

Final Report

Combining Income Support and Earnings

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Table of Contents

Executive Summary	3
2. Previous Australian Research	7
3. Data	11
3.1 Being on Income Support	11
3.2 Having earnings and combining IS with earnings	11
3.3 Participation requirement	12
4. Results: Descriptive Statistics	13
4.1 Incidence of combining by benefit type	13
4.2 Incidence of combining by participation requirement	17
4.3 Incidence of combining by benefit type and participation requirement	20
4.4 Characteristics by benefit type of IS recipients who combine versus IS recipients who do not combine	22
4.5 Characteristics by participation requirement of IS recipients who combine versus IS recipients who do not combine	23
4.6 Characteristics by benefit type and participation requirement of IS recipients who combine versus IS recipients who do not combine	24
4.7 Characteristics of IS recipients who combine IS receipt with earnings by the length of the combining spell	28
5. Results: Models of IS and Combining	31
5.1 Modelling the probability of combining IS receipt with earnings	31
5.2 Models for describing the length of the IS spell	34
5.2 Models for describing the length of the earnings (while on IS) spell	38
6. Patterns of combining over time and attitudes	40
6.1 Patterns of combining	40
6.2 Combining and attitudes	43
References	49
APPENDIX	50

Executive Summary

The incidence of combining IS receipt with earnings is fairly stable over time for the period from 1 July 2006 to 30 June 2008. There are two exceptions: for Parenting Payment Single there is a slight but steady upward trend, and for Youth Allowance Student there is a relatively sharp downward trend, but only in the first half of 2008.

At the end of the calendar year there is a drop in the incidence of combining earnings with IS receipt for all benefit types, except for students whose incidence of combining actually increases during that period. This could be a choice by the IS recipients not to work during the Christmas period, or it could be that the type of jobs IS recipients hold when combining them with IS receipt are jobs that tend to end at the end of the calendar year. Or it could be a combination of both.

IS recipients receiving Youth Allowance Student and Parenting Payment Single have the highest incidence of combining these with earnings; both close to 40 percent. The incidence is lowest for those receiving Disability Support Pension, which is consistent with a much reduced ability to work relative to other IS recipients.

The time trend for combining IS receipt with earnings is flat for the period from 1 July 2006 to 30 June 2008 when the IS benefit has no participation requirement. For the IS payments that have a part-time requirement there is a steady upward trend in the incidence of combining. In the first half of 2008 a downward trend of combining IS payments with a full-time requirement partially offsets the upward trend for payments with a part-time requirement.

Parenting Payment recipients who do combine IS receipt with earnings tend to be a few years older, on average, than those Parenting Payment recipients who do not. For Disability Support Pension recipients, Age pensioners and Carer's Payment recipients, this is the reverse: for these benefit types those who combine IS receipt with earnings tend to be younger. For the other benefit types there appears to be no age difference.

Women and Australian born IS recipients are more likely than other IS recipients to combine IS receipt with earnings.

The distribution over geographical States and Territories does not substantially differ between those who do combine IS receipt with earnings and those who do not. In general, Tasmania, Queensland and the Australian Capital Territory are ‘over-represented’ among the group that combines. New South Wales and the Northern Territory are ‘under-represented’.

Conditional on receiving an IS payment with a full-time participation requirement, there are almost no differences in partnership status between those who choose to combine the payment with earnings compared to those who do not. When the IS payment has a part-time participation requirement, those who combine are less likely to be married and more likely to be separated. If the IS payment has no participation requirement, those who combine are more likely to be single.

The effect of age on the probability of combining almost completely disappears when one restricts the recipients to the same benefit type with the same participation requirements.

Results from economic modelling confirm many of the findings from the descriptive analysis. Controlling for personal characteristics such as age, partnership status and geographical location, higher incidences of combining is associated with receiving Parenting Payment (except Parenting Payment Partnered when not subject to a participation requirement), Newstart, and Youth Allowance Student. Lower incidences are associated with receiving Disability Support Pension, Carers Payment, and Parenting Payment Partnered when not subject to a participation requirement.

Economic modelling further supports that men, recipients of indigenous and Torres Strait Islander descent, recipients not born in Australia, and recipients who are partnered are all less likely to combine IS receipt with earnings.

When including random effects to capture unobserved heterogeneity, such as preferences, the qualitative effects remain largely the same.

Economic modelling capturing the effect of combining IS with earnings on the length of the IS spell shows that combining IS receipt with earnings in the previous fortnight increases the probability of exiting IS in the next fortnight compared to not combining in the previous fortnight, all else equal. This effect is largest in the first two months and smallest in the second half of the first year.

Combining less than 75% of the time (but still combining) is associated with a shorter IS spell duration, compared to not combining at all. The effects are strongest for the period between fortnight 8 (after 4 months) and fortnight 25 (a year). For IS recipients on a spell that has lasted a year (26 fortnights), combining IS receipt with earnings up to a modest proportion of the time increases the probability of exiting IS and shortening the IS spell duration. However, combining more intensively makes a recipient no more or less likely to exit IS than a recipient who never combined IS receipt with earnings but who has been on IS an equal length of time.

Patterns of combining for completed NewStart spells that lasted between 1 and 2 years show that in 25% of the NewStart spells customers did not combine, or combined rarely (less than 5% of the total length of the NewStart spell); approximately 20% experienced 1 or 2 combining spells that lasted a total of between 5 and 20% of the length of the NewStart spell; about 10% experienced 3 or more separate combining spells that in total lasted more than 50% of the length of the NewStart spell.

In terms of how customers who combine differ in their attitudes to customers who do not combine, the biggest disparities are recorded for questions that directly correspond to work. Those who combine agree more with statements that favour work. The largest discrepancy in attitudes between those who combine and those who do not are recorded for the statement; 'Given my current situation, work just isn't worth my while', for customers on Parenting Payment and DSP. However, these discrepancies in attitudes are not the result of differences in a reluctance to lose concessions or benefits, since the agreement scores for statements pertaining to benefits and concessions are similar for combiners and non-combiners alike.

1. Introduction

There is evidence that some income support recipients consistently receive earnings from employment over relatively long periods of time. This has prompted a series of questions that are addressed in this study. Specifically, the core questions are:

- [1] Who is combining income support and earnings?
- [2] Does working while on IS increase the probability of recipients exiting income support?
- [3] Does new information gained from employment affect – either positively or negatively – their decisions about future employment?
- [4] What impact do attitudes have on the motivation for people to combine income support and employment?

The report is organised as follows: Section 2 briefly discusses previous research for Australia in relation to earnings and IS, and Section 3 outlines specifics about the data and definitions used. In Section 4 question 1 is discussed using descriptive statistics. The incidence of combining IS with earnings over time is split by benefit type, participation requirement and by benefit type interacted with the participation requirement. Furthermore, the characteristics of those recipients who do combine IS receipt with earnings are compared to the characteristics of those IS recipients who do not combine. In Section 5 question 1 is addressed using a logit regression to model the probability of combining or not. Patterns of combining, such as combining once but for a long time or frequently but for short amounts of time, are discussed in Section 6.

Section 5 also presents the analysis for question 2. A duration model with a variety of explanatory variables is estimated to describe the length of the IS spell. To investigate the role of combining IS receipt with earnings on the length of the IS spell two different measures are included: combining IS with earnings in the previous fortnight and the (cumulative) proportion of time the IS recipient has been combining IS with earnings.

The questions 3 and 4 are addressed by re-estimating the models in Section 5 after inclusion of random effects to control for unobservables, such as preferences, and explicitly in Section 6 where responses to attitudinal questions are compared for those who combine to those who do not.

2. Previous Australian Research

This section reviews some previous Australian studies that have looked at employment and/or earnings of income support recipients, although combining earnings and income support is not the focus of the studies. Except for the study by Landt and Pech (2000) and Cai and Gregory (2005), all other studies reviewed below come from research conducted by the Melbourne Institute of Applied Economic and Social Research (MI) for the Department of Education, Employment and Workplace Relations (DEEWR).

The most recent MI study that relates to the current project is Cai *et al.* (2008). In the study Cai *et al.* use the first six waves of the Household, Income and Labour Dynamics in Australia (HILDA) Survey to examine the patterns of employment and income support receipt of working age Australians, with a focus on the role of human capital, as measured by education, work experience and health, in affecting the patterns. Based on individual employment and welfare receipt status, they define four mutually exclusive states for working age Australians: (i) not-employed-and-on-welfare; (ii) employed-and-on-welfare; (iii) not-employed-and-not-on-welfare; and (iv) employed-and-not-on-welfare. They then examine how human capital and other observed individual and family characteristics affect these employment and welfare receipt patterns. People in state (ii) in Cai *et al.* refer to those who combine income support with employment and who are, therefore, to a large extent, equivalent to the group of individuals focused on in the current project. When looking at the probability of being in one of the four states, Cai *et al.* find that increases in work experience in general increase the probability of being in the state employed-and-not-on welfare and reduce the probability of being in the other three states. The negative effect of work experience on the probability of being in the state not-employed-and-on-welfare is larger than on the probability of being in the state employed-and-on-welfare, suggesting that, for welfare recipients, increases in work experience could lead to a higher probability of combining employment with welfare. Lower education is found to significantly reduce the probability of being in the state employed-and-not-on-welfare, and increases the probability of being in the other three states. Again, since the effect of education on the probability of being in the state not-employed-and-on-welfare is larger than on the probability of being in the state employed-and-on-welfare, an increase in education is expected to increase the probability of combining employment and welfare among welfare recipients. The other human capital variable, health, is found to have a similar qualitative effect to education. Cai *et al.* also examine how transitions of individuals between the four states are affected by the human capital variables and other individual and family

characteristics. They found that increases in human capital, either in terms of work experience, education or health, raises the probability of transition to the state employed-and-on-welfare from the state not-employed-and-on-welfare, and reduces the probability of transition from the state employed-and-on-welfare to the state not-employed-and-on-welfare. These results suggest that, among welfare recipients who are not currently employed, those with higher human capital are more likely to combine employment with welfare in the future.

The second MI study relating to the current project is Black *et al.* (2006). Using a 10 per cent sample of the administrative record data on income support recipients for the period from January 1995 to June 2004, the study examines the extent of welfare reliance of income support recipients, how the reliance has changed over the period, and whether the reliance is associated with individual and family characteristics. Using the proportion of total income from income support payments as a measure of welfare reliance, they show that the extent of welfare reliance among income support recipients increased between 1995 and 2003 for both males and females, and this increase is largely driven by increases in the proportion of recipients with welfare reliance of 100 per cent. From their multivariate analysis, they find that recipients with the following characteristics tend to have a higher level of welfare reliance (or lower level of earnings while on income support): older age, non-English speaking background, indigenous persons, living in a rural area, living in public housing or renting, being single, having a very young child or having a large number of children, receiving a payment that has no activity test requirement, and living in an area with high unemployment. Most relevant to the current project is that Black *et al.* examine how earnings while on income support, measured as mean fortnightly earnings in a year, affect welfare reliance in the subsequent six months. They find that increases in median earnings reduces future welfare reliance for most recipients, suggesting that combining earnings with welfare might represent a ‘stepping stone’ to reduced reliance on welfare.

A complementary MI study to Black *et al.* (2006) is Mavromaras *et al.* (2006), which uses the first three waves of HILDA to examine welfare reliance of working age Australians, with a focus on time persistence of the reliance. The measure of welfare reliance in Mavromaras *et al.* is the same as in Black *et al.* (2006). Mavromaras *et al.* find that about 40 per cent of individuals in the HILDA sample receive a welfare payment that accounts for less than 20 per cent of their total income; about 35 per cent of individuals have welfare income that accounts for more than 80 per cent of their total income; and the rest have welfare income that accounts for 20 to 80 per cent of their total income. The degree of welfare reliance depends on payment

type, with recipients on the Disability Support Pension (DSP) having the highest level of reliance and recipients of labour market assistance, such as Newstart Allowance, have the lowest level of reliance. Their multivariate regression analysis shows that individuals who are single, have long-term health conditions, have low education, and have children aged under 5, tend to have a higher level of welfare reliance. It is also found that welfare reliance exhibits considerable time persistence even after controlling for observed individual and family characteristics, and the degree of time persistence varies with payment type. For example, the reliance on DSP exhibits the highest time persistence, while the reliance on parenting payment partnered has the lowest time persistence.

Tseng *et al.* (2006) use administrative record data on income support recipients over the period July 1995 to June 2002 to examine the dynamic properties of income support recipients and how individual and family characteristics are associated with alternative patterns of welfare receipt. They find that churning, a process of ending a spell on income support and subsequently commencing a new spell, and transferring, a process of moving from one payment to another within a spell on income support, are significant features of income support receipt in Australia. For example, they find that over half of recipients churn and one-fifth make a payment transfer within five years of commencing an income support spell. Relevant to the current project, Tseng *et al.* examine how earned income is associated with five alternative patterns of welfare receipt in their multivariate regression analysis: a single short payment spell, a single long payment spell, only experiencing payment transfer, only experiencing churn, and experiencing both transfer and churn. They define two earned income variables, earning amount and earning time. Earning amount refers to average earnings per fortnight when a recipient has earnings; earning time refers to the proportion of fortnights on income support in which the recipient has earned income. An interesting finding with respect to the two earned income variables is that earning time generally works in the opposite direction to earning amount. For example, increasing the average amount of earnings by 100 dollars per fortnight in which earnings are positive is found to lower the probability of a short spell on one payment by 0.015 for males and 0.008 for females. In contrast, increasing earning time (i.e. the proportion of the fortnights on income support in which an individual has positive earnings) from zero to 100% is found to raise the probability of a single short spell by 0.198 for males and 0.148 for females.

Cai and Gregory (2005) examine the role of earned income in transitions off unemployment benefits using a one percent sample of the administrative record data on income support

recipients. They also define two earned income variables: whether a recipient has earned income while on unemployment benefits, and the average amount of earned income if having earned income. For transition destinations from unemployment benefits they identify three: transition to DSP, transition to other income support payments, and exit from income support altogether (i.e. non-transitional exit). Their results show that the variable having earned income is statistically significant in all three hazard functions. The sign indicates that people with earned income have a lower hazard of leaving unemployment for any destination and are therefore more likely to stay on unemployment benefits than individuals without earned income, all else being equal. The amount of earned income is also significant in all three hazard functions, but with different signs: an increase in earned income reduces the hazard of transition to DSP and other payments, but increases the hazard of non-transitional exits.

In a descriptive paper Landt and Pech (2000) note that the proportion of income support recipients who combined earnings and income support payments had increased substantially during 1980s and 1990s, particularly among recipients of sole parent pensions. As a result, the proportion of recipients receiving a part-rate payment increased significantly. For example, they find that at the beginning of the 1980s very few working-age income support recipients were on a part-rate payment, but by June 1998 around 18 per cent of recipients received a part-rate payment. They also found that sole parent pensioners had the highest proportion of combining employment and income support, which is followed by recipients of partner and carer payments and unemployment benefits. Recipients of DSP had the lowest proportion of combining employment and income support.

3. Data

The data used for this report come from the Research and Evaluation Dataset (RED). The RED has information on the population of clients and is, therefore, extremely large. For this reason the results presented in this report are based on a 5 percent random sample of the full RED.

3.1 Being on Income Support

A person is defined to be on income support (IS) in a particular fortnight, if, according to RED table Benefit History, (s)he has been in receipt of an IS payment during that fortnight. Note, that RED excludes Service Pension (DVA) and includes Exceptional Circumstances Payment and Abstudy income support, which are not Income Support payments as defined in the Social Security Act (1991). Therefore, “being on income support” means receiving one of the following payments: Newstart Allowance, Youth Allowance, Austudy Payment, Sickness Allowance, Mature Age Allowance, Partner Allowance, Disability Support Pension, Carer Payment, Widow Pension, Widow Allowance, Wife Pension, Bereavement Allowance, Age Pension, Parenting Payment (Single and Partnered), Special Benefit, or Exceptional Circumstances Payment.

3.2 Having earnings and combining IS with earnings

A person is defined as having earnings in a particular fortnight if there is a record of earnings during at least one day during that fortnight in one of the following RED tables: Continuous Earnings, Variable Earnings, Supported Wage System (SWS) Continuous Earnings, SWS Variable Earnings, Disability Supported Continuous Earnings, Disability Supported Employment Variable Earnings, or CDEP Wages. Due to the character of the RED data, as a rule, we have no information on the person’s earnings during the time when (s)he is not on income support. This is no drawback in this particular instance because our question of interest is in regards to combining income support with earnings. That is, we are interested in earnings as long as the individual is on income support.

A person who is both on income support and who has a record of earnings during the same fortnight is defined as combining IS and earnings.

Demographics and other customer details are linked from respective RED tables, containing relevant information: ‘Customer’ for background information, ‘Partner History’ for marital

status, 'Principal Carer Children' and 'Other Children' for information on children. Postcode information from the RED 'Postcode' table was used for deriving state of residence.

3.3 Participation requirement

Lastly, for determining participation requirements, information from the 'Target Group' tables -Principal Carers, Person with a Disability and Mature Age- were used along with information on type of payment received.

Although the RED dataset contains data on customers with income support payments since 1 July 2002, the need for particular data to be collected is determined by the regulatory framework prevailing at the time. For example, the introduction of Welfare to Work (WtW) on 1 July 2006 necessitated the introduction of new tables in the RED dataset to properly assess workforce participation requirements for individuals with a partial capacity to work. In particular, data on supported employment and 'Target Group' tables, which readily allow determination of participation requirements, are available only from 1 July 2006. For this reason the analysis presented in this report focuses on the last two years of RED data made available for this project -July 2006 to June 2008.

4. Results: Descriptive Statistics

This section of the report presents and discusses the descriptive statistics in relation to IS receipt and earnings. The first three subsections report the incidence of combining earnings with receiving IS. This is broken down by benefit type, by participation requirement, and finally by benefit type and participation requirement (for select benefit types). As outlined in section 3, availability of data in RED is determined by the legislative environment of the day. We will restrict the presentation of the results to the period post 1 July 2006, that is, focus on recent trends in combining IS with earnings in the post WtW policy environment, rather than giving a historical perspective on the incidence of combining IS with earnings for different payment types.¹

After having established the recent time trends in the incidence of combining IS with earnings the next three subsections investigate in more detail how the characteristics of those on IS who do combine their IS receipt with earnings differ from those who have no additional earnings. The characteristics considered are gender, ethnicity, country of birth, age, the number of children, partnership status and geographical location. We again break down the data first by benefit type, then by participation requirement, and finally by benefit type and participation requirement (for select benefit types).

4.1 Incidence of combining by benefit type

Table 1 below reports the incidence of combining IS receipt with earnings over time for six different IS benefit types: Parenting Payment (Single and Partnered), Newstart, Disability Support Pension, Carer's Payment, and Youth Allowance Student. Only for the Carer's Payment (CAR) do we report two series: one without an age restriction for the recipient and one with the age of the recipient restricted to be 21 years of age or older, but less than 60 years of age. The period covered is the period from 1 July 2006 to 30 June 2008. For ease of exposition we replicate the information graphically in Figure 1. To clarify the composition of Income Support recipients for these six payment types an overview is provided in accompanying Table 1A.

In terms of the incidence of combining IS receipt with earnings, the incidence is fairly stable over time. There are two exceptions: for Parenting Payment Single there is a slight but steady

¹ Presenting a historical perspective on the incidence of combining IS with earnings would be straightforward when done by benefit type.

**Table 1: Proportion (%) of individuals on IS who combine IS receipt with earnings:
Select benefit types; 1 July 2006 to 30 June 2008.**

Fortnight start date	Benefit Type						
	PPP	PPS	NSA	DSP	CAR	CAR*	YAS
26-Jun-06	15.1	37.5	25.0	8.5	12.8	14.3	40.0
10-Jul-06	15.2	37.6	24.7	8.4	12.6	14.2	39.9
24-Jul-06	15.5	38.1	25.2	8.5	12.7	14.2	39.9
07-Aug-06	15.3	38.2	25.6	8.6	12.7	14.4	39.8
21-Aug-06	15.5	38.5	26.0	8.5	12.9	14.5	39.9
04-Sep-06	15.4	38.6	26.1	8.5	12.7	14.3	40.0
18-Sep-06	15.4	38.7	26.5	8.5	12.6	14.3	40.1
02-Oct-06	15.5	38.8	26.9	8.5	12.6	14.3	40.2
16-Oct-06	15.4	39.3	27.5	8.5	12.8	14.6	40.1
30-Oct-06	15.2	39.6	27.9	8.7	12.6	14.4	40.4
13-Nov-06	15.3	39.5	27.9	8.7	12.6	14.3	41.4
27-Nov-06	15.2	39.3	27.8	8.6	12.8	14.4	42.7
11-Dec-06	14.3	38.2	25.6	8.3	12.2	13.8	42.6
25-Dec-06	13.0	36.3	23.3	7.9	11.6	13.1	41.6
08-Jan-07	13.1	36.5	24.6	7.9	12.1	13.6	41.1
22-Jan-07	14.4	37.9	26.2	8.4	12.6	14.2	41.0
05-Feb-07	15.2	38.7	27.0	8.5	12.8	14.4	40.5
19-Feb-07	15.5	39.2	27.2	8.6	12.8	14.5	40.2
05-Mar-07	15.8	39.5	27.4	8.6	12.8	14.5	39.7
19-Mar-07	15.7	39.6	27.1	8.6	12.9	14.6	39.7
02-Apr-07	15.5	39.5	26.9	8.5	12.8	14.6	39.7
16-Apr-07	15.2	39.6	26.6	8.5	12.5	14.3	39.6
30-Apr-07	15.4	40.0	26.5	8.6	12.5	14.3	39.5
14-May-07	15.4	40.0	26.4	8.6	12.3	14.2	39.3
28-May-07	15.3	39.7	26.0	8.5	12.4	14.3	39.4
11-Jun-07	15.4	39.8	26.1	8.5	12.3	14.1	39.9
25-Jun-07	15.2	39.9	26.0	8.5	12.1	13.9	40.3
09-Jul-07	15.1	39.8	26.2	8.5	12.1	13.8	40.5
23-Jul-07	15.3	40.1	26.4	8.5	12.2	14.1	40.9
06-Aug-07	15.7	40.3	26.6	8.4	12.2	14.0	40.6
20-Aug-07	15.6	40.7	26.7	8.4	12.4	14.2	40.2
03-Sep-07	15.6	41.1	27.1	8.5	12.3	14.0	40.1
17-Sep-07	15.8	41.5	27.2	8.5	12.4	14.2	40.6
01-Oct-07	16.1	41.8	27.5	8.5	12.6	14.3	40.6
15-Oct-07	16.3	42.5	27.3	8.6	12.6	14.3	40.3
29-Oct-07	16.5	42.9	27.6	8.6	12.4	14.2	40.6
12-Nov-07	17.0	43.2	27.7	8.7	12.4	14.2	42.6
26-Nov-07	16.9	43.1	27.6	8.5	12.3	14.1	44.0
10-Dec-07	16.0	42.0	25.4	8.3	12.1	13.9	44.0
24-Dec-07	14.8	39.9	23.1	7.8	11.1	12.6	42.9
07-Jan-08	14.7	39.9	23.6	7.8	11.1	12.5	42.8
21-Jan-08	15.6	41.4	25.5	8.2	11.7	13.2	42.7
04-Feb-08	16.1	42.1	26.1	8.3	11.9	13.4	41.6
18-Feb-08	16.6	42.4	26.0	8.3	12.1	13.7	41.1
03-Mar-08	16.5	42.5	26.1	8.4	12.3	14.0	40.0
17-Mar-08	16.3	42.3	26.1	8.3	12.3	13.9	39.9
31-Mar-08	16.2	42.5	26.1	8.3	12.2	13.8	39.6
14-Apr-08	16.3	42.3	25.4	8.1	12.1	13.7	39.2
28-Apr-08	16.4	42.4	24.9	8.1	12.1	13.8	39.2
12-May-08	16.6	42.2	24.7	8.2	11.8	13.4	38.8
26-May-08	16.5	41.9	24.0	8.1	11.8	13.5	38.2
09-Jun-08	15.2	40.7	21.6	7.8	11.4	13.1	35.1

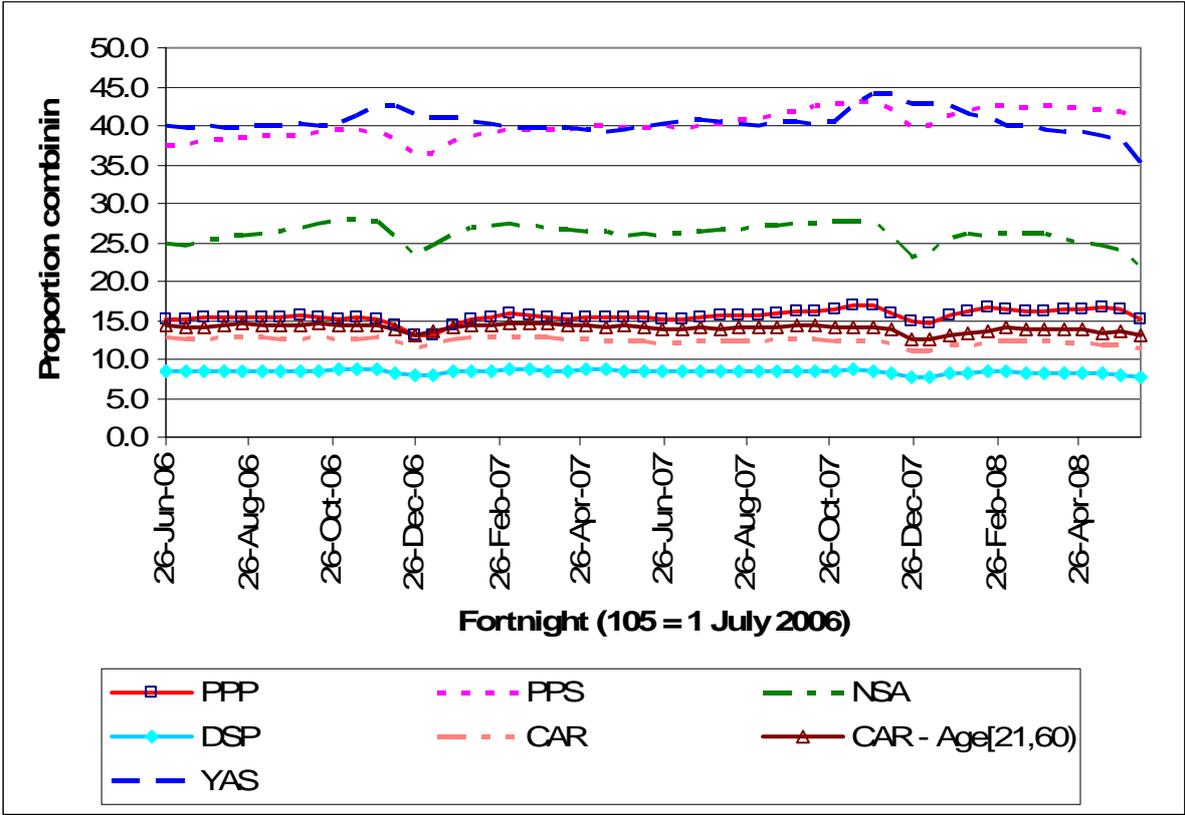
* Denotes recipient's age restricted to 21 years or over, but less than 60 years.

Table 1A: Composition of select benefit types; 1 July 2006 to 30 June 2008.

	Was receiving this payment before 1 July 2006	Claimed this payment on or after 1 July 2006
Parenting Payment Partnered (PPP)	Principal carer parents with a child under 16 years of age.	Principal carer parents with a child under 6 years of age.
Parenting Payment Single (PPS)	Single parents with a child under 16 years of age.	Single parents with a child under 8 years of age.
Newstart Allowance (NSA)	Individuals (considered) unemployed who are 21 years of age or older, but under Age Pension age. This includes persons who may have applied for DSP but were assessed as ineligible, i.e. had a work capacity of 30 hours per week or more.	Individuals (considered) unemployed who are 21 years of age or older, but under Age Pension age. This includes persons who may have applied for DSP but were assessed as ineligible, i.e. had a work capacity of 15 hours per week or more at or above the relevant minimum wage and after two years of assistance, including from specialists services. It may also include people who were granted DSP between 10 May 2005 and 30 June 2006, but who were reassessed post 1 July 2006 as having a work capacity of 15 hours per week or more at or above the relevant minimum wage and after two years of assistance, including from specialists services. Principal carer parents with a child aged 6 years or over. Single parents with a child aged 8 years or over.
Youth Allowance Student (YAS)	Full-time students and new apprentices aged 16-24 years, or temporarily incapacitated for study or undertaking apprenticeship (individuals granted YAS just prior to 25 years of age and who remain in the same course of study may continue to receive YAS)	
Carer's Payment (CAR)	Persons providing constant care for: a person with a physical, mental or psychiatric disability; a child with a profound disability; two or more children with disabilities; an adult and that adult's dependent child.	
Disability Support Pension (DSP)	Individuals with a capacity to work fewer than 30 hours per week if granted DSP on or before 10 May 2005. Individuals with a capacity to work fewer than 30 hours per week if granted DSP between 11 May 2005 and 30 June 2006. From 1 July 2006, this group may be reassessed. People reassessed as unable to work 15 hours or more per week at or above the relevant minimum wage and after two years of assistance, including from specialists services, continued to be eligible for DSP.	Individuals unable to work 15 hours or more per week at or above the relevant minimum wage and after two years of assistance, including from specialists services.

upward trend, and for Youth Allowance Student there is a relatively sharp downward trend, but only in the first half of 2008. What Figure 1 shows quite clearly is that during the end of the calendar year there is a drop in the incidence of combining earnings with IS receipt for all benefit types, except for students whose incidence of combining actually increases during that period. This can easily be explained by the fact that the long summer holidays are prime periods for students to supplement their incomes as there are no classes to attend or coursework to complete. Why non-students in receipt of IS benefits would stop earning is not immediately clear. It could be a choice by the IS recipient not to work during the Christmas period, or it could be that the type of jobs IS recipients hold when combining them with IS receipt are jobs that tend to end at the end of the calendar year, that is the choice is made by the employer. It could, of course, also be a combination of both.

Figure 1: Proportion (%) of individuals on IS who combine IS receipt with earnings: By benefit type; 1 July 2006 to 30 June 2008



Comparing the different benefit types to each other we see that IS recipients receiving Youth Allowance Student have the highest incidence of combining this with earnings, followed by individuals (mostly women) on Parenting Payment Single. Both rates of combining are close to 40 percent. The benefit type with the lowest incidence of combining IS receipt with earnings is the Disability Support Pension, which has a recipient population for whom one would expect a much reduced capacity to work relative to other IS recipients. About a quarter of individuals receiving Newstart Allowance combine this with earnings.

4.2 Incidence of combining by participation requirement

We now turn our attention to splitting the data by participation requirement, identifying full-time requirement, part-time requirement or no requirement. We restrict recipients to be 21 years of age or older, but less than 60 years of age. Figure 2 replicates the information in Table 2 graphically. To clarify the composition by payment type and participation requirement an overview is provided in accompanying Table 2A. The time period 1 July 2006 to 30 June 2008 is split in two because participation requirements changed over time for Parenting Payment recipients who were already receiving payments prior to 1 July 2006, i.e. they were grandfathered. Table 2A is also relevant for Section 4.3.

The time trend for combining IS receipt with earnings is slowly declining when the IS benefit has no participation requirement. Figure 2 shows this at a glance. For the IS payments that have a part-time requirement we see that there is a steady upward trend, up until the end of 2008. After the recurring end-of-calendar-year dip it appears the upward trend has stopped and the curve flattens out.

For IS payments with a full-time requirement, the curve is flat up until the end of 2008 (apart from the end-of-calendar-year dips), but shows a downward trend for the first six months of 2008. However, additional data would be needed to determine whether the flattening out of the rates for IS payments with a part-time requirement and the downward trend for IS payments with a full-time requirement have continued in the second half of 2008.

Table 2: Proportion (%) of individuals on IS who combine IS receipt with earnings: By participation requirement; 1 July 2006 to 30 June 2008. Age of recipients restricted to 21 years or over, but less than 60 years

Fortnight start date	Participation Requirement		
	Full-Time	Part-Time	None
26-Jun-06	24.8	32.1	20.1
10-Jul-06	24.4	32.5	20.1
24-Jul-06	24.8	32.9	20.4
07-Aug-06	25.3	33.2	20.4
21-Aug-06	25.7	33.5	20.5
04-Sep-06	25.9	33.6	20.5
18-Sep-06	26.2	33.6	20.5
02-Oct-06	26.7	33.8	20.4
16-Oct-06	27.1	34.4	20.5
30-Oct-06	27.4	34.7	20.6
13-Nov-06	27.5	34.7	20.5
27-Nov-06	27.3	34.7	20.2
11-Dec-06	24.9	34.0	19.3
25-Dec-06	22.7	32.1	18.3
08-Jan-07	24.0	32.4	18.5
22-Jan-07	25.6	34.0	19.2
05-Feb-07	26.2	34.8	19.7
19-Feb-07	26.3	35.4	19.9
05-Mar-07	26.5	35.6	20.0
19-Mar-07	26.0	36.0	19.9
02-Apr-07	25.8	36.0	19.7
16-Apr-07	25.6	36.2	19.7
30-Apr-07	25.6	36.3	19.8
14-May-07	25.7	36.4	19.7
28-May-07	25.1	36.2	19.6
11-Jun-07	25.1	36.6	19.5
25-Jun-07	24.9	36.5	19.4
09-Jul-07	25.2	37.8	17.5
23-Jul-07	25.3	38.3	17.7
06-Aug-07	25.5	38.5	17.7
20-Aug-07	25.6	38.8	17.8
03-Sep-07	26.0	39.2	17.9
17-Sep-07	26.1	39.5	18.0
01-Oct-07	26.4	40.0	18.1
15-Oct-07	26.2	40.6	18.2
29-Oct-07	26.4	40.9	18.3
12-Nov-07	26.7	41.3	18.4
26-Nov-07	26.5	41.3	17.9
10-Dec-07	24.3	40.4	17.3
24-Dec-07	22.0	38.2	16.4
07-Jan-08	22.6	38.0	16.6
21-Jan-08	24.3	39.9	17.2
04-Feb-08	25.0	40.6	17.5
18-Feb-08	24.7	41.0	17.9
03-Mar-08	24.7	41.0	18.0
17-Mar-08	24.6	40.8	17.9
31-Mar-08	24.7	41.0	17.9
14-Apr-08	23.8	40.7	17.9
28-Apr-08	23.2	40.9	18.0
12-May-08	23.0	40.8	18.1
26-May-08	22.3	40.5	17.9
09-Jun-08	19.8	39.3	16.8

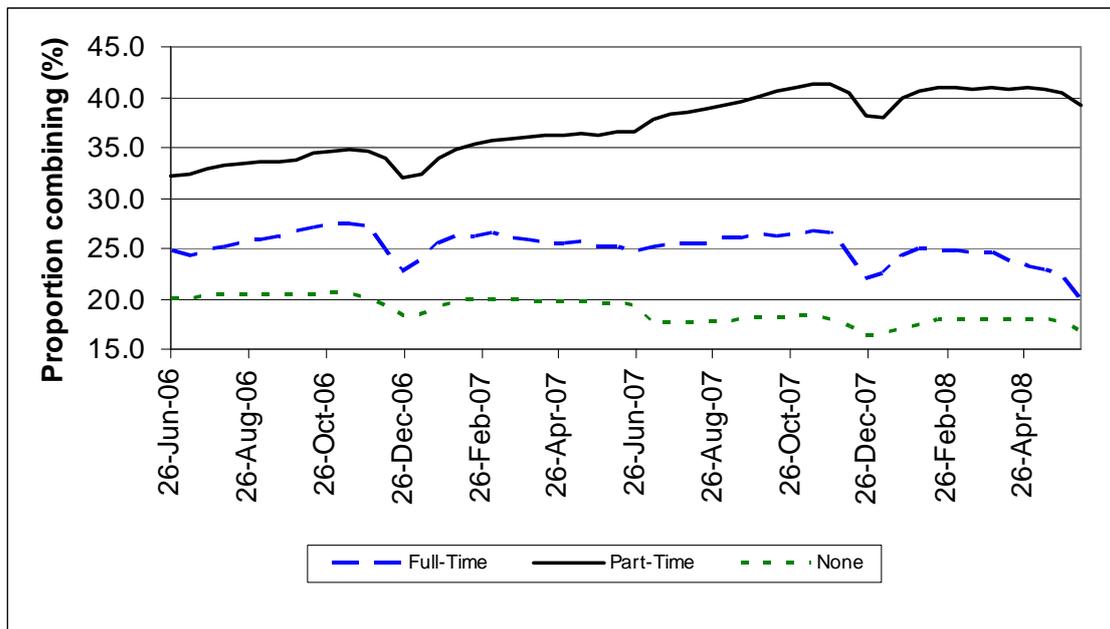
Table 2A: Composition by payment type and participation requirement; 1 July 2006 to 30 June 2008

	Parenting Payment Partnered (PPP)	Parenting Payment Single (PPS)	Newstart Allowance (NSA)	Youth Allowance Student (YAS)	Carer's Payment (CAR)	Disability Support Payment
Full-time 1 July 2006 – 30 June 2007	N/A	N/A	Traditional NSA recipients	N/A	N/A	N/A
Part-time 1 July 2006 – 30 June 2007	N/A	New entrant single parents with a child aged 6 years or over, but less than 8 years of age.	New entrant single parents with a dependent child 8 years or over; New entrant principal carer parents with a dependent child 6 years or over; People with reduced work capacity (that is, able to work less than 30 hours per week). ^{^^}	N/A	N/A	N/A
None 1 July 2006 – 30 June 2007	Principle carer parents with a child less than 16 years of age in receipt of PPP prior to 1 July 2006 (Grandfathered); New entrant principal carer parents with a child under 6 years of age	Single parents with a dependent child less than 16 years of age in receipt of PPS prior to 1 July 2006 (Grandfathered); New entrant single parents with a child under 6 years of age	N/A	YAS recipients	CAR recipients	DSP recipients
Full-time 1 July 2007 – 30 June 2008	N/A	N/A	Traditional NSA recipients	N/A	N/A	N/A
Part-time 1 July 2007 – 30 June 2008	(Grandfathered) principle carer parents with a dependent child 7 years or older (but less than 16) who received PPP prior to 1 July 2006. [^]	New entrant single parents with a dependent child aged 6 years or over, but less than 8 years of age; (Grandfathered) single parents with a dependent child 7 years or over (but less than 16) who received PPS before 1 July 2006.	New entrant single parents with a dependent child 8 years or over; New entrant principal carer parents with a dependent child 6 years or over; People with reduced work capacity (that is, able to work less than 30 hours per week).	N/A	N/A	N/A
None 1 July 2007 – 30 June 2008	(Grandfathered) principle carer parents with a dependent child aged less than 7 years of age who received PPP prior to 1 July 2006; New entrant principal carer parents with a dependent child less than 6 years of age.	(Grandfathered) single parents with a dependent child aged less than 7 years of age who received PPS prior to 1 July 2006; New entrant single parents with a dependent child less than 6 years of age.	N/A	YAS recipients	CAR recipients	DSP recipients

^{^^} Persons aged between 50 and 64 have the same job search requirements as younger job seekers but could do voluntary work in combination with other approved activities to partially meet their activity requirements provided their employment service provider decided that participation in such an activity would be beneficial to the job seeker's employment prospects. Job seekers on NSA aged 55 and older could meet their activity test requirements by undertaking part-time work or approved voluntary work, or a combination of these, for 30 hours or more per fortnight. However, they had to be available for suitable paid work, including full-time work, and must accept all referrals to job interviews.

[^] From 1 July 2007, parents from this 'grandfathered' group with children 7 and over were required to meet part-time participation requirements. Exemptions were available for registered and active foster carers, relatives caring for a child under the family law order, those undertaking home schooling, distance education or those with a large family (four or more children aged under 16). There were also case-by-case exemptions available for parents caring for a child with a disability, subject to domestic violence, or who had other special family circumstances.

Figure 2: Proportion (%) of individuals on IS who combine IS receipt with earnings: By participation requirement; 1 July 2006 to 30 June 2008; Individuals aged 21 and over, but less than 60 yrs



4.3 Incidence of combining by benefit type and participation requirement

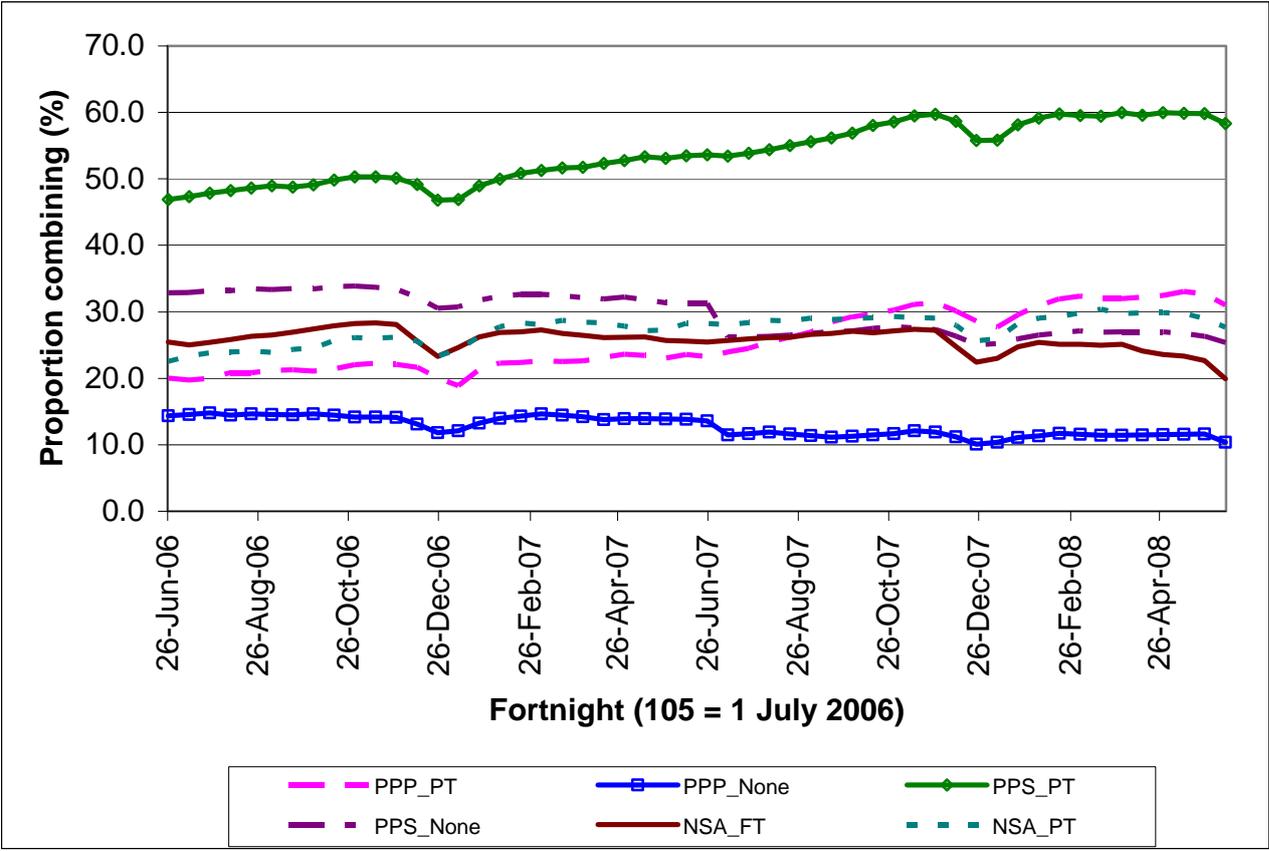
There is, of course, a strong relationship between benefit type and participation requirement. For instance, not everyone on Newstart will have a full-time requirement, but the majority of them will. To further highlight the difference between full-time, part-time and no requirement we interact the benefit type with the participation requirement to get a “within benefit type” effect of the participation requirement. We do this for three select benefit types: Parenting Payment (Single and Partnered) and Newstart, the results for which are shown below in Table 3. Figure 3 presents the result graphically for ease of exposition and to detect trends over time at a glance.

The most salient point of Figure 3 is that only Parenting Payment with a part-time participation requirement shows a steady upward trend in the incidence of combining IS receipt with earnings. The other combinations of benefit type and participation requirement are mainly constant over time. The only possible exception is the incidence of combining for recipients on Newstart with a full-time participation requirement, where the incidence shows a downward trend for the first half of 2008, and Parenting Payments with no requirements, which show a slow decline over time in the proportion combining.

Table 3: Proportion (%) of individuals on IS who combine IS receipt with earnings: By benefit type and participation requirement; 1 July 2006 to 30 June 2008.

Fortnight start date	Benefit Type interacted with Participation Requirement					
	PPP Part-Time	PPP None	PPS Part-Time	PPS None	NSA Full-Time	NSA Part-Time
26-Jun-06	20.0	14.4	46.9	32.9	25.4	22.5
10-Jul-06	19.8	14.6	47.3	32.9	25.0	23.3
24-Jul-06	20.0	14.8	47.9	33.2	25.4	23.9
07-Aug-06	20.8	14.5	48.2	33.2	25.9	24.0
21-Aug-06	20.9	14.7	48.6	33.4	26.4	24.1
04-Sep-06	21.2	14.6	49.0	33.4	26.5	23.9
18-Sep-06	21.3	14.5	48.8	33.5	27.0	24.4
02-Oct-06	21.1	14.7	49.1	33.5	27.4	24.5
16-Oct-06	21.4	14.5	49.8	33.8	27.9	25.6
30-Oct-06	22.1	14.2	50.3	33.9	28.3	26.1
13-Nov-06	22.3	14.2	50.3	33.7	28.3	26.1
27-Nov-06	22.1	14.1	50.1	33.4	28.1	26.2
11-Dec-06	21.7	13.1	49.2	32.2	25.6	25.6
25-Dec-06	20.0	11.8	46.8	30.6	23.3	23.4
08-Jan-07	18.9	12.1	46.9	30.7	24.6	24.3
22-Jan-07	21.3	13.3	49.0	31.8	26.2	26.3
05-Feb-07	22.3	14.0	50.0	32.4	26.9	27.8
19-Feb-07	22.4	14.3	50.8	32.6	27.0	28.3
05-Mar-07	22.7	14.7	51.3	32.6	27.3	28.1
19-Mar-07	22.6	14.5	51.7	32.5	26.8	28.7
02-Apr-07	22.6	14.2	51.8	32.2	26.5	28.5
16-Apr-07	23.2	13.8	52.3	32.0	26.2	28.4
30-Apr-07	23.7	14.0	52.7	32.2	26.2	27.9
14-May-07	23.5	14.0	53.3	31.9	26.2	27.2
28-May-07	23.1	13.9	53.1	31.4	25.7	27.3
11-Jun-07	23.6	13.8	53.5	31.3	25.6	28.3
25-Jun-07	23.3	13.6	53.6	31.3	25.5	28.3
09-Jul-07	24.0	11.5	53.4	26.2	25.7	28.1
23-Jul-07	24.5	11.7	53.9	26.3	25.9	28.4
06-Aug-07	25.4	11.9	54.4	26.3	26.1	28.7
20-Aug-07	26.2	11.6	55.0	26.5	26.2	28.7
03-Sep-07	27.0	11.4	55.6	26.8	26.6	29.1
17-Sep-07	28.5	11.2	56.1	27.0	26.8	28.9
01-Oct-07	29.3	11.3	56.9	27.1	27.1	29.0
15-Oct-07	29.7	11.5	58.0	27.6	26.9	29.1
29-Oct-07	30.3	11.7	58.6	27.8	27.1	29.3
12-Nov-07	31.1	12.1	59.5	27.6	27.4	29.2
26-Nov-07	31.4	11.9	59.7	27.3	27.3	29.1
10-Dec-07	30.1	11.2	58.7	26.3	24.8	27.9
24-Dec-07	28.7	10.1	55.8	25.1	22.4	25.7
07-Jan-08	27.7	10.4	55.8	25.2	23.0	25.9
21-Jan-08	29.6	11.1	58.1	25.9	24.8	28.2
04-Feb-08	30.9	11.3	59.1	26.5	25.4	29.1
18-Feb-08	32.0	11.7	59.8	26.9	25.1	29.3
03-Mar-08	32.4	11.6	59.5	27.2	25.2	29.9
17-Mar-08	32.0	11.5	59.4	27.0	25.0	30.4
31-Mar-08	32.0	11.4	60.0	27.0	25.1	29.7
14-Apr-08	32.3	11.5	59.6	27.0	24.1	29.9
28-Apr-08	32.5	11.5	60.0	27.0	23.6	29.9
12-May-08	33.1	11.6	59.9	26.8	23.3	29.8
26-May-08	32.7	11.6	59.8	26.3	22.7	29.0
09-Jun-08	31.1	10.4	58.3	25.4	19.9	27.7

Figure 3: Proportion (%) of individuals on IS who combine IS receipt with earnings: By benefit type and participation requirement; 1 July 2006 to 30 June 2008.



4.4 Characteristics by benefit type of IS recipients who combine versus IS recipients who do not combine

In section 4.1 we investigated the time trend of the incidence of combining IS receipt with earnings, broken down by benefit type. This section is closely related to that but rather than investigating the incidence of combining over time we contrast the average characteristics of those IS recipients who do combine with those who do not combine. We again do this for each payment type separately. Sections 4.5 and 4.6 break down the results by participation requirement and by benefit type interacted with the participation requirement.

Table 4 below shows the sample means of being: male, Aboriginal or Torres Strait Islander descent, foreign born, the recipient’s age, the number of children, age of the youngest child, a variety of partnership states, and geographical location in the form of State or Territory of residence. For the Parenting Payment, especially Parenting Payment Single, those who do combine IS receipt tend to be a few years older on average. For Disability Support Pension

and Carer's Payment this is the reverse: for these benefit types those who combine IS receipt with earnings tend to be younger. For the other benefit types there appears to be no age difference.

In terms of gender differences, and abstaining from Parenting Payment since those payments predominantly go to mothers, women are more likely to combine IS receipt with earnings.

Perhaps surprisingly, for those receiving the same benefit type there are no large differences in terms of partnership status once those who combine are compared to those who do not. That is, the distribution over the partnership status for both groups is fairly similar. Small differences do exist, for instance for recipients of Parenting Payment Single. If the recipient is divorced or separated they are more likely to combine their IS receipt with earnings, when they are single they are less likely.

Much like the distribution of partnership status, the distribution over geographical States and Territories does not substantially differ between those who do combine IS receipt with earnings and those who do not. In general, Tasmania, Queensland and the Australian Capital Territory are 'over-represented' among the group that combines. New South Wales and the Northern Territory are 'under-represented'.

4.5 Characteristics by participation requirement of IS recipients who combine versus IS recipients who do not combine

Table 5 below breaks down the mean characteristics of those who combine and those who do not combine IS receipt with earnings by the participation requirement for the IS benefit. We restrict the age of the IS recipients to be 21 years of age or older, but less than 60 years of age.

The same gender pattern holds when breaking results down by participation requirement. That is, women are more likely than men to combine IS receipt with earnings. Australian born IS recipients and younger recipients, too, are more likely to combine than recipients born overseas or who are older.

Conditional on receiving an IS payment with a full-time participation requirement, there are almost no differences in partnership status between those who choose to combine the payment with earnings compared to those who do not. When the IS payment has a part-time participation requirement those who combine are less likely to be married and more likely to be separated. If the IS payment has no participation requirement those who combine are more likely to be single.

From the distributions for the geographical States and Territories it is clear that when it comes to combining IS receipt with earnings there are no State effects that can be detected. That is, no State or Territory shows a behavioural pattern that is out of step to any of the other States or Territories.

4.6 Characteristics by benefit type and participation requirement of IS recipients who combine versus IS recipients who do not combine

For completeness we also interact the benefit type with the participation requirement and compare those who do combine IS receipt with earnings to those who do not. In doing so we observe much the same, but there are small nuances to be made. Australian born IS recipients are still more likely to be combining IS receipt and earnings than those born overseas, but the effect of age almost completely disappears when one restricts the recipients to the same benefit type with the same participation requirement. Limited to Newstart, males are still less likely to combine than women. Queensland and Tasmania are ‘over-represented’ amongst those who do combine IS receipt with earnings, at the ‘expense’ of New South Wales.

Table 4: Mean characteristics of individuals on IS that combine IS receipt with earnings, and those who don't: By benefit type; 1 July 2006 to 30 June 2008.

	PPP		PPS		NSA		DSP		CAR		CAR (Age [21,60])		YAS	
	Combines		Combines		Combines		Combines		Combines		Combines		Combines	
	No	Yes	No	Yes	No	Yes								
Male	0.088	0.114	0.075	0.048	0.652	0.554	0.573	0.543	0.335	0.271	0.312	0.253	0.505	0.371
ATSI	0.118	0.093	0.166	0.111	0.195	0.122	0.234	0.133	0.095	0.071	0.092	0.075	0.036	0.025
Foreign born	0.413	0.303	0.218	0.189	0.269	0.249	0.272	0.184	0.366	0.286	0.355	0.287	0.200	0.120
Age	34.146	36.771	33.507	37.050	39.655	39.688	49.040	44.591	50.339	48.248	46.506	46.520	18.502	19.634
Number of children	2.207	1.916	1.844	1.619	0.084	0.110	0.085	0.083	0.352	0.317	0.471	0.368	0.001	0.000
Age youngest child	3.796	6.057	5.107	7.863	9.194	10.093	8.331	9.162	8.056	9.012	8.056	9.020	4.167	1.436
Partnership status														
Defacto	0.265	0.271	0.002	0.001	0.050	0.052	0.028	0.033	0.050	0.070	0.061	0.078	0.009	0.014
Divorced	0.000	0.000	0.053	0.084	0.046	0.055	0.068	0.076	0.040	0.040	0.040	0.038	0.000	0.000
Married	0.570	0.570	0.001	0.001	0.110	0.121	0.172	0.152	0.350	0.343	0.354	0.354	0.005	0.004
Not recorded	0.000	0.000	0.000	0.000	0.005	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002
Separated	0.005	0.006	0.600	0.649	0.230	0.207	0.178	0.169	0.110	0.137	0.132	0.143	0.006	0.009
Single	0.000	0.000	0.325	0.243	0.440	0.435	0.371	0.429	0.173	0.163	0.191	0.161	0.934	0.924
Unknown	0.000	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.039	0.040
Widowed	0.000	0.000	0.019	0.022	0.013	0.012	0.031	0.023	0.025	0.019	0.015	0.017	0.000	0.000
State & Territories														
ACT	0.008	0.009	0.011	0.015	0.011	0.011	0.012	0.018	0.007	0.007	0.007	0.008	0.016	0.022
NSW	0.350	0.284	0.345	0.283	0.342	0.310	0.324	0.273	0.379	0.305	0.388	0.306	0.357	0.271
NT	0.024	0.009	0.017	0.009	0.038	0.009	0.009	0.009	0.004	0.007	0.005	0.006	0.003	0.003
QLD	0.176	0.218	0.200	0.234	0.174	0.205	0.188	0.211	0.189	0.238	0.187	0.247	0.143	0.201
SA	0.072	0.091	0.082	0.084	0.085	0.094	0.094	0.099	0.077	0.079	0.076	0.079	0.082	0.081
TAS	0.030	0.045	0.028	0.032	0.031	0.044	0.036	0.038	0.036	0.044	0.036	0.042	0.032	0.028
VIC	0.260	0.264	0.225	0.236	0.241	0.256	0.242	0.231	0.247	0.248	0.243	0.243	0.301	0.294
WA	0.078	0.079	0.090	0.107	0.075	0.069	0.079	0.120	0.059	0.072	0.057	0.068	0.064	0.098

Table 5: Mean characteristics of individuals on IS who combine IS receipt with earnings, and those who don't: By participation requirement; 1 July 2006 to 30 June 2008. Recipient's age restricted to 21 years or over, but less than 60 years

	Full-Time Combines		Part-Time Combines		None Combines	
	No	Yes	No	Yes	No	Yes
Male	0.633	0.565	0.247	0.112	0.388	0.261
ATSI	0.196	0.115	0.126	0.116	0.195	0.090
Foreign born	0.250	0.230	0.345	0.235	0.249	0.170
Age	36.976	36.604	44.587	41.979	40.257	33.820
Number of children	0.045	0.036	1.032	1.350	0.795	0.886
Age youngest child	8.304	9.160	9.211	9.886	3.594	5.320
Partnership status						
Defacto	0.050	0.052	0.045	0.023	0.058	0.045
Divorced	0.046	0.049	0.064	0.093	0.044	0.041
Married	0.073	0.091	0.240	0.103	0.166	0.087
Not recorded	0.005	0.004	0.000	0.000	0.000	0.001
Separated	0.249	0.202	0.314	0.519	0.249	0.321
Single	0.475	0.490	0.193	0.188	0.368	0.444
Unknown	0.001	0.001	0.000	0.000	0.001	0.005
Widowed	0.026	0.016	0.021	0.024	0.017	0.011
State & Territories						
ACT	0.012	0.012	0.008	0.013	0.013	0.020
NSW	0.340	0.311	0.368	0.289	0.329	0.281
NT	0.040	0.009	0.012	0.007	0.012	0.008
QLD	0.172	0.196	0.181	0.224	0.191	0.220
SA	0.084	0.098	0.082	0.085	0.089	0.085
TAS	0.029	0.041	0.034	0.037	0.033	0.035
VIC	0.240	0.261	0.246	0.250	0.244	0.243
WA	0.078	0.069	0.068	0.095	0.082	0.107

Table 6: Mean characteristics of individuals on IS who combine IS receipt with earnings, and those who don't: By Benefit Type and Participation Requirement; 1 July 2006 to 30 June 2008.

	PPP Part-Time Combines		PPP None Combines		PPS Part-Time Combines		PPS None Combines		NSA Full-Time Combines		NSA Part-Time Combines	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	Male	0.090	0.079	0.087	0.131	0.114	0.052	0.057	0.042	0.674	0.586	0.556
ATSI	0.082	0.072	0.126	0.103	0.151	0.119	0.173	0.100	0.203	0.117	0.157	0.142
Foreign born	0.557	0.398	0.384	0.257	0.262	0.203	0.197	0.171	0.243	0.231	0.385	0.320
Age	42.199	42.298	32.540	34.105	39.274	39.646	30.835	33.762	35.801	36.063	56.496	54.225
Number of children	1.904	1.772	2.269	1.986	1.677	1.598	1.922	1.646	0.045	0.037	0.245	0.402
Age youngest child	9.359	10.046	2.680	4.129	9.333	9.862	3.144	5.328	8.203	9.215	10.267	10.511
Partnership status												
Defacto	0.144	0.135	0.290	0.336	0.001	0.000	0.003	0.002	0.053	0.054	0.034	0.043
Divorced	0.000	0.000	0.000	0.000	0.092	0.107	0.035	0.055	0.035	0.043	0.095	0.104
Married	0.671	0.684	0.550	0.515	0.001	0.001	0.001	0.001	0.077	0.095	0.258	0.225
Not recorded	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.004	0.002	0.000
Separated	0.001	0.001	0.006	0.008	0.623	0.654	0.589	0.644	0.239	0.195	0.187	0.256
Single	0.000	0.000	0.000	0.000	0.253	0.212	0.358	0.282	0.500	0.502	0.181	0.167
Unknown	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.002	0.001
Widowed	0.000	0.000	0.000	0.000	0.030	0.026	0.013	0.016	0.009	0.008	0.031	0.031
State & Territories												
ACT	0.004	0.009	0.009	0.009	0.008	0.015	0.013	0.017	0.011	0.012	0.009	0.008
NSW	0.392	0.311	0.342	0.272	0.356	0.283	0.340	0.283	0.342	0.315	0.341	0.290
NT	0.018	0.009	0.026	0.009	0.015	0.007	0.019	0.011	0.043	0.009	0.019	0.006
QLD	0.124	0.185	0.187	0.234	0.184	0.224	0.208	0.248	0.169	0.197	0.194	0.234
SA	0.077	0.089	0.071	0.092	0.089	0.086	0.080	0.081	0.084	0.098	0.086	0.078
TAS	0.031	0.044	0.029	0.046	0.029	0.032	0.028	0.032	0.029	0.041	0.040	0.055
VIC	0.292	0.298	0.254	0.247	0.236	0.248	0.219	0.220	0.239	0.258	0.247	0.250
WA	0.061	0.056	0.082	0.089	0.082	0.106	0.093	0.108	0.077	0.067	0.064	0.079

4.7 Characteristics of IS recipients who combine IS receipt with earnings by the length of the combining spell

This section is the last of the descriptive statistics and it investigates the difference between individuals who combine IS receipt and earnings for only a brief number of consecutive fortnights and those who combine for much longer. We distinguish four groups: those who combine for 2 or 3 fortnights, those who combine 4 to 6 fortnights (i.e. up to 3 months), those who combine between 7 and 25 fortnights (that is between a quarter and a year), and finally those who combine for more than a year. We restrict recipients to be aged 21 years or older, but less than 60 years of age.

In order to make a clean comparison we exclude recipients who were already receiving an IS payment on 1 July 2006. That is, we will have no grandfathered cases in our group. For this reason, individuals registered as receiving Parenting Payment Partnered will have no participation requirement. If their child turns 6 they will be transferred to Newstart. Individuals receiving Parenting Payment Single overwhelmingly have no participation requirement either, but there is a small group for whom a part-time participation requirement holds: when their child is 6 years of age or older, but not yet 8 years of age.

Table 7 below reports the sample means of various characteristics for the four different groups. The characteristics can and do overlap. That is, we report, for instance, the proportion of people on Newstart, on Newstart with full-time participation requirements, and having full-time participation requirements on its own. If the length of the earnings spell, that is the number of consecutive fortnights an IS recipient combined his/her payment with earnings, was a random event or does not depend on any (personal) characteristics, then the distribution of characteristics would be identical for all four groups. However, they are not the same and a few observations stand out.

In terms of the different benefit types, the mix of payments is different for the four groups. Parenting Payment Partnered is relatively over-represented for combining spells that last between 7 to 25 fortnights, but under-represented for very long combining spells of over a year. For both Youth Allowance Student and Parenting Payment Single it holds that the longer the combining spell the more dominant these two benefit types are. For Newstart the reverse holds, that is, Newstart is not a benefit type associated with long spells of combining IS receipt with earnings.

Table 7: Mean characteristics of individuals on IS who combine IS receipt with earnings by length of earning spell: Recipients aged 21 and over but less than 60; 1 July 2006 to 30 June 2008; IS spell started post 1 July 2006

	Earnings spell length (consecutive fortnights)			
	2 or 3	4 to 6	7 to 25	26 or more
PPP	0.044	0.041	0.047	0.031
PPS	0.050	0.053	0.095	0.156
NSA	0.634	0.522	0.345	0.131
DSP	0.014	0.012	0.008	0.025
CAR	0.020	0.019	0.023	0.006
YAS	0.119	0.205	0.298	0.475
Other benefit	0.086	0.096	0.089	0.119
PPP with no requirement	0.044	0.040	0.047	0.031
PPS with Part-Time requirement	0.010	0.009	0.018	0.063
PPS with no requirement	0.040	0.044	0.078	0.094
NSA with Full-Time requirement	0.555	0.452	0.255	0.094
NSA with Part-Time requirement	0.078	0.070	0.089	0.038
Full-Time requirement	0.575	0.470	0.268	0.119
Part-Time requirement	0.108	0.097	0.131	0.106
No requirement	0.203	0.291	0.424	0.600
Male	0.521	0.524	0.427	0.250
ATSI	0.314	0.263	0.208	0.150
Foreign born	0.308	0.304	0.267	0.213
Age	34.205	33.011	32.952	29.981
Number of children	0.239	0.252	0.357	0.369
Age youngest child	5.166	4.809	4.918	5.270
Partnership status				
Defacto	0.045	0.041	0.038	0.031
Divorced	0.024	0.021	0.016	0.019
Married	0.164	0.166	0.143	0.075
Not recorded	0.012	0.006	0.004	0.000
Separated	0.151	0.149	0.158	0.194
Single	0.511	0.502	0.497	0.594
Unknown	0.000	0.000	0.000	0.000
Widowed	0.005	0.010	0.013	0.013
State & Territories				
ACT	0.012	0.012	0.019	0.013
NSW	0.317	0.351	0.336	0.275
NT	0.008	0.005	0.002	0.000
QLD	0.167	0.179	0.172	0.163
SA	0.099	0.088	0.083	0.081
TAS	0.028	0.028	0.023	0.025
VIC	0.290	0.255	0.283	0.363
WA	0.078	0.083	0.078	0.081

When simply looking at the participation requirement we see that among those recipients who combine for over a year, the group with no participation requirements becomes more prominent at the expense of the group with a full-time requirement. The proportion with a part-time requirement is very close for all four groups.

In terms of partnership status and geographical States and Territories there are few, if any, discernable differences between the characteristics of those recipients who combine IS receipt with earnings for any length of time. Age and gender do play a role, with younger recipients and female recipients are relatively over-represented amongst those recipients who combine for more than a year.

5. Results: Models of IS and Combining

This section discusses and presents the findings from three models, each of them answering a different question. The first subsection models the probability of combining IS receipt with earnings, and is therefore the model-equivalent to Tables 4, 5 and 6 in Section 4.5. The choice to combine, or not, is modelled using a logit regression. To account for the role of preferences and other unobservable characteristics we also estimate a logit regression including a random effect.

The second model focuses on the role that combining IS receipt and earnings has on the length of the IS spell, that is, it investigates whether combining IS receipts with earnings leads to longer or shorter IS spells. The model estimated is a duration model where one models the probability (over time) of exiting IS in the upcoming fortnight, conditional on having been on IS up to the current fortnight.

Finally, the third investigates the length of the combining spell, using the same duration model used to investigate the length of the IS spell. This model is closely linked to Table 7 in Section 4.7.

5.1 Modelling the probability of combining IS receipt with earnings

In this section we model the probability of combining IS receipt with earnings. The choice to combine, or not, is modelled using a logistic regression. Whereas Tables 4, 5 and 6 give a snapshot of the characteristics of IS recipients who do combine, compared to those who do not combine, the logistic regression can be interpreted as the effect of any given characteristic, e.g. gender, on the probability of combining *holding all other characteristics constant*. The characteristics we include relate to the payment type (interacted with the participation requirement), being male, of indigenous descent, being born outside of Australia, marital status, the number of children, and geographical location. Table 8 below presents the results from the logistic regression, with the results reported in the two left columns relating to the model without random effects, and the two columns on the right relating to the model that includes random effects. A positive coefficient implies an increased probability of combining IS receipt with earnings, a negative coefficient implies a reduced probability of combining, all else equal. We will discuss the findings from the model without random effects in detail and report any differences with respect to these findings when including the random effects.

The benefit types distinguished are Parenting Payment (Single and Partnered) interacted with no participation requirement or a part-time participation requirement, Newstart interacted with a part-time or full-time participation requirement, Disability Support Pension, Carer Payment and Youth Allowance Student. Their relative effects are compared to the omitted category, which consist of all other benefit types not mentioned above. Many of the same lessons from the descriptive analysis in Section 4.5 are confirmed: within payments, those with a part-time requirement are more likely to combine than those with no participation requirement. Relative to the omitted category, and controlling for personal characteristics such as age, partnership status and geographical location, higher incidences of combining are associated with receiving Parenting Payment (except Parenting Payment Partnered when not subject to a participation requirement), Newstart, and Youth Allowance Student. A lower incidence, relative to the omitted category, is associated with receiving Disability Support Pension, Carers Payment, and Parenting Payment Partnered when not subject to a participation requirement.

Controlling for payment type and geographical location, personal characteristics are important too. Male recipients, recipients of indigenous and Torres Strait Islander descent, recipients not born in Australia, recipients with more than one child, and recipients who are partnered are all less likely to combine IS receipt with earnings. Recipients residing in the Northern Territory, or who's geographic location can not be determined, are least likely to combine IS receipt with earnings. This result is obtained controlling for all other included characteristics, including indigenous status.

When the logit model in Table 8 is re-estimated including random effects to capture unobserved heterogeneity, such as preferences, the qualitative effects remain the same except in two instances: the finding that recipients in the Northern Territory, or for whom geographical location could not be established, had the lowest propensity to combine is no longer supported. Relative to the omitted (reference) category, New South Wales, all States and Territories have a higher propensity to combine, all else equal. A further effect of inclusion of random effects in the logit model is that the coefficient for Parenting Payment Partnered with no participation requirement is now positive. That is, controlling for unobserved heterogeneity such as preferences, the Parenting Payment Partnered recipients with no requirements are, holding all else constant, more likely to combine, relative to the omitted category.

Table 8: Logit and Random Effects Logit estimates for the probability of individuals on IS combining IS receipt with earnings: Recipients aged 21 and over but less than 60; 1 July 2006 to 30 June 2008

	Logit		Random Effects Logit	
	Coef.	Std. Err.*	Coef.	Std. Err.
Benefit Type (reference case is "other")				
PPS with Part-Time requirement	1.476	0.042	1.565	0.035
PPS with no requirement	0.525	0.041	0.649	0.032
PPP with Part-Time requirement	0.434	0.060	1.662	0.052
PPP with no requirement	-0.431	0.044	0.107	0.035
NSA with Full-Time requirement	0.395	0.028	1.256	0.023
NSA with Part-Time requirement	0.663	0.037	1.231	0.032
DSP	-0.864	0.030	-1.820	0.032
CAR	-0.444	0.043	-0.671	0.038
YAS	1.391	0.037	1.185	0.035
Male	-0.331	0.015	-0.978	0.028
ATSI	-0.504	0.020	-1.845	0.036
Foreign born	-0.357	0.015	-1.376	0.031
Age	-0.003	0.001	-0.007	0.001
One child	0.059	0.031	0.075	0.024
Two children	-0.074	0.034	-0.519	0.028
More than 2 children	-0.526	0.038	-1.146	0.035
Partnered (married or defacto)	-0.022	0.020	-0.089	0.017
State & Territories (NSW=base)				
ACT	0.383	0.052	0.951	0.056
NT	-0.524	0.061	0.710	0.058
QLD	0.316	0.017	0.704	0.023
SA	0.209	0.024	0.335	0.035
TAS	0.317	0.035	0.156	0.048
VIC	0.163	0.017	0.236	0.024
WA	0.358	0.023	0.908	0.035
Unknown	-0.527	0.111	0.017	0.063
Constant	-1.119	0.043	-3.467	0.056
Sigma_u			5.457	0.020
Rho			0.901	0.001
Nobs (individuals*fortnights)	4602107		4602107	
Individuals	133620		133620	
Pseudo R2	0.120		-	
Wald chi2(25)	17890.29		31573.86	
Prob > chi2	0.000		0.000	

All regressors statistically significantly different from zero at the 10% level or better, except the dummy variable 'partnered' in the Logit model without random effects. * Standard errors clustered on the customer id to account for individuals being observed in multiple fortnights.

5.2 Models for describing the length of the IS spell

This section investigates the role of combining IS receipt with earnings on the length of the IS spell. What is estimated is a proportional hazard model with a flexible, piecewise constant, baseline hazard. We will briefly describe, but only in words, what such a model estimates. The hazard is the probability of leaving IS in the upcoming fortnight conditional on having remained on IS thus far. This probability (hazard) changes over time. The probability of someone leaving in the upcoming fortnight after having been on IS for just 3 fortnights is different from the probability of leaving in the next fortnight for someone who has been on income support for 30 fortnights. This is one way that the hazard changes, that is, over time. This is captured by the baseline hazard, which is broken into segments where this probability is assumed to be stable for the duration of the segment, hence the name piecewise constant. The breakdown of the segments is inherently arbitrary. We chose segments that represent three blocks of two months for the first 6 months, the second half of the first year, and the second year and beyond, for a total of 5 segments.

The second way in which the hazard can change is through characteristics included as explanatory variables. These effects either raise or lower the hazard, hence the name proportional hazard model. Coefficients for the characteristics (but not the coefficients for the baseline) have an easy interpretation. A coefficient less than 1 implies it lowers the hazard, a coefficient of greater than one implies it raises the hazard, and a coefficient of exactly 1 implies it leaves the hazard unaffected. The further away from 1, in absolute value, the stronger the effect.

Included in the sample are individuals aged between 21 and 60 years old who start their IS spell after 1 July 2006. The reason for doing this is that we want to investigate not only the role of the benefit type, but also the role of the participation requirement. Restricting the sample to those who start a spell of IS after 1 July 2006 ensures a sample under the (then new) WtW rules not subject to any special grandfathering clauses.

Before discussing the effect of combining IS receipt with earnings on the length of the IS spell we suffice to say here that the baseline hazard implies that, over time, the probability of leaving IS declines, all else equal.

To capture the incidence and intensity of combining we compute two separate variables. The first variable simply is an indicator (dummy variable) to capture the IS recipient combining IS receipt with earnings in the previous fortnight, or not. The second measure captures the intensity of combining and is the fraction of time since the IS spell started that the recipient

combined IS receipt with earnings. In the first fortnight this fraction is either 0 or 100% but as the length of the IS spell increases this fraction becomes an almost continuous variable. We break down this ‘proportion combining’ variable into five groups: not combining at any point in time (i.e. 0), more than 0 but less than 25% of the time, between 25% and 50% of the time, between 50% and 75% of the time, or more than 75% of the time.

All variables that capture the incidence (‘combining in previous fortnight’) and intensity (‘cumulative proportion combining’) are allowed to have different effects as time goes on. We allow for this flexibility to account for the possibility that combining IS receipt with earnings at the very beginning of the IS spell may or may not be associated with quickly leaving IS, whereas combining after already having been on IS for more than a year may or may not be associated with precisely the reverse, that is, entrenching IS reliance.

The coefficients in Table 9 below relating to combining IS receipt with earnings in the previous fortnight, are all greater than 1 and statistically significant, implying an increased probability (hazard) of exiting IS in the next fortnight compared to those who did not combine in the previous fortnight, all else equal. The effect is largest in the first two months and smallest in the second half of the first year.

With respect to the intensity, and purely describing the qualitative effects, we see that combining less than 75% of the time (but still combining) is associated with a larger hazard, and thus shorter IS spell duration, compared to not combining at all. The effects are strongest for the period between fortnight 8 (after 4 months) and fortnight 25 (a year). However, perhaps the most interesting set of coefficients are those coefficients for the period fortnight 26 and beyond. For IS recipients on a spell that has lasted already a year (26 fortnights) the impact of the combining intensity is interesting. When the cumulative proportion of time combining IS with earnings is greater than zero, but less than 25%, this recipient is more likely to exit IS than a similar IS recipient who never combined at all. However, as the cumulative proportion of combining rises, and still focussing on the period of 26 fortnights and beyond, this effect drops off from 1.539 for the cumulative proportion being less than 25%, to 1.186 for the cumulative proportion being between 25% and 50%, down to 1.065 for the cumulative proportion being over 75%. Putting these numbers in a different way, for those on IS for a year or more, combining IS receipt with earnings up to a modest proportion of the time increases the probability of exiting IS and shortening IS spell duration. However, combining more intensively makes a recipient no more or less likely to exit IS than a recipient

who never combined IS receipt with earnings but who has been on IS for an equal length of time.

The remainder of the variables relate to geographical location, personal characteristics, and benefit type interacted with the participation requirement. Their coefficients show that males, recipients of indigenous and Torres Strait Islander descent and partnered individuals have higher hazard rates and thus shorter IS spell durations, all else equal. The benefit payment associated with the highest hazard rates is Newstart, especially when coupled with a full-time participation requirement. The hazard rate for Parenting Payment Single is lower, compared to the reference category, but higher when coupled to a part-time participation requirement than when coupled with no requirement.

Table 9: Piecewise constant hazard model for IS spell length: Recipients aged 21 and over but less than 60; 1 July 2006 to 30 June 2008; IS spell commenced after 1 July 2006

	Hazard Ratio	Std. Err.	z-value	P> z
Baseline hazard				
Fortnight 0-3	0.045	0.004	-37.470	0.000
Fortnight 4 to 7	0.040	0.004	-36.550	0.000
Fortnight 8 to 12	0.034	0.003	-36.100	0.000
Fortnight 13 to 25	0.024	0.002	-39.830	0.000
Fortnight 26 and beyond	0.017	0.002	-34.280	0.000
Earning in previous fortnight during...				
Fortnight 0-3	3.290	0.590	6.650	0.000
Fortnight 4 to 7	2.198	0.314	5.520	0.000
Fortnight 8 to 12	2.209	0.300	5.840	0.000
Fortnight 13 to 25	1.967	0.219	6.070	0.000
Fortnight 26 and beyond	2.666	0.449	5.820	0.000
Not combining at any point during IS spell (ref.)				
Proportion combining less than 25% at.....				
Fortnight 0-3	1.107	0.206	0.550	0.585
Fortnight 4 to 7	1.370	0.184	2.340	0.019
Fortnight 8 to 12	1.450	0.198	2.720	0.007
Fortnight 13 to 25	1.510	0.180	3.460	0.001
Fortnight 26 and beyond	1.539	0.261	2.550	0.011
Proportion combining between 25% -50% at.....				
Fortnight 0-3	0.912	0.147	-0.580	0.565
Fortnight 4 to 7	1.441	0.218	2.410	0.016
Fortnight 8 to 12	1.387	0.216	2.100	0.036
Fortnight 13 to 25	1.629	0.213	3.720	0.000
Fortnight 26 and beyond	1.186	0.252	0.810	0.420
Proportion combining between 50% -75% at.....				
Fortnight 0-3	0.911	0.181	-0.470	0.639
Fortnight 4 to 7	1.033	0.180	0.190	0.853
Fortnight 8 to 12	1.379	0.228	1.950	0.052
Fortnight 13 to 25	1.735	0.242	3.950	0.000
Fortnight 26 and beyond	1.047	0.250	0.190	0.849

Proportion combining more than 75% at.....				
Fortnight 0-3	0.398	0.077	-4.740	0.000
Fortnight 4 to 7	0.879	0.144	-0.780	0.433
Fortnight 8 to 12	0.869	0.143	-0.850	0.394
Fortnight 13 to 25	1.307	0.181	1.930	0.054
Fortnight 26 and beyond	1.065	0.226	0.300	0.766
Age	0.984	0.002	-10.280	0.000
State & Territories (NSW=base)				
ACT	1.045	0.138	0.330	0.740
NT	1.289	0.277	1.180	0.239
QLD	1.070	0.047	1.540	0.125
SA	0.814	0.048	-3.480	0.001
TAS	0.766	0.089	-2.310	0.021
VIC	0.958	0.035	-1.170	0.241
WA	1.171	0.068	2.700	0.007
Male	1.252	0.041	6.940	0.000
ATSI	1.186	0.041	4.910	0.000
Foreign born	0.851	0.028	-4.990	0.000
Partnered (married or defacto)	1.091	0.042	2.280	0.023
One child	0.983	0.068	-0.240	0.809
Two children	1.041	0.080	0.530	0.599
More than two children	0.753	0.081	-2.640	0.008
Benefit type (reference is "other")				
PPP*	1.101	0.097	1.100	0.272
PPS with Part-Time requirement	0.697	0.113	-2.230	0.026
PPS with no requirement	0.357	0.039	-9.440	0.000
NSA with Full-Time requirement	1.925	0.093	13.640	0.000
NSA with Part-Time requirement	1.509	0.103	6.010	0.000
DSP	0.130	0.023	-11.790	0.000
CAR	0.500	0.058	-5.930	0.000
YAS	0.535	0.036	-9.300	0.000
Number of observations	163985			
No. of subjects	10378			
No. of completed spells	4695			
Wald chi2(53)	49950.520			
Prob > chi2	0.000			
Log likelihood	-10232.915			

* Because only IS spells that commenced after 1 July 2006 are included, recipients receiving PPP have no participation requirement.

5.2 Models for describing the length of the earnings (while on IS) spell

After having modelled who combines IS receipt with earnings, and what effect combining has on the duration of the IS spell, this final subsection investigates the length of the combining spell. It is therefore closely related to Table 7 in section 4.7 that contrasted the characteristics of those combining for 2 or 3 consecutive fortnights, for 4 to 6 consecutive fortnights, for between roughly 4 to 12 months consecutively, or for more than a year.

The model estimated is a proportional piecewise constant hazard model, as estimated in Section 5.1. In this particular instance the hazard modelled is the probability of ending the earnings spell while on IS. It therefore says nothing about the actual length of the IS spell. The sample consists of individuals who start their earnings spell after 1 July 2006.

The first 5 rows in Table 10 display the coefficients for the baseline hazard and show that the hazard steadily decreases over time. That is, the longer the earnings spell is ongoing the less likely it is it will end in the next fortnight. We observed a similar downward pattern over time for the hazard of exiting IS in Section 5.1. However, in contrast to modelling the hazard for ending the IS spell, personal characteristics play a less pronounced role when it comes to ending the earning spell. That is, the coefficient estimates for being male, of indigenous or Torres Strait Islander decent, being foreign born or being married etc., are generally closer to 1. The benefit type, interacted with the participation requirement, however, still does make a big difference. Earnings spells while on Newstart are of much shorter duration than those on Parenting Payment Single which, like Youth Allowance Student, is characterised by relatively long spells of combining IS receipt with earnings. As a point of interest, we observe that while Disability Support Pensioners and recipients receiving Carer's Payment are associated with having much longer IS durations, or a low hazard for exiting IS (Table 9), when it comes to the length of the combining spell this is no longer the case. They are no more or less likely to end the earnings spell while on IS than those combining earnings with a benefit type from the reference (omitted) category.

Table 10: Piecewise constant hazard model for Combining spell length: Recipients aged 21 and over but less than 60; 1 July 2006 to 30 June 2008; Earnings spell (with IS receipt) commenced after 1 July 2006

	Hazard Ratio	Std. Err.	z-value	P> z
Baseline hazard				
Fortnight 0-3	0.142	0.004	-65.440	0.000
Fortnight 4 to 7	0.109	0.003	-71.040	0.000
Fortnight 8 to 12	0.077	0.003	-76.650	0.000
Fortnight 13 to 25	0.058	0.002	-84.530	0.000
Fortnight 26 and beyond	0.042	0.002	-74.900	0.000
Age	0.990	0.001	-16.530	0.000
State & Territories (NSW=base)				
ACT	1.059	0.049	1.230	0.220
NT	1.239	0.063	4.240	0.000
QLD	1.065	0.016	4.050	0.000
SA	0.990	0.022	-0.440	0.662
TAS	0.949	0.031	-1.610	0.108
VIC	0.974	0.015	-1.720	0.086
WA	1.078	0.023	3.540	0.000
Male	1.221	0.015	15.810	0.000
ATSI	1.081	0.018	4.760	0.000
Foreign born	0.973	0.013	-2.000	0.046
Partnered (married or defacto)	0.954	0.017	-2.680	0.007
One child	0.923	0.027	-2.750	0.006
Two children	0.863	0.028	-4.590	0.000
More than two children	0.903	0.033	-2.790	0.005
Benefit type (reference is "other")				
PPP*	1.494	0.057	10.490	0.000
PPS with Part-Time requirement	0.864	0.032	-3.960	0.000
PPS with no requirement	0.862	0.030	-4.230	0.000
NSA with Full-Time requirement	2.053	0.036	41.380	0.000
NSA with Part-Time requirement	1.647	0.051	16.250	0.000
DSP	1.087	0.030	3.060	0.002
CAR	1.064	0.050	1.310	0.191
YAS	0.880	0.025	-4.480	0.000
Number of observations	329774			
No. of subjects	39422			
No. of completed spells	32746			
Wald chi2(52)	156530.7			
Prob > chi2	0.000			
Log likelihood	-57880.9			

* Because only earning (while on IS) spells that commenced after 1 July 2006 are included recipients receiving PPP have no participation requirement.

6. Patterns of combining over time and attitudes

Previous sections have investigated who combines, the incidence of combining, the characteristics of those who combine, and the length of the income support and earning spells. In this section we focus on the pattern of combining, distinguishing, for instance, between those who combine income support and earnings only once and briefly, only once but for a very long time, or many times. Furthermore, we investigate the difference in response to attitudinal questions between those income support customers who combine and those customers who do not combine. For the latter analysis we use additional data from the Longitudinal Pathway Survey (LPS).

6.1 Patterns of combining

We analyse the patterns of combining for a subgroup of all income support customers: those customers who are recorded to only receive NewStart allowance at any point between 1 July 2002 and 15 May 2008. We only consider completed spells since the spell needs to have ended in order to determine to what extent the customer combined, and in what fashion. We ignore those spells that have started prior to 1 July 2002. That is, we only look at NewStart spells for which we observe both the start and the end within our observation window.²

The pattern of combining depends very much on the length of the income support spell. For instance, in NewStart spells of short duration one is not likely to encounter multiple earning spells. In contrast, when NewStart spells are very long it is unlikely that the customer has earnings during the entire time. We therefore present descriptive results for NewStart spells of specific lengths: three months, three to 6 months, 6 to 12 months, 1 to 2 years, and two years or more. For two subgroups, Newstart spells between 6 to 12 months and 1 to 2 years, we also estimate basic models to establish correlations between the various patterns of combining and a handful of characteristics.

Table 11 shows the combining patterns for customers who experienced a three month NewStart spell. We only distinguish between no earnings during that spell and some earnings, but for those who had earnings we differentiate between four different levels of combining intensity. Close to half (47%) had no earnings and those who did have earnings mostly combined between 20 and 50% of the time, or more than 80% of the time.

² Our random 5% extract from the RED data goes all the way up to the end of June 2008, but we drop the last three fortnights from the data for reliability reasons. The difference here is that we do not restrict the data period to start in July 2006 since we do not explicitly utilise information on the participation requirement. In nearly all cases the NSA customer has full-time participation requirements.

Table 11: Combining patterns for completed NewStart spells that lasted: 6 fortnights

Proportion of the NewStart spell where the customer had earnings	Number of earning spells within the NewStart spell			
	0	1 or 2	Total (column%)	
Less than 5%	47%	0%	1,865	47%
Between 5 and 20%	0%	5%	214	5%
Between 20 and 50%	0%	23%	910	23%
Between 50 and 80%	0%	8%	317	8%
More than 80%	0%	17%	664	17%
Total (completed spells)	1,865	2105	3,970	100%
(row%)	47%	53%	100%	

Percentages are cell percentages except those in the bottom row and those in the far right column, which present row percentages and column percentages, respectively.

Table 12: Combining patterns for completed NewStart spells that lasted: Between 7 and 13 fortnights

Proportion of the NewStart spell where the customer had earnings	Number of earning spells within the NewStart spell			
	0	1	2+	Total (column%)
Less than 5%	37%	0%	0%	7,197 37%
Between 5 and 20%	0%	9%	0%	1,708 9%
Between 20 and 50%	0%	20%	3%	4,436 23%
Between 50 and 80%	0%	11%	5%	3,101 16%
More than 80%	0%	14%	2%	2,999 15%
Total (completed spells)	7,197	10,399	1845	19,441 100%
(row%)	37%	53%	9%	100%

Percentages are cell percentages except those in the bottom row and those in the far right column, which present row percentages and column percentages, respectively.

Table 13: Combining patterns for completed NewStart spells that lasted: Between 14 and 26 fortnights

Proportion of the NewStart spell where the customer had earnings	Number of earning spells within the NewStart spell				
	0	1	2	3+	Total (column%)
Less than 5%	27%	1%	0%	0%	3,710 28%
Between 5 and 20%	0%	15%	2%	0%	2,220 17%
Between 20 and 50%	0%	14%	9%	3%	3,367 26%
Between 50 and 80%	0%	7%	7%	3%	2,213 17%
More than 80%	0%	9%	3%	1%	1,649 13%
Total (completed spells)	3,610	5,915	2,792	842	13,159 100%
(row%)	27%	45%	21%	6%	100%

Percentages are cell percentages except those in the bottom row and those in the far right column, which present row percentages and column percentages, respectively.

As the length of the NewStart spell increases, the proportion of customers who do not have any earnings drops. Tables 12 and 13 show the patterns of combining for spells that lasted between 3 and 6 months, and between six months and a year, respectively. The proportion of customers with no earnings at all drops to 27% for spells that lasted between six months and a year. We also start to see a small proportion with three or more earning spells. We now also start to see patterns of customers combining once and for a long time and customers combining frequently but for very short periods. It is clear that when the NewStart spell is quite long, such as longer than two years (Table 15), frequent episodes with earnings become more prevalent.

Table 14: Combining patterns for completed NewStart spells that lasted: Between 27 and 52 fortnights

Proportion of the NewStart spell where the customer had earnings	Number of earning spells within the NewStart spell					Total (column%)	
	0	1	2	3	4+		
Less than 5%	22%	3%	0%	0%	0%	1,796	25%
Between 5 and 20%	0%	14%	6%	1%	0%	1,534	22%
Between 20 and 50%	0%	8%	9%	6%	5%	2,005	28%
Between 50 and 80%	0%	3%	4%	4%	4%	1,093	15%
More than 80%	0%	5%	3%	1%	1%	645	9%
Total (completed spells)	1,551	2,318	1,593	904	707	7,073	100%
(row%)	22%	33%	23%	13%	10%	100%	

Percentages are cell percentages except those in the bottom row and those in the far right column, which present row percentages and column percentages, respectively.

Table 15: Combining patterns for completed NewStart spells that lasted: More than 52 fortnights

Proportion of the NewStart spell where the customer had earnings	Number of earning spells within the NewStart spell						Total (column%)	
	0	1	2	3	4	5+		
Less than 5%	20%	8%	1%	0%	0%	0%	878	30%
Between 5 and 20%	0%	8%	8%	4%	2%	2%	717	24%
Between 20 and 50%	0%	3%	5%	4%	5%	9%	761	26%
Between 50 and 80%	0%	1%	2%	2%	2%	6%	384	13%
More than 80%	0%	3%	2%	1%	1%	1%	226	8%
Total (completed spells)	608	668	544	351	284	511	2,966	100%
(row%)	20%	23%	18%	12%	10%	17%		

Percentages are cell percentages except those in the bottom row and those in the far right column, which present row percentages and column percentages, respectively.

For the two subgroups displayed in Tables 13 and 14 we estimate basic multinomial logit models distinguishing seven different outcomes. These outcomes correspond to 7 different patterns of combining and are colour coded:

- non-combiners (grey)
- low intensity occasional combiners (red)
- moderate intensity occasional combiners (yellow)
- high intensity occasional combiners (green)
- very high intensity occasional combiners (light blue)
- low intensity frequent combiners (dark blue)
- high intensity frequent combiners (purple).

The purpose of these models is to establish correlations between the various patterns and a handful of characteristics and do not necessarily describe any causal relationships. Since the coefficients in multinomial logit models are not readily interpretable we display mean marginal effects (MME) only. Full estimation results are presented in Tables A1 and A2 in the appendix. The marginal effects present the increase in the probability of individuals choosing that particular outcome when the characteristic changes from 0 to 1. It is easiest to illustrate this using an example from Table 16. For instance, changing the value of the characteristic ‘male’ from 0 to 1 implies that males are 4.3 percentage points more likely to be low intensity occasional combiners (and 7.2 percentage points less likely to be very high intensity occasional combiners).

The largest marginal effects are found for the outcome ‘non-combining’ and suggest that this outcome is most likely for those individuals residing in the Northern Territory, are of aboriginal or Torres Strait Islander descent, are male, or were born overseas.

6.2 Combining and attitudes

This section investigates how attitudes might differ between those income support recipients who do combine income support benefits with earnings, and those customers who do not. For this purpose we use a different data source, the Longitudinal Pathway Survey (using all waves). We use the income support and earning status contained within the LPS since it is important to control for the precise income support status at the time of the interview when customers respond to the attitude questions.

**Table 16: Mean Marginal Effects (MME) from a Multinomial Logit (MNL) Regression
on different patterns of combining (NewStart spells of 6 to 12 months)**

Combining Frequency	None	Occasional	Occasional	Occasional	Occasional	Frequent	Frequent
Combining Intensity	None	Low	Moderate	High	Very high	Low	High
Colour match with Table 13	Grey	Red	Yellow	Green	Light blue	Dark blue	Purple
ACT	-10.2%	3.4%	6.8%	1.9%	-5.6%	0.6%	3.1%
NT	15.8%	-0.2%	-2.2%	-6.7%	-5.5%	-0.1%	-1.1%
QLD	-8.2%	-0.1%	1.1%	-0.9%	0.8%	3.3%	4.2%
SA	-8.1%	-1.8%	1.8%	0.9%	3.8%	-1.0%	4.5%
TAS	-13.0%	-1.2%	4.5%	-0.4%	6.2%	0.3%	3.5%
VIC	-4.3%	-0.4%	2.2%	0.5%	1.4%	-0.6%	1.3%
WA	-1.8%	-0.4%	0.8%	0.2%	1.3%	-1.2%	1.0%
Male	7.9%	4.3%	-1.1%	-3.0%	-7.2%	3.8%	-4.7%
ATSI	10.3%	-1.0%	-0.3%	-0.1%	-1.3%	-3.5%	-4.1%
Foreign born	6.2%	-0.3%	0.5%	0.1%	-1.3%	-2.3%	-2.8%
Partnered	-1.7%	-3.2%	1.3%	2.1%	1.3%	-2.9%	3.1%
One dependent child	5.2%	4.1%	-2.3%	0.3%	2.8%	-6.1%	-3.9%
Two or more dependent children	7.1%	-3.6%	-5.5%	1.4%	4.5%	-6.3%	2.4%

MMEs are taken from appendix Table A1 that reports the full estimation results for the MNL.

**Table 17: Mean Marginal Effects (MME) from a Multinomial Logit (MNL) Regression
on different patterns of combining (NewStart spells of 1 to 2 years)**

Combining Frequency	None	Occasional	Occasional	Occasional	Occasional	Frequent	Frequent
Combining Intensity	None	Low	Moderate	High	Very high	Low	High
Colour match with Table 13	Grey	Red	Yellow	Green	Light blue	Dark blue	Purple
ACT	1.6%	-0.9%	6.6%	1.4%	2.8%	-14.6%	3.0%
NT	18.1%	-7.9%	-4.9%	-4.3%	-0.6%	0.7%	-1.2%
QLD	-6.2%	-1.1%	1.0%	0.6%	-0.8%	3.4%	3.1%
SA	-6.6%	-1.8%	0.2%	2.1%	1.3%	2.1%	2.7%
TAS	-7.8%	-9.0%	1.9%	0.3%	4.4%	5.2%	5.0%
VIC	-4.8%	-0.7%	0.4%	1.7%	0.2%	0.9%	2.3%
WA	-0.5%	-0.2%	-0.1%	0.1%	-0.4%	0.5%	0.5%
Male	4.0%	5.7%	-2.3%	-5.7%	-7.0%	7.9%	-2.6%
ATSI	17.7%	-0.7%	-5.9%	0.2%	-4.8%	-1.3%	-5.1%
Foreign born	8.5%	0.0%	1.9%	-1.3%	-2.6%	-3.9%	-2.6%
Partnered	2.8%	-5.4%	2.2%	1.4%	2.0%	-2.6%	-0.3%
One dependent child	2.0%	-4.3%	-6.9%	1.8%	3.9%	1.9%	1.5%
Two or more dependent children	-6.2%	-10.6%	9.3%	5.3%	2.1%	-5.2%	5.2%

MMEs are taken from appendix Table A1 that reports the full estimation results for the MNL.

Specifically, the question in the LPS survey that we analyse is the attitude question J5:

J5 Now a few questions to get an overview of your attitudes and opinions. I am going to read out a number of statements and ask if you agree or disagree with each one. Some of these may not apply to you but it is important that we ask these of everyone. To what extent do you agree or disagree that ...?

(STATEMENTS)

- a) For me, studying and training is a good way of getting ahead
- b) I'd rather be a stay at home parent than a working parent³
- c) Given my current situation, work just isn't worth my while
- d) I don't want to earn so much that I go off payments altogether⁴
- e) I don't think people in my situation should have to work or look for work
- f) I have a lot of confidence in myself and my skills and abilities
- g) I don't want to earn too much, because I want to keep the concessions I get

(RESPONSE FRAME)

- 1. Strongly agree
- 2. Agree
- 3. (Neither agree nor disagree)
- 4. Disagree
- 5. Strongly disagree

For the purpose of comparing attitudes we compute the mean response score to each of these 7 attitude statements by earnings status, for everyone on income support.⁵ The higher the mean score the higher the disagreement with the statement. Conversely, the lower the mean score the higher the agreement with the statement.

The top part of Table 18 gives a comparison for all customers in the LPS who report being on income support at the time of interview. Not surprisingly, the biggest disparity in agreement is recorded for those questions that directly correspond to work and the difference seems to correspond to the choice that customers have made. For instance, the response to 'I'd rather be a stay at home parent than a working parent' there is much less agreement amongst those who combine (mean score of 3.40) than those who do not (mean score of 2.84). Similarly the statement 'Given my current situation, work just isn't worth my while' shows a large discrepancy (4.10 and 3.17, respectively). On the one hand one might say this is just confirmation bias and is to be expected. However, when the statements are viewed as a group, interesting conjectures can be drawn. For instance, those who combine do not differ substantially in their agreement with the statement that they do not want to earn so much that they would lose concessions (3.69 versus 3.63), or go off benefits altogether (3.62 versus

³ Only asked of primary caregivers

⁴ Only asked of those currently receiving payments

⁵ These are determined by the variable 'is_status' and 'earn_dm' taking the value 1, respectively.

3.53). So clearly then, it is not a reluctance to lose concessions or benefits that drives the difference in responses to the statement 'Given my current situation, work just isn't worth my while' between those who combine and those who do not.

Breaking down the responses by the type of benefit customers receive (the second and lower panels of Table 18) shows that for the statement 'For me, studying and training is a good way of getting ahead' there is very little difference between those who combine and those who do not. For Parenting Payment Single recipients the mean response to this statement is nearly identical for combiners and non-combiners alike (1.60 and 1.61). Also, a breakdown by benefit type not only contrasts combiners and non-combiners, it also contrasts differences in attitudes for recipients receiving different income support payments. For instance, young customers on Youth Allowance and single parents agree much more that training and studying are good ways of getting ahead (agreement scores between 1.34 and 1.66) whereas recipients on DSP agree, to a lesser extent, with this sentiment, yet in the main still agree (the average score is just above 2 for those on DSP).

The largest discrepancy in attitudes between those who combine and those who do not is recorded for the statement 'Given my current situation, work just isn't worth my while' for customers on Parenting Payment Partnered (3.88 versus 2.66, a spread of 1.22 points), closely followed by the same statement for customers on DSP (a difference of 1.16 points) and Parenting Payment Single (a difference of 1 point). However, as established for all income support recipients in the main, these discrepancies in attitude for the DSP and Parenting Payment subgroups are not the result in differences in a reluctance to lose concessions or benefits, since the agreement scores for statements pertaining to benefits and concessions are pretty similar for combiners and non-combiners alike.

Table 18: Level of agreement with various attitudinal statements by combining status and (selected) benefit types

	Combining			Not combining		
	Obs	Mean	St Dev	Obs	Mean	St Dev
Anyone on Income Support at interview						
For me, studying and training is a good way of getting ahead	4316	1.79	1.03	12518	2.03	1.17
I'd rather be a stay at home parent than a working parent	1850	3.40	1.32	4083	2.84	1.40
Given my current situation, work just isn't worth my while	4260	4.10	1.05	11993	3.17	1.44
I don't want to earn so much that I go off payments altogether	4180	3.62	1.31	11666	3.53	1.30
I don't think people in my situation should have to work or look for work	4240	3.93	1.18	12200	3.09	1.46
I have a lot of confidence in myself and my skills and abilities	4325	1.84	0.95	12520	2.28	1.25
I don't want to earn too much, because I want to keep the concessions I get	4171	3.69	1.23	11666	3.63	1.24
Anyone on NewStart at interview						
For me, studying and training is a good way of getting ahead	1176	1.92	1.08	3411	1.98	1.12
I'd rather be a stay at home parent than a working parent	100	3.67	1.27	327	3.50	1.27
Given my current situation, work just isn't worth my while	1158	4.15	1.04	3299	3.77	1.29
I don't want to earn so much that I go off payments altogether	1156	4.01	1.15	3266	3.88	1.19
I don't think people in my situation should have to work or look for work	1164	4.16	1.06	3350	3.73	1.34
I have a lot of confidence in myself and my skills and abilities	1177	1.89	0.98	3413	2.10	1.16
I don't want to earn too much, because I want to keep the concessions I get	1149	4.05	1.04	3295	3.96	1.11
Anyone on DSP at interview						
For me, studying and training is a good way of getting ahead	879	2.05	1.19	4273	2.36	1.32
I'd rather be a stay at home parent than a working parent	123	3.74	1.07	494	3.03	1.34
Given my current situation, work just isn't worth my while	863	4.01	1.09	3992	2.85	1.41
I don't want to earn so much that I go off payments altogether	823	3.32	1.32	3810	3.41	1.31
I don't think people in my situation should have to work or look for work	853	3.65	1.27	4114	2.55	1.39
I have a lot of confidence in myself and my skills and abilities	884	2.08	1.14	4282	2.63	1.37
I don't want to earn too much, because I want to keep the concessions I get	833	3.46	1.27	3795	3.46	1.29
Anyone on Parenting Payment Partnered at interview						
For me, studying and training is a good way of getting ahead	358	1.77	0.97	1331	1.79	0.97
I'd rather be a stay at home parent than a working parent	319	2.90	1.37	1233	2.41	1.33
Given my current situation, work just isn't worth my while	352	3.88	1.13	1287	2.66	1.41
I don't want to earn so much that I go off payments altogether	351	3.56	1.32	1253	3.39	1.30
I don't think people in my situation should have to work or look for work	356	3.74	1.26	1294	2.83	1.41
I have a lot of confidence in myself and my skills and abilities	359	1.70	0.83	1323	2.04	1.05
I don't want to earn too much, because I want to keep the concessions I get	345	3.78	1.10	1249	3.62	1.18

Anyone on Parenting Payment Single at interview

For me, studying and training is a good way of getting ahead	1222	1.60	0.86	1862	1.61	0.83
I'd rather be a stay at home parent than a working parent	1163	3.49	1.30	1749	2.96	1.40
Given my current situation, work just isn't worth my while	1211	4.18	1.00	1812	3.17	1.42
I don't want to earn so much that I go off payments altogether	1197	3.60	1.32	1793	3.31	1.36
I don't think people in my situation should have to work or look for work	1198	4.04	1.07	1826	3.29	1.39
I have a lot of confidence in myself and my skills and abilities	1224	1.74	0.85	1863	2.11	1.16
I don't want to earn too much, because I want to keep the concessions I get	1201	3.59	1.28	1807	3.50	1.28

Anyone on Youth Allowance (unemployment) at interview

For me, studying and training is a good way of getting ahead	49	1.49	0.71	186	1.66	0.68
I'd rather be a stay at home parent than a working parent	n.a.			n.a.		
Given my current situation, work just isn't worth my while	49	4.27	0.91	185	4.06	1.07
I don't want to earn so much that I go off payments altogether	48	3.90	1.19	182	3.79	1.18
I don't think people in my situation should have to work or look for work	48	4.29	0.77	187	4.17	0.93
I have a lot of confidence in myself and my skills and abilities	49	1.86	0.65	187	2.15	1.17
I don't want to earn too much, because I want to keep the concessions I get	47	3.91	1.10	184	3.86	1.11

Anyone on Youth Allowance (student) at interview

For me, studying and training is a good way of getting ahead	278	1.34	0.57	328	1.40	0.61
I'd rather be a stay at home parent than a working parent	n.a.			n.a.		
Given my current situation, work just isn't worth my while	277	4.09	1.03	323	3.42	1.28
I don't want to earn so much that I go off payments altogether	272	2.92	1.37	316	3.15	1.31
I don't think people in my situation should have to work or look for work	278	3.83	1.23	326	3.51	1.29
I have a lot of confidence in myself and my skills and abilities	279	1.71	0.73	327	1.84	0.85
I don't want to earn too much, because I want to keep the concessions I get	274	3.15	1.30	316	3.39	1.28

Agreement is a 5 point scale ranging from 1 (strongly agree) to 5 (strongly disagree); Response scores are averaged for the group of combiners and non-combiners (all are on Income Support); Lower mean scores represents more agreement.

References

Black, D., Oguzoglu, U., and Wilkins, R. (2006) “Reliance Income Support in Australia: A Dynamic “Income-Based” Analysis Using Payment’s Administration Data”, Report prepared for the Australian Government Department of Employment and Workplace Relations under the Social Policy Research Services Agreement.

Cai, L. and Gregory, B. (2005) “Unemployment Duration and Inflows onto the Disability Support Pension Program: Evidence from FaCS LDS Data”, *The Australian Economic Review*, vol. 38, no. 3, pp. 233–52.

Cai, L., Mavromaras, K., Zakirova, R., and Fok, Y.K. (2008) “Human Capital and the Patterns of Employment and Welfare Receipt”, Report prepared for the Australian Government Department of Employment and Workplace Relations under the Social Policy Research Services Agreement.

Landt, J. and Pech, J. (2000) “Work and Welfare in Australia: the Changing Role of Income Support”, *Australian Social Policy*, Issue 2, p33-53.

Mavromaras, K., Lee, W.S., and Black, D. (2006) “An Examination of Welfare Transitions Using the First Three Waves of the HILDA Survey”, Report prepared for the Australian Government Department of Employment and Workplace Relations under the Social Policy Research Services Agreement.

Tseng, Y.P., Vu, H., and Wilkins, R. (2006) “Dynamic Properties of Income Support Receipt in Australia”, Melbourne Institute Working Paper Series Working Paper No. 23/06, the University of Melbourne.

APPENDIX

**Table A1: Multinomial Logit (MNL) Regressions on different patterns of combining:
Completed NewStart spells that lasted between 14 and 26 fortnights for recipients aged
21 and over, but less than 60**

	Coeff.	St. Error	t-value	p-value	MME
Occasional combiner; low intensity (1 earnings spell; combining less than 20% of the time)					
State & Territories (NSW=ref)					
ACT	0.593	0.257	2.31	0.021	3.4%
NT	-0.588	0.223	-2.63	0.008	-0.2%
QLD	0.294	0.079	3.70	0.000	-0.1%
SA	0.178	0.123	1.45	0.147	-1.8%
TAS	0.399	0.198	2.02	0.044	-1.2%
VIC	0.131	0.074	1.77	0.077	-0.4%
WA	0.038	0.102	0.37	0.711	-0.4%
Male	-0.009	0.072	-0.13	0.900	4.3%
ATSI	-0.446	0.092	-4.86	0.000	-1.0%
Foreign born	-0.244	0.063	-3.88	0.000	-0.3%
Partnered	-0.146	0.084	-1.75	0.081	-3.2%
One dependent child	0.077	0.252	0.30	0.761	4.1%
Two or more dependent children	-0.497	0.435	-1.14	0.253	-3.6%
Constant	-0.563	0.081	-6.92	0.000	
Occasional combiner; moderate intensity (1 earnings spell; combining between 20 and 50% of the time)					
State & Territories (NSW=ref)					
ACT	0.872	0.256	3.40	0.001	6.8%
NT	-0.757	0.263	-2.88	0.004	-2.2%
QLD	0.385	0.084	4.58	0.000	1.1%
SA	0.438	0.124	3.54	0.000	1.8%
TAS	0.822	0.190	4.33	0.000	4.5%
VIC	0.323	0.077	4.19	0.000	2.2%
WA	0.123	0.108	1.13	0.257	0.8%
Male	-0.386	0.070	-5.52	0.000	-1.1%
ATSI	-0.402	0.095	-4.21	0.000	-0.3%
Foreign born	-0.195	0.065	-3.01	0.003	0.5%
Partnered	0.163	0.081	2.01	0.045	1.3%
One dependent child	-0.358	0.288	-1.24	0.214	-2.3%
Two or more dependent children	-0.658	0.436	-1.51	0.131	-5.5%
Constant	-0.553	0.081	-6.80	0.000	
Occasional combiner; high intensity (1 earnings spell; combining between 50 and 80% of the time)					
State & Territories (NSW=ref)					
ACT	0.650	0.336	1.93	0.053	1.9%
NT	-1.605	0.517	-3.11	0.002	-6.7%
QLD	0.171	0.111	1.54	0.125	-0.9%
SA	0.454	0.154	2.94	0.003	0.9%
TAS	0.438	0.262	1.67	0.094	-0.4%

VIC	0.245	0.099	2.47	0.014	0.5%
WA	0.103	0.139	0.74	0.457	0.2%
Male	-0.768	0.084	-9.12	0.000	-3.0%
ATSI	-0.397	0.127	-3.12	0.002	-0.1%
Foreign born	-0.218	0.085	-2.58	0.010	0.1%
Partnered	0.393	0.099	3.96	0.000	2.1%
One dependent child	-0.151	0.331	-0.46	0.649	0.3%
Two or more dependent children	-0.031	0.418	-0.07	0.942	1.4%
Constant	-0.948	0.098	-9.63	0.000	

Occasional combiner; very high intensity (1 earnings spell; combining over 80% of the time)

State & Territories (NSW=ref)					
ACT	-0.272	0.451	-0.60	0.546	-5.6%
NT	-1.250	0.429	-2.92	0.004	-5.5%
QLD	0.402	0.101	3.99	0.000	0.8%
SA	0.764	0.136	5.62	0.000	3.8%
TAS	1.230	0.201	6.13	0.000	6.2%
VIC	0.336	0.093	3.61	0.000	1.4%
WA	0.218	0.128	1.70	0.089	1.3%
Male	-1.159	0.075	-15.55	0.000	-7.2%
ATSI	-0.546	0.119	-4.58	0.000	-1.3%
Foreign born	-0.391	0.079	-4.94	0.000	-1.3%
Partnered	0.224	0.094	2.39	0.017	1.3%
One dependent child	0.132	0.278	0.48	0.634	2.8%
Two or more dependent children	0.277	0.344	0.81	0.421	4.5%
Constant	-0.481	0.088	-5.45	0.000	

Frequent combiner; low intensity (2 or more earnings spells; combining less than 50% of the time)

State & Territories (NSW=ref)					
ACT	0.419	0.281	1.49	0.135	0.6%
NT	-0.591	0.243	-2.44	0.015	-0.1%
QLD	0.542	0.080	6.78	0.000	3.3%
SA	0.227	0.127	1.79	0.074	-1.0%
TAS	0.505	0.200	2.53	0.011	0.3%
VIC	0.113	0.078	1.44	0.151	-0.6%
WA	-0.019	0.110	-0.18	0.859	-1.2%
Male	-0.020	0.075	-0.27	0.785	3.8%
ATSI	-0.635	0.100	-6.35	0.000	-3.5%
Foreign born	-0.399	0.067	-5.96	0.000	-2.3%
Partnered	-0.146	0.088	-1.67	0.095	-2.9%
One dependent child	-0.636	0.340	-1.87	0.061	-6.1%
Two or more dependent children	-0.713	0.498	-1.43	0.152	-6.3%
Constant	-0.641	0.084	-7.60	0.000	

Frequent combiner; high intensity (2 or more earnings spells; combining more than 50% of the time)

State & Territories (NSW=ref)					
ACT	0.600	0.279	2.15	0.031	3.1%
NT	-0.686	0.270	-2.54	0.011	-1.1%
QLD	0.612	0.082	7.47	0.000	4.2%
SA	0.638	0.119	5.34	0.000	4.5%
TAS	0.752	0.194	3.88	0.000	3.5%

VIC	0.256	0.079	3.23	0.001	1.3%
WA	0.145	0.110	1.32	0.187	1.0%
Male	-0.654	0.067	-9.72	0.000	-4.7%
ATSI	-0.689	0.102	-6.75	0.000	-4.1%
Foreign born	-0.438	0.067	-6.52	0.000	-2.8%
Partnered	0.292	0.079	3.68	0.000	3.1%
One dependent child	-0.476	0.296	-1.61	0.108	-3.9%
Two or more dependent children	-0.078	0.347	-0.22	0.822	2.4%
Constant	-0.320	0.079	-4.05	0.000	

Reference outcome: **Non-combiner**

State & Territories (NSW=ref)					
ACT					-10.2%
NT					15.8%
QLD					-8.2%
SA					-8.1%
TAS					-13.0%
VIC					-4.3%
WA					-1.8%
Male					7.9%
ATSI					10.3%
Foreign born					6.2%
Partnered					-1.7%
One dependent child					5.2%
Two or more dependent children					7.1%
Constant					
Number of obs	12974				
LR chi2(78)	860.61				
Prob > chi2	0				
Pseudo R2	0.0179				
Log likelihood	-23648.67				

The base outcome is to not combine during the NewStart spell. Mean Marginal Effects are calculated for this choice, but the coefficients are not displayed as they are all normalized to zero.

**Table A2: Multinomial Logit (MNL) Regressions on different patterns of combining:
Completed NewStart spells that lasted between 27 and 52 fortnights for recipients aged
21 and over, but less than 60**

	Coeff.	St. Error	t-value	p-value	MME
Occasional combiner; low intensity (1or 2 earnings spells; combining less than 20% of the time)					
State & Territories (NSW=ref)					
ACT	-0.117	0.301	-0.39	0.697	-0.9%
NT	-1.154	0.294	-3.93	0.000	-7.9%
QLD	0.211	0.106	2.00	0.046	-1.1%
SA	0.192	0.157	1.22	0.222	-1.8%
TAS	-0.117	0.282	-0.41	0.679	-9.0%
VIC	0.166	0.096	1.73	0.084	-0.7%
WA	0.013	0.130	0.10	0.924	-0.2%
Male	0.123	0.091	1.36	0.174	5.7%
ATSI	-0.776	0.116	-6.68	0.000	-0.7%
Foreign born	-0.357	0.081	-4.41	0.000	0.0%
Partnered	-0.390	0.107	-3.65	0.000	-5.4%
One dependent child	-0.297	0.438	-0.68	0.497	-4.3%
Two or more dependent children	-0.271	0.702	-0.39	0.699	-10.6%
Constant	-0.100	0.103	-0.97	0.332	
Occasional combiner; moderate intensity (1or 2 earnings spells; combining between 20 and 50% of the time)					
State & Territories (NSW=ref)					
ACT	0.332	0.288	1.15	0.249	6.6%
NT	-1.058	0.336	-3.15	0.002	-4.9%
QLD	0.324	0.111	2.93	0.003	1.0%
SA	0.297	0.164	1.81	0.070	0.2%
TAS	0.458	0.261	1.75	0.079	1.9%
VIC	0.228	0.101	2.26	0.024	0.4%
WA	0.018	0.140	0.13	0.897	-0.1%
Male	-0.324	0.089	-3.65	0.000	-2.3%
ATSI	-1.103	0.136	-8.11	0.000	-5.9%
Foreign born	-0.255	0.084	-3.05	0.002	1.9%
Partnered	0.019	0.102	0.19	0.853	2.2%
One dependent child	-0.483	0.457	-1.06	0.291	-6.9%
Two or more dependent children	0.827	0.511	1.62	0.106	9.3%
Constant	-0.054	0.103	-0.52	0.600	
Occasional combiner; high intensity (1 or 2 earnings spells; combining between 50 and 80% of the time)					
State & Territories (NSW=ref)					
ACT	0.150	0.415	0.36	0.718	1.4%
NT	-1.347	0.530	-2.54	0.011	-4.3%
QLD	0.349	0.148	2.36	0.018	0.6%
SA	0.568	0.205	2.77	0.006	2.1%
TAS	0.398	0.345	1.15	0.248	0.3%
VIC	0.429	0.133	3.22	0.001	1.7%
WA	0.032	0.191	0.17	0.866	0.1%
Male	-0.974	0.107	-9.07	0.000	-5.7%
ATSI	-0.756	0.169	-4.48	0.000	0.2%

Foreign born	-0.546	0.115	-4.74	0.000	-1.3%
Partnered	0.084	0.133	0.64	0.524	1.4%
One dependent child	0.177	0.489	0.36	0.718	1.8%
Two or more dependent children	1.007	0.581	1.73	0.083	5.3%
Constant	-0.483	0.127	-3.79	0.000	

Occasional combiner; very high intensity (1 or 2 earnings spells; combining over 80% of the time)

State & Territories (NSW=ref)					
ACT	0.368	0.387	0.95	0.342	2.8%
NT	-0.872	0.486	-1.79	0.073	-0.6%
QLD	0.166	0.154	1.08	0.281	-0.8%
SA	0.491	0.211	2.33	0.020	1.3%
TAS	0.984	0.292	3.37	0.001	4.4%
VIC	0.251	0.138	1.82	0.069	0.2%
WA	-0.031	0.196	-0.16	0.875	-0.4%
Male	-1.222	0.109	-11.19	0.000	-7.0%
ATSI	-1.463	0.218	-6.71	0.000	-4.8%
Foreign born	-0.745	0.122	-6.13	0.000	-2.6%
Partnered	0.188	0.133	1.41	0.159	2.0%
One dependent child	0.481	0.451	1.07	0.286	3.9%
Two or more dependent children	0.621	0.653	0.95	0.341	2.1%
Constant	-0.251	0.126	-2.00	0.046	

Frequent combiner; low intensity (3 or more earnings spells; combining less than 50% of the time)

State & Territories (NSW=ref)					
ACT	-1.186	0.541	-2.19	0.029	-14.6%
NT	-0.710	0.307	-2.31	0.021	0.7%
QLD	0.525	0.117	4.48	0.000	3.4%
SA	0.438	0.173	2.53	0.012	2.1%
TAS	0.733	0.262	2.80	0.005	5.2%
VIC	0.268	0.112	2.39	0.017	0.9%
WA	0.062	0.154	0.40	0.690	0.5%
Male	0.445	0.111	3.99	0.000	7.9%
ATSI	-0.849	0.135	-6.28	0.000	-1.3%
Foreign born	-0.654	0.098	-6.70	0.000	-3.9%
Partnered	-0.322	0.122	-2.63	0.008	-2.6%
One dependent child	0.063	0.462	0.14	0.891	1.9%
Two or more dependent children	-0.141	0.813	-0.17	0.863	-5.2%
Constant	-0.846	0.126	-6.70	0.000	

Frequent combiner; high intensity (3 or more earnings spells; combining more than 50% of the time)

State & Territories (NSW=ref)					
ACT	0.255	0.369	0.69	0.489	3.0%
NT	-0.912	0.441	-2.07	0.039	-1.2%
QLD	0.587	0.133	4.43	0.000	3.1%
SA	0.576	0.192	3.01	0.003	2.7%
TAS	0.875	0.283	3.09	0.002	5.0%
VIC	0.448	0.124	3.61	0.000	2.3%
WA	0.079	0.178	0.44	0.659	0.5%
Male	-0.466	0.104	-4.48	0.000	-2.6%
ATSI	-1.301	0.180	-7.24	0.000	-5.1%

Foreign born	-0.642	0.107	-5.99	0.000	-2.6%
Partnered	-0.144	0.129	-1.11	0.265	-0.3%
One dependent child	0.080	0.487	0.16	0.870	1.5%
Two or more dependent children	0.829	0.606	1.37	0.171	5.2%
Constant	-0.531	0.124	-4.28	0.000	

Reference outcome: **Non-combiner**

State & Territories (NSW=ref)					
ACT					1.6%
NT					18.1%
QLD					-6.2%
SA					-6.6%
TAS					-7.8%
VIC					-4.8%
WA					-0.5%
Male					4.0%
ATSI					17.7%
Foreign born					8.5%
Partnered					2.8%
One dependent child					2.0%
Two or more dependent children					-6.2%
Constant					
Number of obs	6916				
LR chi2(78)	752.24				
Prob > chi2	0				
Pseudo R2	0.0294				
Log likelihood	-12422.9				

The base outcome is to not combine during the NewStart spell. Mean Marginal Effects are calculated for this choice, but the coefficients are not displayed as they are all normalized to zero.