 tax reforms lead to more tax being paid for income levels up to \$800 per week.

What led government to increase taxes among lone mothers and not move towards significantly better work incentives? There seem to be two possible explanations. One is that the interactions of the tax and welfare systems were so complex that government did not know that that its reform objectives were not being met for this group. The second possible explanation is that given the various constraints that are inevitably involved in an extensive reform process, the government knew that its work incentive objectives would not be met for this group and that substantial reform would need to wait for another day.

Part C: Family Assistance

For lone mothers the largest reforms were associated with family assistance. There were four aspects to these reforms. First, ten family assistance measures were rolled into two, Family Tax Benefit Part A and Family Tax Benefit Part B. Second, the taper

on family allowance was reduced from 50 to 30 per cent. Third, for one dependent child under five years the new family allowance taper became operative at \$28,908 a year rather than \$22,901. Finally, the income cut-off point for more than minimum family payments was extended considerably from \$29,796 to \$35,048 per annum.

These changes in family assistance delivered large income increases to all lone mothers with eligible dependent children (Column 7, Table 2). For those with no private income or child support, and one dependent child under 5 years of age, the increase was \$25.15 per week. This was a uniform increase up to the old pension cut-off point after which additional income from the change in family payments increased quite sharply. As with the tax and taper reforms these changes strongly favoured lone parent pensioners with the highest income levels. In this instance, most of the income gains went to the new eligible group of lone mothers who were previously excluded from pension entitlement because their private income was too high.

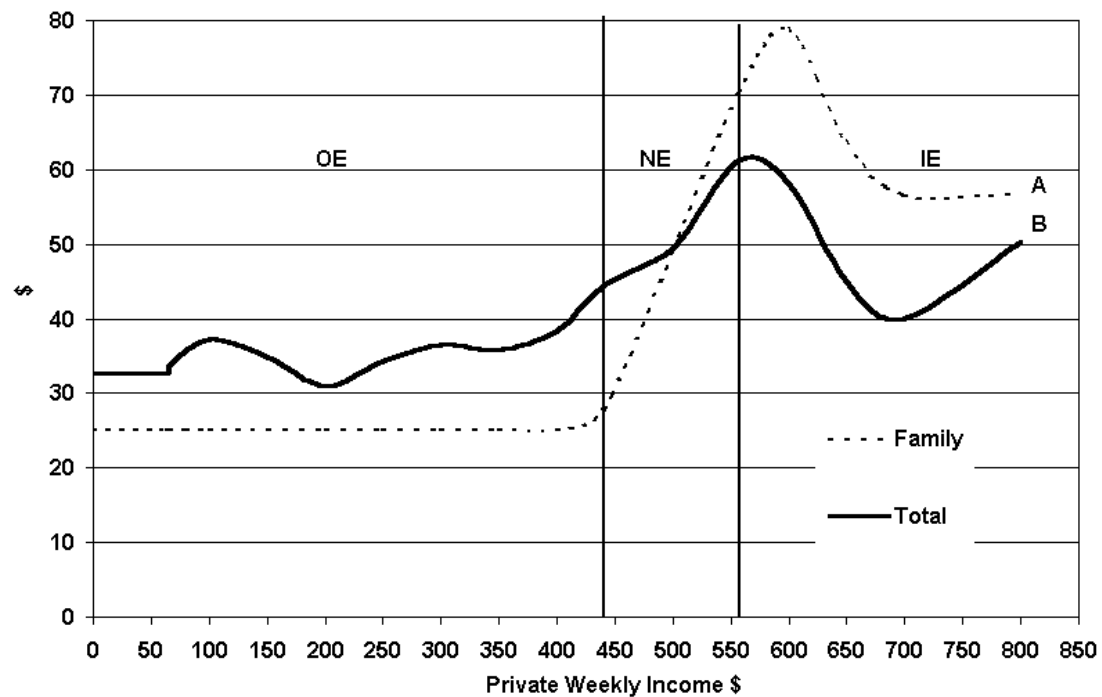
How this came about is illustrated in Figure 2, which presents a stylised picture of the family assistance system before and after reform. The old family allowances system is represented by line A where the vertical axis measures the level of family assistance and the horizontal axis the level of private income. The new family assistance system is represented by line B. The two vertical lines represent the pre and post reform pension cut-off points. The new maximum family assistance rate is higher and extends to the new pension cut-off point after which the taper is 30 per cent, rather than 50 per cent, until the minimum payment rate, which is also higher, is reached. The vertical distance between line A and line B represents the net gain from the family assistance reform,

which peaks just after the new pension cut-off point.

Part D: The Total Reform Effect

The total net income effects of the reforms are calculated by subtracting the difference in disposable income between March and July 2000 (Column 8, Table 2). Figure 3 plots these changes and the contribution of tax and taper changes. The gap in Figure 3 between line A (the effect of the change in family allowances) and line B (the change in disposable income) measures the change in the base entitlement, income tax and pension taper. There are a number of clear patterns.

Figure 3 Parenting Payment Single with One Child under 5 years of age



OE - Old Eligible NE - New Eligible IE - Ineligible

Total and Family Assistance effects on Disposable Income, July 2000 Tax Reforms

Consider additions to disposable income. There are three groups that seem to have been differently affected; the old eligible group, OE, the new eligible group, NE, and

the ineligible group IE (those just above the new pension cut-off point). We know from the FaCS administrative data the number of lone mothers receiving payment in OE and NE. We do not know how many lone mothers are in IE or their income distribution. However, our best guess is that there are perhaps 85 per cent of lone mothers in the OE range, 3 per cent among NE and 12 per cent above the new cut-off point.⁹ It is important to keep these proportions in mind because the largest income changes impact primarily on the very small group of lone mothers in NE.

Lone mothers in the old eligible group gained considerable income from the reforms, something of the order of \$35 per week. Almost all the increase came from changes in the base rate of family allowances rather than from changes in the pension entitlement, income tax and tapers (Columns 2, 6 and 7, Table 2). Putting aside indexation adjustments, the change in family allowances accounts for 100 per cent of the change in income for those not working (75 per cent of lone mothers), and for 93 per cent of the income change of those employed (25 per cent of lone mothers).

The new eligible group, NE, received significantly larger income gains, about 50 per cent more than the old eligible group. All the gains arise from the base increase in family allowances, and the difference between the old and new income levels at which the family allowance tapers begin and finish (see Figure 2). Over this income range, net tax and taper effects make very little net contribution to income.

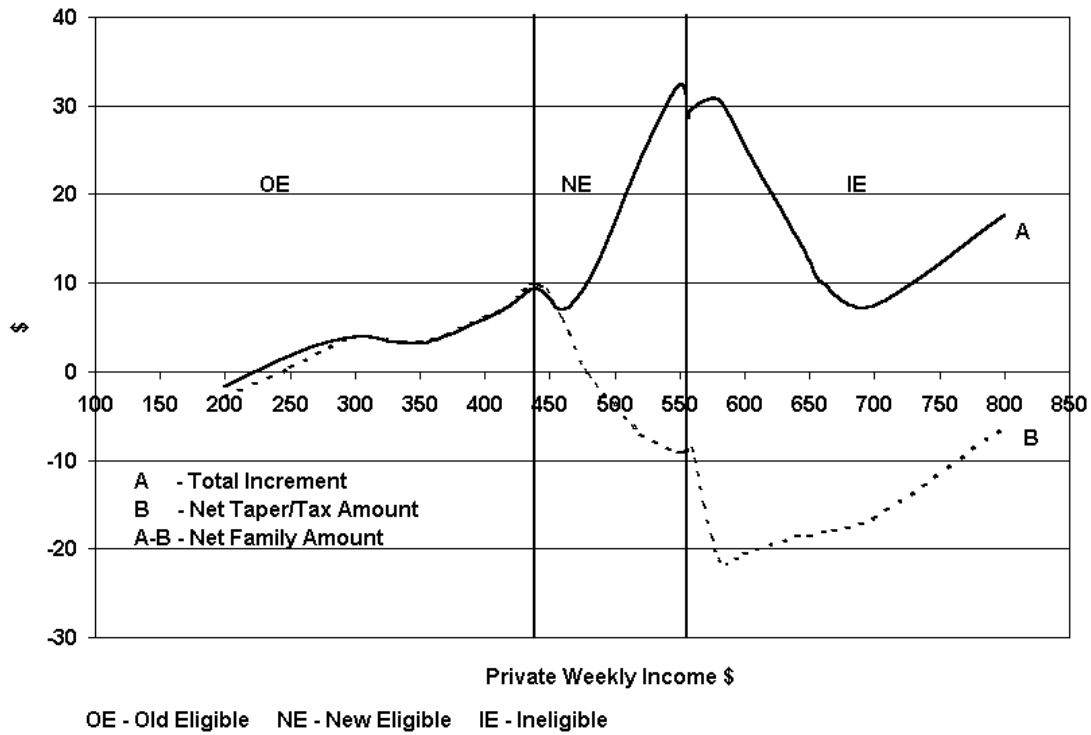
⁹ Derived from comparing data from the ABS, Labour Force Status and Characteristics of Families, Australia, Cat No 6224.0, and administrative data from FaCS.

Among ineligible lone mothers, IE, there were also considerable income increases which peaked just outside the new pension cut-off point. Once again most of these gains flowed from the family assistance reforms rather than tax effects which make a negative contribution.

Consider the change in work incentive subsidies which are calculated by subtracting the additional income available at each employment income level from the base increase in disposable income at zero private earnings (Column 9, Table 2). These changes appear to be trivial for most individual lone mothers. For lone mothers who were under the pre-reform pension cutoff point the average work incentive effect is an additional \$4.95. The decomposition of the additional work incentives into its component effects is illustrated in Figure 4 which plots the additional net income levels associated with each level of employment income (line A), and the contribution of tax and income support taper changes (line B). The gap between line A and line B reflects the family allowance work incentive changes.

Among the 85 per cent of lone mothers in the old eligible group, all the change in work incentives arise from tax and transfer effects because over this income range the change in family allowances was constant. The largest increase in net income from employment is very small, less than \$4 a week for those earning less than \$300 a week, increasing to a peak of \$9.35 per week at \$440 a week.

Figure 4 Change in Employment Rewards

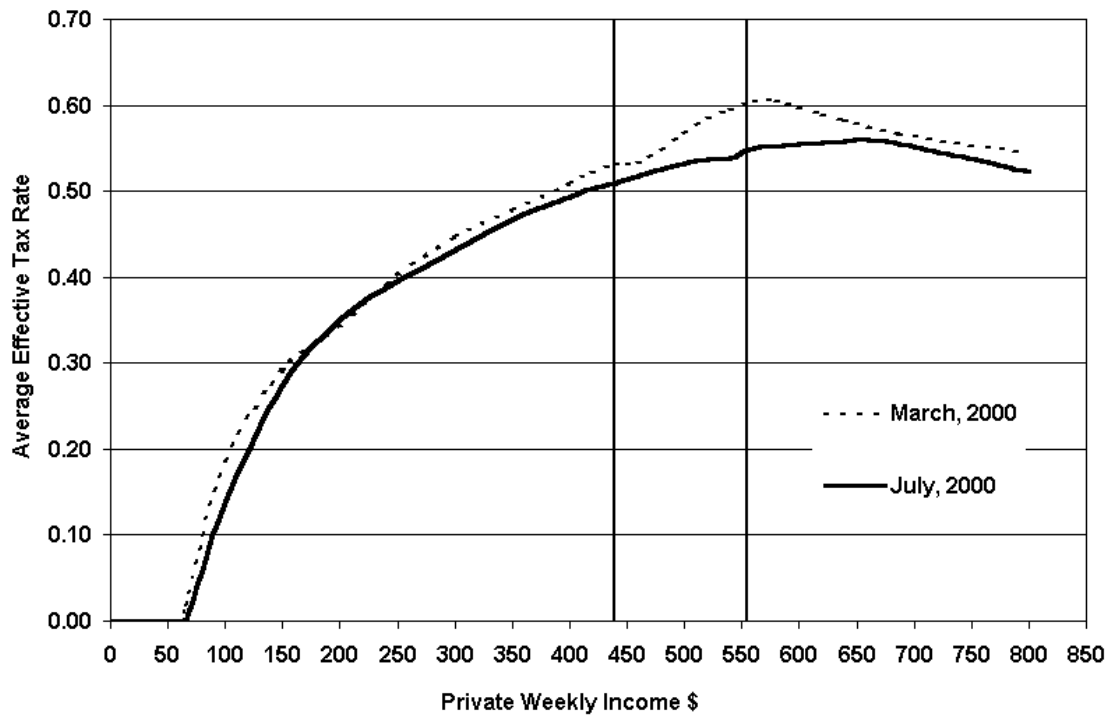


Since all lone mothers on income support received their largest income increases from family allowances, whether they are employed or not, this might reduce labour market incentives since additional income is available without labour market involvement. It is likely that the potential negative effect on employment arising from this source will dominate any work incentive effect. In other words the income effect from a higher level of non-labour income available to all lone mothers could dominate the smaller wage effect of an increased net wage available when participating in the labour market.

For the 3 per cent in the new eligible group the change in work incentives is much larger, peaking at \$30 at the new pension cut-off point. For this group, all positive work incentive changes came from family allowance changes as the tax and pension taper effects were generally negative.

Finally, the increased work incentives for those just outside the new pension cut-off decline quickly. The additional work incentive effect also arises primarily from the change in family allowances.

Figure 5 Average Effective Tax Rates



March and July 2000

The change in work incentives can be represented in an alternative way by comparing the average effective tax rate under the pre and post reform income support and tax system (Figure 5). There is virtually no change for the 85 per cent of lone mothers in the OE group and an improvement of 4 percentage points for the NE group. Noticeably that the largest work incentive improvements occur around the new pension cut-off point. This effect is generated by the large changes in family allowances in this income range (as was illustrated in Figure 2). Figure 5 therefore reinforces the key point that tax and pension taper changes were trivial but changes in family allowances and the change in the range over which the family allowance taper

applies were important.¹⁰

IV Employment and the Policy Changes

In this section we identify how many lone mothers are affected by different financial outcomes from the reforms. This can be done with a new data set – the Longitudinal Data Survey (LDS) which contains Centrelink’s fortnightly payment records for a one percent sample of Centrelink’s customers. The period of the sample extends from January 6th, 1995 to June 14th, 2002. The records contain information on the personal characteristics and payment details of pensioners and other low income payment recipients. Each individual has an identifier that enables their payment record to be traced through time. As long as the individual is receiving a payment, the amount and program location can be followed over fortnight to fortnight. Access to the LDS is subject to strict confidentiality protocols and it is not possible for the researcher to identify any particular individual. The earnings data is reported to Centrelink by the customer and there is always the possibility that earnings are understated.¹¹

¹⁰ Calculations for other groups of lone mothers, i.e. those with more children or those receiving rent assistance, produce returns from the taper reduction that are even smaller. It is difficult to see changes of 2 to 3 per cent in net disposable income producing a large effect on employment decisions.

¹¹ The empirical foundation of this study is quite different from the series of papers from NATSEM (Harding and Polette, 1995; Beer, 2003 and Toohey and Beer, 2003) and the Melbourne Institute of Applied Economic and Social Research, such as Duncan and Harris (2002). These studies use micro

There are two important points to be borne in mind when comparing the results of this section with earlier figures and tables. First, these data refer to *all* lone mothers on income support and not just lone mothers with one child under five years of age. Second, we confine our attention to lone mothers receiving income support from Centrelink. We know very little about lone mothers who are not in the income support system, especially before June 2001, before the LDS sample was extended.

The LDS data set allows us to compare the work patterns of lone mothers before and after the July 2000 reforms. We do this mainly by comparing outcomes between June 2000 (before) and June 2001 and June 2002 (after). In methodological terms “before” and “after” comparisons are not the same thing as “with” and “without” reform comparisons that is required. However, since the LDS is a longitudinal data set that extends back to 1995 we make use of this longer data series on historical trends, to assess what kind changes one could reasonably have expected in July 2000, based on historical trends, if the ANTS package had not been implemented. With such a control we can then highlight more clearly the specific changes in July 2000 that are due to the ANTS reforms.

The Employment Distribution

Table 3 presents the distribution of employment earnings taken from a cross section

simulators based on hypothetical families with hypothetical labour market responses calibrated from income distribution surveys conducted by the ABS. Our study is based on actual individuals receiving income support payments and sampled from administrative records.

of lone mothers receiving income support during the last two weeks of June for each year before the income tax and welfare reforms, 1995 to 2000. At June of each year between 71 and 75 per cent of lone mothers are not combining income support with employment earnings. There is some year to year variation but the overwhelming impression is one of stability of outcomes. There is also little change between 2000 and 2002.

It might be thought surprising that more than 70 per cent of lone mothers on income support do not report labour market earnings. Perhaps it is even more surprising that only 3 to 7 per cent report availing themselves of the free area, where neither income tax nor pension taper applies. In March 2000, only 25 per cent of lone mothers are employed and immediately affected by the work incentive changes from taper, tax and family assistance reforms. The majority of these lone mothers report employment incomes between \$75 and \$200 per week which are largely unaffected by the July 2000 income tax reform and pension taper reductions. The immediate incidence of work incentive reform is very low, affecting around 22 per cent of lone mothers on income support through the taper adjustment and 11 per cent through the tax change.

**Table 3 Female PPS Stock, June 1995-2002
Earnings from Employment, Basic PPS Entitlements by Employment**

Year	Weekly Employment Earnings, \$ (Percent)					Basic Entitlement Not Employed \$	Basic Entitlement if Employed \$	Basic Entitlement Loss \$	Average Earnings if Employed \$	Total Income if Employed \$
	0	<75	75-250	250-400	400+					
1995	74	6	13	7	0	162	111	51	173	284
1996	72	7	13	8	1	170	118	53	184	301
1997	71	7	13	8	1	173	114	59	185	299
1998	72	7	12	8	1	175	116	60	188	303
1999	71	7	12	9	2	178	115	64	194	308
2000	75	4	10	9	2	180	105	75	219	324
2001	72	3	11	8	6	188	111	78	267	378
2002	71	4	10	8	8	208	128	81	277	405

The Employment Response

Perhaps the simplest way to begin to analyze the short run employment response to the reforms is to plot the proportion of lone mothers with earnings in each employment income category for the last two weeks of June of each year. We can then compare employment in the pre and post reform period. There are no other significant policy changes apart from ANTS within this time frame to complicate the analyses. In Figure 6 earnings are arranged along the horizontal axis and the proportion of lone mother pensioners in each earning category are arranged along the vertical axis.¹²

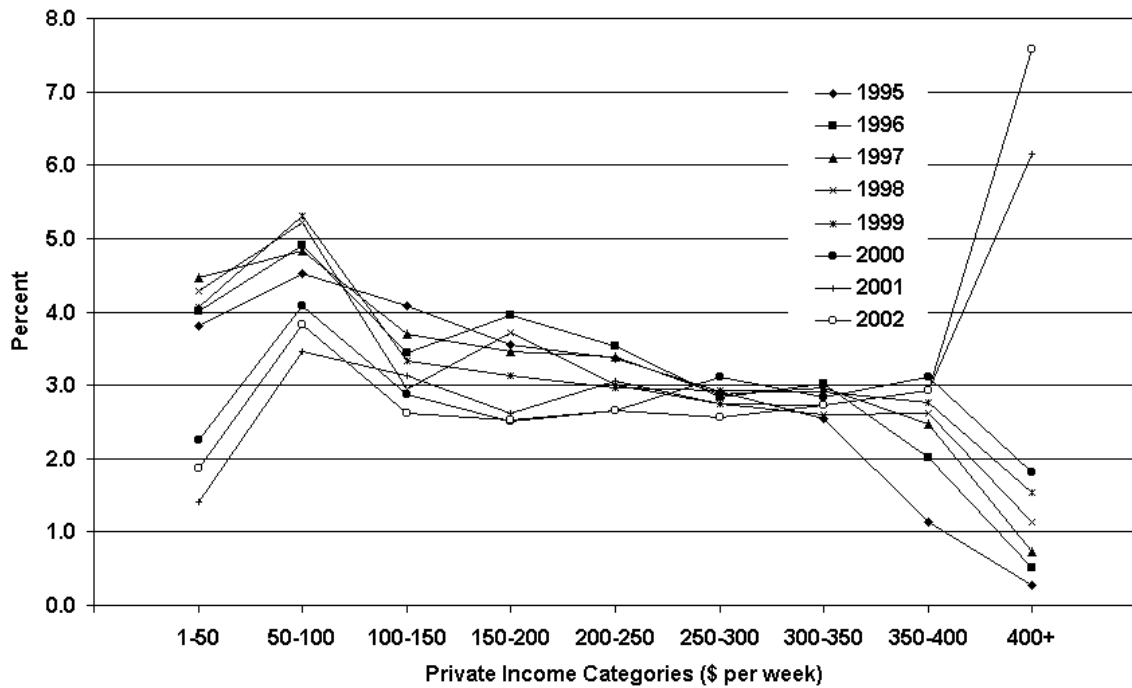
The first point to note is that for those who earn less than \$50 per week there is a clear break after 1999 when the proportion of lone mothers reporting earnings within

¹² We have made no adjustment for changes in the consumer price level or for a shifting pension cut-off point as pension income is adjusted for increases in Total Male Average Weekly Earnings. The highest income group is \$400 or more per week.

the free area fell considerably. We do not know why this occurred, but a close examination of the data indicates that almost all of this fall occurred in March 1999 which is 15 months before the reforms. At this point, we think this is an administrative or data programming related decision on the part of Centrelink and we are reluctant to attribute any of these changes to the reforms.

The second point to note is that across the \$50 to \$400 a week earnings range there is no obvious and systematic variation in the proportions in each category across the six years before the reforms. There is a slow drift downwards at lower income levels and a slow drift upwards at higher income levels as average wages increase and individuals move into higher income categories. Employment levels are similar in all income categories comparing one year with the next. In 2001, however, under the new welfare and tax system, the proportion of lone mothers in the \$400 plus a week category increases markedly, an annual increase of just over 4 percentage points. This increase is more than twice the total increase of the previous six years; and in terms of the distribution of lone mothers who are employed in the \$400 plus income category has moved from the lowest to the highest percentage category. The next year there is a further 1.5 percentage point increase. We attribute these large distributional changes to the entitlement effect in response to the pension taper reduction. There does not appear to be any evidence, apart from this, to suggest that lone mothers employment has responded in a marked way to the ANTS reforms.

**Figure 6 Percent of Lone Mothers
Private Income Categories Per Week
June 1995 - June 2002**



Where did this large increase in the proportion of lone mothers with earnings of more than \$400 a week come from? There are three possible sources. One source is an increased inflow from those who entered the \$400 plus a week category from outside the income support system. We do not know the previous income of these lone mothers but the extension of the taper means that lone mothers with income levels just outside the old income pension cut-off point are now automatically included in the eligible group for income support. There are two financial advantages if members of this group register for Parenting Payment Single. One advantage is their weekly income is increased by government income support by an average of approximately \$30 to \$40 per week. The other advantage is that they now have access to a Pensioner Concession Card.

Another source is an increased inflow of those who entered from within the income support system. For example, some lone mothers may have previously left income support for a job within the income range between the old and new pension cut-off points. These mothers would now remain within the income support system.

The final group is a reduced outflow from the \$400 plus income category. Perhaps many who were employed within this income category may now find that wage increases in their present job do not move them out of the income support system.

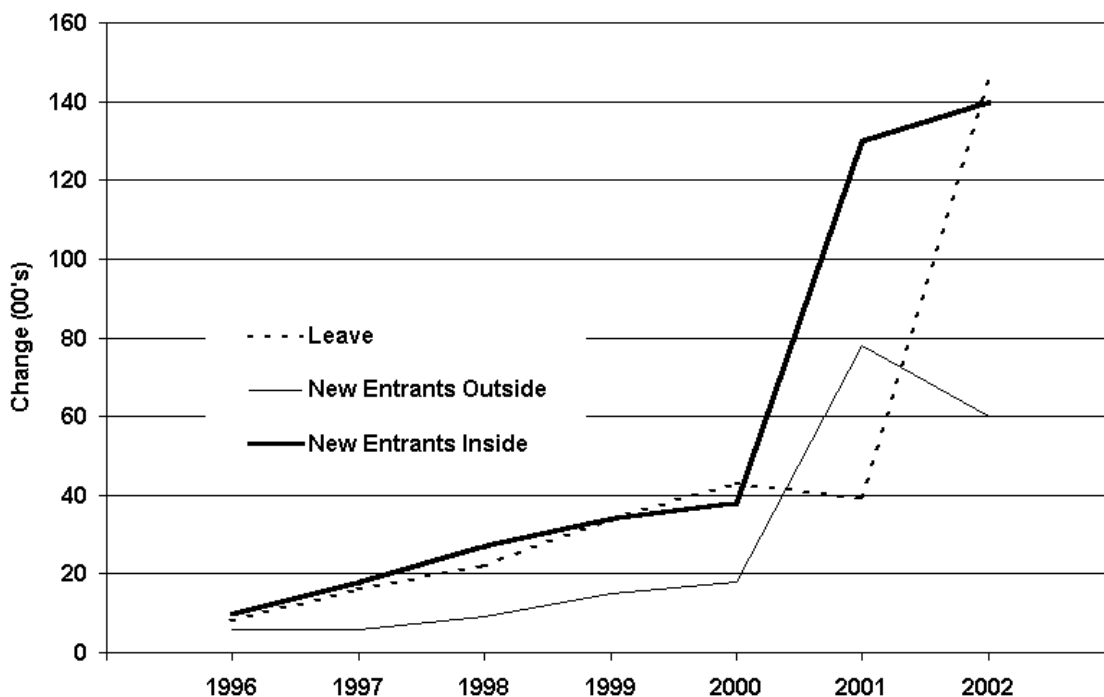
Employment Flows to and from the new Entitlement Category

We can easily calculate the numbers falling into each of the above categories from the LDS flow data. To simplify the analysis we compare employment stocks at the last two weeks of June for each year. By looking back a year we can identify new entrants to the over \$400 a week category from either within or outside the income support system and identify those who remain within the \$400 plus income category.

The results of these calculations are presented in Figure 7. Inflows and outflows from the \$400 plus category gradually increase between 1996 and 2000. Then, just after the reform period, between June 2000 and June 2001, there is a very large increase in inflows and a marginal reduction in outflows. The largest increase in inflows are entrants from within the income support system. These are individuals on income support during the last two weeks in June 2000, just before the policy change, but who were not in the \$400 plus employment earnings category at that time. These lone mothers have moved up the income/employment distribution. The second largest

increase is in new entrants from outside the income support system, that is those not on income support a year earlier. Outflows from this earning category were increasing in the pre-reform period but after the reforms there was a marginal reduction.

Figure 7 Change in the Number of Lone Mothers who Combine Welfare and Work with Earnings of >\$400 per week Movements from year to year, June



In the second year after the reforms the number of new entrants from within the system are again substantial and marginally larger than the year before. New entrants from outside the system fell marginally but is still at historically high levels. The largest change, however, is the very large increase in the number of mothers leaving the \$400 a week category. A significant increase is to be expected given the substantial growth in the stock of lone mothers now in this income category.

Figure 7 suggests two further avenues to explore. What can be learnt about those individuals who make up the increased inflow into the \$400 a week category during the

the previous five and a half years on income support and almost all individuals (91.5 per cent) had previously combined employment and income support at some time. Indeed, between one half and two thirds of their time on income support was associated with employment; and, on average, their employment income while employed and on income support was approximately equal to their pension income. The inflow group for 2002 has similar characteristics and therefore the data are not listed here.

Entrants to the New Entitlement Category from outside the Income Support System

This group also has a substantial welfare history (“Outside Inflow” rows in Table 4). For example, of the 2001 inflow, around 70 per cent were on income support at some time since 1995 and their period on income support accounted for one third of this time. Eighty per cent of this group had combined employment earnings with income support in roughly equal proportions¹³ Once again the inflow for 2002 has similar characteristics.

Perhaps the most interesting inflow fact revealed from Table 4 is that less than 10 per cent of the total inflow into the \$400 category had no previous history of income support since 1995. This point reinforces earlier results (Gregory and Klug, 2001) that stresses that lone mothers find it very difficult to leave income support permanently. Almost all new entrants to income support during a year have a previous income support history. The effect of the taper reduction therefore is to extend the time spent on

¹³ It is not clear that a large proportion of this group has left income support permanently since 60 per cent experienced their last income support spell within the two years previous to the reforms.

income support rather than to bring into the system a substantial number of lone mothers with no income support history.

To conclude, it appears that the reforms, rather than encouraging employment to foster a greater rate of leaving the income support system, has had the opposite effect, at least in the short run. It has brought back into the income support system a large number of mothers who had previously left. Only 10 per cent or less of the inflows from outside the income support system inflows had not had an income support period during the previous five and half years.

The Increased Outflow from the New Entitlement Category

In the first year after the reforms most outflows were to lower income levels. In the second year 60 per cent of the outflow was to outside the income support system. These results reinforce the major feature of the welfare system – that is, most of the employment changes among lone mothers tend to occur within the income support system rather than in terms of leaving the system. Table 4 indicates there is very little difference between those who leave the income support system and those who move to a lower income level, although there is some evidence that those who leave tend to have marginal higher employment income just before leaving.

V Concluding Remarks

How well did the July 2000 tax and welfare reforms meet their income objectives? All three groups of lone mothers – the group eligible for income support before the reforms,

the new eligible group brought into the expanded welfare system and the group whose income places them just above the new entitlement cut-off point – received substantial income increases. In absolute terms the increases were largest for those with the highest incomes. For lone mothers brought into the expanded income support system, and those with income just above the new pension cut-off point, the weekly income increase was about twice the \$32.60 received by non-employed lone mothers.

Were work incentives improved? The answer is work incentives were only affected marginally. For those on income support before the reforms the changes impacted directly on only 21 per cent of lone mothers, and for this small group the changes were trivial. The average additional after tax income from taking employment was around \$4 per week. It is difficult to imagine anyone in this group who has previously rejected a job offer reversing their decision for such a small amount. This group is largely employed part-time and therefore the reforms should have no noticeable effect on encouraging the combination of part-time employment and income support.

The reforms impacted more on the 6 per cent of lone mothers who could now be part of an expanded income support system and combine low paying full-time jobs with income support. But once again the incentive changes are small. For those brought into the system the incentive changes, relative to not working, averaged \$20 a week or 4 per cent of earnings. For lone mothers just outside the new pension cut-off point the change in work incentives is similar relative to not working. But the employment income they need to give up to be entitled to a pension card and some government income support

has fallen. As a result, a significant proportion of this group may find it more worthwhile to reduce employment to return to income support.

The second general point to note is that the increase in disposable income not associated with work incentives (the increase in family allowances) exceeds the increase in income associated with work incentives (generated by changes in the pension taper, family allowance taper and tax reform) by a factor of twenty or so when defined over all lone mothers. As a result, it is likely that any possible reduced employment response to the increase in non-employment income (the income effect) may offset the very weak work incentive changes.

What have we learnt about the effectiveness of the policy instruments? The answer is quite a lot; and some of the lessons were not obvious before we began the reform assessment. One lesson is that the income tax changes were largely ineffective for lone mothers. More often than not they led to no change in income and work incentives and occasionally to lower income and less work incentives. The ineffectiveness of the income tax changes flowed from two important facts: most lone parents on income support do not pay income tax, because of substantial tax rebates, and, among those who do pay income tax, the removal of the Sole Parent Tax rebate offset any income tax reductions from ANTS.

Another lesson is that the pension taper change was largely ineffective in terms of income and work incentive changes. Almost all income and work incentive changes flowed from changes in the family allowance base rate and taper. It follows therefore that the more significant and immediate work incentive effects were concentrated on a

narrow group of lone mothers who were previously ineligible for income support and subject to family allowance tapers, especially those whose earnings are just above the new pension cut-off point. The change in family allowances delivered more than 90 per cent of the income and work incentive changes for this group.

Although the direct income and incentive effects of the pension taper reduction were trivial, we argue that the pension taper reduction was nevertheless important because of entitlement effects and interactions with family allowance tapers.

The taper reforms expanded the income support system so that almost all employed lone mothers are now entitled to a Lone Parent Pension and Pensioner Concession Card. The taper reduction extended the pension income cut-off point by 25 per cent and moved it from the 45th to 60th percentile of weekly earnings for women. This is an interesting result in that it was probably not expected that reforms would expand the income support system.

The taper reduction also increased the number of lone mothers combining employment and income support. However, this was done not by increasing work incentives for the existing set of lone parents on income support but by bringing into an expanded welfare system employed lone parents with high weekly earnings who were previously excluded. Our estimates suggest that after the reforms, a further 6 per cent of lone mothers were brought into the expanded welfare system and that most of these lone mothers had previously been on income support for substantial periods. Under the new expanded welfare system these mothers can now stay in the welfare system with

employment income as high as \$550 to \$600 a week. As a result of the pension taper change it is likely that lone mothers will spend a longer period on income support.

Finally, just as the pension taper reform extended the pension entitlement range, the family assistance taper adjustment extended the income range for more than minimum family payments. This was a considerable change moving the more than minimum family assistance cut-off point from the 37th percentile to the 56th percentile of the distribution of full time weekly earnings of women.

Where to now? Is an expanded welfare system with higher income levels and weaker incentives to leave welfare where we want to be? A reading of the recent welfare discussion paper, “Building a simpler system to help jobless families and individuals” (Commonwealth of Australia, 2002) suggests that the government wanted to move towards a smaller welfare system and more individual self reliance. The July 2000 reforms moved the welfare system in the opposite direction.

With regard to moving towards government objectives it appears that there is an obvious conflict inherent in further pension taper reductions. On the one hand, work incentives for existing income support lone parents may be increased; but, on the other, the entitlement effect extends the pension cut-off point further up the income scale and brings into the income support system a significant proportion of the few remaining lone parents not currently included in the income support system. If something is to be done to reduce high effective marginal tax rates faced by lone mothers a more radical approach is needed which seems inexorably to lead to moving the base level of income support downwards. This policy will inevitably make lone parents worse off. It would

not be surprising therefore if government continued to search elsewhere to reduce welfare reliance and increase work incentives. It may turn towards better and more child-care assistance, more employment related counseling, an extension of mutual obligations and perhaps changing eligibility rules for various income support payments and allowances.

References

Barrett, Garry, F., (2002), “The Dynamics of Participation in the Sole Parent Pension”, *Economic Record*, Vol. 78, March, 1-15.

Beer, G., (1998), “Is it Worth Working? The financial impact of increased hours of work by married mothers with young children”, *Australian Bulletin of Labour*, Vol. 24, No. 2 June, 79-83.

Beer, G., (2003), “Work Incentives under A New Tax System: the distribution of effective marginal tax rates in 2002”, *Economic Record*, Vol. 79 Special Issue ; S14-25.

Chalmers, Jenny, (1999), “Sole Parent Exit Study”, A Report presented to the Department of Family and Community Services, as part of the Social Policy Research Centre 1997 commissioned research program, February.

Dawkins, P. 2002, “The ”five economists plan”: The original idea and further developments”, *Australian Journal of Labour Economics*, Vol.5, June, 203-230

Department of Family and Community Services (1998), “Some Common Questions About Lone Parents Answered”, Parenting Policy Section, November, Canberra.

Duncan, Alan and Mark N. Harris, (2002), “Simulating the Behavioural Effects of Welfare Reforms Among Sole Parents in Australia”, *Economic Record*, Vol. 78, 264-276, September.

Flateau, Paul and Mark Dockery, (2001) “How do income support recipients engage with the labour market?”, Policy Research Paper No. 12, June, Department of Family

and Community Services.

Gregory, R. G. and E. Klug, (2001), "A Picture Book Primer, Welfare Dependency and the Dynamics of Female Lone Parent Spells", Australian National University (mimeo).

Harding, A. and J. Polette, (1995), "The Price of Means Tested Transfers, Marginal effective tax rates in Australia in 1994", *Australian Economic Review*, 3,100-106.

Ingles, D.S., (2000), "Rationalising the interaction of tax and social security: Part 1 specific problem areas", Discussion Paper No. 423, Research School of Social Sciences, Australian National University, November.

Pech, J and F. McCoull, (2000), "Transgenerational welfare dependence: myths and realities", *Australian Social Policy*, No 1.

Polette, J., (1995), "Distribution of Effective Marginal Tax Rates across the Australian Labour Force", Discussion Paper No 6, National Centre for Social and Economic Modelling, University of Canberra.

Toohey, Mathew and Gillian Beer, (2003), "Is it Worth Working Now?" Paper presented to the 2003 Australian Social Policy Conference, Sydney, 9 July.

Treasurer, (1998), *Tax Reform: Not a New Tax, a New Tax System*, AGPS, Canberra.

Yi-Ping Tseng and Roger Wilkins, (2003), "Reliance on Income Support in Australia Prevalence and Persistence", *Economic Record*, Vol 79, No 245, June, 196-217.

Department of Family and Community Services, (2001), Information Strategies Branch, Longitudinal Data Set, LDS 1% Sample User Documentation, Version 1.7 December,

Canberra.

Commonwealth of Australia (2002), *Building a simpler system to help jobless families and individuals.*