



Australian Government

Department of Education, Employment
and Workplace Relations

EMPLOYMENT PATHWAY FUND

Chapter 2: Wage subsidies

EVALUATION OF JOB SERVICES AUSTRALIA 2009-2012

March 2012

For further information about this publication contact:

Employment Services Evaluation Section
Labour Market Strategy Group
Department of Education, Employment and Workplace Relations
GPO Box 9880, CANBERRA ACT 2601

General: 1300 363 079

Switchboard: 13 33 97

Text telephone for the hearing impaired (TTY): FreeCall TM 1800 554 609

Website: Department of Education, Employment and Workplace Relations
(<http://www.deewr.gov.au/Employment/ResearchStatistics/ProgEval/Pages/Overview.aspx>)

CC by 3.0

Commonwealth of Australia 2012

978-0-642-78550-3 – Employment Pathway Fund, Chapter 2: Wage Subsidies: Evaluation of Job Services Australia 2009-2012 (PDF)

978-0-642-78551-0 – Employment Pathway Fund, Chapter 2: Wage Subsidies: Evaluation of Job Services Australia 2009-2012 (DOCX)



With the exception of the Commonwealth Coat of Arms and where otherwise noted all material presented in this document is provided under a Creative Commons Attribution 3.0 Australia (<http://creativecommons.org/licenses/by/3.0/au/>) licence.

The details of the relevant licence conditions are available on the Creative Commons website (<http://creativecommons.org/licenses/by/3.0/au/legalcode>) (accessible using the links provided) as is the full legal code for the CC BY 3.0 AU licence.

The document must be attributed as Department of Education, Employment and Workplace Relations, 2012, *Employment Pathway Fund, Chapter 2: Wage Subsidies*, DEEWR, Canberra.

Contents

- List of tables ii
- List of figures iv
- Key findings 1
- 2.1 Introduction..... 3
 - 2.1.1 Scope.....3
 - 2.1.2 Data sources3
- 2.2 Wage subsidies under JSA 5
 - 2.2.1 Wage subsidies in Job Services Australia5
 - 2.2.2 Number of wage subsidies5
 - 2.2.3 Expenditure on wage subsidies.....7
 - 2.2.4 Average value of wage subsidies10
 - 2.2.5 Initiation of wage subsidy13
 - 2.2.6 Duration of wage subsidy14
 - 2.2.7 Employers’ attitudes towards wage subsidies14
 - 2.2.8 Proportion of gross wage.....18
 - 2.2.9 Timing of assistance.....20
 - 2.2.10 Targeting of wage subsidies21
- 2.3 Effectiveness of wage subsidies 26
 - 2.3.1 Control group selection26
 - 2.3.2 Time spent on income support27
 - 2.3.3 Off benefit outcomes.....27
 - 2.3.4 Effectiveness of wage subsidies28
 - 2.3.5 Conclusion.....29
- References 30
- Appendix A2 Data tables for figures..... 31

List of tables

Table 2.1: Number and percentage of wage subsidies by locality and Stream service, 1 October 2009 to 31 October 2011.....	6
Table 2.2: Number of work trial wage subsidies by Stream service, 1 October 2009 to 31 October 2011	6
Table 2.3: Value of wage subsidies by JSA provider locality and Stream service, 1 October 2009 to 31 October 2011.....	7
Table 2.4: Value of work trial wage subsidies, 1 October 2009 to 31 October 2011 (\$ million)	10
Table 2.5: Average value of wage subsidies by JSA provider locality, 1 October 2009 to 31 October 2011 (\$)	11
Table 2.6: Average value of work trials, 1 October 2009 to 31 October 2011 (\$)	11
Table 2.7: Average and maximum value of wage subsidies by JSA provider locality, 1 October 2009 to 31 October 2011 (\$)	11
Table 2.8: Recruitment methods for wage subsidies under JSA	13
Table 2.9: Gender of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 compared to initial JSA commencements	23
Table 2.10: Country of birth of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 compared to initial JSA commencements.....	23
Table 2.11: Level of education of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 compared to initial JSA commencements.....	24
Table 2.12: Income support payment type of job seekers who received a wage subsidy, 1 October 2009 to 31 October 2011	24
Table 2.13: Number of wage subsidies that were for very long term unemployed(1), 1 October 2009 to 31 October 2011.....	25
Table A2.1 Number of wage subsidies by Stream service, 1 October 2009 to 31 October 2011	31
Table A2.2 Number of wage subsidies and total job placements by Stream service, October 2009 to October 2011.....	32
Table A2.3: Total value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.....	34
Table A2.4: Average value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011...	35
Table A2.6: Effectiveness of JSA wage subsidy job placements by unemployment duration	36
Table A2.7: Effectiveness of JSA wage subsidy job placement by Stream service of job seeker	37
Table A2.8: Sustainability of placement by JSA wage subsidy effectiveness	37
Table A2.9: Likelihood of hiring disadvantaged job seekers by disadvantaged group (per cent).....	37
Table A2.10: Gross wages for wage subsidy recipients(1) by Stream service(2), 1 October 2009 to 31 October 2011.....	38
Table A2.11: Level of education of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 compared to initial JSA commencements	39
Table A2.12: Number of wage subsidies by length of time job seeker had been unemployed and Stream service, 1 October 2009 to 31 October 2011	39

Table A2.13: Average value of wage subsidies by Stream service and locality of provider, 1 October 2009 to 31 October 2011 41

Table A2.14: Distribution of days on income support during 12 months from placement 41

Table A2.15: Regression of receiving a wage subsidy and job seeker characteristics on coming off income support 42

List of figures

Figure 2.1:	Number of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.....	7
Figure 2.2:	Number of wage subsidies and total job placements by Stream service, October 2009 to October 2011	9
Figure 2.3:	Total value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.....	10
Figure 2.4:	Average value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.....	12
Figure 2.5:	Average value of wage subsidies by labour market region of provider compared to unemployment rate, 1 October 2009 to 31 October 2011.....	13
Figure 2.6:	Effectiveness of JSA wage subsidy job placement by unemployment duration	15
Figure 2.7:	Effectiveness of JSA wage subsidy job placement by Stream service of job seeker	16
Figure 2.8:	Sustainability of placement by JSA wage subsidy effectiveness	17
Figure 2.9:	Likelihood of hiring disadvantaged job seekers(1) by disadvantage group	18
Figure 2.10:	Gross wages for wage subsidy recipients by Stream service, 1 October 2009 to 31 October 2011	19
Figure 2.11:	Proportion of gross wage contributed by provider by Stream service, 1 October 2009 to 31 October 2011	20
Figure 2.12:	Number of wage subsidies by length of time job seeker had been unemployed and Stream service, 1 October 2009 to 31 October 2011.....	20
Figure 2.13:	Average value of wage subsidies by Stream service(1) and locality of provider, 1 October 2009 to 31 October 2011.....	22
Figure 2.14:	Distribution of days on income support during 12 months from placement ...	27
Figure 2.15:	Odds Ratios for factors affecting income support status in 12 months.....	29

Key findings

Wage subsidies provided through the Employment Pathway Fund (EPF) between 1 October 2009 and 31 October 2011 were analysed in this paper. Key findings are:

- 52,446 wage subsidies were paid for 50,637 job seekers with a total value of \$162.2 million, or an average of \$3,092 per wage subsidy.
- Wage subsidies are becoming an increasingly more common form of assistance, with the number of subsidies commencing each month doubling between April 2010 and October 2011 (1,531 to 3,108 commencements). This increase outstripped the growth in job placements over this period.
- The majority of wage subsidy placements are going to Stream 2 job seekers in metropolitan and regional areas, however Stream 3 placements account for the largest percentage of wage subsidy expenditure.
- The majority of wage subsidies are being provided for job seekers within the first six months of unemployment which means they may be being used to prevent people from becoming very long term unemployed (VLTU) more than assisting those who are already VLTU.
- Wage subsidies contributed over 70 per cent of gross wages for approximately 13 per cent of Stream 1 placements, but contributed to the same extent for a much smaller percentage of Stream 2 subsidies (5 per cent). This raises the question as to why providers are paying such a high percentage of gross wages for proportionally more job seekers in Stream 1 in comparison to Stream 2, given the relative levels of job seeker disadvantage.
- Wage subsidies under JSA Stream services are effective in leading to sustained outcomes over a 12 month period as evidenced by:
 - Job seekers who received wage subsidies spent fewer days on income support in the 12 month period following job placement compared to the control group job seekers (34 per cent compared to 52 per cent of the year on income support, respectively).
 - More wage subsidy recipients (63 per cent) were off income support 12 months after their job placement compared to the control group (59 per cent).
 - The odds of being off income support 12 months after a job placement were approximately 14 per cent higher for job seekers who received a wage subsidy compared to job seekers who received a job placement without a wage subsidy (after controlling for job seeker characteristics).

These results demonstrate that wage subsidies under JSA Stream services are associated with slightly better 12-month off benefit outcomes and reduced reliance on income support.

Results of a survey of employers' views of wage subsidies showed that:

- While 81 per cent of employers reported they originally intended to keep employees indefinitely, in practice only 57 per cent intended to retain the employees at the time of the survey.
- The two most common reasons for JSA wage subsidy placements ending were either the employee decided to leave or problems associated with employee behaviour.

- Most employers who engaged a job seeker using a JSA wage subsidy stated that they would consider a wage subsidy placement again.
- Wage subsidies can increase the likelihood of employing job seekers from some disadvantaged groups, but could act as a disincentive for some employers for other disadvantaged groups.
- Employers reported that:
 - around two thirds of wage subsidies produced some primary or secondary benefit
 - approximately one quarter of JSA wage subsidy job seekers got a job they would not have if not for the wage subsidy
 - around 15 per cent of JSA wage subsidy placements, while provided to job seekers who would have been placed anyway, were used to provide the job seekers with better conditions
 - dead weight is more of an issue for Stream 2 than Streams 3 and 4 job seekers, indicating that subsidies need to be well targeted to minimise this increased cost of outcomes that would have been achieved without the subsidy.

2.1 Introduction

Wage subsidies, a form of active labour market assistance, have been used internationally for some time. These schemes have been used to address social exclusion and have targeted groups such as the long term unemployed, those from severely disadvantaged geographical areas and unemployed youth. Subsidies have been applied in varying ways such as through payments to employers or employees, as income tax credits and through the social security system (Robalino and Banerji, 2009); some aimed at the unemployed, others for those already employed. Previous evaluations of wage subsidies have drawn varying conclusions as to the effectiveness of such interventions. Card, Kluve and Weber (2009) undertook a meta analysis of 97 evaluation studies of active labour market programs conducted between 1995 and 2007. They concluded that:

- longer-term evaluations (after two to three years) tend to be more favourable than short-term evaluations, many programs that exhibit insignificant or even negative impacts after only a year have significant positive impact in the longer term
- the outcome variable chosen to determine program effectiveness is important, with some variables more likely to show positive short-term impacts.

This paper uses DEEWR and Centrelink administrative data to examine the short term outcomes achieved by job seekers who received wage subsidy assistance through JSA Stream services.¹ Under Job Services Australia (JSA) wage subsidies are used as an incentive to encourage employers to employ disadvantaged job seekers on an ongoing basis. This evaluation assesses how effective wage subsidies have been in leading to sustained outcomes for job seekers.

2.1.1 Scope

This project evaluates the effectiveness of wage subsidies under Job Services Australia, with particular focus on sustained outcomes for jobseekers. Specifically, it examines the off-benefit outcomes achieved by job seekers who received wage subsidy assistance through JSA Stream Services between 1 October 2009 and 31 October 2011.

Jobseekers who received subsidies through Disability Employment Services (DES) and the Indigenous Employment Program (IEP) were out of scope for this research.

Wage subsidies are just one of a suite of assistance measures that job seekers can receive under JSA. A subsequent evaluation report is proposed that will consider the effectiveness of these measures, with comparisons made to assistance provided under JSAs predecessor, Job Network.

2.1.2 Data sources

The main source of administrative data for this analysis was the Employment Services System (ESS) used by JSA providers to enter details about wage subsidies. Additionally employers'

1 Between 1 October 2009 and 31 October 2011. Wage subsidies that commenced between 1 July 2009 and 30 September 2009 were excluded from the analysis to eliminate any transition effects in the first three months of the transfer from the Job Network to Job Services Australia model.

views regarding wage subsidies, canvassed in the Employer Incentives Survey conducted in mid 2011, are also summarised in this report.

ESS has been designed to flexibly and efficiently support provider business processes. This approach determines the data that is available for analysis purposes. Section 1.1.2 of Chapter 1 summarises data availability considerations that determined the level of analysis that could be conducted for this report. In addition the following considerations specifically affected the wage subsidy analysis:

- It is not possible to determine the planned duration of each wage subsidy, with neither planned start nor end dates recorded consistently. As a consequence the start dates for wage subsidies were determined based on available data matched with income support system data.
- It is not possible to establish whether each planned subsidy period was completed, cut short or extended.
- Several data entry fields in the ESS system are not mandatory. As a consequence, information is not captured for all variables of interest to this evaluation.
- There are instances where consistency between related data items is not enforced, for example, gross weekly wage and provider contribution towards gross weekly wage.
- Identifying individual wage subsidy placements is problematic due to flexible EPF arrangements in regards to wage subsidies. For the purposes of this evaluation project a wage subsidy placement was defined as the period of time for which the same employer was receiving subsidy payments for the same job seeker, where the job seeker did not receive an additional job placement during this time period. In regards to the DEEWR administrative data, this meant collapsing multiple subsidy entries for a job seeker into a single subsidy placement with a particular employer. This process was achieved by examining the (non-mandatory) employer ABN, a 10 character employer key and lastly by inspection. Only EPF transactions which could be attributed to individual job seekers and had approved or pending claim status were included in this analysis.
- It is not possible to accurately link the wage subsidy placements to job placement information.

2.2 Wage subsidies under JSA

This section provides a description of wage subsidies provided through Employment Pathway Fund (EPF) funding for JSA Stream Services between 1 October 2009 and 31 October 2011, along with employers views about wage subsidies obtained from a survey² conducted in mid-2011.

2.2.1 Wage subsidies in Job Services Australia

Under Job Services Australia (JSA) wage subsidies are used as an incentive to encourage employers to employ disadvantaged job seekers on an ongoing basis. JSA providers can use the Employment Pathway Fund (EPF) to pay wage subsidies to facilitate employment of eligible job seekers when the provider identifies an employment opportunity with an employer or an employer offers to take on a new employee.

Work experience placements and paid work trials where an employer has an ongoing vacancy and wants to ascertain the suitability of a job seeker for the position can be funded through EPF as short-term wage subsidies. Such work trials can be paid for up to two weeks. Wage subsidies for other short term or seasonal positions that would not lead to sustainable employment are not intended to be funded under the EPF.

Wage subsidies can be used for any eligible job seeker on the provider's caseload at the provider's discretion; however the level of a wage subsidy should be commensurate with the level of the job seeker's disadvantage and may be expected to increase for job seekers in higher Stream services. Wage subsidies are paid to the employer by the provider in accordance with a wage subsidy agreement negotiated between the parties, and are reimbursed to the provider through the EPF. The length of the wage subsidy, the amount that will be paid and the payment schedule are negotiated between the provider and the employer. Wage subsidies cannot exceed 100 per cent of a job seeker's gross wage.³

A wage subsidy gives an employer the capacity to provide a job seeker with the opportunity to commence in a position which will be sustainable after the subsidy has ceased. To demonstrate their commitment to ongoing employment, the employer is expected to make a contribution to the cost of the job seeker's wage and the payment schedule may incorporate a tapering off of the subsidy over the duration, by agreement.

2.2.2 Number of wage subsidies

During the analysis period, 1 October 2009 to 31 October 2011, 52,446 wage subsidies were paid for 50,637 job seekers through the EPF. The value of these subsidies amounted to \$162.2 million, or an average of \$3,092 per wage subsidy.

-
- 2 The Employer Incentives Survey collected information in relation to wage subsidies through JSA, disability employment services (DES) and Indigenous wage subsidy (IWS) providers. The statistics presented in this report relate only to wage subsidies received through JSA providers.
 - 3 JSA providers must seek Contract Manager approval for wage subsidies and work trials that are equal to 100 per cent of the wage. The total amount of the wage subsidies must not exceed 100 per cent. This includes any wage assistance provided through other complementary programs.

The split of wage subsidies between Streams varied across locality type. In remote areas providers allocated wage subsidies to a larger proportion of job seekers in Streams 3 and 4 (73 per cent) compared to regional and metropolitan areas (55 per cent and 56 per cent respectively). In regional areas providers allocated a greater proportion to Stream 3 over Stream 4 (34 per cent and 21 per cent respectively) compared to metropolitan areas (30 per cent and 26 per cent respectively), reflecting differences in caseload mix between the locality types.

Table 2.1: Number and percentage of wage subsidies by locality and Stream service, 1 October 2009 to 31 October 2011

Number						
Locality	Stream 1	Stream 2	Stream 3	Stream 4	Other(1)	Total
Metropolitan	294	11,794	8,296	7,269	117	27,770
Regional	160	10,124	8,031	4,872	59	23,246
Remote	2	382	805	241	-	1,430
Total	456	22,300	17,132	12,382	176	52,446

Per cent						
Locality	Stream 1	Stream 2	Stream 3	Stream 4	Other(1)	Total
Wage subsidies(2)	0.8	42.7	32.8	23.7	-	100.0

1 "Other" includes Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear

2 Excluding "Other" includes Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear

Source: DEEWR Administrative Data

Of the 52,446 wage subsidies funded through EPF during this period, 3,970 subsidies were work trials. While it is expected that work trials will be used for job seekers who are difficult to place such as Stream 3 and 4 participants 1,500 wage trials (or 37.8 per cent) were funded for Stream 2 job seekers (see Table 2.2).

Table 2.2: Number of work trial wage subsidies by Stream service, 1 October 2009 to 31 October 2011

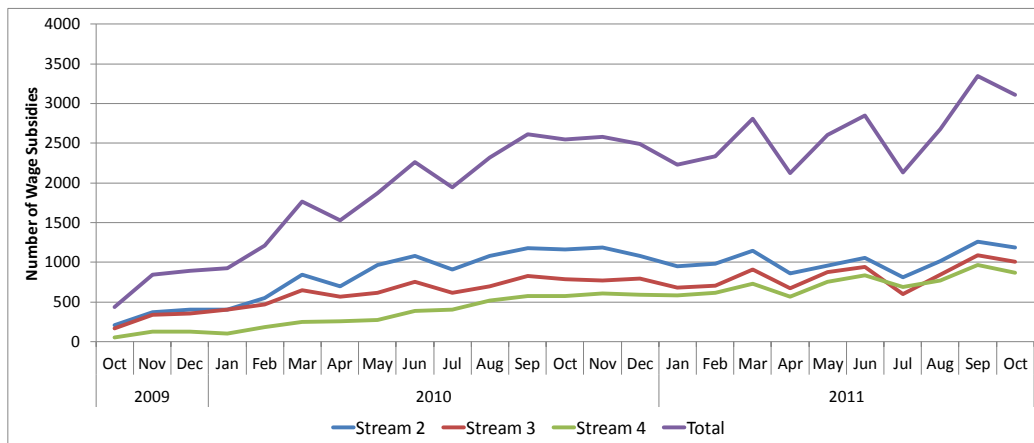
Work trial	Stream 1	Stream 2	Stream 3	Stream 4	Other(1)	Total
Yes	38	1,500	1,302	1,106	24	3,970
No	418	20,800	15,830	11,276	152	48,476
Total	456	22,300	17,132	12,382	176	52,446

1 "Other" includes Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear

Source: DEEWR Administrative Data

The number of subsidies provided under JSA has been steadily increasing over time, with Stream 2 consistently higher than Streams 3 and 4 higher in terms of the number of wage subsidies (Figure 2.1). The total number of wage subsidies commencing each month doubled between April 2010 (1,531 commencements) to October 2011 (3,108 commencements).

Figure 2.1: Number of wage subsidies by Stream service(1), 1 October 2009 to 31 October 2011



1 Total includes Stream 1 and Other (Tasmanian Forestry, Automobile Industry and Textile, Clothing and Footwear) service stream

Source: DEEWR Administrative Data

Refer to Appendix Ax.x to view the text version of Figure 2.1: Number of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.

Figure 2.2 compares the number of wage subsidies by Stream service compared to total job placements. For all three Streams wage subsidy use has been increasing steadily over time. The increase in wage subsidy use for Streams 2, 3 and 4 is above the rate of increase in job placements over this period. This shows that wage subsidies have become an increasingly more common method of assistance.

Refer to Appendix Ax.x to view the text version of Figure 2.2: Number of wage subsidies(1) and total job placements(2) by Stream service, October 2009 to October 2011.

2.2.3 Expenditure on wage subsidies

The amount of each wage subsidy is negotiated between the JSA provider and employer involved. Under JSA guidelines it is expected that the employer will, in most cases, make a significant contribution towards an employee's wage to demonstrate their commitment to providing ongoing employment. Providers need to take into consideration the job seeker's barriers to employment and the sustainability of the job offer when negotiating the wage subsidy level. It is expected that the level of subsidy will be higher for job seekers in higher Streams. Providers cannot exceed 100 per cent of a job seeker's gross wage.⁴

Table 2.3: Value of wage subsidies by JSA provider locality and Stream service, 1 October 2009 to 31 October 2011

Locality	Stream 1 \$ million	Stream 2 \$ million	Stream 3 \$ million	Stream 4 \$ million	Other(1) \$ million	Total \$ million	Per cent
Metropolitan	0.67	27.59	27.48	26.56	0.26	82.56	50.9

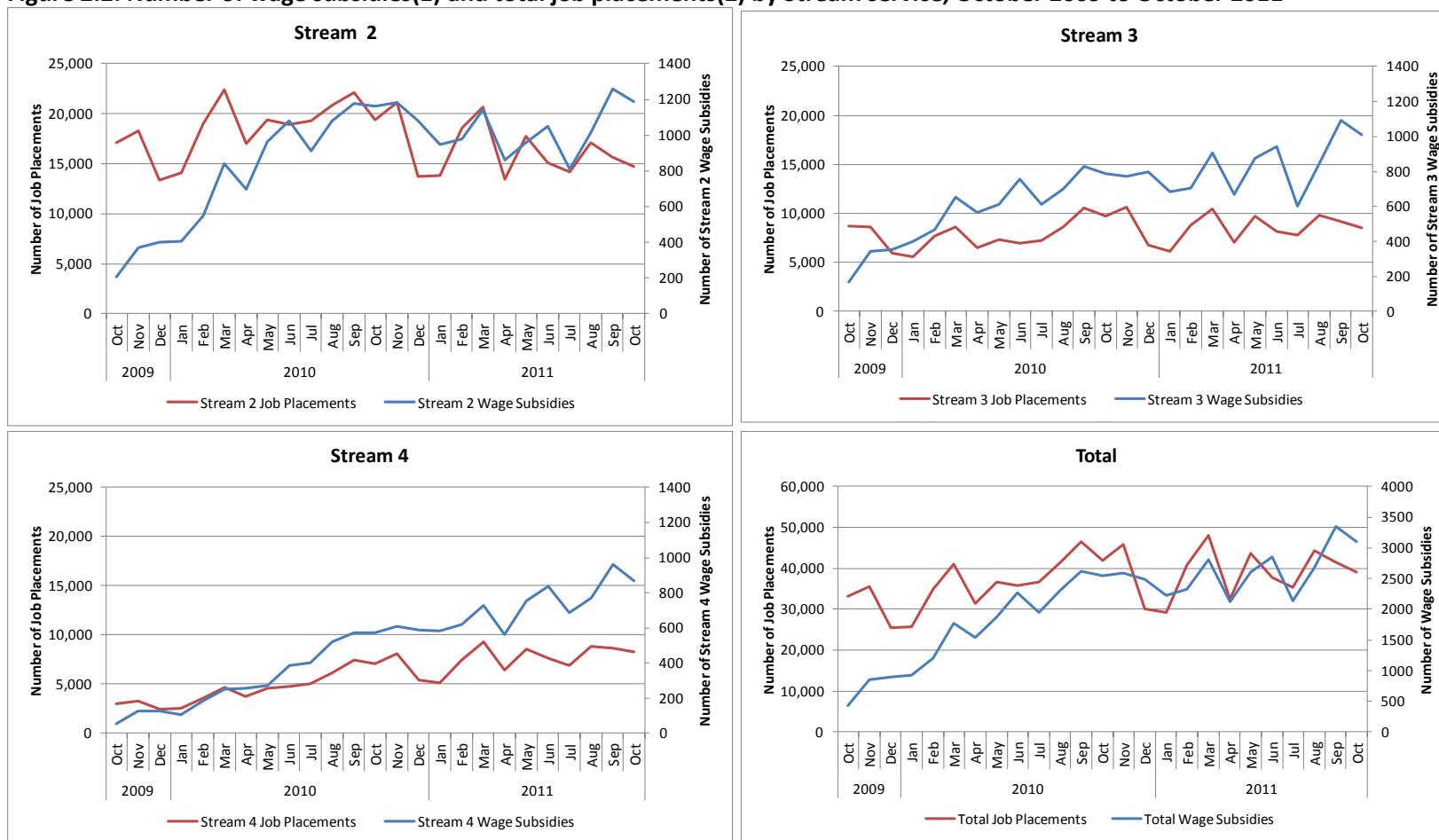
4 JSA providers must seek Contract Manager approval for wage subsidies and work trials that are equal to 100 per cent of the wage. The total amount of the wage subsidies must not exceed 100 per cent. This includes any wage assistance provided through other complementary programs.

Regional	0.49	24.72	28.95	19.20	0.22	73.58	45.4
Remote	0.01	1.16	3.78	1.08	0.00	6.03	3.7
Total	1.16	53.47	60.21	46.84	0.48	162.17	100.0
Per cent	0.7	33.0	37.1	28.9	0.3	100.0	

1 "Other" includes Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear

Source: DEEWR Administrative Data

Figure 2.2: Number of wage subsidies(1) and total job placements(2) by Stream service, October 2009 to October 2011



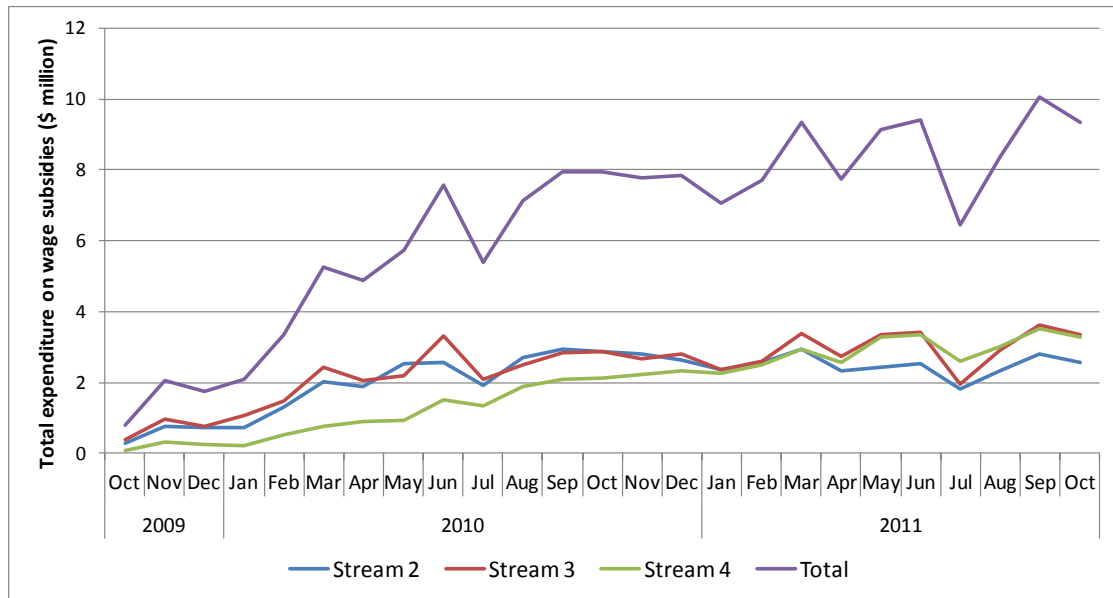
1 Total wage subsidies include Stream 1 and Other (Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear) service stream. Stream 1 not shown separately as number of wage subsidies is quite small

2 Total job placements excludes Stream 1 limited and NEIS

Source: DEEWR Administrative Data

Total expenditure on wage subsidies almost doubled in the eighteen month period between April 2010 (\$4.9 million) and October 2011 (\$9.3 million) (see Figure 2.3), more a reflection of the growth in the number of wage subsidies provided rather than an increase in average size of subsidies (see Section 2.2.4 below).

Figure 2.3: Total value of wage subsidies by Stream service(1), 1 October 2009 to 31 October 2011



1 Total includes Stream 1 and Other (Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear) service stream

Source: DEEWR Administrative Data

Note: Refer to Appendix A2.3 to view the text version of Figure 2.3: Total value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.

Work trials (which accounted for 7.6 per cent of the number of wage subsidies) represented 3.2 per cent of total EPF expenditure on wage subsidies over this period (Table 2.4). This is as would be expected as work trials are of shorter duration than other wage subsidy placements.

Table 2.4: Value of work trial wage subsidies, 1 October 2009 to 31 October 2011 (\$ million)

Work trial	Stream 1	Stream 2	Stream 3	Stream 4	Other(1)	Total
Yes	0.04	1.73	1.83	1.51	0.02	5.13
No	1.12	51.75	58.39	45.33	0.45	157.04
Total	1.16	53.47	60.21	46.84	0.48	162.17

1 "Other" includes Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear

Source: DEEWR Administrative Data

2.2.4 Average value of wage subsidies

The average value of wage subsidies during this period was \$3,092. The average value of wage subsidies in metropolitan areas was below the national average, regional areas marginally above and remote areas significantly above (refer Table 2.5). This differential reflects difficulties of weaker labour markets outside of metropolitan areas. The average value of subsidies increased across the streams as would be expected, from Stream 1 (\$2,547) to Stream 4 (\$3,783), reflecting the relative level of job seeker disadvantage.

Table 2.5: Average value of wage subsidies by JSA provider locality, 1 October 2009 to 31 October 2011 (\$)

Locality	Stream 1	Stream 2	Stream 3	Stream 4	Other(1)	Total
Metropolitan	2,268	2,340	3,312	3,654	2,222	2,973
Regional	3,042	2,442	3,605	3,941	3,688	3,165
Remote	4,000	3,042	4,701	4,476	—	4,219
Total	2,547	2,398	3,515	3,783	2,714	3,092

1 "Other" includes Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear

Source: DEEWR Administrative Data

Work trials had an average value of \$1,292 compared to \$3,240 for all other wage subsidies (Table 2.6).

Table 2.6: Average value of work trials, 1 October 2009 to 31 October 2011 (\$)

Work Trial	Stream 1	Stream 2	Stream 3	Stream 4	Other(1)	Total
Yes	1,082	1,150	1,403	1,366	1,007	1,292
No	2,680	2,488	3,688	4,020	2,983	3,240
Total	2,547	2,398	3,515	3,783	2,714	3,092

1 "Other" includes Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear

Source: DEEWR Administrative Data

It was not possible to determine the average value of all subsidies as agreed to between employer and JSA provider from available data. The figures shown in this report are the average value of monies spent on wage subsidies. As some subsidies placements were not completed these averages are less than the average amount that would have been spent on the subsidies had all placements lasted for their planned durations.

Variation in subsidy size within Streams

Table 2.7 provides the average value of wage subsidies by Stream in terms of the mean, median and mode as well as showing maximum subsidies provided within each Stream. There is a large variation in the size of subsidies within each Stream, as shown by the magnitude of the standard deviations.

Table 2.7: Average and maximum value of wage subsidies by JSA provider locality, 1 October 2009 to 31 October 2011 (\$)

Measure	Stream 1	Stream 2	Stream 3	Stream 4	Total
Mean	2,546	2,397	3,514	3,782	3,092
Median	2,000	2,000	3,000	3,300	2,500
Mode	250	2,000	2,000	4,000	2,000
Standard Deviation	2,429	1,797	2,489	2,731	2,367

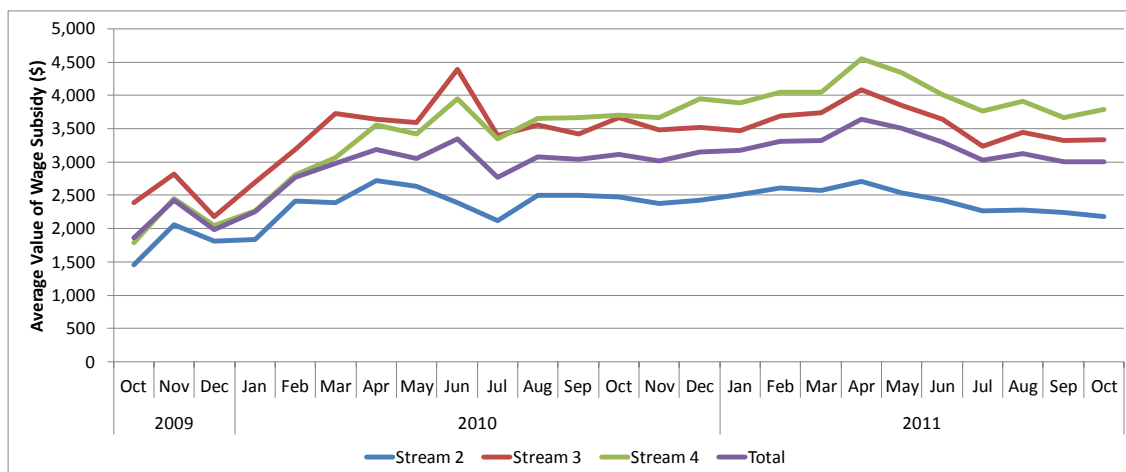
Source: DEEWR Administrative Data

The median measure shown in Table 2.7 is less affected by outlier or extreme values (both large and small) than the mean (as presented in Table 2.5 above).

Variation over time

Figure 2.4 shows that the average value of wage subsidies increased from October 2009 to around April 2011 and has since declined slightly. This pattern is observed for Streams 2, 3 and 4.

Figure 2.4: Average value of wage subsidies by Stream service (1), 1 October 2009 to 31 October 2011



1 Total includes Stream 1 and Other (Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear) service stream

Source: DEEWR Administrative Data

Note: Refer to Appendix A2.4 to view text version of Figure 2.4: average value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.

Variation by labour market region

Figure 2.5 shows how the average value of wage subsidies varied across the different labour market regions and compares these values to the unemployment rates. Above the national average of \$3,092 were:

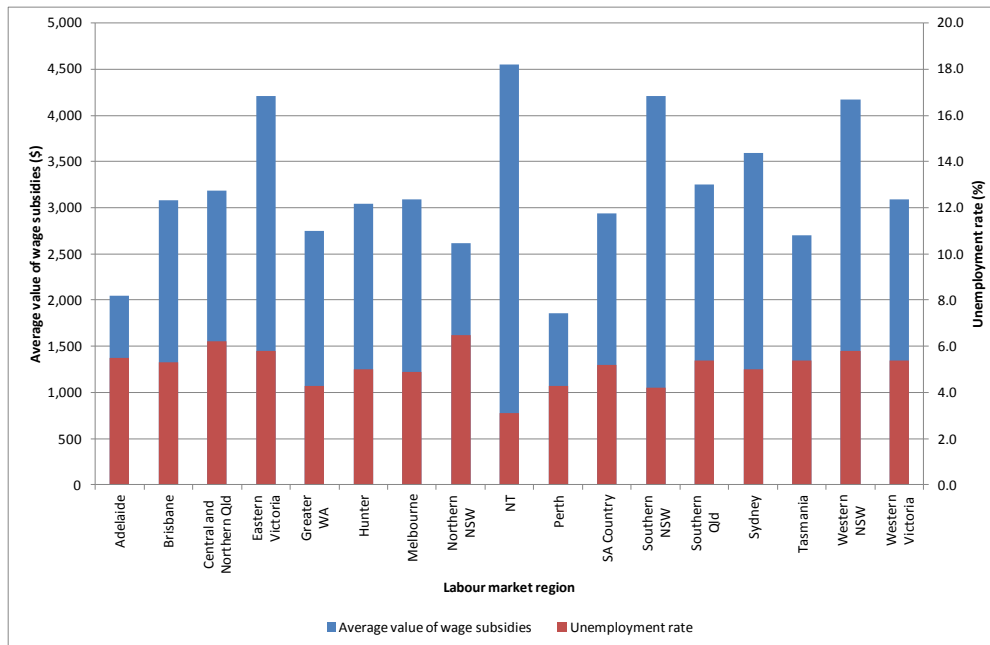
- Northern Territory \$4,546 3.1 per cent unemployment rate
- Eastern Victoria \$4,212 5.8 per cent unemployment rate
- Southern NSW \$4,209 4.2 per cent unemployment rate
- Western NSW \$4,169 5.8 per cent unemployment rate

while below the national average wage subsidy cost were:

- Northern NSW \$2,612 6.5 per cent unemployment rate
- Adelaide \$2,050 5.5 per cent unemployment rate
- Perth \$1,859 4.3 per cent unemployment rate.

The unemployment rate in itself is not determinative of the value of the wage subsidy. Clearly other factors such as job seeker disadvantage, other local labour market conditions such as locality type, provider practice, and possibly employer demands will be more influential on the size of the wage subsidy.

Figure 2.5: Average value of wage subsidies by labour market region of provider compared to unemployment rate(1), 1 October 2009 to 31 October 2011



1 Unemployment rate DEEWR Employment Service Area estimate, derived from DEEWRs Small Area Labour Markets Statistical Local Area estimates September quarter 2011 and the working age population which is ABS Estimated Resident Population (ERP) June 2008

Source: DEEWR Administrative Data

Note: Refer to Appendix A2.5 to view the text version of Figure 2.5: average value of wage subsidies by labour market region of provider compared to unemployment rate(, 1 October 2009 to 31 October 2011.

2.2.5 Initiation of wage subsidy

Wage subsidies are used as an incentive to encourage employers to employ disadvantaged job seekers on an ongoing basis. Subsidies may be used where the JSA provider identifies an opportunity or an employer offers to take on new employees. The provider and employer negotiate the length of subsidy period, amount of the subsidy and payment schedule.

Employers report that almost one third of employees attracting a JSA wage subsidy were recruited at the initiation of the JSA provider, while in 27.6 per cent of cases the employer reported that they had initiated the job placement.

Table 2.8: Recruitment methods for wage subsidies under JSA

Recruitment method	Per cent
Employment agency contacted me/ cold calling by the agency	32.8
Contacted an employment agency to find an employee	27.6
Employee contacted me/ cold calling by employee	11.2
Advertised a vacancy and the employee applied	10.7
Referral from friend or family member	6.9
Referral from colleague or other employee	3.7
Don't know	3.5

Recruitment method	Per cent
Worked here already/Used to work here	2.9
Other	0.7
TOTAL (N)	739

Source: Employer Incentives Survey (2011)

2.2.6 Duration of wage subsidy

The duration of job placements attracting a wage subsidy should not be limited to the length of the subsidy as placements should be for ongoing employment. Work experience placements and paid work trials can be funded through EPF as short-term wage subsidies.

Job placements which include a wage subsidy may cease for a range of reasons. Employers reported the most common reasons why wage subsidy employees had left their jobs as:

- the employee decided to leave and/or did not like the job 25 per cent
- problems associated with employee behaviour or performance such as personality clashes, not getting on with others, poor attitude and attendance problems 20 per cent
- the business had insufficient work, was restructuring / downsizing 17 per cent
- the employee found another job 19 per cent
- employee was taken ill 5 per cent

This shows that wage subsidies in isolation may not be sufficient to ensure ongoing employment. JSA providers may also need to monitor placements carefully, and provide support to employees and employers in order to sustain the placement.

2.2.7 Employers' attitudes towards wage subsidies

The Employer Incentives Survey 2011 was designed to estimate the effectiveness of the current wage subsidy program and to gauge employers' attitudes towards wage subsidies. In particular the survey collected data relating to:

- *Additionality*, i.e. whether provision of wage subsidies creates 'new' jobs by encouraging employers to fill vacancies that would otherwise not be filled.
- *Substitution*, i.e. whether wage subsidies encourage employers to employ a job seeker in the target group (i.e. someone on the JSA caseload) instead of a job seeker who is not in the target group.
- *Dead weight*, i.e. whether wage subsidies increase the cost of outcomes that would have been achieved anyway.
- Evidence was sought for both primary and secondary benefits of wages subsidies including:
 - primary benefits to job seekers: getting a job they would not have if not for the subsidy (additional jobs or substitution jobs)
 - secondary benefits to the job seekers: better conditions than they would have if not for the subsidy (e.g. permanent instead of casual, ongoing instead of temporary, more hours per week)

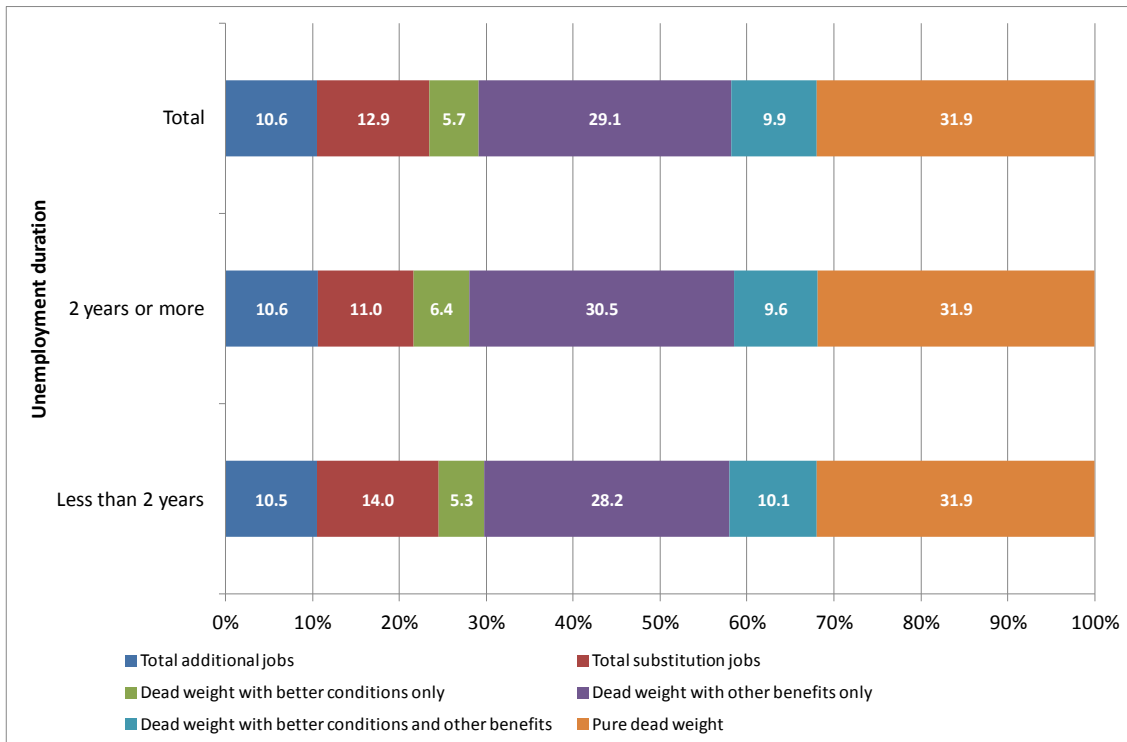
- secondary benefits to the business or its other employees: other benefits to the employer (e.g. being able to hire other staff, retain other staff, give other staff more hours).

Employers reported that around 68 per cent of wage subsidies produced some primary or secondary benefit (shown by all effects other than pure dead weight in Figure 2.6).

Job seekers who had been unemployed for less than two years were found to be three percentage points more likely to be placed in a job that would have been filled without a wage subsidy (but with a different job seeker) compared to those who had been unemployed for two years or longer⁵.

Approximately one quarter of JSA wage subsidy job seekers got a job they would not have if not for the wage subsidy (shown as additional and substitution jobs in Figure 2.6). Or in other words more than three quarters of employers surveyed reported that they would have hired the same job seeker even if they had not received the wage subsidy⁶. However for a significant proportion of such cases, 20 per cent of dead weight cases accounting for 16 per cent of all subsidies, the subsidy facilitated the job seeker receiving better conditions of employment (see Figure 2.6).

Figure 2.6: Effectiveness of JSA wage subsidy job placement by unemployment duration



1 Unemployment duration is the period the job seeker had been registered for Employment Assistance, including allowable breaks, at the time they commenced their wage subsidy job.

Refer to Appendix Table A2.6 to view the text version of Figure 2.6.

Source: DEEWR Employer Incentives Survey 2011

5 Referred to as “substitution”.

6 This is known as ‘deadweight’, because the outcome would have been achieved without the subsidy.

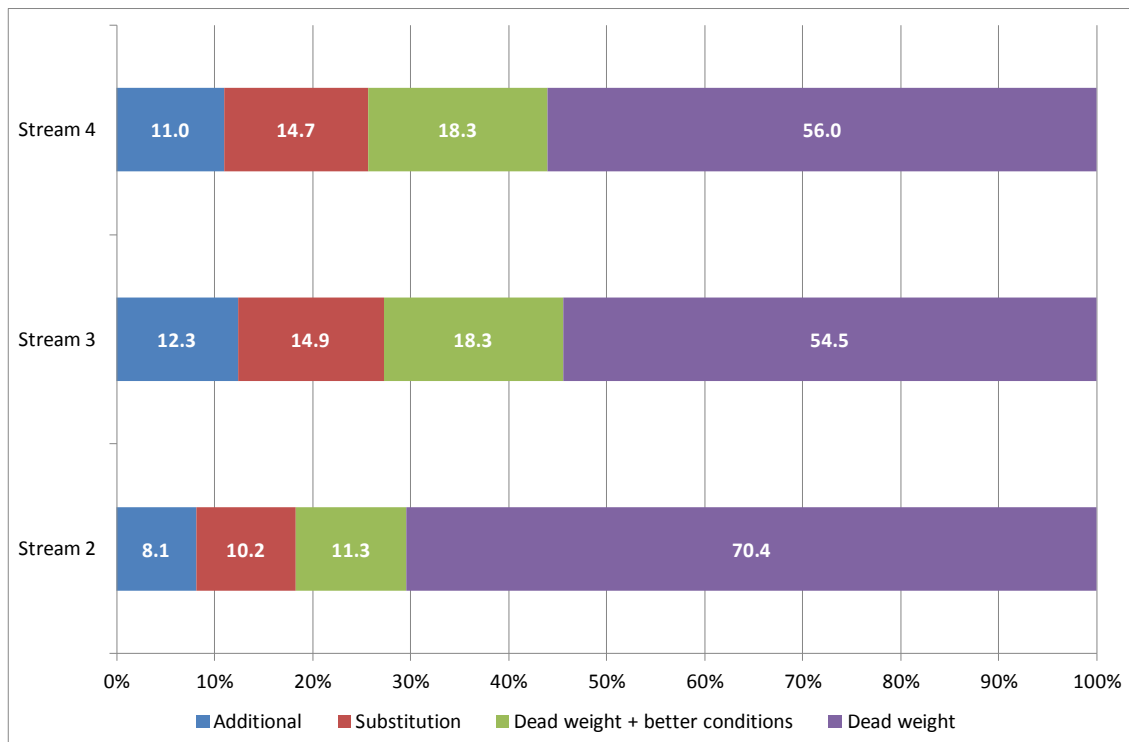
Figure 2.7 presents similar information by Stream service of job seeker involved. Employers reported that, in comparison to Stream 2 job seekers, Streams 3 and 4 job seekers were:

- more likely to receive primary benefits as they were:
 - more likely to be placed in to additional jobs, that is jobs that would not have been filled at all without the subsidy;
 - more likely to be substituted instead of another candidate, that is placed into jobs that the employer would have filled with another candidate without the subsidy; and
- less likely to be employed if a subsidy was not available (dead weight).

These results suggest that wage subsidies are associated with better effects for more disadvantage job seekers than for Stream 2 job seekers, with Stream 2 job seekers more likely to be the preferred candidates without the availability of the subsidy. As discussed previously (see Section 2.2.2 and Section 2.2.3) Stream 2 job seekers accounted for significant proportion of wage subsidies (42.7 per cent), accounting for 33.0 per cent of wage subsidy expenditure between 1 October 2009 and 31 October 2011.

These findings indicate that subsidies should be targeted to minimise dead weight effects, which results in increased cost to government for outcomes that would have been achieved without the financial incentive.

Figure 2.7: Effectiveness of JSA wage subsidy job placement by Stream service of job seeker



Source: DEEWR Employer Incentives Survey 2011 and DEEWR administrative data

Note Refer to Appendix Table A2.7 to view the text version of Figure 2.7.

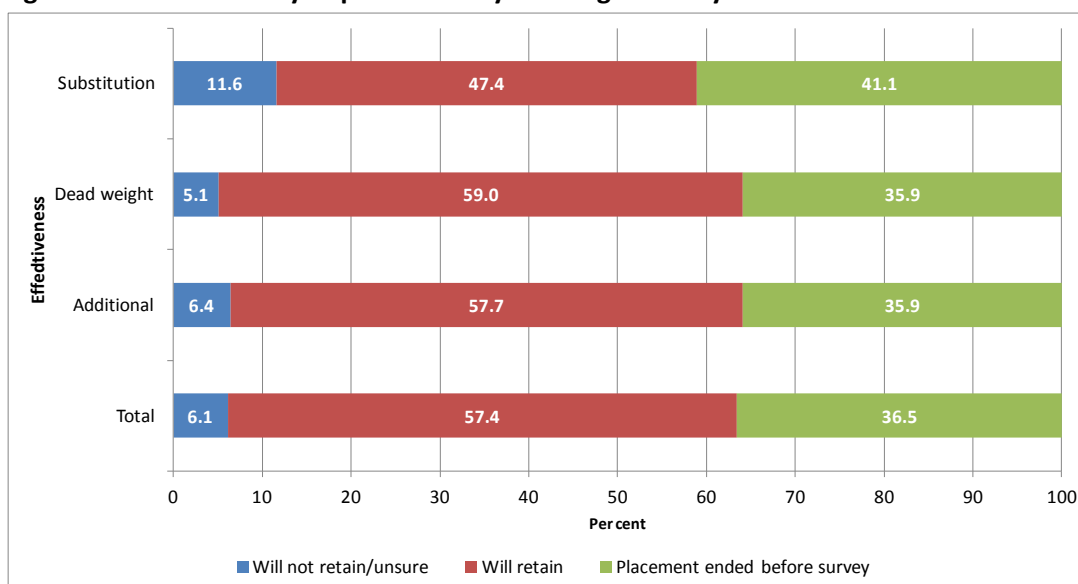
A key objective of wage subsidies is to place job seekers in sustainable employment. The majority (81 per cent) of employers⁷ surveyed reported that they intended to provide a permanent job when the job seeker was hired. Figure 2.8 shows that, by the time of the survey, 57.4 per cent of employers of JSA wage subsidies placements intended to retain their employees. For those wage subsidy placements where the employer would have considered hiring someone else without a subsidy this rate decreased to 47.4 per cent, whereas for those cases where the employee was the employer’s preferred choice this rate increased to 59.0 per cent. These figures show that employers still generally intended to retain the employees that remained in their employ, but that there was a slightly higher risk to sustainability of the jobs for those job seekers who had filled positions that the employer would have filled with someone else had the subsidy not been available.

Employers also reported secondary benefits from the wages subsidies, which enabled them to:

- employ other staff 35 per cent
- retain existing staff 42 per cent
- increase the hours of other staff 25 per cent

These benefits are not the primary objective of wage subsidies, but show some effect in terms of supporting employment more generally.

Figure 2.8: Sustainability of placement by JSA wage subsidy effectiveness



Source: DEEWR Employer Incentives Survey 2011

Note Refer to Appendix Table A2.8 to view the text version of Figure 2.8.

Employers’ satisfaction with wage subsidies

The majority of employers surveyed (85 per cent) indicated that they would consider using a wage subsidy again, if they had a vacancy in the future. Those respondents who still employed the job seekers were more willing to consider using wage subsidies again than those who were

7 Where subsidy was obtained from a JSA provider

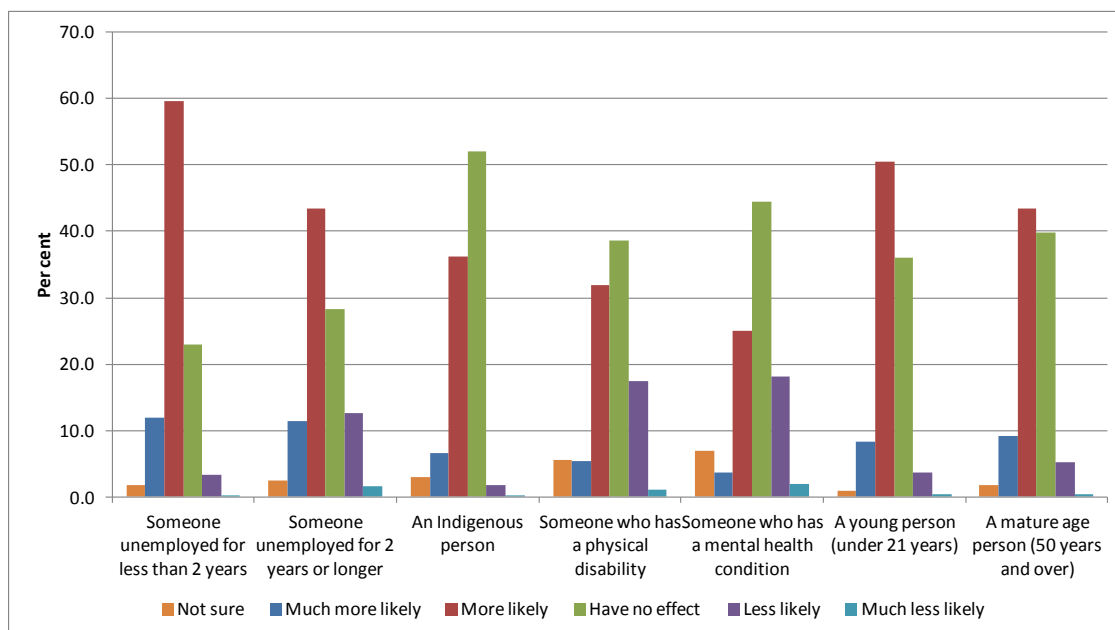
not still employing the job seeker (91 per cent compared to 76 per cent). This suggests that a key driver of employer satisfaction is sustained placement.

Employers were asked if financial incentives make them more likely to consider employing disadvantaged job seekers. The majority of respondents stated that the financial incentive would increase the likelihood that they would employ job seekers in one or more of the following categories:

- unemployed for less than two years
- unemployed for two years or longer
- aged 21 years or younger
- aged 50 years and over.

For job seekers who are Indigenous, have a physical disability or who have a mental health condition, however, the majority of respondents reported that a financial incentive would have no effect on whether they would consider hiring the job seeker, or would make them less likely to do so. For a minority of employers, offering subsidies to employ job seekers may act as a disincentive to consider the candidate. In particular, respondents indicated that being offered a financial incentive would make them less likely or much less likely to consider employing job seekers who have been unemployed for two years or longer (14.3 per cent), job seekers with a physical disability (18.5 per cent), or job seekers with a mental health condition (20.0 per cent) (Figure 2.9). These results indicate that wage subsidies alone are not an effective strategy to overcome employer reservations about some disadvantaged groups.

Figure 2.9: Likelihood of hiring disadvantaged job seekers(1) by disadvantage group



1 JSA wage subsidies only

Note Refer to Appendix Table A2.9 to view the text version of Figure 2.9.

Source: DEEWR Employer Incentives Survey 2011

2.2.8 Proportion of gross wage

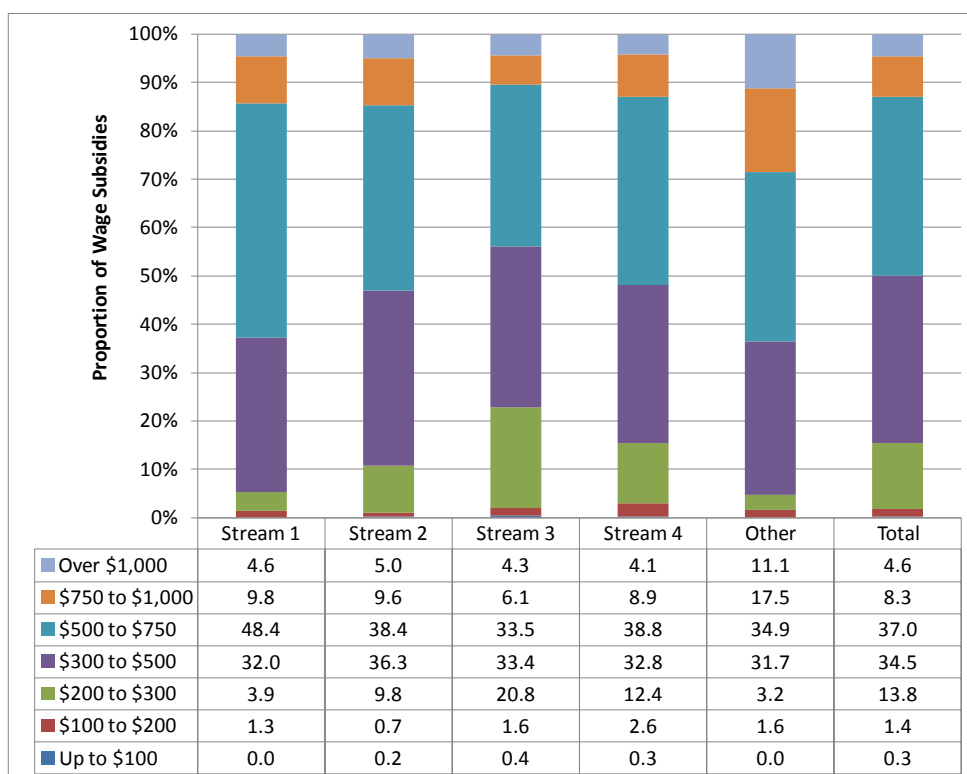
Gross wage data was entered by providers for approximately 31 per cent of wage subsidies (see discussion about data sources in Section 2.1.2 above). Based on the available data

36.9 per cent of wage subsidy recipients are working for between \$500 and \$750 a week and 34.6 per cent between \$300 and \$500 (refer Figure 2.10).

Information was entered in relation to the contribution providers are making towards the gross wage for around 26 per cent of wage subsidies. As expected, based on this data, it appears that as the level of disadvantage of the job seeker increases (i.e. moving from Stream 2 to Stream 4) the wage subsidy contributes more towards the gross wage (see Figure 2.11).

Wage subsidies contributed above 70 per cent of gross wages for the majority of work trials. After excluding work trial subsidies from the data, analysis shows that providers contributed over 70 per cent of gross wages for approximately 13 per cent of the remaining Stream 1 subsidies⁸. In comparison they contributed to the same extent for a much smaller percentage of Stream 2 subsidies (5 per cent), slightly less for Stream 3 (12 per cent) and significantly more Stream 4 subsidies (18 per cent). This raises the question as to why providers are paying such a high percentage of gross wages for proportionally more job seekers in Stream 1 in comparison to the other Streams, given the relative levels of job seeker disadvantage.

Figure 2.10: Gross wages for wage subsidy recipients(1) by Stream service(2), 1 October 2009 to 31 October 2011



1 Based on data available for 19,259 wage subsidies

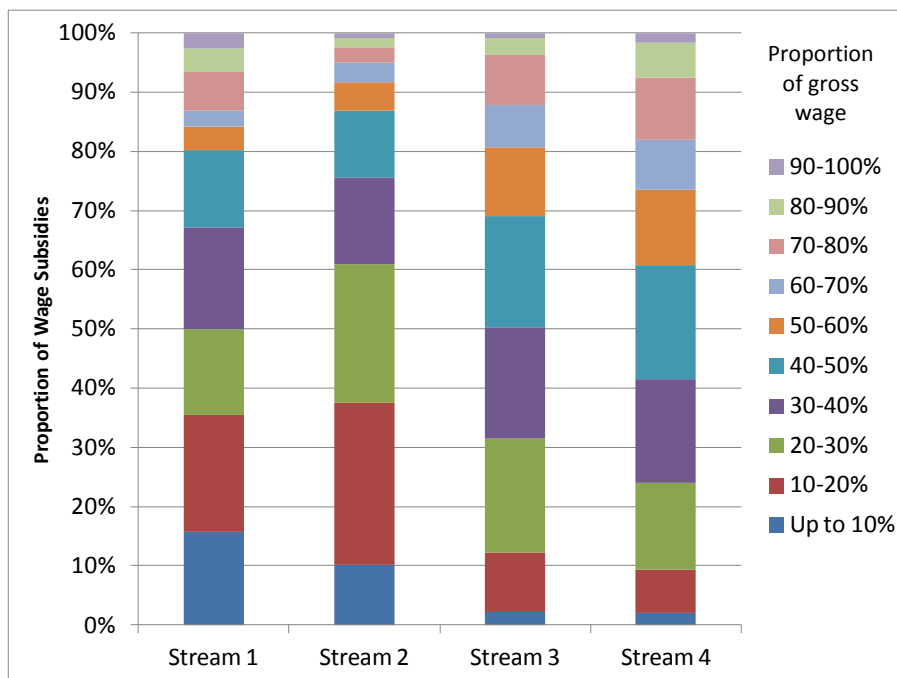
2 "Other" includes Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear

Source: DEEWR Administrative Data

Note Refer to Appendix Table A2.10 to view the text version of Figure 2.10.

8 Note there is only a small number of Stream 1 wage subsidies

Figure 2.11: Proportion of gross wage contributed by provider(1) by Stream service, 1 October 2009 to 31 October 2011



1 Based on data available for 12,047 wage subsidies. Work trials excluded.

Note Refer to Appendix Table A2.11 to view the text version of Figure 2.11.

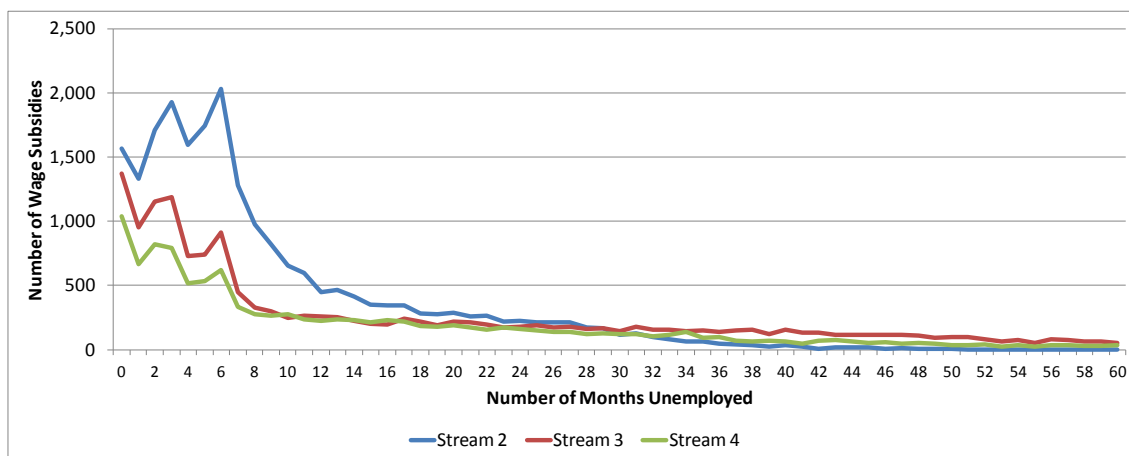
Source: DEEWR Administrative Data

2.2.9 Timing of assistance

The majority of wage subsidies are being allocated to job seekers within the first 6 months of unemployment (as shown in Figure 2.12 below). This pattern is observed for Streams 2, 3 and 4 job seekers, with peaks around the three and six month period of unemployment for all three Streams.

Almost two thirds (62.4 per cent) of wage subsidies were provided to job seekers who had been unemployed for 12 months or less across Streams 2 to 4. While intervention earlier in the unemployment duration may reduce the number of job seekers who subsequently become long term unemployed, this targeting may not reduce the number of job seekers who have already been unemployed for 12 months or more.

Figure 2.12: Number of wage subsidies by length of time job seeker had been unemployed and Stream service, 1 October 2009 to 31 October 2011



Note Refer to Appendix Table A2.12 to view the text version of Figure 2.12.

Source: DEEWR Administrative Data and Centrelink Income Support data

The Employer Incentives Survey results discussed previously (Figure 2.6) showed that there is more of a substitution⁹ effect associated with job seekers who have been unemployed for shorter durations. Approximately 77.9 per cent of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 had been unemployed for less than two years so there is possibly higher substitution associated with wage subsidies provided to date under JSA than might have been associated if wage subsidies were targeted more tightly to jobs seekers with longer unemployment durations.

A new wage subsidy, Wage Connect, was announced as part of the Australian Government’s Building Australia’s Future Workforce package. It will be available from 1 January 2012 with 35,000 places available over four years. Wage Connect is aimed at supporting the employment of people with no or minimal recent work experience that have been on income support payments for at least the last two years. The objective of the subsidy is to give job seekers access to paid work so as to maximise their chances of becoming attached long-term to the labour market. The subsidy equates to the average rate of Newstart Allowance over 26 weeks. It will be paid for at least six months but may be paid for longer in some circumstances. Providers will be able to use the subsidy as an additional tool to assist highly disadvantaged job seekers into paid employment.

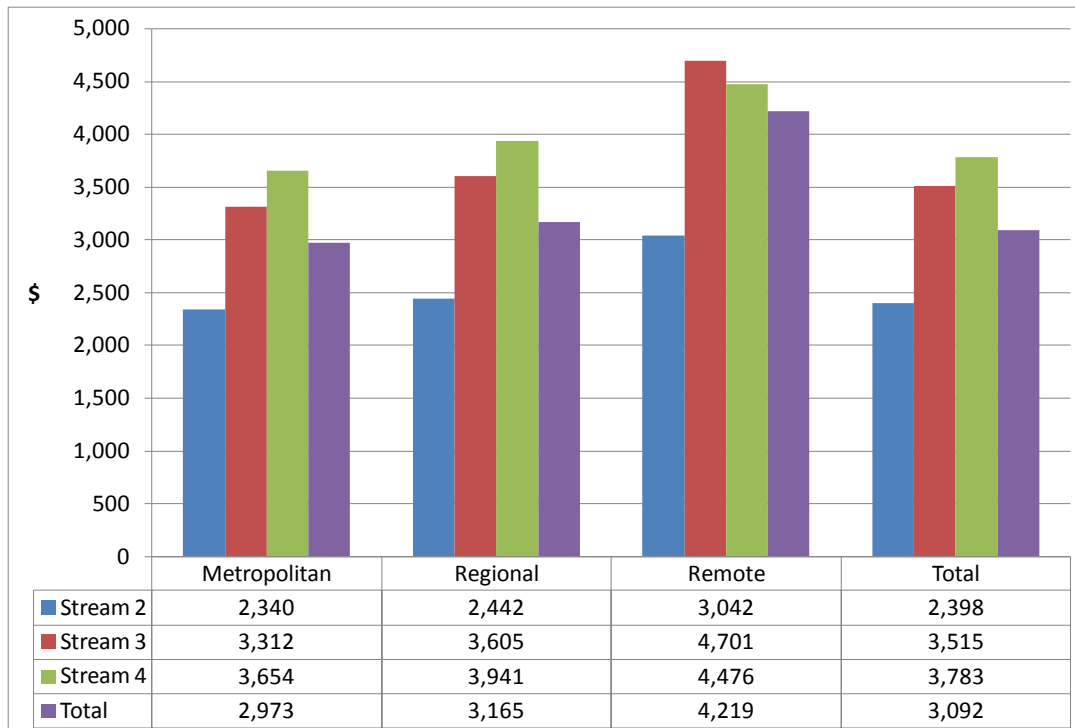
2.2.10 Targeting of wage subsidies

Stream service

The average value of wage subsidies varied by locality type and Stream service of job seeker, from an average value of \$2,340 for metropolitan Stream 2 job seekers to an average of \$4,701 for remote Stream 3 job seekers (see Figure 2.13). Within each Stream the average value of the wage subsidies increases from the lowest average (metropolitan), followed by regional, with the highest average value recorded in remote areas. This pattern is as would be expected, with the subsidy amount driven by job seeker disadvantage and local labour market characteristics.

9 Substitution occurs where the job would have been filled without the wage subsidy and a person who is eligible for a wage subsidy is employed instead of someone who is not eligible.

Figure 2.13: Average value of wage subsidies by Stream service(1) and locality of provider, 1 October 2009 to 31 October 2011¹⁰



1 Total includes Stream 1 and Other (Tasmanian Forestry, Automobile industry and Textile, Clothing and Footwear) service stream

Note Refer to Appendix Table A2.13 to view the text version of Figure 2.13.

Source: DEEWR Administrative Data

Between Streams, within locality type, the general pattern is for Stream 2 wage subsidies to be the lowest, followed by Stream 3 with Stream 4 attracting the highest subsidy, the exception being Stream 4 in remote localities.

¹⁰ Only Streams 2,3 and 4 shown separately –the number of wage subsidies in other categories are too small.

Gender

Males were more likely to receive a wage subsidy than females. Table 2.9 shows that males represented 56 per cent of the job seekers who commenced with JSA between 1 October 2009 and 31 October 2011, while 60 per cent of wage subsidy recipients were male over the same period.

Table 2.9: Gender of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 compared to initial JSA commencements

Gender	Job seekers who received a wage subsidy (number)	Job seekers who received a wage subsidy (per cent)	Initial JSA commencements(1) (per cent)
Male	30,342	60	56
Female	20,294	40	44
Total	50,637	100	100

1 Initial JSA commencements between 1 July 2009 and 31 October 2011

Source: DEEWR Administrative Data

Country of birth

Table 2.10 shows the proportion of wage subsidy job seekers by language background, derived from country of birth information.

Table 2.10: Country of birth of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 compared to initial JSA commencements

Country of birth	Job seekers who received a wage subsidy (number)	Job seekers who received a wage subsidy (per cent)	Initial JSA commencements(1) (per cent)
Australia	39,349	78	78
Other English Speaking	2,743	5	6
Non-English speaking	8,545	17	16
Total	50,637	100	100

1 Initial JSA commencements between 1 July 2009 and 31 October 2011

Source: DEEWR Administrative Data

Highest Level of Education

Table 2.11 below compares the highest level of education that wage subsidy recipients reported prior to receiving their latest wage subsidy compared to all job seekers that commenced with JSA between 1 October 2009 and 31 October 2011. It demonstrates that job seekers with vocational education are more highly represented in the wage subsidy group compared to initial JSA commencements (23 per cent compared to 19 per cent).

Table 2.11: Level of education of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 compared to initial JSA commencements

Highest level of education	Job seekers who received a wage subsidy (number)	Job seekers who received a wage subsidy (per cent)	Initial JSA commencements(1) (per cent)
Primary	7,724	15	17
Year 10	18,395	36	35
Year 12	7,664	15	17
Vocational	11,677	23	19
Degree	4,729	9	11
Unknown	448	1	1
Total	50,637	100	100

1 Initial JSA commencements between 1 July 2009 and 31 October 2011

Source: DEEWR Administrative Data

Income support payment type

Income support data was not found for 2,304¹¹ of the 50,637 wage subsidy recipients, indicating that not all wage subsidy recipients were on income support when they commenced a wage subsidy placement. Table 2.12 shows the last income support payment type for the 48,333 job seekers who were on income support prior to receiving a wage subsidy.

Table 2.12: Income support payment type of job seekers who received a wage subsidy, 1 October 2009 to 31 October 2011

Income support payment type	Number of Job seekers	Per cent
Newstart Allowance	39,909	82.6
Parenting Payment Single (PPS)	5,580	11.5
Parenting Payment Partnered (PPP)	943	2.0
Disability Support Pension (DSP)	354	0.7
Carers	216	0.4
Age Pension	34 ¹²	0.1
Other	1,297	2.7
TOTAL	48,333	100.0

Source: DEEWR Administrative Data and Centrelink Income Support data

11 This figure could be explained by job seekers such as Youth 15 to 20 years old, someone previously placed, and job-in-jeopardy job seekers. It may also be indicative of some underlying data integrity issues. For these 2,304 job seekers, no record at all could be found within the ISS system for 926 of them, that is they do not have an SSR. Of the remaining 1,378 job seekers, 805 had an SSR but were recorded as never having received income support, while the remainder (573 job seekers) had received income support in the past but were not on income support at the start of the wage subsidy.

12 Volunteers are eligible for wage subsidies so it is possible to receive a wage subsidy and be on an age pension.

Very long term unemployed

As mentioned above (see Section 2.2.9) wage subsidies have tended to be targeted more towards those who have been unemployed for 12 months or less. Overall, approximately 21 per cent of wage subsidies were paid for the very long term unemployed (VLTU), that is, those who had been unemployed for two years or more. This indicates that while wage subsidies may be being used to prevent people from becoming very long term unemployed they are not being used extensively to assist those who are already long term unemployed. Wage Connect, discussed in Section 2.2.9, is designed to address this (see Table 2.13).

Table 2.13: Number of wage subsidies that were for very long term unemployed(1), 1 October 2009 to 31 October 2011

Stream Service	Non VLTU Number	VLTU Number	TOTAL Number
Stream 1	435	21	456
Stream 2	20,423	1,877	22,300
Stream 3	11,403	5,729	17,132
Stream 4	8,963	3,419	12,382
Total (2)	41,224	11,046	52,270

1 VLTU is defined in this table as having been unemployed for 24 months or longer

2 Excludes 176 wage subsidies for Other category (Tasmanian Forestry, Automobile Industry and Textile. Clothing and Footwear)

Source: DEEWR Administrative Data and Centrelink Income Support data

2.3 Effectiveness of wage subsidies

To evaluate the effectiveness of wage subsidies as a method of achieving sustainable employment two key indicators were analysed and a logistic regression analysis conducted. In the 12 months following the commencement of the subsidy placement the following key indicators were examined:

- the proportion of time the job seeker was on income support during the 12 months from placement
- the proportion of wage subsidy recipients that were off income support 12 months after the job placement.

For these analyses outcomes for job seekers who received a wage subsidy that commenced between 1 October 2009 and 28 October 2010 were compared to those for a control group of job seekers who had commenced a job placement in the same time frame. Limiting the period of analysis to October 2010 enabled examination of the entire 12 month period from the commencement of the job placement. Where a job seeker received more than one wage subsidy placement under JSA, only the most recent wage subsidy details and job seeker characteristics were examined. To be in-scope for either the wage subsidy or control group, an individual had to be on income support at the beginning of the placement, have had a job seeker classification instrument (JSCI) assessment conducted and administrative data had to be available for the whole analysis period.¹³

2.3.1 Control group selection

The control group was selected by matching (pairing) one similar job seeker (based on specific criteria) to each job seeker who received a wage subsidy that commenced between 1 October 2009 and 28 October 2010. The possibility of bias arises in case-control studies as the effectiveness of a treatment, in this case a wage subsidy, may depend on characteristics that are associated with whether or not a participant in an observational study receives a given treatment. In order to eliminate this bias and isolate the treatment effect the control group was selected by matching job seekers on the following characteristics:

- Stream of service
- JSCI score
- benefit type
- gender
- age group
- locality type of JSA provider (metropolitan, regional or remote)
- Indigenous status
- highest level of education.

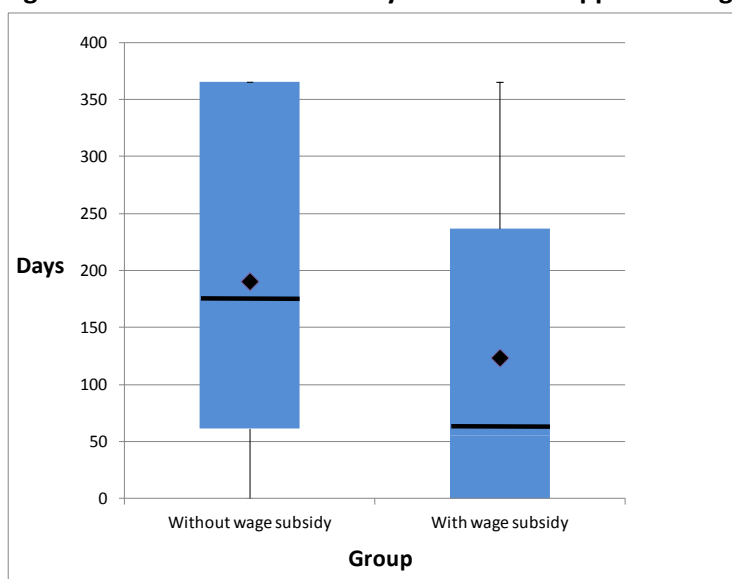
13 Job seekers were excluded if data was not available for the entire period of analysis, for instance the job seeker left the labour force.

2.3.2 Time spent on income support

The first measure examined was the proportion of time spent on income support during the 12 months (365 days) after the commencement of the job placement or wage subsidy. On average job seekers who received wage subsidies were on income support for 123 days (34 per cent) of the year as opposed to an average 190 days (52 per cent) for the control group.

Figure 2.14 shows the distribution of days on income support for both groups of interest. This diagram shows that the inter quartile ranges of the two groups are quite different. The median days on income support for those who received a wage subsidy is 55 days in comparison to 177 days on income support for those who received a job placement without a subsidy. This analysis indicates that wage subsidies are an effective adjunct to job placements in terms of reducing reliance on income support.

Figure 2.14: Distribution¹⁴ of days on income support during 12 months from placement



Source: DEEWR Administrative Data and Centrelink Income Support data

Note Refer to Appendix Table A2.14 to view the text version of Figure 2.14.

2.3.3 Off benefit outcomes

The second effectiveness measure is the percentage of each group that was off income support 12 months after the commencement of their job placement or wage subsidy. Basic analysis of means across the two groups shows that at the end of the 12 month period, 59 per cent of those who did not receive a wage subsidy were off benefit in comparison to 63 per cent of those who received a subsidy.

It should be noted that some of the differences observed in the above two indicators may in part reflect JSA providers' selection of job seekers. Effective targeting of wage subsidies occurs where the job seekers selected are those that would not get and stay in a job without a wage

14 The length of each box represents the interquartile range (the distance between the 25th and 75th percentiles), the ♦ in the box interiors represent the group means, the horizontal lines in the box interiors represent the group medians and the vertical lines (called whiskers) issuing from the boxes extend to the group minimum and maximum values.

subsidy, rather than those who are most likely to stay in a job placement whether or not they attract a subsidy.

2.3.4 Effectiveness of wage subsidies

Regression analysis was undertaken to determine which, if any, factors were associated with the job seeker being off income support 12 months after their initial job placement. The variable of interest in this analysis was whether or not the job seeker received a wage subsidy as part of the placement. The following factors associated with labour market disadvantage were controlled for in the model:

- having a disability or medical condition
- not having access to private transport
- country of birth
- not having stable accommodation
- being an ex-offender
- language other than English (first language spoken as a child)
- English proficiency
- living circumstances
- recent work experience
- a history of income support or crisis payments
- assessed impact of personal problems
- being unemployed for a period greater than 12 months

The amount of EPF expenditure on job seeker (excluding wage subsidy) in current period of unemployment was also controlled for.

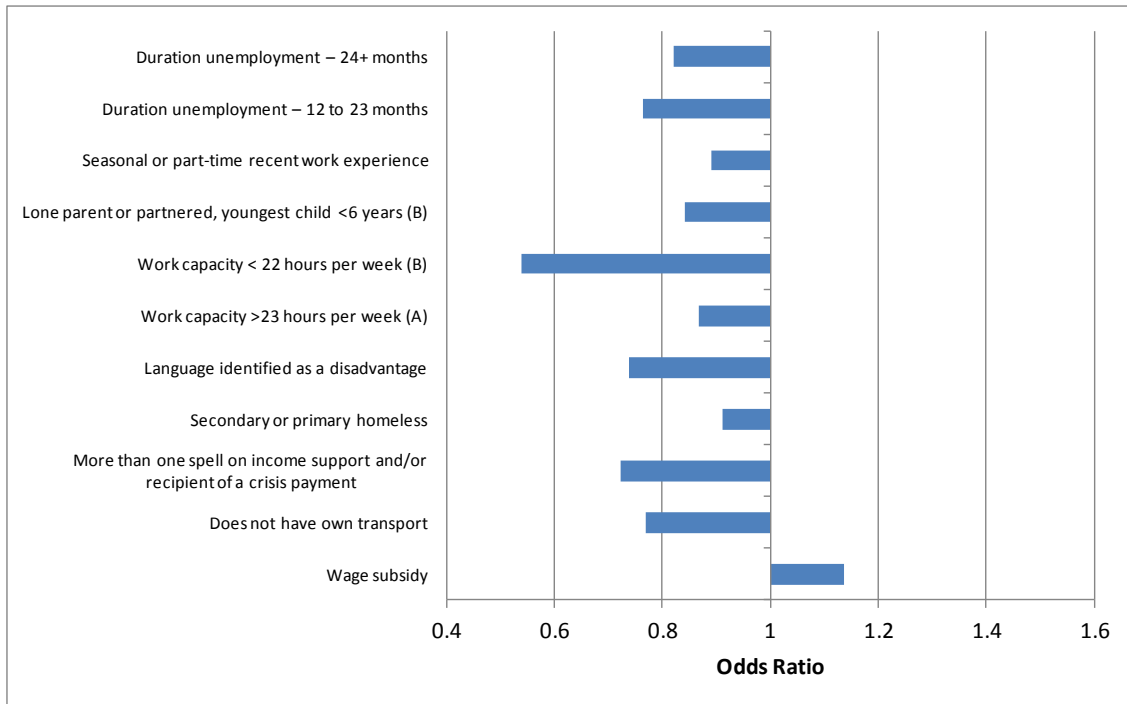
Summary results for the regression analysis are presented below (Figure 2.15). The odds ratios for only those regression variables found to be statistically significant at the 0.05 level are presented in this diagram. Detailed regression results are shown in Appendix A2.

The odds ratios shown in Figure 2.15 and Appendix A2 provide the relative odds of a job seeker being off income support 12 months after initial job placement for each independent regression variable, controlling for the effects of all other regression variables. For indicator variables the odds ratio reflects the odds relative to the opposite situation being the case, for categorical variables the odds relative to the reference category, in both cases controlling for the effects of all other independent variables in the regression.

Some job seeker characteristics made people more or less likely to be off income support regardless of whether they received a wage subsidy, for instance:

- Job seekers who do not have access to their own transport were found to be approximately 23 per cent less likely (odds ratio of 0.77) of being off income support 12 months after initial job placement compared to those that have their own transport.
- Job seekers with disability or medical condition B (with work capacity < 22 hours) are around 46 per cent less likely (odds ratio of 0.54) of being off income support 12 months after initial job placement compared to job seekers with no disability or medical condition.

Figure 2.15: Odds Ratios for factors affecting income support status in 12 months



Source: DEEWR Administrative Data and Centrelink Income Support data

Note Refer to Appendix Table A2.15 to view the text version of Figure 2.15.

The results show that the odds of being off income support in 12 months are approximately 14 per cent higher for job seekers who received a wage subsidy relative to job seekers who received only a job placement in the same time period, controlling for job seeker characteristics.

As mentioned in Section 2.2.7 above, some employers report a secondary benefit to job seekers in that they are able to offer more hours than they would otherwise be able to without the subsidy. It was not possible to determine from the administrative data number of hours worked per week or whether wage subsidy placements were for full-time or part-time employment. Consequently number of hours worked has not been controlled for in the regression.

2.3.5 Conclusion

These results demonstrate that wage subsidies under JSA Stream services are effective in terms of leading to 12-month off benefit outcomes and reduced reliance on income support. However, appropriate targeting is required to minimise deadweight costs associated with paying wage subsidies for job placements which would have occurred anyway and with minimal or no secondary benefits, and to ensure that the benefit of the subsidy is achieved without paying too high a proportion of gross wage.

References

Card, D., Kluve, J. and Weber A. 2009. Active Labor Market Policy Evaluations: A Meta-Analysis, Institute for the Study of Labor, Bonn, Discussion paper No. 4002.

Robalino, D. and Banerji, A. 2009. Addressing the Employment Effects of The Financial Crisis: The Role of Wage Subsidies and Reduced Work Schedules, World Bank Employment Policy Primer No 14.

Appendix A2 Data tables for figures

Table A2.1 Number of wage subsidies by Stream service, 1 October 2009 to 31 October 2011

2009	Stream 2	Stream 3	Stream 4
October	206	168	54
November	370	341	125
December	400	351	128

2010

Month	Stream 2	Stream 3	Stream 4
January	405	401	104
February	547	466	181
March	841	651	251
April	695	563	257
May	964	614	270
June	1078	757	385
July	910	613	402
August	1078	700	518
September	1179	830	570
October	1161	786	574
November	1182	772	610
December	1081	798	590

2011

Month	Stream 2	Stream 3	Stream 4
January	947	683	581
February	978	704	617
March	1141	906	727
April	860	669	562
May	956	873	753
June	1052	942	835
July	810	601	688
August	1016	846	769
September	1257	1090	962
October	1186	1007	869

View Figure 2.1

Table A2.2 Number of wage subsidies and total job placements by Stream service, October 2009 to October 2011

Year: Month	Stream 2 Wage Subsidies	Stream 2 Job Placements	Stream 3 Wage Subsidies	Stream 3 Job Placements	Stream 4 Wage Subsidies	Stream 4 Job Placements
2009: October	206	17109	168	8739	54	2952
2009: November	370	18263	341	8638	125	3313
2009: December	400	13346	351	5894	128	2477
2010: January	405	14080	401	5561	104	2558
2010: February	547	19007	466	7695	181	3518
2010: March	841	22431	651	8631	251	4639
2010: April	695	16995	563	6469	257	3739
2010: May	964	19396	614	7322	270	4544
2010: June	1078	18946	757	6928	385	4793
2010: July	910	19292	613	7217	402	5010
2010: August	1078	20807	700	8581	518	6094
2010: September	1179	22100	830	10550	570	7455
2010: October	1161	19389	786	9719	574	7049
2010: November	1182	21143	772	10654	610	8083
2010: December	1081	13694	798	6808	590	5375
2011: January	947	13844	683	6090	581	5139
2011: February	978	18604	704	8796	617	7420
2011: March	1141	20632	906	10460	727	9310
2011: April	860	13447	669	7079	562	6435
2011: May	956	17748	873	9696	753	8552
2011: June	1052	15118	942	8110	835	7580

Year: Month	Stream 2 Wage Subsidies	Stream 2 Job Placements	Stream 3 Wage Subsidies	Stream 3 Job Placements	Stream 4 Wage Subsidies	Stream 4 Job Placements
2011: July	810	14167	601	7734	688	6915
2011: August	1016	17136	846	9814	769	8841
2011: September	1257	15616	1090	9164	962	8608
2011: October	1186	14771	1007	8501	869	8251

View reference in text to Figure 2.2

Table A2.3: Total value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011

2009	Stream 2	Stream 3	Stream 4
October	300941	401533	96411
November	762198	963124	305869
December	722450	763302	261108
2010			
January	743343	1083560	235455
February	1321047	1485370	509025
March	2007894	2425333	769109
April	1889329	2050889	912886
May	2541026	2209723	923052
June	2574323	3323000	1521887
July	1931670	2079795	1348021
August	2698865	2487563	1890971
September	2941712	2837155	2088042
October	2872206	2884939	2124415
November	2814187	2684101	2235104
December	2622553	2807167	2328492
2011			
January	2380662	2373246	2259806
February	2556432	2599809	2496124
March	2938688	3388860	2938973
April	2325084	2732155	2561661
May	2428012	3362722	3268160
June	2548917	3431155	3348448
July	1832728	1947460	2589054
August	2317819	2916252	3011339
September	2821624	3622518	3522643
October	2580849	3353250	3294318

View Figure 2.3: Total value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.

**Table A2.4: Average value of wage subsidies by Stream service,
1 October 2009 to 31 October 2011**

2009	Stream 2	Stream 3	Stream 4
October	1461	2390	1785
November	2060	2824	2447
December	1806	2175	2040
2010			
January	1835	2702	2264
February	2415	3187	2812
March	2388	3726	3064
April	2718	3643	3552
May	2636	3599	3419
June	2388	4390	3953
July	2123	3393	3353
August	2504	3554	3651
September	2495	3418	3663
October	2474	3670	3701
November	2381	3477	3664
December	2426	3518	3947
2011			
January	2514	3475	3890
February	2614	3693	4046
March	2576	3740	4043
April	2704	4084	4558
May	2540	3852	4340
June	2423	3642	4010
July	2263	3240	3763
August	2281	3447	3916
September	2245	3323	3662
October	2176	3330	3791

View Figure 2.4: Average value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.

Table A2.5: Average value of wage subsidies by labour market region of provider compared to unemployment rate(1), 1 October 2009 to 31 October 2011

Labour market region	Average value of wage subsidies	Unemployment rate
Adelaide	2050	5.5
Brisbane	3083	5.3
Central and Northern Queensland	3182	6.2
Eastern Victoria	4212	5.8
Greater Western Australia	2750	4.3
Hunter	3046	5
Melbourne	3089	4.9
Northern New South Wales	2612	6.5
Northern Territory	4546	3.1
Perth	1859	4.3
South Australia Country	2941	5.2
Southern New South Wales	4209	4.2
Southern Queensland	3255	5.4
Sydney	3591	5
Tasmania	2705	5.4
Western New South Wales	4169	5.8
Western Victoria	3086	5.4

View Figure 2.5: Average value of wage subsidies by Stream service, 1 October 2009 to 31 October 2011.

Table A2.6: Effectiveness of JSA wage subsidy job placements by unemployment duration

Employers' reported benefit to job seeker	Unemployed less than 2 years	Unemployed 2 years or more	Total
Total additional jobs	10.5	10.6	10.6
Total substitution jobs	14.0	11.0	12.9
Dead weight with better conditions only	5.3	6.4	5.7
Dead weight with other benefits only	28.2	30.5	29.1
Dead weight with better conditions and other benefits	10.1	9.6	9.9
Pure dead weight	31.9	31.9	31.9

View Figure 2.6 Effectiveness of JSA wage subsidy job placements by unemployment duration.

Table A2.7: Effectiveness of JSA wage subsidy job placement by Stream service of job seeker

Stream	Additional job	Substitution	Dead weight + better conditions	Dead weight
Stream 2	8.1	10.2	11.3	70.4
Stream 3	12.3	14.9	18.3	54.5
Stream 4	11.0	14.7	18.3	56.0

View Figure 2.7: Effectiveness of JSA wage subsidy job placement by Stream service of job seeker.

Table A2.8: Sustainability of placement by JSA wage subsidy effectiveness

Reported sustainability of employment	Total	Additional	Dead weight	Substitution
Will not retain/unsure	6.1	6.4	5.1	11.6
Will retain	57.4	57.7	59.0	47.4
Placement ended before survey	36.5	35.9	35.9	41.1
Total	100.0	100.0	100.0	100.0

View Figure 2.8: Sustainability of placement by JSA wage subsidy effectiveness.

Table A2.9: Likelihood of hiring disadvantaged job seekers by disadvantaged group (per cent)

Disadvantaged group	Not sure	Much more likely	More likely	Have no effect	Less likely	Much less likely	Total
Someone unemployed for less than 2 years	2	12	60	23	3	0	100
Someone unemployed for 2 years or longer	3	11	43	28	13	2	100
An Indigenous person	3	7	36	52	2	0	100
Someone who has a physical disability	6	5	32	39	17	1	100
Someone who has a mental health condition	7	4	25	44	18	2	100
A young person (under 21 years)	1	8	50	36	4	0	100
A mature age person (50 years and over)	2	9	43	40	5	0	100

View Figure 2.9: Likelihood of hiring disadvantaged job seekers by disadvantaged group (per cent).

Table A2.10: Gross wages for wage subsidy recipients(1) by Stream service(2), 1 October 2009 to 31 October 2011

Gross wages	Stream 1	Stream 2	Stream 3	Stream 4	Other	Total
Over \$1,000	4.6	5.0	4.3	4.1	11.1	4.6
\$750 to \$1,000	9.8	9.6	6.1	8.9	17.5	8.3
\$500 to \$750	48.4	38.4	33.5	38.8	34.9	37.0
\$300 to \$500	32.0	36.3	33.4	32.8	31.7	34.5
\$200 to \$300	3.9	9.8	20.8	12.4	3.2	13.8
\$100 to \$200	1.3	0.7	1.6	2.6	1.6	1.4
Up to \$100	0	0.2	0.4	0.3	0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

View Figure 2.10: Gross wages for wage subsidy recipient) by Stream service, 1 October 2009 to 31 October 2011

Table A2.11: Level of education of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 compared to initial JSA commencements

Gross wages	Stream 1	Stream 2	Stream 3	Stream 4	Other	Total
Over \$1,000	4.6	5.0	4.3	4.1	11.1	4.6
\$750 to \$1,000	9.8	9.6	6.1	8.9	17.5	8.3
\$500 to \$750	48.4	38.4	33.5	38.8	34.9	37.0
\$300 to \$500	32.0	36.3	33.4	32.8	31.7	34.5
\$200 to \$300	3.9	9.8	20.8	12.4	3.2	13.8
\$100 to \$200	1.3	0.7	1.6	2.6	1.6	1.4
Up to \$100	0	0.2	0.4	0.3	0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

View Figure 2.11: Level of education of job seekers who received a wage subsidy between 1 October 2009 and 31 October 2011 compared to initial JSA commencements.

Table A2.12: Number of wage subsidies by length of time job seeker had been unemployed and Stream service, 1 October 2009 to 31 October 2011

Unemployment duration

(months)	Stream 2	Stream 3	Stream 4	Total
Less than 1	1568	1375	1042	4142
1	1335	951	669	3025
2	1709	1156	822	3739
3	1928	1191	794	3953
4	1595	729	518	2876
5	1748	743	537	3059
6	2032	914	623	3604
7	1280	450	333	2094
8	979	327	278	1613
9	823	299	267	1407
10	654	246	274	1185
11	595	264	235	1101
12	450	257	224	942
13	464	256	237	968
14	413	223	232	873
15	350	203	213	776
16	346	197	229	781
17	343	239	217	804
18	281	219	183	694
19	278	191	178	654
20	286	217	191	702
21	257	212	172	649

Unemployment duration (months)	Stream 2	Stream 3	Stream 4	Total
22	264	194	158	622
23	221	174	175	571
24	224	176	162	564
25	213	189	147	552
26	212	173	141	531
27	212	181	139	535
28	174	164	123	462
29	168	165	129	465
30	118	144	119	381
31	128	178	122	429
32	101	155	105	362
33	83	155	116	355
34	66	142	136	344
35	66	149	93	309
36	47	138	96	282
37	40	147	68	255
38	33	157	66	258
39	25	119	67	211
40	34	154	61	249
41	23	132	46	201
42	9	131	71	211
43	17	118	74	209
44	19	114	62	195
45	15	115	54	184
46	9	115	59	183
47	10	116	49	175
48	5	109	55	169
49	5	94	44	143
50	4	101	35	140
51	3	100	34	137
52	3	82	43	129
53	1	62	25	88
54	2	76	34	112
55	2	54	24	80
56	3	82	33	118
57	-	75	37	112
58	1	63	30	94

Unemployment duration (months)	Stream 2	Stream 3	Stream 4	Total
59	1	63	32	96
60	2	54	37	93
More than 5 years	23	1363	813	2199
Total	22300	17132	12382	52446

View Figure 2.12: Number of wage subsidies by length of time job seeker had been unemployed and Stream service, 1 October 2009 to 31 October 2011.

Table A2.13: Average value of wage subsidies by Stream service and locality of provider, 1 October 2009 to 31 October 2011

Locality	Stream 2	Stream 3	Stream 4	Total
Metropolitan	2340	3312	3654	2973
Regional	2442	3605	3941	3165
Remote	3042	4701	4476	4219
Total	2398	3515	3783	3092

View Figure 2.13: Average value of wage subsidies by Stream service and locality of provider, 1 October 2009 to 31 October 2011

Table A2.14: Distribution of days on income support during 12 months from placement

Descriptive statistic	With wage subsidy	Without wage subsidy
25% quantile	0	62
50% quantile (median)	55	177
75% quantile	236	365
Mean	123.2	190.2
Minimum	0	0
Maximum	365	365

View Figure 2.14: Distribution of days on income support during 12 months from placement.

Regression Results

The model used to estimate the odds ratios in Figure 2.15 was a logistic regression modelling the odds of a job seeker coming off income support 12 months after initial job placement.¹⁵ A mix of paired matching and statistical matching was used to control for job seeker characteristics. Details are below.

Table A2.15: Regression of receiving a wage subsidy and job seeker characteristics on coming off income support

Indicator Variable	Level	Standard Error	Odds Ratio	95% Wald Confidence Limit (lower)	95% Wald Confidence Limit (upper)
Wage subsidy	1	0.0243	1.136*	1.083	1.192
Transport – does not have own transport	1	0.0302	0.769*	0.725	0.816
Jobseeker History – more than one spell on income support and/or recipient of a crisis payment	1	0.0333	0.723*	0.677	0.771
Country of birth – disadvantage identified	1	0.0522	0.911	0.822	1.009
Residence Stability – secondary or primary homeless	1	0.0421	0.911*	0.839	0.989
Ex offender	1	0.0386	0.938	0.870	1.012
Language – identified as a disadvantage	1	0.0954	0.737*	0.612	0.889
English Proficiency – mixed/ poor English proficiency	1	0.0498	0.963	0.874	1.062
Categorical Variable: Disability	Level	Standard Error	Odds Ratio	95% Wald Confidence Limit (lower)	95% Wald Confidence Limit (upper)
No disability or medical condition	Reference	-	-	-	-
Work capacity > 23 hours per week (A)	1	0.0423	0.867*	0.798	0.942
Work capacity < 22 hours per week (B)	2	0.0811	0.538*	0.459	0.631

15 Further technical details regarding logistic regressions can be found in most econometric textbooks, for example in Wooldridge (2009, pp. 529-565).

Categorical Variable: Living Circumstances	Level	Standard Error	Odds Ratio	95% Wald Confidence Limit (lower)	95% Wald Confidence Limit (upper)
Otherwise	Reference	-	-	-	-
Lives alone or partnered, youngest child 6-15 years (A)	1	0.0370	0.962	0.895	1.034
Lone parent or partnered, youngest child <6 years (B)	2	0.0637	0.841*	0.742	0.953

Categorical Variable: Personal Characteristics	Level	Standard Error	Odds Ratio	95% Wald Confidence Limit (lower)	95% Wald Confidence Limit (upper)
Otherwise	Reference	-	-	-	-
Low impact problems	1	0.0524	0.944	0.852	1.046
Medium impact problems	2	0.0549	1.003	0.901	1.117
High impact problems	3	0.0606	1.085	0.964	1.222

Categorical Variable: Recent Work Experience	Level	Standard Error	Odds Ratio	95% Wald Confidence Limit (lower)	95% Wald Confidence Limit (upper)
Otherwise	Reference	-	-	-	-
Seasonal or part-time <8 hours per week	1	0.0409	0.892*	0.823	0.966
Not in labour force, unpaid work, unemployed	2	0.0427	0.951	0.875	1.035

Categorical Variable: Unemployment Duration	Level	Standard Error	Odds Ratio	95% Wald Confidence Limit (lower)	95% Wald Confidence Limit (upper)
Duration unemployment – < 12 months	Reference	-	-	-	-
Duration unemployment – 12 to 23 months	1	0.0553	0.764*	0.685	0.851
Duration unemployment – 24+ months	2	0.0453	0.820*	0.750	0.896

* indicates significant at 5% level

Testing Global Null Hypothesis: $\beta=0$

Test	Chi-square	Probability > Chi-square
Likelihood Ratio	1,007.9235	<.0001
Score	967.9098	<.0001
Wald	901.0691	<.0001

View Figure 2.15