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[1] Now affiliated to the Central Statistics Office.

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Abbreviations

BTE	Back to Education Programme
BTEA	Back to Education Allowance
BTW	Back to Work
CE	Community Employment
CIA	Conditional Independence Assumption
COE	Commencement of Employment
CRS	Central Records System
CSO	Central Statistics Office
CSS	Client Services System
DARE	Disability Access Route to Education
DES	Department of Education and Skills
DSFA	Department of Social and Family Affairs
DSP	Department of Social Protection
DSW	Department of Social Welfare
EOS	Educational Opportunities Scheme
ESRI	Economic and Social Research Institute
ET&D	Education, Training and Development Option
HEAR	Higher Education Access Route
JA	Jobseeker's Allowance
JB	Jobseeker's Benefit
JLD	Jobseeker Longitudinal Dataset
LMR	Lansdowne Market Research
NFQ	National Framework of Qualifications
OPF	One-Parent Family
PLC	Post Leaving Certificate
PPS	Personal Public Service
PSM	Propensity Score Matching
PTEO	Part-Time Education Option
QQI	Quality and Qualifications Ireland
SLA	Second Level Allowance
SLO	Second-Level Option
TATS	Technical Assistance and Training Schemes
TESG	Technical Employment Support Grant
TLA	Third Level Allowance
TLO	Third-Level Option
WG	Working Group

Executive Summary

CONTEXT

Between 2008 and 2012, Ireland experienced one of the most severe economic crises since the foundation of the State, which had serious knock-on effects on the country's labour market. In particular, the unemployment rate increased from an average of 4.5 per cent in 2004 to reach a peak of 15.1 per cent by Quarter 1 2012, while the employment rate declined from 66.3 per cent to 58.3 per cent over the same time period.

In response to the unemployment crisis that evolved from the recession, the Department of Social Protection (DSP) increased its expenditure on its Working Age Employment Supports schemes, which comprise a suite of activation programmes aimed at assisting social welfare recipients to progress into employment. Examples include the Community Employment (CE) scheme, JobBridge, the Back to Education Allowance (BTEA) and the Back to Work Enterprise Allowance. Between 2007 and 2012, expenditure on these programmes rose by 48 per cent. However, the DSP's spending on the BTEA scheme more than trebled, increasing from €64.1 million to €199.5 million, while the number of recipients quadrupled, growing from approximately 6,000 to almost 25,000. In terms of total expenditure, the BTEA scheme represents the second largest activation measure in Ireland, second only to the CE scheme.

The DSP undertook a review of its Working Age Employment Supports programmes in 2012 and found that the BTEA was not effective in assisting participants to find employment (DSP, 2012a). Furthermore, a 2005 review of the scheme, which was undertaken at a time when labour market conditions were much more favourable, also found the BTEA to be ineffective (Department of Social and Family Affairs, 2005a). Given that these earlier reviews were based on descriptive evidence, the DSP commissioned the Economic and Social Research Institute (ESRI) in 2014 to conduct a counterfactual analysis of the impact of the BTEA scheme using anonymised data from the Department's newly constructed Jobseeker Longitudinal Dataset (JLD). This dataset, which was created through the amalgamation of five administrative data sources, tracks the social welfare claim, employment, training and activation programme episodes of jobseeker claimants since 2004. The development of the JLD represents a significant step forward in Ireland's data collection approach and allows for the rigorous evaluation of activation programmes such as the BTEA. Given this, in addition to

assessing the effectiveness of the BTEA scheme in assisting jobseekers to progress into employment, the DSP also wanted the BTEA evaluation to act as a 'pathfinder' with regard to the use of the JLD as a tool for evaluating the effectiveness of the Department's remaining suite of activation programmes.

BTEA EVALUATION

The BTEA programme, which was established in 1998, is a non-statutory second-chance education scheme for jobseekers, lone parents and people with disabilities currently in receipt of certain qualifying social welfare payments who would like to undertake a full-time second or third-level education course, but retain access to a welfare payment. In the case of people who are unemployed, the BTEA allows recipients to participate in a course of education while unemployed, and continue to receive an income support payment equivalent to their jobseeker payment. However, they are not required to be actively seeking work and will typically cease any job-seeking activity for the duration of their education course.

In this report, we focus on the effectiveness of the BTEA in assisting jobseekers to progress into employment, as **the main objective of the BTEA scheme is to raise the education and skill levels of unemployed individuals in order to help them to progress from unemployment into employment.** Unlike previous evaluations of the scheme, we go beyond summary statistics and average effects of the programme. Instead, we apply econometric methodologies to the JLD microdata to take account of the diversity of individuals participating in the BTEA when evaluating the scheme's effectiveness. In particular, the evaluation is based on a counterfactual methodology, in which we compare the employment outcomes in both 2012 and 2014 of jobseekers who commenced an education course under the BTEA scheme in 2008, with the employment outcomes of a matched group of unemployed jobseekers who did not commence an education course at that time.

For the purposes of this study, we focussed on jobseekers who commenced either a second-level option (SLO) or a third-level option (TLO) education programme in September/October 2008. These two groups of BTEA participants, the SLO and TLO, are referred to as the 'treatment' groups in the study. The impact of these two BTEA options are measured by comparing the labour market outcomes of the two treatment groups in June 2012 and 2014 with individuals who had unemployment histories similar to those in the treatment groups, but who continued to be unemployed in September/October 2008 and did not participate in any education scheme. This latter group of individuals are referred to as the 'control' group in this report.

From an international perspective, Ireland's approach to labour market activation seems somewhat at odds with usual practice. In other OECD countries, activation measures tend to predominantly focus on schemes in the areas of specific skills training and wage subsidies as opposed to public sector employment programmes (e.g., the CE scheme) or second-chance education schemes like the BTEA (Card et al., 2010).

MAIN FINDINGS

After taking into account a range of factors that would influence an unemployed person's likelihood of labour market success, the results indicate that jobseekers who commenced an SLO BTEA claim in September/October 2008 were between 28 and 30 percentage points less likely to have left the Live Register in June 2012 relative to the control group. This negative impact fell to 25 percentage points by June 2014.

In relation to the effectiveness of the TLO BTEA option, the results again indicate that claimants who commenced this programme in September/October 2008 were less likely to be signed off the Live Register in both June 2012 and 2014 relative to a control group. Specifically, such individuals were 20 percentage points less likely to be signed off the Live Register in June 2012 in comparison with a control group, with this figure decreasing to 14 percentage points in June 2014.

While gaining employment is the main objective of the BTEA, some individuals may use the BTEA programme as a stepping stone into another education course that will eventually lead to employment. Given this, we separated out exits from the Live Register into (i) exits to employment and (ii) exits to continued education. When we did this we found that those who commenced the SLO BTEA option in September/October 2008 were 38 percentage points less likely to be in employment in June 2012 and 30 percentage points less likely in June 2014, relative to a control group. In terms of the TLO BTEA route, individuals who commenced programmes in September/October 2008 were found to be 23 and 14 percentage points less likely to be in employment in June 2012 and June 2014 respectively, relative to a control group.

In relation to continued education, the SLO BTEA programme was found to raise the likelihood of a participant being in education in June 2012 and 2014 by approximately 7 percentage points. However, descriptive analyses revealed that

over half of the SLO treatment group who remained in education progressed into another SLO programme in the later time points as opposed to a more advanced education or training course (see Table 4.6). In relation to the TLO option, this was also found to have increased the probability of a participant remaining in education or training in 2012 and 2014 by approximately 10 percentage points relative to a control group.

There is little doubt that schemes that support acess to education, like the BTEA, are a vital component of any life-long learning strategy. Nevertheless, the evidence presented in this report, which is consistent with the findings from past reviews of the programme, raises concerns about the effectiveness of the BTEA in assisting jobseekers to transition from unemployment to employment. There is evidence that the BTEA scheme was successful in redirecting participants to further study or training. However, the scheme does not appear to be effective in terms of its core goal of assisting the unemployed to transition to employment. Furthermore, there is some concern around the degree of progression into higher level study for those BTEA participants that go this route of continued education.

It is important to emphasise that the evaluation results presented in this report represent a purely empirical exercise aimed at producing a counterfactual estimate of the BTEA programme. The evaluation does not contain any qualitative information that will cast light on the individual experiences or processes that would contribute to the observed result, nor does it assess the quality of the employment outcomes for those jobseekers supported under the BTEA scheme that found employment on completion of their education course. As such, additional conclusions cannot be drawn with respect to the quality or impact of the educational programmes undertaken by BTEA claimants, nor any potential lock-in effects from benefit rules that may result in longer term welfare dependency. Thus, further research is required to identify the processes at play that have given rise to the negative results derived in this report on the BTEA scheme's effectiveness as an activation programme. In this regard, course content, completion rates, the quality of the qualifications received, the in-employment earnings of BTEA recipients who progress to employment and the employment outcomes over a longer duration are all factors that would assist in a more comprehensive analysis of the BTEA scheme.

As a pathfinder for the use of the JLD, the findings of this counterfactual evaluation indicate that the JLD provdes a robust basis for quantitative analysis of the effectiveness of the Department's Working Age Employment Support schemes using a counterfactual methodology. The outcomes of such an analysis can challenge existing beliefs and give rise to significant questions, and in

addition can contribute to the task of clarifying policy objectives and the development of evidenced-based policies that will improve outcomes. In this regard, while it is positive to see that the unemployment rate has started to decline since 2012, it still remains around 10 per cent (CSO, 2015). Thus, it is important that the Government's activation measures can be shown to be effective in applying scarce resources to the task of assisting unemployed people to reintegrate into the labour market.

Chapter 1

Introduction

1.1 INTRODUCTION

In this chapter, we begin by setting out the context to the BTEA evaluation that is conducted in this report. In particular, we outline the Department of Social Protection's response to the economic crisis that took place between 2008 and 2012, specifically in relation to expenditure on its Working Age Employment Schemes. We then provide some overview information on the BTEA scheme, along with an outline of the evaluation conducted in the report. The importance of education in and of its own right is discussed next, while the chapter concludes with an outline of the remainder of the report.

1.2 CONTEXT

Between 2008 and 2012, Ireland experienced one of the most severe economic crises since the foundation of the State, which had serious knock-on effects on the country's labour market. In particular, the unemployment rate increased from an average of 4.5 per cent in 2004 to reach a peak of 15.1 per cent by Quarter 1 2012, while the employment rate declined from 66.3 per cent to 58.3 per cent over the same time period.[2] The collapse in the property sector resulted in most job losses occurring in the construction sector, and in particular among males. Fortunately, the economy seems to have turned a corner since 2012 (see Duffy et al., 2015); by Quarter 2, 2015 the unemployment rate stood at 9.8 per cent and the employment rate 63.1 per cent.[3]

In response to the unemployment crisis that evolved from the recession, the Department of Social Protection (DSP) increased its expenditure on its Working Age Employment Supports schemes, which comprise a suite of activation programmes aimed at assisting social welfare recipients to progress into employment. The various programmes, which are set out in Table 1.1, can be grouped into four categories: (i) work programmes, (ii) internships, (iii) training and education, and (iv) self-employment supports.

2 www.cso.ie/en/qnhs/releasesandpublications/qnhspostcensusofpopulation2011.

3 Ibid.

TABLE 1.1 DSP Working Age Employment Support Schemes

Work Programmes	Internships	Training and Education	Self-Employment Supports
Community Employment (CE)	JobBridge	Back to Education Allowance (BTEA)	Back to Work Enterprise Allowance
TÚS	Work Placement Programme	Part-Time Education Option	Short-Term Enterprise Allowance
Rural Social Scheme		Education, Training and Development Option	Credit Union Loan Guarantee Scheme
Job Initiative		Activation and Family Support Programme	
Part-Time Job Initiative		Technical Employment Support Grant (TESG)	
		Technical Assistance and Training Schemes (TATS)	

Source: High Level Issues Paper emanating from a Review of Department of Social Protection Employment Support Schemes, DSP (2012a).

Between 2007 and 2012, expenditure on these programmes rose by 48 per cent. However, spending on the Back to Education Allowance (BTEA) scheme more than trebled, increasing from €64.1 million to €199.5 million, while the number of recipients grew from approximately 6,000 to almost 25,000. This increased expenditure on the BTEA programme was explicitly highlighted in a departmental policy review of its Working Age Employment Supports programmes in 2012 (DSP, 2012a). This review, which was undertaken to evaluate the contributions of the Department's various schemes in supporting people into employment, found, using Live Register administrative data for 2011/2012, that the BTEA scheme was not effective in assisting participants to find employment. While the 2012 departmental review was conducted at a time when BTEA participants would have faced a poor labour market on completion of their course, a 2005 review of the BTEA, which was undertaken at a time when the labour market was much more favourable, also found the scheme to be ineffective (Department of Social and Family Affairs, 2005a). Given that the 2005 and 2012 reviews were based on descriptive evidence, the DSP commissioned the Economic and Social Research Institute (ESRI) to conduct a counterfactual analysis of the BTEA scheme to assess the scheme's effectiveness in assisting jobseekers to find employment.

1.3 OVERVIEW OF BTEA SCHEME

The BTEA is a non-statutory second-chance education scheme for jobseekers, lone parents and people with disabilities currently in receipt of certain qualifying social welfare payments who would like to undertake a full-time second or third-level education course, but retain acess to a welfare payment. In the case of people who are unemployed, the BTEA allows recipients to participate in a course of education while unemployed and continue to receive an income support

payment equivalent to their jobseeker payment. However, they are not required to be actively seeking work and will typically cease any job-seeking activity for the duration of their education course.

The courses provided through the BTEA Scheme are, for the most part, provided by educational institutions that are under the remit of the Department of Education and Skills (DES), while the BTEA payment is administered by the Department of Social Protection (DSP).

The BTEA was established in 1998, through the merger of the Third Level Allowance (TLA) and the Second Level Allowance (SLA) schemes. These two second-chance education programmes, which were originally set up in 1990,[4] evolved from the Department of Social Welfare's (DSW)[5] 1986 Educational Opportunities Scheme (EOS). The high unemployment rate that existed in Ireland around the mid-1980s, which stood at 17 per cent in 1986,[6] combined with the acknowledged strong link between poor educational attainment and long-term unemployment, led the DSW to establish the EOS. The scheme was specifically established to give individuals in receipt of certain social welfare payments an opportunity to pursue educational courses that would assist them to gain employment. The EOS was initially administered on a pilot basis in both Dublin and Limerick to long-term unemployed individuals aged over 25: these individuals attended a Leaving Certificate type course and received an allowance for attendance at the course in lieu of their unemployment payment (Department of Social and Family Affairs, 2005a). Over time, the Department's second-chance education opportunities scheme has been modified in a number of ways,[7] and today the scheme, known now as the Back to Education Programme (BTE), consists of three main options: (i) the BTEA, (ii) the Part-Time Education Option (PTEO) and (iii) the Education, Training and Development Option (ET&D).[8]

Almost all courses attended by participants under the BTEA are standard Post-Leaving Certificate (PLC) or undergraduate degree courses within the Secondary, Further and Higher Education sectors. However, the stated objective of the BTEA scheme in supporting unemployed people to attend these courses is to assist participants to acquire sustainable employment. Thus, the courses can be considered as activation programmes because, under the BTEA scheme, they are

4 The TLA was established as a stand-alone programme in September 1996 and the SLA in January 1998.

5 Known as the DSP since 2010.

6 Walsh (2002).

7 For a detailed chronology of the changes that have been made to the TLA/SLA and BTEA since 1990, see Appendix 2 at www.welfare.ie/en/Pages/Back-to-Education-Allowance-Scheme.aspx#1.1.

8 For more details on the BTE options, see www.welfare.ie/en/Pages/Back-to-Education-Supports.aspx.

designed to provide individuals in receipt of certain social welfare payments with the skills and qualifications that will allow them to obtain employment.

1.4 OUTLINE OF BTEA EVALUATION

The attainment of employment has been the objective of the Department's second-chance education initiatives, including the BTEA, since the establishment of the EOS in 1986. Given this remit, the main objective of this study is to evaluate the effectiveness of the BTEA in helping participants, specifically those in receipt of a jobseekers payment (Jobseeker's Allowance (JA) or Jobseeker's Benefit (JB)) to transition to the labour market, and in particular those who commenced a BTEA programme in September/October 2008. While gaining employment is the main objective of the BTEA, some individuals may use the BTEA programme as a stepping stone into another education course that will eventually lead to employment. For that reason, we also assess the success of the BTEA in facilitating progression to another education programme, training course or employment placement. Before considering the programme impact on different routes of exit from the Live Register, we begin our evaluation of the effectiveness of the BTEA scheme by examining its general capability of keeping jobseekers out of unemployment[9] (i.e., off the Live Register[10] irrespective of the reason for exit).

The evaluation of the BTEA scheme is conducted using administrative data from the DSP's *Jobseeker Longitudinal Dataset* (JLD). The JLD is a new DSP database covering all individuals who made a jobseekers or one-parent family payment since 2004. The database, which was created through the amalgamation of five administrative data sources, tracks the social welfare claim, employment, training and activation programme episodes of these individuals. Further information on the database is provided in Section 3.1. In addition to assessing the effectiveness of the BTEA scheme in assisting jobseekers to progress into employment, the DSP also wanted the BTEA evaluation to act as a 'pathfinder' with regard to the use of the JLD as a tool for evaluating the effectiveness of the Department's remaining suite of activation programmes.

[9] One of the sensitivity checks that we undertook on our results was to re-run the analysis on all BTEA recipients and not just jobseekers. When we did this, we found that the overall results derived on the effectiveness of the BTEA programmes did not change (see Section 5.5). However, it is not appropriate to include non-jobseeker payment recipients in the BTEA evaluation because not all such individuals are required to look for work as part of their social welfare payment contract.

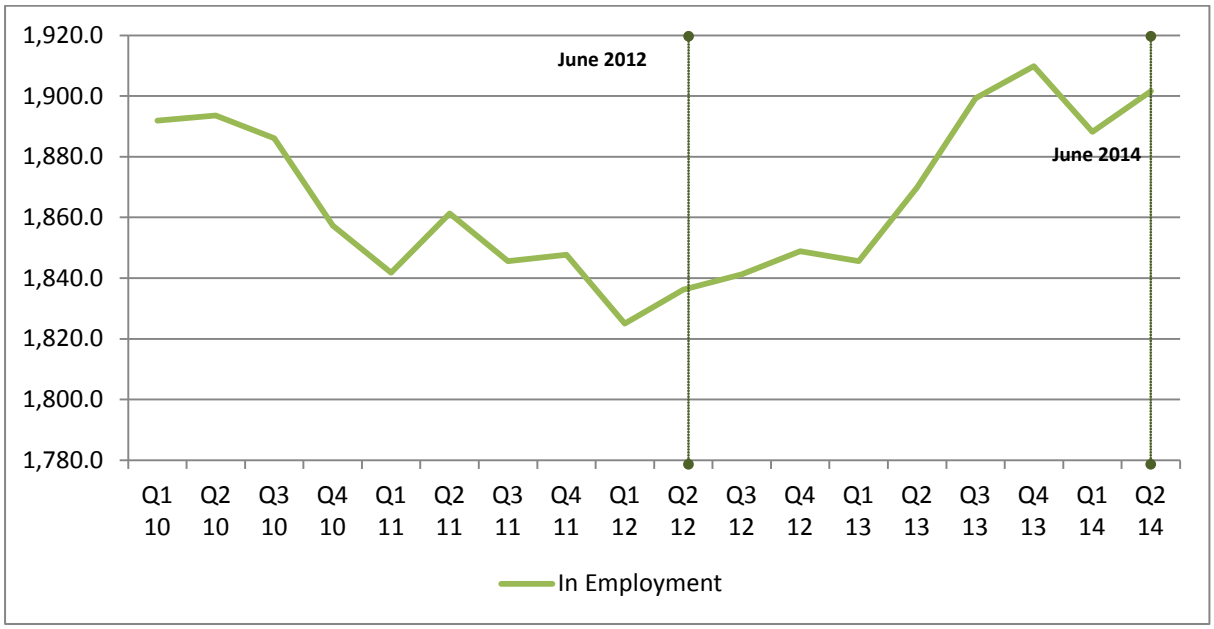
[10] The Live Register is Ireland's national administrative dataset that captures all individuals in receipt of an unemployment benefit.

The decision was taken to focus on those who commenced a BTEA course in September/October 2008 as this was the last cohort to enter the scheme before its significant expansion in 2009: not only did the selection of this cohort provide the largest sample of BTEA participants since the programme's inception in 1998, the time point was also favourable as it enabled the evaluation to take full account of the duration of BTEA courses and lock-in effects.[11] However, one needs to bear in mind the significant change in Ireland's economic environment that took place over the period of the evaluation, which was alluded to earlier. Specifically, those who commenced a BTEA course in September/October 2008 did so as the economy went into recession: at that time the unemployment rate averaged around 7.5 per cent.[12] As with the Department's own review in 2012, the majority of the 2008 BTEA cohort faced a poor economic environment with few job openings on completion of their course. The unemployment rate stood at 12.1 per cent in Quarter 2, 2009, which would have been the period when those undertaking a one-year BTEA course would have completed their studies. The unemployment rate continued on an upward trajectory after this and stood at 14.7 per cent in Quarter 2, 2012, which is when the 2008 BTEA cohort who commenced a four-year course would have sat their final exams. However, the evaluation compares the outcomes of BTEA participants with those of a matched control group of unemployed individuals who faced identical economic conditions. Furthermore, for the time periods when the effectiveness of the BTEA scheme is evaluated in this report, which were June 2012 and June 2014, the economy had started to show signs of recovery with the numbers in employment increasing (see Figure 1.1). Thus, evaluating the BTEA when the labour market had started to improve allows us to assess the long-term sustainability of the content of BTEA courses, in terms of assisting participants to gain employment.

[11] The lock-in effect is when job entry rates decline due to a decrease in job search efforts when participating in a training programme or some other type of activation scheme.

[12] The unemployment rate was 6.9 per cent in Quarter 3 2008 and 8.1 per cent in Quarter 4 2008; thus the rate of 7.5 per cent is an average of these two rates (see www.cso.ie/en/qnhs/releasesandpublications/qnhspostcensusofpopulation2011).

FIGURE 1.1 Numbers in Employment in Ireland: Q1 2010 - Q2 2014



Source: Constructed using data from the Quarterly National Household Survey (Central Statistics Office).[13]

1.5 VALUE OF EDUCATION

Before going on to outline the structure of the report, it is important to stress that the value of education cannot be overstated. In addition to education allowing a person to develop intellectually, socially and morally, it is also a powerful determinant of an individual's future life chances (Smyth and McCoy, 2009). For example, research for Ireland has found that adults with low levels of education have lower earnings (McGuinness et al., 2009; Kelly et al., 2009; and Kelly et al., 2012a) and are at higher risk of unemployment, including long-term (O'Connell et al., 2009), particularly during an economic downturn (Kelly and McGuinness, 2015). Low levels of education creates costs for society as well in the form of higher social welfare spending, lower levels of tax receipts and higher crime rates (Belfield and Levin, 2007). Thus, a second-chance education scheme like the BTEA has the potential to give individuals with low educational attainment an opportunity to attain higher qualifications that should, in turn, enhance their labour market prospects.

A second-chance education initiative like the BTEA may also help to stem the negative intergenerational effects associated with low levels of education. Specifically, research by Smyth and McCoy (2009) illustrates that parental

[13] Time Series Table (www.cso.ie/en/qnhs/releasesandpublications/qnhspostcensusofpopulation2011).

education is significantly associated with a range of educational outcomes among young people, including the duration a young person remains in the education system. Smyth and McCoy (2009) also showed that education is highly predictive of a person's life chances in Ireland and that a Leaving Certificate qualification is the 'minimum' qualification that is required to secure access to further and higher education and training, along with high quality employment. While we do not question the important positive impacts of life-long learning initiatives from both societal and individual perspectives, this report asks a very specific question with respect to the effectiveness of a second-chance educational programme, namely the BTEA, as a form of labour market activation.

1.5 STRUCTURE OF THE REPORT

The remainder of the report is structured as follows. Chapter 2 provides a detailed description of the BTEA scheme. The data and methodologies used to conduct the evaluation are set out in Chapter 3. Some descriptive statistics are presented and discussed in Chapter 4, while the econometric evaluation results are set out in Chapter 5. Finally, Chapter 6 provides a summary of the report, and also outlines the main conclusions that can be drawn from the evaluation.

Chapter 2

The Back to Education Allowance

2.1 OVERVIEW

The Back to Education Allowance (BTEA) is a non-statutory second-chance education opportunities scheme for individuals in receipt of certain qualifying social welfare payments[14] who would like to undertake a second- or third-level education course in order to improve their education and skills, but at the same time retain access to a welfare payment. In the case of people who are unemployed, the BTEA allows recipients to participate in a course of education while unemployed and continue to receive an income support payment equivalent to their jobseeker payment. However, they are not required to be actively seeking work and will typically cease any job-seeking activity for the duration of their education course.

BTEA courses are predominately provided by education institutions that are under the remit of the Department of Education and Skills (DES), while the income support associated with the scheme is controlled by the Department of Social Protection (DSP). In its role in the administration of the BTEA programme, the objective of the DSP is to raise the education and skill levels of unemployed individuals in order to help them to gain employment.

In the remainder of this chapter, we set out the eligibility criteria for accessing a BTEA payment, along with the BTEA rates and monitoring arrangements that are in place for the scheme. We also outline recipient numbers and DSP expenditure on the BTEA programme since its introduction in 1998. The chapter concludes by summarising the findings from previous reviews of the BTEA scheme.

[14] Jobseeker's Allowance, Jobseeker's Benefit, farm assist, one-parent family payment, deserted wife's benefit or allowance, widow's, widower's or surviving civil partner's contributory or non-contributory pension, prisoners wife's allowance, carer's allowance, blind pension, disability allowance, invalidity pension and incapacity supplement. People who have been in receipt of illness benefit for two years or more can also qualify for the BTEA.

2.2 ELIGIBILITY CRITERIA

To be eligible for the BTEA, individuals must be at least 21 years of age; for those who would like to undertake a third-level post-graduate course,[15] the minimum age level is 24. However, people aged between 18 and 20 who are in receipt of Jobseeker's Allowance (JA), Jobseeker's Benefit (JB) or a One-Parent Family (OPF) payment and have been out of the formal education system for at least two years are also eligible for the BTEA. Individuals aged 18 or over (over 24 for post-graduate course) who are in receipt of a blind pension, disability allowance, invalidity pension or incapacity supplement can qualify as well.

To pursue a second-level course, a claimant must be getting a qualifying social welfare payment for a minimum of three months,[16] while those who would like to undertake a third-level course need to be in receipt of a qualifying payment for nine months.[17] However, a person does not have to have been in receipt of a qualifying payment continuously. Specifically, time spent on other qualifying social welfare payments (including the receipt of credits) that are not broken by more than 12 months (52 weeks) can be used to determine if a person satisfied the qualifying period criterion.[18] Individuals need to be in receipt of their qualifying payment immediately before starting a course, and they must have been accepted onto a qualifying course before they can be eligible for the BTEA as well.

To qualify for a BTEA payment, a claimant must generally also be commencing the first year of a course,[19] pursuing a course that will lead to a Quality and Qualifications Ireland (QQI) accreditation or equivalent, and progressing in educational qualifications (i.e., going from a Level 3 qualification to Level 4, to Level 5 and so on). In May 2014, the Minister for Social Protection announced an amendment to the progression rule for claimants applying for courses at National Framework of Qualifications (NFQ) Levels 5 and 6. Specifically, applicants holding a qualification at one of these two levels are allowed, as of 1 June 2014, to undertake further courses of study at these levels if the course assists the individual in their professional development and overall job prospects. However,

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15 Only post-graduate courses that lead to a Higher Diploma qualification or a Graduate Diploma in Education are eligible for the BTEA scheme. One exception to this rule, however, is where a college has admitted a person without a primary degree to a Master's course on the basis of relevant life experience.

16 78 days of unemployment (with Sunday excluded from this calculation).

17 234 days of unemployment (with Sunday excluded from this calculation).

18 Where a person has been signing on for unemployment credits, or providing medical certificates for illness credits, that person can qualify to participate in a BTE programme on a non-payment basis, once he/she has been in receipt of the credits for the required qualifying time period.

19 There are some exceptions to this criterion for third-level courses (for more details, see www.citizensinformation.ie/en/social_welfare/social_welfare_payments/back_to_education/back_to_education_allowance.html).

for the BTEA recipient cohort examined in this study (September/October 2008), they must progress to higher qualifications on the NFQ.

Eligible courses of education under the BTEA scheme include those from second-level (e.g., Junior Certificate, Leaving Certificate, Post-Leaving Certificate (PLC) or a City and Guilds Certificate)[20] to a Higher Diploma level in any discipline.[21] The new Professional Masters in Education programme that replaced the Higher Diploma in Education in September 2014 is supported under the BTEA also. Extension of the BTEA to cover this education course, and two other DES run education initiatives to assist the unemployed, Springboard[22] and Momentum,[23] was announced by the Minister of Social Protection in May 2014. These programmes were specifically added to the existing list of BTEA courses to assist those who are long-term unemployed, and their inclusion took effect from 1 June 2014.[24] Given the courses covered by the BTEA programme, this means that the expected duration of SLO courses is one to three years, while for TLO programmes it is three to four years. However, the DSP (2012a) have found that the actual average length of participation on an SLO course is 1.4 years, and that most of the SLO courses being undertaken are Post-Leaving Certificates (see Table 3.1). The DSP (2012a) have also found that the average duration on a TLO course is three years.

In addition to the changes to the BTEA programme mentioned above, which have been introduced since 1 June 2014, the role of the DSP in the BTEA selection process has been strengthened since that date as well. Specifically, all new BTEA applications have to be recommended and approved by a jobseeker's Case Officer as opposed to the applicant self-selecting into a course.

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20 To be undertaken on a full-time basis at any secondary, community, comprehensive or vocational school and lead to a certificate recognised by the Department of Education and Skills (DES) or approved by Quality and Qualifications Ireland (QQI). Access/Foundation courses are considered second-level courses for BTEA purposes.

21 Full-time day course of study, up to Level 8 on the NFQ, at any university, third-level college or institution. The course needs to be approved by the DES for student grant purposes and/or recognized by the QQI.

22 Springboard was launched in 2011 as part of the Government's *Jobs Initiative* strategy. The programme specifically targets funding of free part-time higher education courses to enable unemployed and previously self-employed people to either up-skill or re-skill in areas of the labour market where skills shortages or employment opportunities have been (for more details, see www.springboardcourses.ie).

23 Momentum, which was launched in 2012, is an initiative that provides education and training to long-term unemployed individuals to assist them to acquire the skills needed to obtain jobs in those sectors of the economy where job opportunities have been identified.

24 Claimants who apply for the BTEA to undertake a Professional Masters in Education course need to have been in receipt of a qualifying social welfare payment for 12 months (i.e., have been unemployed for 312 days).

2.3 BTEA RATES AND MONITORING ARRANGEMENTS

In terms of the BTEA rates, applicants that were approved prior to 1 January 2013 receive a weekly personal rate that is equivalent to the maximum standard personal rate of their qualifying social welfare payment. Since 1 January 2013, new BTEA entrants aged over 26 on means tested payments (e.g., JA, one-parent family, disability allowance, etc.) no longer have their payment up-rated to the maximum personal rate for their specific qualifying payment i.e., the payment that such individuals receive will be equal to their previous social welfare benefit rate as opposed to the maximum personal rate for that payment. As of 1 January 2013, new BTEA participants aged under 26 who are in receipt of a reduced age-related Jobseeker's Allowance payment will receive a new personal maximum BTEA rate of €160 per week.[25] A BTEA recipient can qualify for payment increases for a qualified adult and/or qualified children. However, any payment increase for a qualified adult may be means-tested if the BTEA recipient's spouse or partner has income in their own right.

BTEA participants do not get a BTEA payment during the summer period between academic years; however, they can apply for JB or JA if they meet the qualifying criteria.[26] People that qualify for a BTEA can work part-time without their payment being affected. In addition, individuals in receipt of secondary benefits (fuel allowance, rent supplement and mortgage interest supplement) that qualify for a BTEA can continue to receive these benefits, as long as there is no change in their means during the period of their course.[27]

If a BTEA participant drops out of an approved course of study, their allowance is terminated. In relation to repeat years, BTEA participants will receive their payment for a repeat year as long as he/she is registered and attending as a full-time student for that year. However, a participant is only allowed to repeat one academic year for their course of study, and this is on the basis of exam failure and/or exceptional circumstances (e.g., illness, pregnancy, etc.) for which evidence needs to be provided.

Regarding monitoring arrangements, the main requirement placed on participants is the provision of a certificate from the school or college in which the BTEA participant will be attending to confirm registration, commencement and attendance at the course. This information needs to be made available

25 Any means (i.e., other sources of income) that such individuals have are deducted from this rate.

26 Individuals who are on a work placement or who are undertaking work experience that is an essential part of their course can receive their BTEA during the summer.

27 A person's means may change if he/she works part-time while undertaking a BTEA course.

before payment of the BTEA allowance is commenced. After this, participants may be asked to provide evidence of continued participation in the course. However, no regular monitoring of BTEA participants is carried out during the academic year.[28]

2.4 BTEA RECIPIENT AND EXPENDITURE NUMBERS

Table 2.2 presents BTEA recipient numbers and expenditure since the programme was established in 1998. The expenditure information in this table specifically captures the annual cost of the programme to the DSP, via the value of the total allowances that it paid out under the programme, but not the costs associated with the programme that the education providers will have incurred. For the first ten years of the scheme, recipient numbers increased gradually from 4,139 in 1998 to 7,886 in 2008, with some small declines in participation recorded in the period 2004 to 2006. Naturally, programme expenditure increased over this time period as well, from €16.33 million in 1998 to €77.18 million in 2008. However, with the onset of the recession in late 2008, participants in the BTEA programme increased by 101.3 per cent between 2008 and 2009 (rising to 15,887). The number of BTEA recipients has continued to grow since this, peaking at just under 25,000 in 2012 and falling to 24,175 in 2013.[29]

TABLE 2.2 BTEA Recipient Numbers and Expenditure: 1998 - 2013[(1)]

	1998	1999	2000	2001	2002	2003	2004	2005
Expenditure (€m)	16.33	19.88	29.08	30.55	35.39	38.27	44.16	46.69
Recipients	4,139	4,518	4,237	4,101	5,041	5,696	5,247	5,156
	2006	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013[(2)]**
Expenditure (€m)	52.07	64.14	77.13	107.31	179.85	201.51	199.56	186.87
Recipients	5,679	5,980	7,886	15,877	21,147	24,666	24,910	24,175

Source: Statistical Information on Social Welfare Services (Departmental Publications, 1998-2013).[30]
Notes: [(1)] Expenditure based on calendar year and recipient numbers based on 31 December of each year.
[(2)] Provisional.

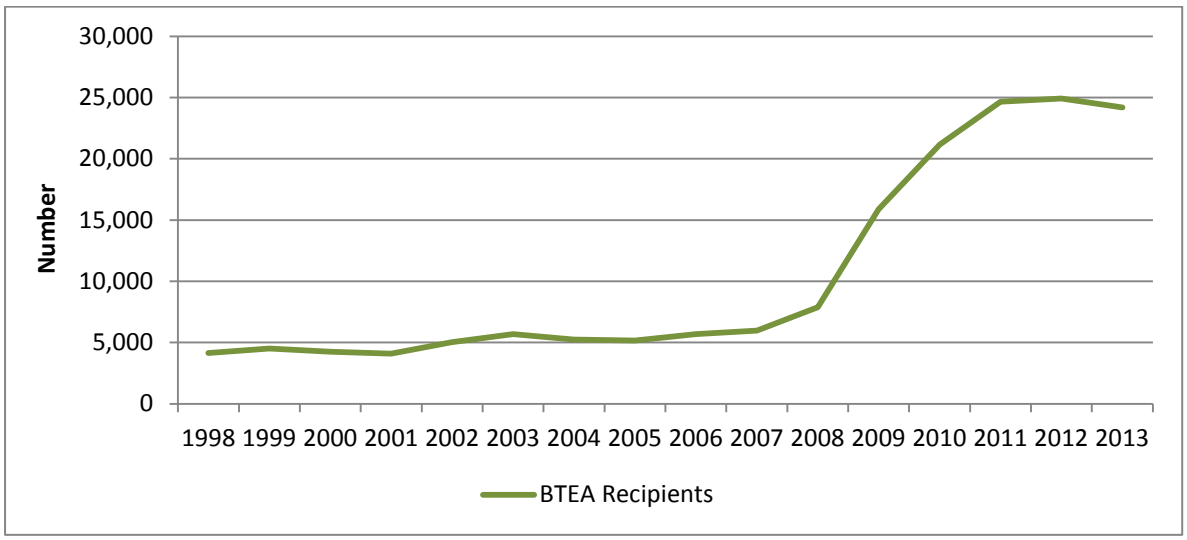
28 Additional details on the BTEA programme can be obtained from the DSP's website: www.welfare.ie/en/Pages/Back-to-Education-Allowance-Scheme.aspx.

29 In 2013, the BTEA payment mechanism was used for shorter Momentum courses; thus, a proportion of the 2013 BTEA recipient figures relates to Momentum programme participants; approximately 1,600 at the end of 2013. Consequently, a percentage of the 2013 BTEA expenditure will relate to Momentum courses as well (information provided by the DSP).

30 See References (Section 7) for list of various publications.

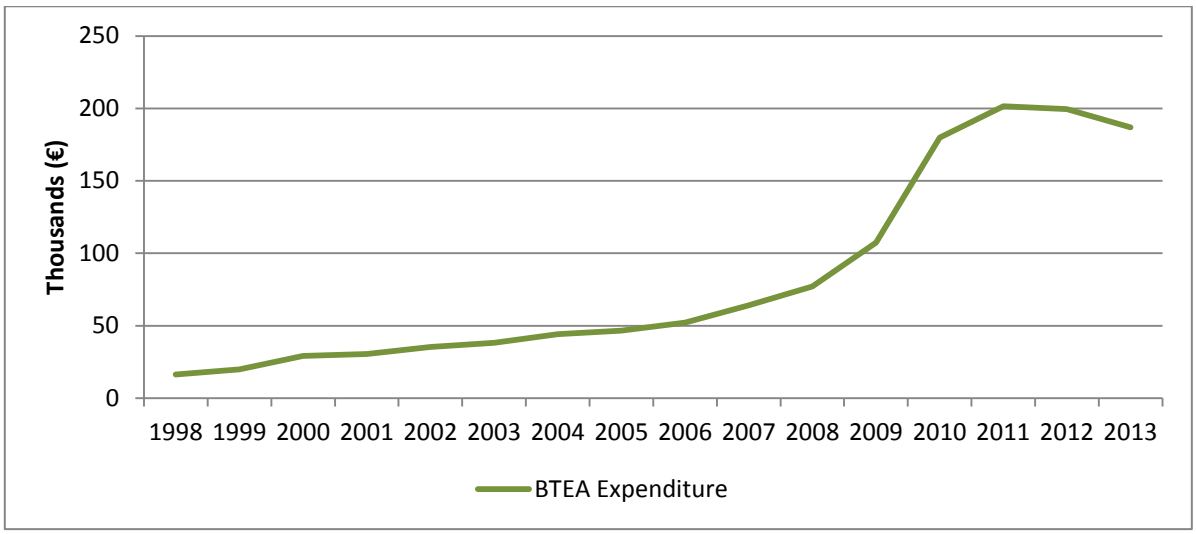
Given the large rise in participant numbers since 2008, programme expenditure has increased considerably, growing from €77.13 million in 2008 to a peak of €199.56 million in 2012. In 2013, expenditure on the BTEA programme fell to €186.87 million, which is in line with the fall in recipient numbers. The growth in both BTEA recipients and programme expenditure with the onset of the recession in 2008 can be seen clearly in Figures 2.1 and 2.2 respectively.

FIGURE 2.1 Number of BTEA Recipients: 1998 - 2013



Source: Statistical Information on Social Welfare Services (Department Publications, 1998-2013).[31]

FIGURE 2.2 BTEA Programme Expenditure (€ million): 1998 - 2013



Source: Statistical Information on Social Welfare Services (Department Publications, 1998-2013).[32]

31 See References (Section 7) for list of various publications.

32 *ibid*.

Historically, the BTEA has been the largest scheme within the Department's Working Age Employment Supports high-level expenditure programme, in terms of both recipient numbers and expenditure. While this is still the case in terms of numbers, since responsibility for expenditure on the Community Employment (CE) scheme was transferred to the DSP in 2011, the largest proportion of its employment supports programme budget is now spent on the CE scheme: this stood at €342.69 million in 2013, which was almost 35 per cent of the Department's employment supports programme budget for that year. This expenditure compares with €186.87 million on the Department's next biggest expenditure scheme in 2013, which was the BTEA programme.[33] From an international perspective, Irelands approach to labour market activation seems somewhat at odds with usual practice. In other OECD countries, activation measures tend to predominantly focus on schemes in the areas of specific skills training and wage subsidies as opposed to public sector employment programmes (e.g., CE Scheme) or second-chance education schemes like the BTEA (Card et al., 2010).

2.5 PREVIOUS REVIEWS OF THE BTEA

In 2003, a Department of Social and Family Affairs (DSFA)[34] Working Group (WG) was established to review expenditure under the BTEA (Department of Social and Family Affairs, 2005a).[35] One of the main terms of reference of the WG was to establish if the BTEA scheme was achieving its main objective of enhancing the employability of unemployed individuals. The WG used descriptive data to assess the effectiveness of the BTEA in achieving its objective. Specifically, it examined employment status data gathered from a survey of 551 BTEA recipients in 2004,[36] along with DSFA administrative data on the 2004[37] Live Register status of 1999 programme participants, and eligible non-participants. The survey results indicated that 63 per cent of BTEA recipients were in either full- or part-time employment at the time the survey was conducted, while a further 9 per cent were undertaking further education. Examination of the administrative data revealed that in 2004 there was no difference in the Live Register status of the

33 For more information on the Department's employment support programmes, in terms of both numbers and expenditure, see the DSP's *Statistical Information on Social Welfare Services* reports (1998 to 2013).

34 Known as the Department of Social Protection (DSP) since 2010.

35 The WG consisted mainly of individuals from the DSFA, but also the Department of Education and Science (Department of Education and Skills since 2010), the Department of Enterprise, Trade and Employment (Department of Jobs, Enterprise and Innovation since 2011) and the Department of Finance.

36 The survey was carried out by Lansdowne Market Research (LMR) between 24 November and 5 December 2003, with supplementary interviews undertaken with lone parents between 5 and 12 March 2004. The survey was telephone based, with a response rate of 18.9 per cent (the DSFA provided LMR with a sample of 7,427 BTEA participants, phone numbers were sourced for 2,923 of this group and 551 were successfully interviewed).

37 December time period.

1999 programme participants and the eligible non-participants in the programme: the same percentage (64 per cent) of both samples were no longer on the Live Register in 2004. While the results from the two data sources on the effectiveness of the BTEA programme in achieving its objective were inconsistent, the descriptive methodology used to conduct the evaluation was not appropriate. Thus, any results derived from such an approach would be somewhat unreliable as the study did not simultaneously control for factors that would influence Live Register status, nor did it account for possible selection bias.

In 2012, the DSP undertook a policy review of its various Working Age Employment Supports schemes, including the BTEA, in order to evaluate the contributions of the various schemes in supporting people into employment (DSP, 2012a). One of the main reasons for the review was the significant increase in expenditure on these programmes that took place between 2007 and 2012, which rose by 48 per cent: this increase in spending was in response to the impact that the economic downturn that took place during that time period had on Ireland's labour market, and specifically the numbers unemployed. The increased expenditure on the BTEA scheme that took place over this time period was explicitly highlighted in the Department's policy review: spending on this programme more than trebled from €64.1 million to €199.5 million between 2007 and 2012, with the number of recipients growing from approximately 6,000 in 2007 to almost 25,000 in 2012. In evaluating the effectiveness of the BTEA, the Department examined their administrative unemployment register data (i.e., the Live Register) to identify the number of participants who undertook a course in the 2011/2012 academic year that were back on the Live Register the following September. In doing this, the DSP policy review group found that 60 per cent of those who had completed or dropped out of their BTEA course were back in unemployment in September 2012. This examination of the Live Register status of BTEA participants post-course completion indicated that the scheme was not effective in assisting participants to find employment; however, one needs to bear in mind the poor economic environment and few job openings that participants faced on completion of their course at that time. Nevertheless, the programme was also found to be ineffective in the 2005 review when the labour market was much more favourable for participants on completion of their BTEA course (Department of Social and Family Affairs, 2005a). However, both the 2005 and 2012 reviews are based on only descriptive evidence and no counterfactual analysis was carried out in either report.

After the completion of this 2012 policy review, the DSP published a high level issues paper in which it highlighted that current BTEA programmes had weak linkages with the labour market (i.e., not effective in helping participants to find

employment) (DSP, 2012b). However, the Department advocated that if the recommendations made in their 2012 policy review were implemented, in particular a stronger role for the DSP in determining the course pursed by an unemployed individual (as opposed to self-selection), that this could result in certain BTEA courses having stronger labour market linkages. The increased authority that has been given to DSP Case Officers in signing off on all new BTEA applicants courses, as of 1 June 2014, on the face of it, seeks to better align the BTEA courses undertaken by jobseekers with labour market needs.

In the next chapter, we outline the data used to evaluate the BTEA scheme, how the sample used in the analysis was constructed and the counterfactual methodology employed to evaluate the scheme.

Chapter 3

Data, Sample Construction and Methodology

3.1 INTRODUCTION

In this chapter, we begin by describing the data used to evaluate the BTEA scheme. We then outline how the sample used to assess the programme's effectiveness was constructed. The final section of the chapter sets out our approach to the evaluation and the methodologies employed.

3.2 DATA

Anonymised data provided by the DSP to the Economic and Social Research Institute (ESRI) were used in this evaluation of the BTEA. The data were extracted from the Department's new *Jobseeker Longitudinal Dataset* (JLD), which tracks people's social welfare claim histories, along with their employment, training and activation programme episodes over time. This new dataset, which covers any individual making a jobseeker or one-parent family claim since 2004, was created by the DSP through the amalgamation of five administrative data sources:

1. ISTS, which is the Department's Live Register datafile;
2. FÁS/SOLAS's Management Information Systems;
3. The Client Services System (CSS);
4. The Commencement of Employment (COE) dataset, and
5. The Central Records System (CRS).

The JLD is a rich data source as it contains information on a claimant's gender, age, marital status, nationality, educational attainment, previous occupation, employment and unemployment histories (both duration and number of episodes), unemployment training history (type, duration and number of episodes), benefit type (e.g. JA, JB, etc.), spousal earnings (to qualify for an adult dependent allowance), number of child dependents, family payment type (e.g., adult and child dependent allowances, adult only, etc.) and geographic location.[38]

[38] Social welfare claimant office.

In addition, the dataset contains information on the type of BTEA (SLO or TLO) an individual pursues and the level of course attendance. All records in the JLD contain Personal Public Service (PPS) Number[39] and revenue employer number information, which allows for linking with Revenue Commissioners data; thus, the JLD also contains sector and earnings information for those who transition from unemployment into work.

One limitation with the JLD is that it does not contain highest level of educational attainment data for the full population of claimants within the datafile as such information is not captured on the Department's ISTS system: ISTS along with the CSS are the two administrative data files that form the basis of the JLD's population. To generate our counterfactual estimate, which is discussed in further detail below, educational attainment is highly desirable. In order to help overcome this data limitation we use previous occupation to proxy educational attainment, which, we believe, works quite well.

Another drawback with the JLD is that we cannot identify the exact qualification or course pursued by SLO and TLO scheme participants, as the relevant administrative data are not currently linked into the JLD.[40] Thus, the SLO findings outlined in Chapter 5 combine the effect of a Junior Certificate, Leaving Certificate, PLC and City and Guilds Certificate qualification,[41] while the TLO results capture the collective effect of undergraduate and postgraduate courses. However, previous research by the DSP (2012a), and also more up-to-date data provided by the DSP during the course of this evaluation, indicate that the majority of SLO BTEA scheme participants undertake PLC courses and most TLO participants' take undergraduate degrees.[42] This can be seen in Table 3.1, which gives the distribution of all BTEA participants in the 2009-2010 academic year by qualification level pursued.[43]

39 A PPS Number is a unique reference number in Ireland that helps a person to access social welfare benefits and public services.

40 The Third Level Allowance (TLA) data system contains detailed information on the BTEA, in terms of course type, field of study and institution details, but this data system is not currently linked into the JLD as there are issues in reconciling the TLA data with the ISTS datafile.

41 And also Access/Foundation courses for those who have applied to undertake such programmes under the BTEA scheme.

42 Data provided by the DSP during this evaluation indicated that 84.3 per cent of SLO BTEA participants were undertaking a PLC course at the end of 2013: this includes City and Guild type courses, but such courses make up a very small proportion of the PLC total (information provided by the DSP). For information on the types of courses undertaken by SLO and TLO BTEA scheme participants see Appendix Tables A1 and A2, which outline the fields of study of SLO and TLO BTEA scheme participants at the end of 2013.

43 The data for the September/October 2008 cohort of BTEA scheme participants were not readily available.

Additional information missing from the JLD that would be beneficial in evaluating the BTEA, and any education/training activation measure, includes data on course duration, completion versus drop-out, accreditation, any additional social welfare supports accessed and the nature of such supports, and any additional non-social welfare supports availed of, monetary (e.g., the student grant scheme)[44] or otherwise (e.g., HEAR,[45] DARE,[46] Guidance Services, etc.). Identification of BTEA recipients who work part-time during their studies would be useful information to have as well. Nevertheless, in our analysis we test the robustness of our counterfactual estimates to omitted variables.

TABLE 3.1 2009-2010 BTEA Participants by Qualification Level Pursued

	%
SLO:	
Junior Certificate; FETAC Levels 3 and 4; Access and Foundation Courses	3
Leaving Certificate	2
PLC/FETAC Levels 5 and 6[1]	45
TLO:	
Higher Certificate	7
Diploma	4
Degree	37
Post-Graduate Diplomas	2
Total:	100

Source: Internal Report on BTEA Participation 2009-2010, DSP (2011).
Note: [1] City and Guilds courses included in this category, but such courses represent less than 1 per cent of all PLC courses.

3.3 SAMPLE CONSTRUCTION

Table 3.2 sets out the approach used to construct our sample for the BTEA evaluation. For the purposes of the evaluation, we focussed on individuals who commenced a BTEA programme in September/October 2008, and specifically those in receipt of a Jobseeker's Benefit (JB) or Jobseeker's Allowance (JA) payment. The DSP extracted these data from its JLD datafile for two specific groups of individuals: (i) those who commenced one of the BTEA options in September/October 2008 who were in receipt of a JB or JA payment for the

[44] Since 2010, people obtaining a BTEA are not eligible for student support grants. However, they can apply to be exempt from college fees or the Student Contribution.

[45] Higher Education Access Route: this is a third-level admissions scheme for students aged 23 or less who are from socially disadvantaged backgrounds.

[46] Disability Access Route to Education: this is a third-level admissions scheme that aims to assist students with a disability or learning difficulty that are aged 23 or less, to access higher education.

minimum time period required to receive a BTEA (three months for a SLO and nine months for a TLO), which are referred to as the 'treatment' groups in the report; and (ii) individuals who had similar unemployment durations as those in the treatment groups but who continued to be unemployed in September/October 2008. This latter group of individuals are referred to as the 'control' group in the study.

As can be seen from Table 3.2, the original September/October 2008 sample consisted of 222,290 individuals. This sample fell to 190,351 when we eliminated non-jobseeker claimants, 186,419 of which were the control group, 1,518 the TLO treatment group and 2,414 the SLO treatment group.[47] Further modifications needed to be made to the sample before we could effectively evaluate the BTEA. Specifically:

1. To minimise the estimation of biased results, we needed to exclude control group individuals who subsequently undertook an SLO or TLO course during the evaluation time period (i.e., post-September/October 2008). There were 11,507 such individuals, which reduced our control group to 174,912;
2. Due to the lock-in effect, which is when job entry rates decline due to a decrease in job search efforts when participating in a training programme or some other type of activation scheme, we needed to eliminate control and treatment group individuals who went on to undertake a Community Employment (CE) or Back to Work (BTW) scheme during the evaluation time period. This is because the programme duration associated with each scheme is 19.1 and 21.9 months respectively.[48] There were 22,599 claimants who received such training, which reduced our control group sample to 152,750, our TLO treatment group to 1,347 and our SLO treatment group to 2,148.
3. To prevent our BTEA results from being contaminated by the effects of other forms of unemployment training, we needed to exclude treatment group individuals who received such training[49] during the evaluation time period. There were 571 such cases, which reduced our TLO sample to 1,137 and our SLO sample to 1,787.
4. When we examined the data, we found that 319 TLO treatment cases had transferred to an SLO programme during the evaluation time-period.

47 Those who reported being aged zero, of which there were only three cases, were excluded at this stage of the sample construction process as well.

48 Data provided by the DSP from the JLD.

49 Former FÁS training courses (now SOLAS), Information and Communication Technologies Programmes, JobBridge, Momentum and Labour Market Education Fund programmes.

Such individuals were excluded from the analysis, which reduced out TLO sample to 818.[50]

5. In implementing our counterfactual methodology, which is discussed in further detail below, our treatment and control group individuals were matched on similar characteristics. As indicated previously, educational attainment is a desired characteristic in this matching process. However, because this information does not exist for the full population in the JLD we used previous occupation to proxy for this factor instead. Given that 'progressing in educational qualifications' is one of the BTEA eligibility criteria (see Section 2.2), the majority of BTEA applicants will have less than a third-level qualification. Thus, to implement our counterfactual methodology, and to match our treatment and control group individuals on similar characteristics, we excluded individuals whose previous occupation was either 'Managers', 'Professionals' and 'Associate Professionals' on the basis that the majority of such claimants will have a third-level qualification. There were 18,767 individuals with one of these previous three occupations, and when we excluded them from the data our final sample consisted of 136,588 claimants, 134,289 of which were our control group, 661 our TLO treatment group and 1,638 our SLO treatment group.

6. Finally, at the estimation stage of the evaluation we excluded from the control group individuals who had commenced a training course six months prior to the evaluation time point. This was undertaken because of the lock-in issue that arises for such individuals. The BTEA was evaluated at both June 2012 and June 2014, which, on the basis of this data adjustment, resulted in the exclusion of 1,064[51] and 1,205[52] cases respectively from our final samples at the two evaluation time points.

7. At the evaluation time points, we also excluded SLO and TLO treatment group individuals who were still completing their courses. These individuals were identified through the level of attendance variable.

[50] As a sensitivity check, we re-ran our June 2014 SLO 'Closed off the Live Register' model with these TLO cases reclassified as SLO treatment individuals and there was no change in the overall result derived on the effectiveness of the SLO BTEA programme.

[51] Individuals who commenced training between December 2011 and May 2012.

[52] Individuals who commenced training between December 2013 and May 2014.

TABLE 3.2 Sample Information

Adjustments	Number
Original September/October 2008 Sample	***222,290***
Of which:	
Control	217,234
TLO	1,959
SLO	3,097
JA and JB Claimants only:	***190,351***
Of which:	
Control	186,419
TLO	1,518
SLO	2,414
Exclude Control Group with SLO/TLO Exposure:	11,507
Control	174,912
TLO	1,518
SLO	2,414
Total Sample:	***178,844***
Exclude CE and BTW Training Cases:	22,599
Control	152,750
TLO	1,347
SLO	2,148
Total Sample:	***156,245***
Exclude Treatment Cases that Received Other Training Post Sept/Oct 2008:	571
Control	152,750
TLO	1,137
SLO	1,787
Total Sample:	***155,674***
Exclude TLO Cases That Received SLO Post Sept/Oct 2008:	319
Control	152,750
TLO	818
SLO	1,787
Total Sample:	***155,355***
Exclude Top 3 Occupations:	18,767
Final Sample	***136,588***
Of which:	
Control	134,289
TLO	661
SLO	1,638
During Estimation:	
i) Exclude Cases in Receipt of Training 6 Months Prior to June 2012	1,064
June 2012 Sample	***135,524***
ii) Exclude Cases in Receipt of Training 6 Months Prior to June 2014	1,205
June 2014 Sample	***135,383***

Source: Jobseekers Longitudinal Dataset (Department of Social Protection).

3.4 METHODOLOGY

In terms of our approach, separate estimates were generated for each of the BTEA options. In particular, we estimated individual models measuring the overall impact of the SLO and TLO BTEA scheme routes, before going on to examine the extent to which the SLO and TLO impacts varied by the amount of time participants spent on their respective programmes under each of the two routes.

Each BTEA option was assessed in terms of its effectiveness in:

1. Keeping people off the Live Register (i.e., out of unemployment) on completion of their course,
2. Helping participants to transition into employment on completion of their course, and
3. Facilitating participants to pursue another education, training or employment placement course.

The effectiveness of the SLO and TLO programmes for 2008 participants was evaluated at two time points, June 2012 and June 2014, approximately four and six years following course commencement. Based on DSP data (2012a), it is likely that the majority of SLO participants are undertaking one or two year courses and TLO individuals are taking three year programmes. The selection of the two time points sufficiently subsequent to the course completion date will ensure that our analysis is not affected by potential lock-in effects. In studies that evaluate the effectiveness of training programmes, the lock-in effect is often given as one of the reasons for the poor performance of some programmes: this is because participants are 'locked-in' to their course and are unlikely to undertake job search; thus, job entry rates are lower for such individuals during this period.[53] In addition to addressing the lock-in issue, evaluating the effectiveness of the BTEA in June 2012 and June 2014 also allows us to assess how effective BTEA courses are at different points in the economic cycle (see Figure 1.1). Furthermore assessing the position of BTEA participants in June 2012 and June 2014 will allow for the identification of the medium-run effects of the programmes.

The dependent variables for our evaluation models were derived from variables in the JLD that identified an individual's economic status in June 2012 and June 2014. The specific economic status categories were as follows: (i) still on the Live

[53] In this analysis, we are assessing participants' economic status (i.e., employed, unemployed or participating in another education, training or employment placement course) at least one year (assuming three-year duration courses) post-programme completion in our June 2012 analysis, and at least three years post-course completion date in our June 2014 analysis.

Register, (ii) closed off the Live Register to employment, (iii) closed off to an education, training or employment placement course, or (iv) closed off the Live Register for another reason.[54] For our 'closed off the Live Register' model, all economic status closure types (categories (ii) to (iv)) were compared to individuals who remained on the Live Register (category (i)). The dependent variable for our labour market model was based on the 'closed off to employment' economic status category (category (ii)), with such individuals compared to those who continued to be unemployed (category (i)), while the dependent variable in our education, training and employment models were based on the economic status category 'closed off to an education, training or employment placement course' (category (iii)). This latter group of individuals were compared to those who continued to remain on the Live Register (category (i)).

The covariates that we included in our specifications were as follows: gender, age, marital status, nationality, benefit type (e.g. JA, etc.), previous occupation, geographic location, spousal earnings (to qualify for an adult dependent allowance), number of child dependents, family payment type, previous employment and unemployment histories (both duration and number of episodes) and previous unemployment training. In addition to this, we included a CSS dataset marker in our models as previous research work based on the JLD indicates that the characteristics of unemployed individuals captured by the two main data sources used to create the JLD, ISTS and CSS, differ (see McGuinness et al., 2014). Specifically, the CSS data system is skewed towards people who have been unemployed for a long period of time and, therefore, are further from the labour market and have been in more regular contact with the activation authorities (i.e., the DSP and FÁS).[55]

The methodology used to evaluate the BTEA options is centred on the estimation of a counterfactual, which is in line with international best practice (Martin and Grubb, 2001). This means that the evaluation approach estimates the extent to which those in receipt of one of the BTEA options (i.e. treatment group) are more likely to (i) exit the Live Register, (ii) find employment or (iii) progress to another education or training or employment placement course relative to a group of similarly unemployed individuals who did not participate in the BTEA scheme (i.e. control group). This approach allows us to assess the value added of the programme by comparing it to a counterfactual situation where individuals were not activated.

[54] Examples of other Live Register closure reasons include emigration, death, etc.

[55] FÁS now known as SOLAS.

When evaluating the effectiveness of the BTEA options, we employed Propensity Score Matching (PSM) econometric techniques. This methodology, which is discussed further below, accounts for potential programme selection effects by matching control group and treatment group individuals on key observable characteristics.

The application of PSM is standard in impact evaluations of public policies to control for sample selection bias that is based on observable characteristics. PSM is a non-parametric technique that is designed to address the non-random selection that exists in treatment groups. The PSM approach is a two-step procedure. In step one, each individual's probability (or propensity score) of receiving the treatment, in this study receiving a BTEA, is assessed conditional on a set of explanatory variables (e.g., age, gender, unemployment history, etc.). Treatment and control group individuals are then matched on the basis of their propensity scores, which is equivalent to matching on the key characteristics of the treatment group. In the second step, the average outcome measures[56] of the treatment and control groups are compared. We also apply the "mhbounds" procedure in Stata software to our estimated models in order to test the sensitivity of our BTEA evaluation results to unobserved characteristics (e.g., innate ability, motivation, etc.).

In our analysis, we first explore the relative impacts of BTEA participation using basic probit models; however, because these do not account for the selection issue, we focus on the PSM model results when drawing our conclusions on the effectiveness of the BTEA options. Before going on to discuss these econometric results in Chapter 5 of the report, the next chapter presents descriptive information for a number of key characteristics of the treatment and control groups examined in the report.

[56] Which in this evaluation is (i) off the Live Register after course completion, (ii) in the labour market or (iii) gone onto another education, training or employment placement course.

Chapter 4

Descriptive Analysis

4.1 INTRODUCTION

In this chapter of the report we descriptively examine the SLO and TLO treatment groups and the control group across a number of key personal and unemployment characteristics. We also examine the duration of time that the SLO and TLO BTEA participants spent on their courses (i.e., level of attendance), along with the economic status (e.g., still unemployed, transitioned to the labour market, etc.) of the control and two treatment groups at the evaluation time points - June 2012 and June 2014.

4.2 PERSONAL CHARACTERISTICS

In terms of gender (Table 4.1), a larger proportion of individuals participating in both the SLO and TLO BTEA programmes were male; 55 per cent for the SLO programme and 62 per cent for the TLO scheme; and males made up a still higher percentage of the unemployment control group (71 per cent). These findings are in line with the overall Live Register unemployment data, in that the majority of the unemployed are male (CSO, 2014). However, a higher proportion of females are more likely to be engaging in a BTEA course than remaining unemployed, whereas the opposite is true for males. The average age of those who commenced a SLO and TLO course in September/October 2008 was quite similar (27 and 28 years of age respectively), and such individuals were approximately four to five years younger than the average age of the control group (32.5 years of age). The SLO and TLO treatment groups had similar marital status distributions, with over 60 per cent of each group being single (64 and 65 per cent respectively) and 23-24 per cent married. Just over 50 per cent of the control group were single, while a larger percentage, relative to the treatment groups, was married (33 per cent). In relation to nationality (Table 4.1), while approximately 80 per cent of all three groups (i.e., the treatment and control groups) were Irish, non-Irish nationals were slightly more likely to be in the treatment groups relative to Irish nationals.

Regarding previous occupation, based on our final sample (see Section 3.2)[57] the main professions represented by those who undertook a SLO course in September/October 2008 were former operative workers (20.1 per cent), those previously employed in elementary occupations (18.1 per cent), skilled trades (17.6 per cent) and other services (17.2 per cent). For the TLO course, the main participants previously worked as skilled trade individuals (21.8 per cent), operatives (20.4 per cent) and sales people (17.5 per cent). The main previous professions of the control group were skilled trades (29.6 per cent), operatives (19.9 per cent) and elementary occupations (18.6 per cent).

TABLE 4.1 Personal Characteristic Information of the Control Group and the SLO and TLO Treatment Groups (Per Cent): 2008

	Control Group %	SLO Treatment Group %	TLO Treatment Group %
Gender:			
Male	70.7	55.3	61.6
Female	29.3	44.7	38.4
Age	32.5	27.3	27.9
Marital Status:			
Single	51.1	63.9	64.8
Married	33.1	23.7	23.4
Cohabits	7.5	6.8	*
Separated	6.5	4.9	*
Widowed	1.0	*	*
Unknown	0.6	*	*
Nationality:			
Irish	83.0	78.9	80.0
Non-Irish	17.0	21.1	20.0
Previous Occupation:			
Clerical	10.2	10.9	14.5
Skilled Trades	29.6	17.6	21.8
Other Services	11.8	17.2	14.7
Sales	9.8	16.0	17.5
Operatives	19.9	20.1	20.4
Elementary	18.6	18.1	11.0

Source: Jobseekers Longitudinal Dataset (Department of Social Protection).
Note: * Percentages cannot be presented due to insufficient numbers.

[57] Managers, Professional and Associate Professionals are excluded from this.

The geographic distribution of the 2008 September/October SLO and TLO treatment groups, and control group, is presented in Table 4.2. SLO course participants were most heavily concentrated in Dublin, Cork, Tipperary, Waterford, Limerick and Wexford. Those who undertook a TLO course were predominantly located in a county with a third-level institution (Dublin, Cork and Galway): Donegal was the one exception to this. The largest proportion of the control group resided in Dublin, followed by Cork, Galway, Limerick, Donegal, Wexford, Waterford and Kildare.

TABLE 4.2 Personal Characteristic Information of the Control Group and the SLO and TLO Treatment Groups (Per Cent): 2008

	Control Group %	SLO Treatment Group %	TLO Treatment Group %
Location:			
Carlow	1.4	*	*
Cavan	1.7	*	*
Clare	2.6	*	*
Cork	9.3	13.7	9.8
Donegal	4.8	*	8.3
Dublin	24.6	27.4	20.3
Galway	5.4	3.4	9.2
Kerry	3.6	3.5	*
Kildare	4.1	*	*
Kilkenny	1.5	*	*
Laois	1.9	*	*
Leitrim	0.9	*	*
Limerick	5.1	4.5	*
Longford	1.3	*	*
Louth	3.8	3.7	*
Mayo	2.9	*	*
Meath	2.2	*	*
Monaghan	1.4	*	*
Offaly	2.0	*	*
Roscommon	0.9	*	*
Sligo	1.3	*	*
Tipperary	3.5	5.7	*
Waterford	4.1	5.2	*
Westmeath	2.6	*	*
Wexford	4.4	4.5	*
Wicklow	2.8	3.4	*

Source: Jobseekers Longitudinal Dataset (Department of Social Protection).
Note: * Percentages cannot be presented due to insufficient numbers.

Social welfare payment information for the sample is presented in Table 4.3. The majority of the SLO treatment group were in receipt of a JA payment, while almost an equal distribution of the TLO group were in receipt of a JA or JB payment, 53 and 47 per cent respectively. However, a higher proportion of the TLO cohort were on a JB payment compared to the SLO group. A slightly higher proportion of the control group were JB recipients (52.5 per cent). The number of child dependents was similar across both the treatment and control groups. In relation to family type, slightly higher proportions of both the control group and the TLO treatment group were in receipt of both adult and child dependent allowances (10.4 and 8.5 per cent respectively) in comparison with the SLO treatment group (5.9 per cent).

TABLE 4.3 Benefit Type Information of the Control Group and SLO and TLO Treatment Groups (Per Cent): 2008

	Control Group %	SLO Treatment Group %	TLO Treatment Group %
Jobseeker's Payment:			
Jobseeker's Allowance	47.5	62.0	53.0
Jobseeker's Benefit	52.5	38.0	47.0
Family Type:			
Both Adult and Child Dependent Allowances	10.4	5.9	8.5
Adult Dependent Allowance only	5.0	*	*
Child Dependent Allowance only	6.9	7.3	7.9
Neither Type of Allowance	77.6	84.0	81.4
Number of Child Dependents	2.1	2.0	2.0

Source: Jobseekers Longitudinal Dataset (Department of Social Protection).
Note: * Percentages cannot be presented due to insufficient numbers.

We can see from Table 4.4 that the SLO and TLO treatment groups had similar average previous unemployment durations (i.e., prior to September/October 2008), two years, which are lower than the average durations among the control group (5.7 years). The control group also had longer previous employment durations (4.5 years) relative to the two treatment groups (3.2 years). A higher proportion of the SLO and TLO treatment groups had received previous unemployment training (i.e., prior to September/October 2008) than the control group; approximately one-third of both treatment groups in comparison to only one-seventh of the control group. Thus, it would appear that the

September/October 2008 BTEA scheme participants are more frequent recipients of the DSP's unemployment activation programmes in comparison with the control group.

TABLE 4.4 Unemployment, Employment and Training Histories of the Control Group and SLO and TLO Treatment Groups (Per Cent): 2008

	Control Group %	SLO Treatment Group %	TLO Treatment Group %
Count of Previous Unemployment Episodes	1.8	2.1	2.2
Duration of Previous Unemployment (Years)	5.7	2.0	2.0
Number of Previous Employment Episodes	1.6	1.6	1.8
Duration of Previous Employment (Years)	4.5	3.2	3.2
Pre-October 2008 Unemployment Training %	14.0	29.7	31.2
Post -October 2008 Unemployment Training %	11.9	0.0	0.0

Source: Jobseekers Longitudinal Dataset (Department of Social Protection).

4.3 LEVEL OF COURSE ATTENDANCE

We do not observe levels of accreditation in the data; however, the number of years spent on each of the respective programmes is recorded. Table 4.5 presents the duration of time that the SLO and TLO treatment groups spent on their respective programmes. Almost 57 per cent of the September/October 2008 SLO cohort attended the programme for one year, followed by 24.4 per cent attending for two years. Just over 12 per cent of this SLO BTEA group spent less than a year on the programme, while 5 per cent attended courses for three years.

In relation to our September/October 2008 TLO treatment group, just over 60 per cent attended courses for between two and four years (approximately 20 per cent for each year category). Another 20 per cent spent a year or less on the programme, with almost 17 per cent attending for between five and six years.

TABLE 4.5 Level of Course Attendance Information for 2008 SLO and TLO BTEA Course Participants (Per Cent)

	SLO	TLO
< 1 Year	12.1	3.9
1 Year	56.8	17.1
2 Years	24.4	20.3
3 Years	5.2	20.7
4 Years	*	21.3
5 - 6 Years	-	16.7
Observations:	1,638	661

Source: Jobseekers Longitudinal Dataset (Department of Social Protection).
Note: * Percentages cannot be presented due to insufficient numbers.

4.4 ECONOMIC STATUS IN JUNE 2012 AND JUNE 2014

In Table 4.6 we examine the economic status of our control and treatment groups in June 2012 and June 2014, our two evaluation time points. In relation to the September/October 2008 SLO treatment group, 59 per cent were unemployed in June 2012, falling to 51 per cent by June 2014. 20 per cent were in the labour market in June 2012, which increased slightly to 22 per cent by June 2014. Almost 7 per cent were pursuing either another education course or had gone onto a training or employment placement course in June 2012; however, the majority of this transition was into another SLO course (3.9 per cent), with the remaining progressing into a TLO course or some other form of education or training course. By June 2014, just over 6 per cent of the September/October 2008 SLO treatment group were in education, or on a training or employment placement course: again, the majority of this progression was into another SLO course (3.3 per cent). While a relatively low proportion of the SLO group were in education and training by 2014, it is somewhat worrying that the majority of those who were had not progressed beyond SLO courses some six years after commencing the programme. Some of these individuals are likely to be SLO BTEA recipients who commenced a Junior Certificate qualification in September/ October 2008 and then progressed to the Leaving Certificate followed by a PLC. However, the fact that the majority of SLO recipients undertake a PLC course (see DSP, 2012a) raises some concerns around this presupposition.

TABLE 4.6 Economic Status of the 2008 Control Group and SLO and TLO Treatment Groups in June 2012 and June 2014 (Per Cent)

	Control Group	SLO Treatment Group	TLO Treatment Group
June 2012:			
Remain on Live Register	52.0	58.7	53.6
Transitioned to Employment	29.3	19.5	26.2
Transitioned to Education, Training or Employment Placement Course	2.0	6.9	9.8
Of which:			
SLO	-	*3.9*	-
TLO	-	*	*8.0*
Other	*2.0*	*	*
Closed Off Live Register for Other Reason	16.6	14.9	10.4
June 2014:			
Remain on Live Register	45.4	50.6	40.4
Transitioned to Employment	29.9	21.9	35.9
Transitioned to Education, Training or Employment Placement Course	2.9	6.2	8.2
Of which:			
SLO	-	*3.3*	-
TLO	-	*	*
Other	*2.9*	*	*
Closed Off Live Register for Other Reason	21.9	21.3	15.6

Source: Jobseekers Longitudinal Dataset (Department of Social Protection).

Notes: * Percentages cannot be presented due to insufficient numbers.
Individuals who closed off the Live Register for 'other reasons' are excluded from the (i) labour market and (ii) education, training or employment placement course analyses that are conducted in the study.

Regarding the September/October 2008 TLO treatment group, 54 per cent were signing on the Live Register in June 2012, with the proportion falling to just over 40 per cent by June 2014. 26 per cent of this group had transitioned to the labour market and were in employment in June 2012, and this had increased by 10 percentage points to 36 per cent by June 2014. Another 10 per cent were undertaking either another education programme or had gone into training or an employment placement in June 2012, with the majority of this advancement into another TLO course. By June 2014, just over 8 per cent of the September/October 2008 TLO treatment group were pursuing further education or training (including employment placements).

In relation to the control group, 52 per cent were unemployed in June 2012, which is almost 2 percentage points lower than the proportion of the TLO group,

and 7 percentage points less than the SLO treatment group. A higher proportion of the control group were also in employment in comparison with the SLO and TLO treatment groups in June 2012. However, in comparison with either treatment groups, very few of the control group (2 per cent) were in education, training or an employment placement course in June 2012. In June 2014, the proportion of the control group that were unemployed had fallen to 45 per cent, which was 5 percentage points higher than the TLO treatment group, but 5 percentage points less compared with the SLO treatment group. A similar proportion of the control group was in employment in June 2014 as in June 2012 (29.9 per cent), which was higher than the SLO treatment group but lower than the TLO treatment group. As in June 2014, a smaller proportion of the control group were in an education, training or an employment placement course in June 2014 compared to the two treatment groups.

While this economic status descriptive analysis is informative, its main drawback is that it does not take account of other characteristics, aside from whether or not an individual undertook a BTEA course, which can influence a person's economic status. Such factors would include gender, age, previous occupation, previous unemployment experience, etc. Thus, for this reason, we move on to evaluate the effectiveness of the BTEA programme using multivariate regression techniques in the next chapter as such techniques allow us to isolate the impact of the BTEA options on a person's economic status controlling for the other factors that can influence this outcome. Also, more systematic characteristic differences between the treatment groups and the control group that were outlined in Section 4.2 are taken account of in the evaluation of the two BTEA scheme categories through our PSM econometric techniques. While PSM cannot take account of unobservable differences between the control and treatment groups, such as innate ability or motivation, we can apply the "mhbounds" procedure in Stata to test the robustness of our BTEA evaluation results to unobserved factors: this procedure is discussed in further detail in Section 5.2.1.

Chapter 5

Econometric Results

5.1 INTRODUCTION

In this section of the report, we generate estimates of the impact of the BTEA SLO and TLO courses in terms of (i) keeping participants off the Live Register on finishing their course, (ii) assisting them to exit to the labour market and (iii) facilitating them to move to further education or training or an employment placement course in both June 2012 and June 2014.

5.2 CLOSED OFF THE LIVE REGISTER

5.2.1 SLO BTEA Course

The results from our initial probit model for being closed off the Live Register in both June 2012 and June 2014 for those who commenced a SLO BTEA course in September/October 2008 relative to a control group of similarly unemployed individuals are presented in Table 5.1. The models are well specified with the non-BTEA coefficients all operating in the expected direction. There is also a high level of stability in the estimated coefficients between 2012 and 2014. Being closed off the Live Register in both time points was positively related to being married or widowed (relative to being single); having previously been employed as a clerical worker, other services or sales person (relative to an elementary occupation); spousal earnings; and having an adult dependent allowance or a child dependent allowance. On the other hand, being male; increasing age; cohabiting (relative to being single); being Irish; being previously employed as a skilled trades person (relative to an elementary occupation); being from a number of locations outside Dublin;[58] and being in receipt of both adult and child dependent allowances (relative to neither type of allowance) all had a negative influence on the outcome variable. Furthermore, activation-related variables, such as having a previous history of unemployment (based on duration), having received unemployment training post to September/October 2008, and being captured on the CSS DSP data system, which proxies factors associated with being long-term unemployed, were all negatively associated with being off the Live Register in both June 2012 and 2014.

[58] Carlow, Cavan, Clare, Cork, Donegal, Kildare, Kilkenny, Laois, Leitrim, Limerick, Longford, Louth, Mayo, Meath, Monaghan, Offaly, Roscommon, Sligo, Tipperary, Westmeath, Wexford and Wicklow.

In relation to the effectiveness of undertaking an SLO BTEA programme on being closed off the Live Register, after controlling for a wide range of observables that can influence this outcome we found that SLO BTEA participants were 28.2 percentage points less likely to be closed off the Live Register in June 2012 relative to our control group of similarly unemployed individuals. This percentage point difference stood at 24.6 in June 2014. Thus, the preliminary evidence suggests that an SLO BTEA programme was not an effective activation tool for keeping unemployed individuals who commenced this programme in September/October 2008 off the Live Register. In fact, relative to the control group, BTEA participants had a much lower probability of leaving the Live Register over a period of between four and six years following course commencement when account is taken of these individual characteristics.

TABLE 5.1 Probit Model of Closed Off the Live Register for 2008 SLO BTEA Participants

	June 2012[(1)]	June 2014
SLO Participation	-0.282***	-0.246***
	(0.008)	(0.011)
Personal Characteristics:		
Male	-0.065***	-0.075***
	(0.004)	(0.004)
Age	-0.004***	-0.010***
	(0.001)	(0.001)
Age squared	0.000***	0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	0.024***	0.031***
	(0.005)	(0.005)
Cohabits	-0.091***	-0.067***
	(0.006)	(0.006)
Separated	0.005	0.002
	(0.007)	(0.007)
Widowed	0.221***	0.272***
	(0.016)	(0.013)
Unknown	0.033	0.020
	(0.021)	(0.019)
Nationality (Reference: Non-Irish)		
Irish	-0.035***	-0.050***
	(0.004)	(0.004)

Contd.

TABLE 5.1 Contd.

	June 2012[1]	June 2014
Previous Occupation (Reference: Elementary)		
Clerical	0.019***	0.017***
	(0.007)	(0.006)
Skilled Trades	-0.042***	-0.020***
	(0.005)	(0.005)
Other Services	0.019***	0.004
	(0.006)	(0.006)
Sales	0.011*	0.015**
	(0.006)	(0.006)
Operatives	-0.006	-0.007
	(0.005)	(0.005)
Location (Reference: Dublin)		
Carlow	-0.078***	-0.059***
	(0.012)	(0.013)
Cavan	-0.037***	-0.034***
	(0.012)	(0.012)
Clare	-0.047***	-0.038***
	(0.010)	(0.010)
Cork	-0.024***	-0.015***
	(0.006)	(0.006)
Donegal	-0.047***	-0.047***
	(0.007)	(0.007)
Galway	0.001	0.005
	(0.007)	(0.007)
Kerry	-0.012	-0.007
	(0.009)	(0.008)
Kildare	-0.052***	-0.063***
	(0.008)	(0.008)
Kilkenny	-0.060***	-0.043***
	(0.012)	(0.012)
Laois	-0.073***	-0.088***
	(0.011)	(0.011)
Leitrim	-0.028*	0.019
	(0.016)	(0.016)
Limerick	-0.042***	-0.024***
	(0.007)	(0.007)
Longford	-0.053***	-0.060***
	(0.013)	(0.013)
Louth	-0.026***	-0.019**
	(0.008)	(0.008)
Mayo	-0.017*	-0.017*
	(0.009)	(0.009)
Meath	-0.041***	-0.046***
	(0.010)	(0.010)

Contd.

TABLE 5.1 Contd.

	June 2012[1]	June 2014
Monaghan	-0.076***	-0.072***
	(0.013)	(0.013)
Offaly	-0.062***	-0.090***
	(0.011)	(0.011)
Roscommon	-0.045***	-0.042***
	(0.016)	(0.016)
Sligo	-0.047***	-0.034**
	(0.014)	(0.014)
Tipperary	-0.055***	-0.040***
	(0.008)	(0.008)
Waterford	-0.009	-0.003
	(0.008)	(0.008)
Westmeath	-0.060***	-0.089***
	(0.010)	(0.010)
Wexford	-0.052***	-0.062***
	(0.008)	(0.008)
Wicklow	-0.037***	-0.063***
	(0.009)	(0.009)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	0.014***	0.002
	(0.004)	(0.004)
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	0.023***	0.007
	(0.005)	(0.005)
< €99.00	0.156***	0.081***
	(0.026)	(0.024)
€100.00 - €310.00	0.028*	0.022
	(0.016)	(0.016)
€310.01 - €400.00	0.027***	0.027***
	(0.010)	(0.010)
€401.00 plus	0.040***	0.042***
	(0.008)	(0.007)
AD Details Unknown	-0.007	0.006
	(0.009)	(0.009)
Number of Child Dependents	-0.007**	-0.003
	(0.003)	(0.003)

Contd.

TABLE 5.1 Contd.

	June 2012[(1)]	June 2014
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	-0.024***	-0.047***
	(0.009)	(0.009)
Adult Dependent Allowance Only	0.055***	0.035***
	(0.008)	(0.008)
Child Dependent Allowance Only	0.043***	0.035***
	(0.009)	(0.008)
Previous Employment History Information:		
Number of Previous Employment Episodes	-0.002*	0.000
	(0.001)	(0.001)
Duration of Previous Employment (Years)	-0.001**	-0.001***
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	0.002*	-0.007***
	(0.001)	(0.001)
Duration of Previous Unemployment (Years)	-0.068***	-0.050***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	-0.000	-0.003
	(0.005)	(0.004)
Post -October 2008 Unemployment Training	-0.170***	-0.117***
	(0.004)	(0.005)
CSS Dataset Marker	-0.062***	-0.079***
	(0.004)	(0.004)
Observations	134,603	134,484
Pseudo R-squared	0.233	0.175

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).
[(1)] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

Given that participation in a BTEA programme is self-selecting, once the participant meets the eligibility criteria and is accepted onto their course of choice,[59] it could be the case that those selecting to undertake an SLO BTEA

[59] As for individuals who go directly from secondary education into a PLC or third-level course, a potential BTEA recipient's acceptance onto their course of choice will be dependent on place availability.

programme are in some ways different, in terms of characteristics, to the unemployed control group. Thus, non-random assignment which is systematically related to the outcome variable may be influencing the SLO BTEA course result. To test the sensitivity of our results to this issue, we employ Propensity Score Matching (PSM) techniques as this framework ensures that those who undertook a SLO BTEA programme are compared with members of the unemployed control group that have similar observable characteristics when estimating the effectiveness of the SLO BTEA course.

As indicated in Section 3.3, PSM is a two-step procedure. In the first step the main observable characteristics of being in a SLO BTEA programme are identified through a probit model, and both treatment and control group individuals are then assigned a 'propensity score' based on their estimated probability of receiving the treatment. In the second step, individuals within the treatment group are matched with individuals in the control group that have similar propensity scores and their outcomes, which in this model is being off the Live Register in June 2012 and June 2014, are then compared. Rosenbaum and Ruben (1983) have shown that matching on propensity scores is the equivalent to matching on actual observable characteristics. Thus, in this case PSM is comparing the probability of being off the Live Register in June 2012 and 2014 of individuals who undertook an SLO BTEA programme with claimants with similar characteristics (and thus similar likelihoods of participating in the SLO programme) who did not participate in a SLO BTEA programme. In applying this approach, we are comparing like-with-like individuals and ensuring that our estimated result of the effectiveness of the SLO BTEA programme is not being affected by non-random assignment into the treatment group. The same model of PSM applies when we use the approach in our other evaluation analyses (e.g. exits from unemployment to employment, etc.).

We estimated the impact of the SLO BTEA course using the most common PSM estimator; nearest neighbour with replacement. Nearest neighbour matching works by selecting a control group matching partner for a treated individual that is closest in terms of propensity score, while the additional 'with replacement' option means that a control group individual can be used more than once as a match (see Caliendo and Kopeinig, 2008). We conducted a number of sensitivity checks on the evaluation results derived using nearest neighbour with replacement by employing a range of other matching algorithms, as well as using variations in nearest neighbour matching. The results from this work are presented in Appendix B.

In the first stage probit model (see Table 5.2) we found that the main factors that increased an individual's likelihood of participating in an SLO BTEA programme in September/October 2008 were being in receipt of a JA payment, having child dependents, being in receipt of an adult dependent allowance only (relative to receiving both adult and child dependent allowances), being captured on the CSS data system (which proxies characteristics associated with being long-term unemployed), having numerous previous unemployed episodes and having received previous unemployment training (i.e. prior to September/October 2008). Unemployment claimants in Cork, Carlow, Tipperary and Waterford were also more likely to undertake an SLO BTEA programme in comparison to those from Dublin.

TABLE 5.2 PSM First Stage Probit Model for Participating in a SLO BTEA Course in September/October 2008

	Coefficient	Standard Error	P>z
Personal Characteristics:			
Male	-0.133	(0.028)	0.000
Age	0.003	(0.007)	0.624
Age squared	0.000	(0.000)	0.120
Marital Status (Reference: Single)			
Married	-0.087	(0.036)	0.016
Cohabits	-0.067	(0.046)	0.148
Separated	-0.090	(0.059)	0.127
Widowed	-0.435	(0.186)	0.019
Unknown	-0.427	(0.242)	0.078
Nationality (Reference: Non-Irish)			
Irish	0.010	(0.030)	0.743
Previous Occupation (Reference: Elementary)			
Clerical	-0.032	(0.046)	0.491
Skilled Trades	-0.245	(0.038)	0.000
Other Services	0.075	(0.041)	0.072
Sales	0.080	(0.042)	0.058
Operatives	0.071	(0.038)	0.061
Location (Reference: Dublin)			
Carlow	0.270	(0.079)	0.001
Cavan	-0.319	(0.127)	0.012
Clare	-0.113	(0.077)	0.143
Cork	0.179	(0.038)	0.000
Donegal	-0.357	(0.069)	0.000
Galway	-0.218	(0.060)	0.000
Kerry	-0.001	(0.064)	0.983

Contd.

TABLE 5.2 Contd.

	Coefficient	Standard Error	P>z
Location (Reference: Dublin)			
Kildare	-0.153	(0.068)	0.024
Kilkenny	0.147	(0.083)	0.078
Laois	-0.218	(0.097)	0.024
Leitrim	-0.423	(0.174)	0.015
Limerick	-0.114	(0.056)	0.041
Longford	0.169	(0.090)	0.060
Louth	-0.050	(0.063)	0.427
Mayo	-0.032	(0.067)	0.635
Meath	-0.160	(0.094)	0.089
Monaghan	-1.122	(0.298)	0.000
Offaly	-0.250	(0.103)	0.016
Roscommon	-0.475	(0.174)	0.006
Sligo	-0.506	(0.145)	0.000
Tipperary	0.166	(0.054)	0.002
Waterford	0.145	(0.056)	0.010
Westmeath	-0.178	(0.082)	0.030
Wexford	0.073	(0.057)	0.199
Wicklow	0.087	(0.066)	0.187
Benefit Type Information:			
Jobseeker's Payment (reference: Jobseeker's Benefit)			
Jobseeker's Allowance	0.413	(0.028)	0.000
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)			
Not Applicable	0.157	(0.039)	0.000
< €99.00	0.113	(0.261)	0.664
€100.00 - €310.00	-0.271	(0.166)	0.102
€310.01 - €400.00	0.024	(0.076)	0.748
€401.00 plus	0.025	(0.054)	0.650
AD Details Unknown	-0.446	(0.097)	0.000
Number of Child Dependents	0.090	(0.026)	0.001
Family Type (Reference: Neither Type of Allowance)			
Both Adult and Child Dependent Allowances	-0.099	(0.082)	0.226
Adult Dependent Allowance Only	0.216	(0.075)	0.004
Child Dependent Allowance Only	-0.207	(0.067)	0.002
Previous Employment History Information:			
Number of Previous Employment Episodes	-0.081	(0.008)	0.000
Duration of Previous Employment (Days)	0.000	(0.000)	0.000

Contd.

TABLE 5.2 Contd.

	Coefficient	Standard Error	P>z
Previous Unemployment History Information:			
Number of Previous Unemployment Episodes	0.110	(0.008)	0.000
Duration of Previous Unemployment (Days)	-0.001	(0.000)	0.000
Unemployment Training History Information:			
Pre-October 2008 Unemployment Training	0.370	(0.028)	0.000
CSS Dataset Marker	0.379	(0.033)	0.000
Constant	-1.906	(0.131)	0.000
Observations	119,727		
Pseudo R-squared	0.2124		

Source: Authors' analysis.
Note: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

On the other hand, males, married and widowed claimants (in comparison to single), those in receipt of a child dependent allowance only (relative to receiving both adult and child dependent allowances), individuals with previous long unemployment durations or employment durations, numerous previous employment episodes and those whose previous occupation was a skilled trade person were less likely to undertake an SLO BTEA course, as were claimants from Donegal, Galway, Roscommon, Monaghan and Sligo (relative to Dublin claimants). These results were consistent across the two time point specifications that were estimated - June 2012 and June 2014.[60]

The results from the second stage of the PSM procedure, which is evaluating the effectiveness of the SLO BTEA scheme in keeping participants off the Live Register on completion of their course, are presented in Table 5.3 along with the initial probit model results. The PSM estimates indicate that post-matching 41.3 per cent of the SLO treatment group exited the Live Register compared to 71.7 per cent of the control group. The PSM result suggests that the average member of the SLO treatment group was 30.5 percentage points less likely to have left the Live Register relative to a similar control group member. As can be seen from this table, the results from the PSM models are consistent with those of the probit models, in that the PSM estimates indicate that SLO BTEA participants are less likely to be signed off the Live Register in both June 2012 and June 2014, in comparison with a matched control group. However, the negative effect of the

[60] Results for the June 2014 model available from the authors on request.

SLO BTEA programme is slightly larger under the more robust PSM approach -30.5 percentage points less likely to be signed off the Live Register in June 2012 and -25.4 percentage points less likely in June 2014.

TABLE 5.3 Closed Off the Live Register for 2008 SLO BTEA Participants: Probit and PSM Results

	Probit	PSM
June 2012[(1)]	-0.282***	-0.305***
	(0.008)	(0.017)
June 2014	-0.246***	-0.254***
	(0.011)	(0.017)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

(1) Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

To test the validity of our PSM results on the effectiveness of the SLO BTEA scheme, we undertook the "*pstest*" diagnostic test in Stata. This test (*pstest*) assesses the extent to which individuals in the SLO BTEA treatment group were matched with individuals in the unemployed control group across the range of observable characteristics i.e., that the data were balanced. The results show that the data are perfectly balanced both in terms of the mean difference between observable characteristics across the treatment and control groups post-matching, and the failure of observable characteristics to explain entry to the treatment post-matching (see Appendix Tables C1 and C2).

To further confirm the validity of our PSM results on the effectiveness of the SLO BTEA scheme, we also tested the robustness of our estimates to the influences of unobserved heterogeneity. The reliability of any propensity score matching estimate is dependent upon the Conditional Independence Assumption (CIA) being met i.e. that selection to the treatment is based solely on observables within the dataset and that all variables that simultaneously impact both the treatment and outcome variable are also observed. Despite the richness of our data, it is not possible to completely rule out the possibility that our estimates are unaffected by one or more unobserved effects (e.g., innate ability, motivation, etc.) that simultaneously influence both the treatment and outcome variables. We check our broad BTEA PSM estimates (-30.5 percentage points) for robustness to unobserved heterogeneity bias using the "mhbounds" procedure in Stata and began with the assumption of zero bias i.e. $\Gamma = 1$. The intuition here is that we introduce an unobserved factor that simultaneously impacts the likelihood of an exit from the Live Register and the likelihood of allocation to the

treatment group by 10 per cent (Γ = 1.10) to assess if our estimated treatment effect remains statistically reliable. As the observed impact is negative, we want to ensure that we have not underestimated the impact of the treatment; thus, we tested the sensitivity of our results to negative selection bias. The analysis revealed that our estimate became statistically unreliable in the presence of Γ = 3.2 i.e. that an unobserved factor caused the odds ratio of the SLO BTEA treatment to differ between the control and treatment groups by 3.2. This suggests that unobserved effects would need to be very substantial for our estimate to become questionable.[61]

In Table 5.4 we assess the effectiveness of the SLO BTEA scheme for participants being closed off the Live Register in June 2012 and June 2014 according to the level of course attendance. Both the probit[62] and PSM results[63] are included in the table; however, we focus on the PSM results given that the probit models do not address the treatment group selection issue.

Focussing on the June 2012 time point, we can see that the impact of SLO BTEA remains negative irrespective of the time spent on the programme. Specifically, the adverse impact of the programme increases with duration, with the largest negative effect associated with the SLO BTEA course being for those who spent three years on their course (-42.4 percentage points). The same linear negative pattern was observed when the course's effectiveness was examined again in June 2014. However, the magnitude of the negative effect of the SLO BTEA programme had fallen slightly by this latter evaluation time-point.[64]

61 In addition to the CIA, another important condition that needs to be met when implementing PSM is the common support or overlap condition (see Caliendo and Kopeinig, 2008). The assessment that we undertook to identify if our data fulfilled the common support condition indicated that it did (see Appendix D).

62 The detailed probit model results are presented in Appendix Table E1.

63 Stage one PSM results available from the authors on request.

64 The course completion level PSM evaluation models passed the balancing and unobserved heterogeneity diagnostic tests: results available from the authors on request.

TABLE 5.4 Closed Off the Live Register for 2008 SLO BTEA Participants by Level of Attendance: Probit and PSM Results

	Probit	PSM
SLO Level of Attendance - June 2012:[(1)]		
< 1 Year	-0.220***	-0.263***
	(0.028)	(0.048)
1 Year	-0.280***	-0.306***
	(0.011)	(0.022)
2 Years	-0.297***	-0.337***
	(0.015)	(0.033)
3 Years	-0.333***	-0.424***
	(0.028)	(0.069)
SLO Level of Attendance - June 2014:		
< 1 Year	-0.223***	-0.217***
	(0.033)	(0.048)
1 Year	-0.220***	-0.227***
	(0.015)	(0.022)
2 Years	-0.290***	-0.290***
	(0.021)	(0.033)
3-4 Years[(2)]	-0.323***	-0.351***
	(0.036)	(0.061)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[(1)] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

[(2)] Three and four year SLO BTEA level of attendance observations combined into one category as the number of individuals completing the course over four years was too small to include as a separate category.

5.2.2 TLO BTEA Course

The results from our probit and PSM models on the effectiveness of the TLO BTEA programme in assisting participants to remain off the Live Register in June 2012 and June 2014 are presented in Table 5.5.[65] Before discussing these results, the first stage PSM probit model indicated that the factors associated with undertaking a TLO BTEA course in September/October 2008 were increasing age, residing in Galway (relative to Dublin), being previously employed as a clerical or sales person (relative to an elementary profession), being a JA payment recipient, being captured on the CSS data system, having numerous previous unemployment episodes and having received previous unemployment training (i.e., prior to September/October 2008). Married claimants (compared to single people), those with a good previous employment history (either in terms of the number of jobs or previous employment duration), and those who were

[65] The detailed probit model results, which are almost identical to the SLO model, are presented in Appendix Table E2.

previously unemployed for a long period of time were less likely to undertake a TLO BTEA course.[66]

In relation to the effectiveness of the TLO BTEA course, both the probit and PSM results again indicate that claimants who commenced this programme in September/October 2008 were less likely to be signed off the Live Register in both June 2012 and 2014 relative to a control group. Based on the more reliable PSM estimates, such individuals were 19.9 percentage points less likely to be signed off the Live Register in June 2012 in comparison with a control group of similarly unemployed individuals who did not undertake a TLO BTEA course in September/October 2008, with the figure decreased slightly to 14.0 percentage points in June 2014.[67]

TABLE 5.5 Closed Off the Live Register for 2008 TLO BTEA Participants: Probit and PSM Results

	Probit	PSM
June 2012[(1)]	-0.190***	-0.199***
	(0.021)	(0.034)
June 2014[(2)]	-0.133***	-0.140***
	(0.020)	(0.027)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).
[(1)] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.
[(2)] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

When we assessed the effectiveness of the TLO BTEA programme according to attendance level (Table 5.6),[68] we found that the strongest negative effect emerged for those who commenced their programme in September/October 2008 and remained on it over three years, followed by those who spent one year or less on their course: such individuals were 29.4 percentage points and 18.8 percentage points respectively less likely to be closed off the Live Register in June 2012 in comparison to a control group of similar unemployed individuals. Although there was some change in the magnitude of these negative effects, the results persisted when the course was re-evaluated in June 2014: those who

66 The majority of the PSM stage one probit model results were consistent across the two time point specifications that were estimated, June 2012 and June 2014. However, there was some variation, mainly in the regional and previous occupation results, which can be attributed to the inclusion of those who completed their TLO course over four to six years in the June 2014 specification. Results available from the authors on request.

67 The balancing and unobserved heterogeneity sensitivity tests were conducted on these TLO PSM models, which the models passed: results available from the authors on request.

68 The detailed probit model results are presented in Appendix Table E3.

spent four to five years on the programme were found to be the least likely to be signed off the Live Register during the latter time point (-17.4 percentage points).[69] The only TLO treatment group that were found to be no different to the unemployed control group, in terms of being closed off the Live Register in June 2014, were individuals who remained on the TLO programme for two years.

TABLE 5.6 Closed Off the Live Register for 2008 TLO BTEA Participants by Level of Attendance: Probit and PSM Results

	Probit	PSM
TLO Level of Attendance - June 2012:[(1)]		
Up to and including 1 Year[(2)]	-0.163***	-0.188***
	(0.038)	(0.057)
2 Years	-0.121***	-0.143***
	(0.041)	(0.059)
3 Years	-0.269***	-0.294***
	(0.029)	(0.058)
TLO Level of Attendance - June 2014:[(3)]		
Up to and including 1 Year[(2)]	-0.128***	-0.196***
	(0.043)	(0.055)
2 Years	-0.078*	-0.075
	(0.045)	(0.058)
3 Years	-0.160***	-0.161***
	(0.042)	(0.056)
4-5 Years[(4)]	-0.151***	-0.174***
	(0.034)	(0.045)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[(1)] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.

[(2)] Those who spent less than a year, or one year, on a TLO BTEA course were combined into one category because the number of individuals for each were too small to include as separate categories.

[(3)] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

[(4)] Those who completed their TLO BTEA course over four years and five were combined into one category because the number of individuals taking five years to complete their course was too small to include as a separate category.

5.3 TRANSITIONED TO EMPLOYMENT

5.3.1 SLO BTEA Course

When estimating exits to employment, we excluded all individuals who left the Live Register at both time points for non-employment reasons; thus, our data consist only of individuals who either remained on the Live Register or who left it to take up employment. We found that those who commenced an SLO BTEA course in September/October 2008 were less likely to be in a job in either June

[69] The TLO level of completion PSM models passed the balancing and unobserved heterogeneity diagnostic tests. These results are available from the authors on request, as are the PSM stage one probit model results.

2012 or June 2014 relative to a control group of similarly unemployed individuals (Table 5.7). Based on our PSM estimates,[70] SLO BTEA course participants were 38 percentage points less likely to be in employment in June 2012, with the negative effect associated with the programme decreasing to 29.3 percentage points in June 2014.

TABLE 5.7 Exit to the Labour Market for 2008 SLO BTEA Participants: Probit and PSM Results

	Probit	PSM
June 2012[(1)]	-0.228***	-0.380***
	(0.005)	(0.019)
June 2014	-0.242***	-0.293***
	(0.007)	(0.020)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).
[(1)] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

When we examined the effectiveness of the SLO BTEA course by the length of time spent attending the programme (Table 5.8), we found that its negative effect on participants job finding rate increased with duration: specifically from -28.9 percentage points for those who spent less than a year in their SLO programme to -42.6 percentage points for those who completed a course over three years. These results relate to June 2012, but the negative effects continued to exist when the programme was evaluated again in June 2014. [71]

[70] The probit model results are presented in Appendix Table E4.

[71] The detailed probit model results are presented in Appendix Table E.5.

TABLE 5.8 Exit to the Labour Market for 2008 SLO BTEA Participants by Level of Attendance: Probit and PSM Results

	Probit	PSM
SLO Level of Attendance - June 2012:[(1)]		
< 1 Year	-0.213***	-0.289***
	(0.016)	(0.056)
1 Year	-0.225***	-0.335***
	(0.006)	(0.025)
2 Years	-0.229***	-0.311***
	(0.008)	(0.037)
3 Years	-0.252***	-0.426***
	(0.012)	(0.077)
SLO Level of Attendance - June 2014:		
< 1 Year	-0.263***	-0.369***
	(0.018)	(0.057)
1 Year	-0.219***	-0.306***
	(0.010)	(0.026)
2 Years	-0.263***	-0.386***
	(0.012)	(0.038)
3-4 Years[(2)]	-0.277***	-0.429***
	(0.018)	(0.070)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[(1)] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

[(2)] Three and four year SLO BTEA level of attendance observations combined into one category as the number of individuals completing the course over four years was too small to include as a separate category.

5.3.2 TLO BTEA Course

The TLO BTEA course was also found to be an ineffective labour market activation tool (Table 5.9) as individuals who commenced this course in September/October 2008 were found to be 23.1 percentage points less likely to be in employment in June 2012 relative to a control group of similarly unemployed individuals. By June 2014, this negative labour market effect had decreased by almost 10 percentage points to 13.7 percentage points. [72]

[72] See Appendix Table E6 for the detailed probit model results.

TABLE 5.9 Exit to the Labour Market for 2008 TLO BTEA Participants: Probit and PSM Results

	Probit	PSM
June 2012[(1)]	-0.151***	-0.231***
	(0.015)	(0.038)
June 2014[(2)]	-0.130***	-0.137***
	(0.017)	(0.032)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).
[(1)] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.
[(2)] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

When we examined the TLO programme's effectiveness by time spent on the programme (Table 5.10), the overall negative employment effect associated with this course in June 2012 appears to have been mainly driven by those who spent three years on their course. Based on our PSM estimates,[73] such individuals were 34.7 percentage points less likely to be in a job relative to a control group consisting of similarly unemployed individuals in June 2012. By June 2014, the negative effect associated with all TLO course durations was similar, apart from those who spent two years on their course: in terms of having exited from the Live Register to employment, such individuals were found to be no different to the similar unemployed control group.

[73] See Appendix Table E7 for the detailed probit model results.

TABLE 5.10 Exit to the Labour Market for 2008 TLO BTEA Participants by Level of Attendance: Probit and PSM Results

	Probit	PSM
TLO Level of Attendance - June 2012:[(1)]		
Up to and including 1 Year[(2)]	-0.147***	-0.211***
	(0.028)	(0.067)
2 Years	-0.095**	-0.196***
	(0.034)	(0.067)
3 Years	-0.194***	-0.347***
	(0.019)	(0.061)
TLO Level of Attendance - June 2014:[(3)]		
Up to and including 1 Year[(2)]	-0.143***	-0.184***
	(0.036)	(0.069)
2 Years	-0.080*	-0.040
	(0.042)	(0.071)
3 Years	-0.130***	-0.177***
	(0.035)	(0.065)
4-5 Years[(4)]	-0.149***	-0.162***
	(0.027)	(0.055)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

(1) Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.

(2) Those who spent less than a year, or one year, on a TLO BTEA course were combined into one category because the number of individuals for each were too small to include as separate categories.

(3) Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

(4) Those who completed their TLO BTEA course over four years and five were combined into one category because the number of individuals taking five years to complete their course was too small to include as a separate category.

5.4 PROGRESSED TO ANOTHER EDUCATION COURSE OR A TRAINING OR EMPLOYMENT PLACEMENT COURSE

Although progression to another education programme, or training or employment placement course, is not an explicit objective of the BTEA programme, individuals often undertake one course as a stepping stone into another. Thus, for this reason we examined how effective the BTEA programmes are in assisting participants to pursue another education, training or employment placement course. When estimating this progression pathway, we excluded all individuals who left the Live Register at both time points for non-education/training/employment placement reasons; thus, our data consisted only of individuals who either remained on the Live Register or who left it to take up an education or training course or an employment placement. The results from these evaluations are presented in Tables 5.12 to 5.15.[74]

74 See Appendix Tables E8 to E11 for the detailed probit model results.

In relation to the SLO BTEA programme, we found that this course had a positive impact in assisting those who commenced their programme in September/ October 2008 to progress into another education, training or employment placement programme (Table 5.11). The course's positive effect remained relatively constant between the two evaluation time points examined, June 2012 (7.4 percentage points) and June 2014 (6.9 percentage points). However, it is important to reiterate the economic status findings presented in Section 4.4 of the report, which point to very low overall rates of transition into education, and then with over half of the SLO treatment group who remain in education progressing into another SLO programme as opposed to into a more advanced education or training course.

TABLE 5.11 Exiting from Unemployment to an Education, Training or Employment Placement Course for 2008 SLO BTEA Participants: Probit and PSM Results

	Probit	PSM
June 2012[(1)]	0.025***	0.074***
	(0.004)	(0.011)
June 2014	0.061***	0.069***
	(0.009)	(0.012)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[(1)] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

When we examined the SLO BTEA course's effectiveness by attendance level (Table 5.12), we found that its largest positive education, training or employment placement progression effect in June 2012 was for those who spent less than a year on the programme in 2008, or for those who had a duration of over three years: the former group of SLO course participants were 13 percentage points more likely to have entered an education, training or employment placement course in June 2012 in comparison with a control group of similarly unemployed individuals, while the latter SLO treatment group were 10 percentage points more likely to have transitioned into an education, training or employment placement programme. By June 2014, the strongest education, training or employment placement progression effect of the SLO BTEA programme was for those who had completed their course over three to four years (13.9 percentage points).

Progression of those who spent less than a year on their initial SLO course into another education, training or employment placement programme, two-thirds of

which in June 2012 was into another SLO programme, can be viewed as being a positive development as opposed to such individuals re-entering full-time unemployment. However, an examination of the education/training progression pathways of those who completed their course over three years in June 2012 indicates that three-quarters of this group also transitioned into another SLO course. Thus, while it is important to see individuals pursuing education or training as opposed to returning to full-time unemployment, concern must exist if the BTEA programme is "locking" individuals into the system as opposed to the programme assisting participants to achieve the programme's end goal of sustainable employment.

TABLE 5.12 Exiting from Unemployment to an Education, Training or Employment Placement Course for 2008 SLO BTEA Participants by Level of Attendance: Probit and PSM Results

	Probit	PSM
SLO Level of Attendance - June 2012:[(1)]		
< 1 Year	0.048***	0.130***
	(0.016)	(0.034)
1 Year	0.026***	0.064***
	(0.006)	(0.015)
2 Years	0.014***	0.052***
	(0.006)	(0.020)
3 Years	0.035***	0.100**
	(0.019)	(0.050)
SLO Level of Attendance - June 2014:		
< 1 Year	0.063***	0.063*
	(0.025)	(0.034)
1 Year	0.064***	0.065***
	(0.012)	(0.017)
2 Years	0.047***	0.060***
	(0.015)	(0.022)
3-4 Years[(2)]	0.093***	0.139***
	(0.035)	(0.045)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[(1)] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

[(2)] Three and four year SLO BTEA level of attendance observations combined into one category as the number of individuals completing the course over four years is too small to include as a separate category.

In relation to the TLO course, based on the PSM estimates (Table 5.13) we found that those who commenced this programme in September/October 2008 were more likely to have progressed into another education, training or employment placement course by June 2012 relative to a control group of similarly unemployed individuals (10.3 percentage points), and this positive effect continued to be significant in June 2014 (11.3 percentage points).

TABLE 5.13 Exit from Unemployment to an Education, Training or Employment Placement Course for 2008 TLO BTEA Participants: Probit and PSM Results

	Probit	PSM
June 2012[(1)]	0.041***	0.103***
	(0.011)	(0.020)
June 2014[(2)]	0.097***	0.113***
	(0.018)	(0.024)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[(1)] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.

[(2)] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

When we examined the impact of the TLO course by attendance level (Table 5.14), we found that the positive education progression effect for June 2012 was predominately driven by those who initially spent two years on the programme. This continued to be the case when we evaluated the TLO programme's education/training/employment placement effectiveness in June 2014; however we also observed a relatively large effect for those who had spent less than a year on their TLO course, and also those who had spent four to five years completing their programme. It is not clear how individuals who spent the least time undertaking a TLO after entering the programme in 2008 are still present on the programme some years later. As with the SLO course, it is important to ensure that the intervention is not 'locking-in' those who are participating in the programme to multiple and consecutive courses that have little marginal impacts on their employability.

TABLE 5.14 Exit from Unemployment to an Education, Training or Employment Placement Course for 2008 TLO BTEA Participants by Level of Attendance: Probit and PSM Results

	Probit	PSM
TLO Level of Attendance - June 2012:[1]		
Up to and including 1 Year[2]	0.055***	0.091*
	(0.022)	(0.050)
2 Years	0.071***	0.171***
	(0.026)	(0.049)
3 Years	0.012*	0.036
	(0.010)	(0.036)
TLO Level of Attendance - June 2014:[3]		
Up to and including 1 Year[2]	0.099***	0.103***
	(0.038)	(0.050)
2 Years	0.162***	0.203***
	(0.047)	(0.054)
3 Years	0.058***	0.048
	(0.030)	(0.051)
4-5 Years[4]	0.085***	0.105***
	(0.028)	(0.039)

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[1] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.

[2] Those who spent less than a year, or one year, on a TLO BTEA course were combined into one category because the number of individuals for each were too small to include as separate categories.

[3] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

[4] Those who completed their TLO BTEA course over four years and five were combined into one category because the number of individuals taking five years was too small to include as separate category.

5.5 SENSITIVITY CHECKS

We tested the sensitivity of our estimated results on the effectiveness of the SLO and TLO BTEA programmes to the various sample restrictions that were imposed on the data prior to conducting the evaluations (see Section 3.2). Specifically, we re-ran the June 2014 SLO and TLO 'Closed off the Live Register' models with the removal of some of the restrictions that were implemented for the evaluation. The results from this work, which are presented for the SLO programme in Table 5.15 and the TLO scheme in Table 5.16, indicate that while there are some changes in the magnitude of the effects derived, that the overall results for both programmes remain the same.

TABLE 5.15 Sensitivity Checks on Estimated Results for Imposed Sample Restrictions: SLO BTEA Participants Closed Off the Live Register in June 2014

	Probit	PSM	Sample
SLO BTEA:			
Unrestricted Sample	-0.167***	-0.133***	219,749
	(0.009)	(0.012)	
Unrestricted JA/JB Sample	-0.190***	-0.156***	188,475
	(0.010)	(0.014)	
Full Report Restrictions (Section 3.2):	-0.246***	-0.254***	134,484
	(0.011)	(0.017)	
1a. Less Occupation Restriction (No.5)	-0.263***	-0.248***	152,903
	(0.011)	(0.016)	
1b. Occupation Restriction Less Managers	-0.253***	-0.264***	140,710
	(0.011)	(0.017)	
2. Less Control Group 6-Month Training Lock-in Restriction (No. 6)	-0.244***	-0.237***	135,689
	(0.011)	(0.017)	
3. Exclusion of Control Group Individuals who received any form of training Post Sept 2008	-0.249***	-0.254***	119,749
	(0.011)	(0.017)	
4. Inclusion of TLO to SLO Transfers as SLO BTEA Cases (No. 4)	-0.235***	-0.243***	134,757
	(0.011)	(0.016)	
5. Exclusion of Pre October 2008 SLO to TLO Transfers	-0.246***	-0.259***	134,474
	(0.011)	(0.017)	

Source: Authors' analysis.

For example, for the SLO programme we found that when we implemented the full set of sample restrictions that SLO course participants were 25.4 percentage points (PSM estimate) less likely to be closed off the Live Register in June 2014 compared to a control group of similarly unemployed individuals. When all sample restrictions were completely removed, SLO BTEA course participants were still found to be less likely to be closed off the Live Register in June 2014 compared to the control group (13.3 percentage points).[75] The same overall result was derived for the TLO programme.

[75] See footnote 9.

TABLE 5.16 Sensitivity Checks on Estimated Results for Imposed Sample Restrictions: TLO BTEA Participants Closed Off the Live Register in June 2014

	Probit	PSM	Sample
TLO BTEA:			
Unrestricted Sample	-0.089***	-0.074***	218,615
	(0.012)	(0.015)	
Unrestricted JA/JB Sample	-0.095***	-0.102***	187,582
	(0.013)	(0.017)	
Full Report Restrictions (Section 3.2):	-0.133***	-0.140***	*133,474*
	(0.020)	(0.027)	
1a. Less Occupation Restriction (No.5)	-0.151***	-0.178***	151,898
	(0.018)	(0.024)	
1b. Occupation Restriction Less Managers	-0.134***	-0.164***	139,713
	(0.020)	(0.025)	
2. Less Control Group 6-Month Training Lock-in Restriction (No. 6)	-0.131***	-0.153***	134,676
	(0.020)	(0.027)	
3. Exclusion of Control Group Individuals who received any form of training Post Sept 2008	-0.134***	-0.140***	118,739
	(0.020)	(0.027)	
4. Inclusion of Pre October 2008 SLO to TLO Transfers as TLO BTEA Cases	-0.133***	-0.140***	134,474
	(0.020)	(0.027)	

Source: Authors' analysis.

In the next and final chapter of the report we summarise the main findings from the study, along with outlining the main conclusions that can be drawn from the evaluation.

Chapter 6

Summary and Conclusions

6.1 CONTEXT

Between 2008 and 2012, Ireland experienced one of the most severe economic crises since the foundation of the State, which had serious knock-on effects on the country's labour market.

In response to the unemployment crisis that evolved from the recession, the DSP increased its expenditure on its Working Age Employment Supports schemes, which comprise a suite of activation programmes aimed at assisting social welfare recipients to progress into employment. Between 2007 and 2012, expenditure on these programmes rose by 48 per cent, with spending on the Back to Education Allowance (BTEA) scheme more than trebling from €64.1 million to €199.5 million, while the number of recipients grew from approximately 6,000 to almost 25,000. In a review of its Working Age Employment Supports programmes in 2012, the DSP found that the BTEA was not effective in assisting participants to find employment (DSP, 2012a). Although this review was conducted at a time when BTEA participants faced a poor economic environment on completion of their course, a 2005 review of the BTEA that was undertaken at a time when the labour market was much more favourable found the BTEA to be ineffective then as well (Department of Social and Family Affairs, 2005a). Given that both of these departmental reviews (2005 and 2012) were based on descriptive evidence, in 2014 the DSP commissioned the ESRI to conduct a counterfactual analysis of the effectiveness of the BTEA scheme in assisting jobseekers to find employment.

6.2 THE EVALUATION

The BTEA evaluation was conducted using anonymised data from the DSP's newly developed *Jobseeker Longitudinal Dataset* (JLD). This dataset, which was created through the amalgamation of five administrative data sources, tracks the social welfare claim, employment, training and activation programme episodes of jobseeker claimants since 2004. In addition to assessing the effectiveness of the BTEA scheme in assisting jobseekers to progress into employment, the DSP also wanted the BTEA evaluation to act as a 'pathfinder' with regard to the use of the JLD as a tool for evaluating the effectiveness of the Department's other activation programmes. As evidenced by the quality of the models presented in this report, the JLD will allow for robust estimation of the Department's remaining Working

Age Employment Supports schemes that are covered by the dataset. However, there are some enhancements that could be made to the JLD, which are discussed in further detail below.

In evaluating the BTEA, we identified the separate effects of the two BTEA options, the SLO and TLO, along with the impact of the amount of time spent on programmes by participants. We were not able to identify the exact educational qualification or course pursued by jobseekers under the two BTEA options as such data are not contained in the JLD.

6.3 FINDINGS

In terms of the results, we found no evidence to support the effectiveness of the BTEA as an activation programme. In fact, relative to a control group of similarly unemployed individuals, participants in both components of the BTEA programme, the SLO and TLO, were substantially less likely to be in employment between four and six years following entry into their respective BTEA programmes. The only exception to this result was for TLO participants who received BTEA support for two years: such individuals' employment prospects were no different to the control group of similarly unemployed individuals.

There was evidence that the BTEA was, to an extent, successful in redirecting participants to further study.[76] However, there is some concern that a significant proportion of the 2008 SLO BTEA programme entrants remaining in education in 2012 and 2014 had not progressed beyond second-level by those time points. In particular, the fact that the majority of SLO BTEA participants undertake PLC courses (see Chapter 3), the maximum duration of which is two years, raises a query as to whether the BTEA eligibility criterion that one needs to be progressing in educational qualifications (see Chapter 2) was being fulfilled by the 2008 September/October SLO BTEA cohort. Based on this eligibility rule for this cohort,[77] those pursuing a PLC course through the BTEA scheme in September/October 2008 should not have been able to undertake another PLC course on completion of their first. However, it would appear from the data that a certain proportion of the 2008 SLO BTEA cohort may have been going from one PLC course to the next. While we cannot confirm this in the data, the possibility raises concerns about the effectiveness of monitoring arrangements that were in

[76] The proportions of SLO and TLO participants who remained in education or training during 2012 (2014) were relatively small at 6.9 and 9.8 per cent (6.2 and 8.2 percent) respectively.

[77] Changes made to the BTEA rules in 2014 now permit this type of progression (see Chapter 2), but this was not the case for the cohort of BTEA participants examined in this report.

place for the BTEA scheme at that time, or the degree to which eligibility rules were enforced.

We also found that individuals who undertook one- or two-year continuous TLO programmes, or a four- to five-year course, post-2008, were more likely to be back in the programme by 2012 and 2014. Apart from three-year continuous TLO courses, this suggests that TLO routes into education may more heavily reflect intermittent periods of education spells associated with sporadic unemployment spells rather than continuous progression associated with a specific labour market goal.

Given these SLO and TLO level of attendance results, we have some concerns that certain aspects of both BTEA routes may be locking individuals into education programmes for prolonged periods with relatively little improvements in their ultimate employability. In addition, we cannot assess the extent to which BTEA scheme recipients actually achieved accreditation as such information is not captured, nor can we examine how their course results compare with similar non-BTEA recipient course completers.

Nevertheless, the core objective of the BTEA scheme, which is to provide participants with sustainable employment, was not achieved by the 2008 BTEA programme entrants examined in this evaluation. Thus, while the evidence of the relative success of the BTEA programme in terms of facilitating continuing education is somewhat positive, although there is some apprehension around the nature of the education courses that those BTEA participants that go this route are transitioning into, on the basis of the data available the SLO and TLO BTEA schemes do not appear to be effective in terms of their core goal.

The study, however, does not come without caveats. The first important point to note is that the evaluation represents a purely empirical exercise aimed at producing a counterfactual estimate of the BTEA programme. While the JLD is a rich data source that allows us to control for the impact of a range of key observable characteristics that can effect a jobseeker's employment or education/training prospects,[78] the JLD does not contain any qualitative information that will cast light on the individual experiences or processes that contributed to the observed BTEA scheme results. Specifically, we are not in a

[78] And the "mhbounds" procedure in Stata allows us to test the sensitivity of our results to unobserved factors, which is an important sensitivity test to be able to undertake given that the BTEA programme participants are likely to be a very diverse group.

position to draw conclusions with respect to the quality or impact of the educational programmes undertaken by BTEA claimants. Nor can we assess any potential lock-in effects from benefit or grant rules, or the absence of additional supports that a BTEA recipient might need in undertaking their course, that may result in longer-term welfare dependency. Thus, in order for comprehensive policy conclusions to be drawn regarding the BTEA scheme this empirical evaluation would, ideally, be complemented by qualitative research that collects detailed evidence from BTEA participants, education providers, employers of BTEA completers and officials from both the DSP and the DES.

Another drawback with the JLD was that it did not allow us to identify the extent to which SLO and TLO BTEA scheme outcomes varied by the subject area and duration of the course undertaken, or the level of accreditation attained. Furthermore, for those who did transition into employment on completion of their course, we were not able to make any observations with respect to the quality and/or sustainably of employment entered into, or the degree to which this differed from job entrants from the control group, as sector and earnings information does not currently exist for the full JLD population.

In addition to the collection of qualitative data that was mentioned above, for future evaluations of the BTEA scheme, the factors preventing the linking of the administrative data system that contains detailed information on the BTEA (the TLA datafile) to the JLD should be resolved (see Chapter 3). Furthermore, important information on course participants that is not currently in either the TLA system or the JLD should be collected. In particular, highest level of educational attainment, BTEA course duration and completion data, certification, additional social welfare assistance received, part-time employment during their course of study and other monetary (e.g., free fees) and non-monetary supports (HEAR, DARE, etc.) data. The collection of information on literacy and numeracy difficulties, along with childcare needs and access to transport, would be valuable as well as it is known that such issues can have an impact on peoples' labour market outcomes over and above the effect of educational attainment (see, for example, O'Connell et al., 2009; Kelly et al., 2012a, 2012b and 2012c). As with the qualitative data mentioned above, the collection of this type of additional administrative data would allow for a more comprehensive understanding of the BTEA results derived in this report.[79]

[79] In time, many of these additional variables will become available to evaluators as higher proportions of unemployed claimants are profiled through the DSP's Probability of Exit (PEX) system, which is the system used by the Department to identify a jobseeker's risk of becoming long-term unemployed.

Another important caveat to bear in mind in relation to the analysis is that the time periods at which outcomes were examined, 2012 and 2014, were particularly difficult periods in the Irish labour market. Employment had actually started to grow in the economy at the evaluation time points, as illustrated in Figure 1.1. However, on the basis that the duration of the majority of SLO courses is 1.4 years and the TLO programmes are three years (see DSP, 2012a) most of the September/October 2008 BTEA graduate cohort examined in this study would have completed their courses before this upturn in the labour market commenced. Thus, when the evaluations took place the September/October 2008 BTEA course participants would have been competing for limited jobs with high numbers of highly-qualified applicants with less erratic labour market histories. Nevertheless, while we cannot rule out the possibility that the BTEA scheme would have achieved better outcomes in a more normal economic climate, the fact that BTEA participants' performed so poorly relative to a matched control group facing similar labour market conditions suggests that something other than cyclical factors are driving the lower exit rates to employment. The 2005 and 2012 reviews of the BTEA scheme, although descriptive, would concur with this given that each review was carried out at growth and recessionary periods in the business cycle. There is little doubt that second-chance education programmes like the BTEA are a vital component of any life-long learning strategy. Nevertheless, the evidence presented in this report, and in past reviews of the programme, raises concerns about the effectiveness of activation measures like the BTEA in assisting jobseekers to transition from unemployment to employment.

6.4 POLICY IMPLICATIONS

Government policy in the last few years has focussed on expanding the BTEA and other Working Age Employment Supports schemes like the CE scheme as a way of assisting people to get back to work after the recession: this approach is set out in the Government's *Pathways to Work 2012, 2013 and 2015* strategies, with the most recent strategy concentrating particularly on mechanisms to assist unemployed youths and the long-term unemployed (see DSP 2012c, 2013a and 2014). However, the findings derived in this report in relation to the effectiveness of the BTEA scheme would question whether allowing this scheme to expand as it did over the period was an appropriate intervention mechanism to use to deal with the unemployment crisis. It also raises concerns about how successful the other activation programmes that were expanded during this time period have been given that very few of them, if any, have been subject to a rigorous evaluation. Thus at a minimum, the effectiveness of such programmes should be examined using a counterfactual methodology before any further spending is allocated to these schemes as a means of assisting the unemployed to transition into employment.

As a pathfinder for the use of the JLD, the findings of this evaluation indicate that the JLD provides a robust basis for quantitative analysis of the effectiveness of the Department's Working Age Employment Support schemes using a counterfactual methodology. While the outcomes of such an analysis can challenge existing beliefs and give rise to significant questions, counterfactual evaluations can also contribute to the task of clarifying policy objectives and the development of evidenced-based policies that will improve outcomes. In this regard, while it is positive to see that the unemployment rate has started to decline since 2012, it still remains around 10 per cent (CSO, 2015). Given this, it is important that the Government's activation measures can be shown to be effective in applying scarce resources to the task of assisting unemployed people to obtain employment.

In 2014, the DSP announced some reforms to the BTEA scheme, which took effect from 1 June of that year (see Chapter 2). The bulk of these reforms focussed on expanding the coverage of the scheme (e.g., the inclusion of Springboard and Momentum); and enabling students with Level 5 and 6 qualifications to undertake other courses at the same level, if the courses assisted the individuals in their job prospects, as opposed to progressing in their educational qualifications. While the underlying reasons for the negative results derived in this evaluation of the BTEA are unknown, it is not clear that any of these specific reforms will fundamentally alter the effectiveness of the scheme.

However, the 2014 reform where a jobseeker's Case Officer must now recommend and approve a BTEA scheme course, as opposed to the jobseeker self-selecting into a course of his/her own choice, has the potential to ensure that the courses being pursued by jobseekers are more aligned with labour market needs. This reform, which was a recommendation from a 2012 review of the BTEA scheme (see DSP, 2012b), also has the potential to improve the career guidance and support that a BTEA recipient receives. Specifically, Case Officers can assess if the jobseeker has the existing competencies required to pursue a certain course, along with identifying if the jobseeker will require extra supports to assist him/her to complete their course. However, the achievement of these outcomes from this specific 2014 reform will depend on Case Officers having the necessary labour market knowledge and career guidance skills to guide BTEA scheme applicants into appropriate courses that will match both their needs and that of the economy. At present, it is not clear that this new referral process is sufficiently systematic to ensure that jobseekers will be directed towards suitable course options.

While further research is required to unearth the reasons behind the ineffective results that have been derived in this report for the BTEA scheme as an activation programme, there are some improvements that could be made to the BTEA scheme in the interim. For example, (i) greater targeting of provision; (ii) ensuring that programmes pursued are aligned with labour market needs (see also DSP, 2012b; and Sweeney, 2013); (iii) improved monitoring of participants attendance, completion and certification, along with the courses undertaken from one academic year to the next; (iv) greater conditionality attached to funding with respect to course attendance, the attainment of qualifications and educational progression; and (v) career guidance and support.

References

Belfield, C.R., and H.M. Levin (2007). *The Price We Pay: Economic and Social Consequences of Inadequate Education*. Washington DC: Brookings Institution.

Caliendo, M., and S. Kopeinig (2008). 'Some Practical Guidance for the Implementation of Propensity Score Matching'. *Journal of Economic Surveys*, 22(1): 31-72.

Card, D., J. Kluve and A. Weber (2010). 'Active Labour Market Policy Evaluations: A Meta-Analysis'. *Economic Journal*, 120(548): F452-F477.

Central Statistics Office (2014). *Live Register: September* 2014. Cork: Central Statistics Office.

Central Statistics Office (2015). *Quarterly National Household Survey: Quarter 4 2014*. Cork: Central Statistics Office.

Department of Social, Community and Family Affairs (1998). *Statistical Information on Social Welfare Services 1998*. Dublin: Department of Social, Community and Family Affairs.

Department of Social, Community and Family Affairs (1999). *Statistical Information on Social Welfare Services 1999*. Dublin: Department of Social, Community and Family Affairs.

Department of Social, Community and Family Affairs (2000). *Statistical Information on Social Welfare Services 2000*. Dublin: Department of Social, Community and Family Affairs.

Department of Social, Community and Family Affairs (2001). *Statistical Information on Social Welfare Services 2001*. Dublin: Department of Social, Community and Family Affairs.

Department of Social and Family Affairs (2002). *Statistical Information on Social Welfare Services 2002*. Dublin: Department of Social and Family Affairs.

Department of Social and Family Affairs (2003). *Statistical Information on Social Welfare Services 2003*. Dublin: Department of Social and Family Affairs.

Department of Social and Family Affairs (2004). *Statistical Information on Social Welfare Services 2004*. Dublin: Department of Social and Family Affairs.

Department of Social and Family Affairs (2005a). *Report of the Working Group on the Review of the Back to Education Allowance (BTEA) Scheme*. Dublin: Department of Social and Family Affairs.

Department of Social and Family Affairs (2005b). *Statistical Information on Social Welfare Services 2005*. Dublin: Department of Social and Family Affairs.

Department of Social and Family Affairs (2006). *Statistical Information on Social Welfare Services 2006*. Dublin: Department of Social and Family Affairs.

Department of Social and Family Affairs (2007). *Statistical Information on Social Welfare Services 2007*. Dublin: Department of Social and Family Affairs.

Department of Social and Family Affairs (2008). *Statistical Information on Social Welfare Services 2008*. Dublin: Department of Social and Family Affairs.

Department of Social and Family Affairs (2009). *Statistical Information on Social Welfare Services 2009*. Dublin: Department of Social and Family Affairs.

Department of Social Protection (2010). *Statistical Information on Social Welfare Services 2010*. Dublin: Department of Social Protection.

Department of Social Protection (2011). *Statistical Information on Social Welfare Services 2011*. Dublin: Department of Social Protection.

Department of Social Protection (2012a). *A Review of Department of Social Protection Employment Support Schemes*. Dublin: Department of Social Protection.

Department of Social Protection (2012b). *High Level Issues Paper emanating from a Review of Department of Social Protection Employment Support Schemes*. Dublin: Department of Social Protection.

Department of Social Protection (2012c). *Pathways to Work: Government Policy Statement on Labour Market Activation*. Dublin: Department of Social Protection.

Department of Social Protection (2012d). *Statistical Information on Social Welfare Services 2012*. Dublin: Department of Social Protection.

Department of Social Protection (2013a). *Pathways to Work 2013*. Dublin: Department of Social Protection.

Department of Social Protection (2013b). *Statistical Information on Social Welfare Services 2013*. Dublin: Department of Social Protection.

Department of Social Protection (2014). *Pathways to Work 2015*. Dublin: Department of Social Protection.

Duffy, D., K. McQuinn, D. Byrne and C. Morley (2015). *Quarterly Economic Commentary, Spring 2015*. Dublin: Economic and Social Research Institute.

Heckman, J., R. LaLonde and J. Smith (1999). "The Economics and Econometrics of Active Labor Market Programs", in Ashenfelter, O. and D. Card(eds.), *Handbook of Labor Economics, Volume III*. Amsterdam: Elsevier.

Kelly, E., S. McGuinness and P.J. O'Connell (2009). "Benchmarking, Social Partnership and Higher Renumeration: Wage Setting Institutions and the Public-Private Sector Wage Gap in Ireland", *The Economic and Social Review*, 40 (3): 339-370.

Kelly, E., S. McGuinness and P.J. O'Connell (2012a). *Literacy and Numeracy Difficulties in the Irish Workplace: Impact on Earnings and Training Expenditures*. ESRI Research Series Number 27. Dublin: ESRI.

Kelly, E., S. McGuinness and P.J. O'Connell (2012b). *Literacy, Numeracy and Activation Among the Unemployed*. ESRI Research Series Number 25. Dublin: ESRI.

Kelly, E., S. McGuinness and P.J. O'Connell (2012c). "Transitions to Long-Term Unemployment Risk Among Young People: Evidence from Ireland". *Journal of Youth Studies*, 15 (6): 780-801.

Kelly, E. and S. McGuinness (2015). "Impact of the Great Recession on Unemployed and NEET Individuals' Laboru Market Transitions in Ireland". *Economic Systems.* 39 (1): 59-71.

Martin, J.P. and D. Grubb (2001). "What Works and For Whom: A Review of OECD Countries' Experiences with Active Labour Market Policie." *Swedish Economic Policy Review*, 8 (2001): 9-56.

McGuinness, S., F. McGinnity and P.J. O'Connell (2009). "Changing Returns to Education During a Boom? The Case of Ireland". *LABOUR,* 23 (1): 197-221.

McGuinness, S., E. Kelly and J.R. Walsh (2014). *Predicting the Probability of Long-Term Unemployment in Ireland Using Administrative Data.* ESRI Survey and Statistical Report Series Number 51. Dublin: ESRI.

O'Connell, P.J., S. McGuinness, E. Kelly and J.R. Walsh (2009). *National Profiling of the Unemployed in Irleland*. ESRI Research Series Number 10. Dublin: ESRI.

Rosenbaum, P. and D. Rubin (1983). "The Central Role of the Propensity Score in Observational Studies for Causal Effects", *Biometrika*, 70 (1): 41-55.

Smyth, E. and S. McCoy (2009). *Investing in Education: Combating Educational Disadvantage*. ESRI Research Series Number 6. Dublin: ESRI.

Sweeney, J. (2013). *A Strategic Review of Further Education and Training and the Unemployed*. Dublin: National Economic and Social Council.

Walsh, B.M. (2002). *When Unemployment Disappears: Ireland in the 1990s*, Centre for Economic Research Working Paper Series, No. WP02/29. Dublin: University College Dublin School of Economics.

Appendix A

BTEA Course Field of Study Information

TABLE A.1 SLO BTEA Participants Field of Study: End of 2013

PLC Courses:	%
Business Studies	9.0
Computing/Computers	8.0
Outdoor Education/Sports	6.1
Childhood Care/Studies	6.0
FETAC Qualification	6.0
Beauty Therapy and Hairdressing	5.3
Health Studies	4.9
Film/Radio/TV/Photo/Multimedia	4.3
Social Studies/Care/Work	3.8
Art and Design	2.9
Access/Foundation Studies	2.7
Horticulture/Forestry	2.4
Nursing/Midwifery	2.3
Accounting/Accountancy	1.7
Veterinary Medicine/Animal Studies	1.7
Information Technology/Systems	1.7
Music	1.5
Engineering	1.4
Travel/ Tourism/Hospitality	1.3
Food Science/Technology	1.2
Adult Basic Education	1.2
Hotel/Catering/Bar/Reception	1.2
Community Ed. and Development	1.1
Marketing	1.1
Science/Technology	1.0
Arts	0.9
Agriculture	0.8
Psychology	0.6
Furniture Studies/Technology	0.6
Building/Construction Mgt/Services	0.5
Electrical/Electronics	0.5
Journalism	0.5
Graphic Studies	0.5
All Others:	15.7
Total:[1]	100

Source: Data provided by the DSP (based on codes entered at local DSP offices when approving claimant for BTEA).

Note: [1] Due to rounding, figure is slightly higher than 100 per cent.

TABLE A.2 TLO BTEA Participants Field of Study: End of 2013

	Per Cent
Computing/Computers	9.7
Business Studies	9.4
Social Studies/Care/Work	7.1
Arts	6.9
Engineering	6.2
Science/Technology	4.7
Nursing/Midwifery	3.9
Film/Radio/TV/Photo/Multimedia	3.7
Art and Design	3.4
Accounting/Accountancy	2.6
Outdoor Education/Sports	2.5
Information Technology/Systems	2.3
Music	2.2
Electrical/Electronics	2.0
Health Studies	1.9
Building/Construction Mgt/Services	1.7
Education/Teacher Training	1.7
Law/Legal Studies/Solicitor	1.4
Childhood Care/Studies	1.4
Environmental Studies	1.4
Marketing	1.3
Hotel/Catering/Bar/Reception	1.3
Architecture	1.2
Psychology	1.1
Food Science/Technology	1.0
Horticulture/Forestry	1.0
Travel/ Tourism/Hospitality	1.0
Community Ed. and Development	0.9
Communications	0.8
Humanities	0.8
Veterinary Medicine/Animal Studies	0.6
History	0.5
All Others	12.5
Total:[1]	100

Source: Data provided by the DSP (based on codes entered at local DSP offices when approving someone for BTEA).
Note: [1] Figure slightly higher than 100 per cent due to rounding.

Appendix B

PSM Nearest Neighbour with Replacement Matching Algorthim Sensitivity Checks

The BTEA scheme evaluation results presented in this report are based on the matching algorithm Nearest Neighbour with replacement. To test the sensitivity of our estimated BTEA results to the use of this PSM matching estimator, we employed a range of other matching algorithms, specifically radius and kernel. We also used variations in nearest neighbour matching; in particular, nearest neighbour with over-sampling and nearest neighbour without replacement. The results of this work are presented in Tables B1 and B2.

In general the estimated evaluation results hold, in terms of the size and direction of the effects. However, there was some sensitivity in the TLO labour market and education, training and employment placement models, specifically when we applied the radius and kernel matching algorithms. Radius differs from nearest neighbour in that, instead of selecting the control group matching partner that is nearest to the treated individual in terms of propensity score, this matching approach takes the average of all similar[80] control group members who are within a certain propensity range (i.e. caliper). A drawback with radius matching is that the propensity range used is determined by the researcher and there is no *a priori* guidance on what is a reasonable caliper to select (see Caliendo and Kopeinig, 2008). Thus, selecting a large caliper may result in fewer matches being performed and/or bad matches and, therefore, insignificant results. In relation to kernel matching, this approach uses a weighted average of all individuals in the control group to construct the counterfactual. While one benefit of this matching algorithm is that more information is used when performing the matching, a weakness is that observations that are bad matches are used[81] (see Caliendo and Kopeinig, 2008), which can lead to insignificant results. Given these issues with both the radius and kernel matching estimators, we focussed on the evaluation results derived using nearest neighbour in this report, which, as indicated previously, is the most commonly used PSM estimator.

[80] Similar in terms of propensity score.

[81] The weighted average will contain information on control group individuals who have very different propensity scores i.e., different characteristics, to the individual that they are being matched with in the treatment group.

TABLE B.1 June 2012 SLO BTEA PSM Model: Matching Algorithm Sensitivity Tests

	Off the Live Register	Exit to the Labour Market	Exit to Education, Training, Employment Placement Course
Nearest Neighbour with replacement:	-0.305***	-0.380***	0.074***
	(0.017)	(0.019)	(0.011)
Nearest Neighbour without replacement:	-0.298***	-0.371***	0.072***
	(0.017)	(0.018)	(0.011)
Nearest Neighbour Oversampling:			
2 NN	-0.303***	-0.370***	0.074***
	(0.015)	(0.016)	(0.010)
5 NN	-0.312***	-0.360***	0.070***
	(0.014)	(0.014)	(0.010)
10 NN	-0.310***	-0.360***	0.066***
	(0.013)	(0.014)	(0.010)
Nearest Neighbour with replacement:			
Caliper 0.01	-0.305***	-0.380***	0.073***
	(0.017)	(0.019)	(0.011)
Caliper 0.02	-0.305***	-0.380***	0.073***
	(0.017)	(0.019)	(0.011)
Caliper 0.05	-0.305***	-0.380***	0.074***
	(0.017)	(0.019)	(0.011)
Nearest Neighbour without replacement:			
Caliper 0.01	-0.300***	-0.370***	0.070***
	(0.017)	(0.018)	(0.011)
Caliper 0.02	-0.300***	-0.371***	0.071***
	(0.017)	(0.018)	(0.011)
Caliper 0.05	-0.300***	-0.371***	0.072***
	(0.017)	(0.018)	(0.011)
Radius:			
Caliper 0.01	-0.281***	-0.327***	0.067***
	(0.013)	(0.013)	(0.009)
Caliper 0.02	-0.254***	-0.302***	0.068***
	(0.013)	(0.013)	(0.009)
Caliper 0.05	-0.178***	-0.229***	0.072***
	(0.013)	(0.013)	(0.009)
Kernel:			
Epan	-0.181***	-0.230***	0.072***
	(0.013)	(0.013)	(0.009)
Normal	-0.108***	-0.157***	0.080***
	(0.012)	(0.012)	(0.009)
Biweight	-0.196***	-0.243***	0.071***
	(0.013)	(0.013)	(0.009)
Uniform	-0.163***	-0.213***	0.073***
	(0.012)	(0.013)	(0.009)
Tricube	-0.196***	-0.244***	0.071***
	(0.013)	(0.013)	(0.009)

Source: Authors' analysis.

TABLE B.2 June 2012 TLO BTEA PSM Model: Matching Algorithm Sensitivity Tests

	Off the Live Register	Exit to the Labour Market	Exit to Education, Training, Employment Placement Course
Nearest Neighbour with replacement:	-0.199***	-0.231***	0.103***
	(0.034)	(0.038)	(0.020)
Nearest Neighbour without replacement:	-0.201***	-0.237***	0.106***
	(0.033)	(0.038)	(0.020)
Nearest Neighbour Oversampling:			
2 NN	-0.213***	-0.204***	0.103***
	(0.030)	(0.033)	(0.019)
5 NN	-0.214***	-0.198***	0.106***
	(0.027)	(0.030)	(0.018)
10 NN	-0.213***	-0.210***	0.108***
	(0.026)	(0.028)	(0.018)
Nearest Neighbour with replacement:			
Caliper 0.01	-0.199***	-0.231***	0.101***
	(0.034)	(0.038)	(0.020)
Caliper 0.02	-0.199***	-0.231***	0.104***
	(0.034)	(0.038)	(0.020)
Caliper 0.05	-0.199***	-0.231***	0.103***
	(0.034)	(0.038)	(0.020)
Nearest Neighbour without replacement:			
Caliper 0.01	-0.201***	-0.237***	0.105***
	(0.033)	(0.038)	(0.020)
Caliper 0.02	-0.201***	-0.237***	0.106***
	(0.033)	(0.038)	(0.020)
Caliper 0.05	-0.201***	-0.237***	0.106***
	(0.033)	(0.038)	(0.020)
Radius:			
Caliper 0.01	-0.118***	-0.122***	0.107***
	(0.025)	(0.027)	(0.018)
Caliper 0.02	-0.046*	-0.048*	0.113***
	(0.025)	(0.027)	(0.018)
Caliper 0.05	0.011	0.019	0.121***
	(0.025)	(0.027)	(0.018)
Kernel:			
Epan	0.012	0.020	0.121***
	(0.025)	(0.027)	(0.018)
Normal	0.025	0.033	0.131***
	(0.025)	(0.027)	(0.018)
Biweight	0.005	0.013	0.120***
	(0.025)	(0.027)	(0.018)
Uniform	0.019	0.027	0.123***
	(0.025)	(0.027)	(0.018)
Tricube	0.005	0.013	0.120***
	(0.025)	(0.027)	(0.018)

Source: Authors' analysis.

In using nearest neighbour with replacement, we also checked the number of times that control group cases were used as matches in order to identify if the estimated evaluation results were being driven by a small number of control individuals being used as nearest neighbour matches a large number of times. The results from this examination, which are presented in Appendix Tables B3 and B4, indicate that this was not the case and, therefore, that our estimated evaluation results are not heavily affected by replacement.

TABLE B.3 June 2012 SLO BTEA PSM Model: Number/Percentage of Times Control Group Observations used for Treatment Matches

	Closed off Live Register		Exit to Labour Market		Exit to Education, Training, Employment Placement	
	Number	**%**	**Number**	**%**	**Number**	**%**
Weight of Matched Controls:						
1	1,455	95.3	1,130	94.7	833	89.4
2	66	4.3	57	4.8	86	9.2
3	5	0.3	5	0.4	8	0.9
4	-	-	1	0.1	2	0.2
5	-	-	-	-	2	0.2
6	1	0.1	-	-	1	0.1
Total:	1,527	100.0	1,193	100.0	932	100.0

Source: Authors' analysis.
Note: Nearest neighbour matching with replacement was matching algorithm used to derive PSM estimates.

TABLE B.4 June 2012 TLO BTEA PSM Model: Number/Percentage of Times Control Group Observations used for Treatment Matches

	Closed off Live Register		Exit to Labour Market		Exit to Education, Training, Employment Placement	
	Number	**%**	**Number**	**%**	**Number**	**%**
Weight of Matched Controls:						
1	395	98.5	326	98.8	357	95.0
2	6	1.5	4	1.2	17	4.5
3	-	-	-	-	1	0.3
4	-	-	-	-	1	0.3
Total:	401	100.0	330	100.0	376	100.0

Source: Authors' analysis.

Appendix C

PSM Balanced Data Sensitivity Check

TABLE C.1 June 2012 SLO BTEA PSM Model - Post Diagnostic Test for Balanced Data I

	Mean		Percentage	Percentage	t-test
Variable	**Treated**	**Control**	**Bias**	**Reduction in Bias**	**t p>t**
Male:					
Unmatched	0.55721	0.70128	-30.2		-12.52 (0.000)
Matched	0.55721	0.56716	-2.1	93.1	-0.57 (0.570)
Age:					
Unmatched	27.344	33.186	-52.1		-18.98 (0.000)
Matched	27.344	27.03	2.7	94.8	0.86 (0.390)
Jobseeker's Allowance					
Unmatched	0.62127	0.47427	29.9		11.73 (0.000)
Matched	0.62127	0.62127	0.0	100.0	0.00 (1.000)
Clerical:					
Unmatched	0.10883	0.10191	2.3		0.91 (0.362)
Matched	0.10883	0.10697	0.6	73.1	0.17 (0.865)
Skilled Trades:					
Unmatched	0.17662	0.28822	-26.7		-9.83 (0.000)
Matched	0.17662	0.18035	-0.9	96.7	-0.28 (0.782)
Other Services:					
Unmatched	0.16915	0.12105	13.7		5.86 (0.000)
Matched	0.16915	0.15361	4.4	67.7	1.20 (0.231)
Sales:					
Unmatched	0.16045	0.09659	19.2		8.58 (0.000)
Matched	0.16045	0.17413	-4.1	78.6	-1.04 (0.299)
Operatives:					
Unmatched	0.20211	0.20192	0.0		0.02 (0.984)
Matched	0.20211	0.19838	1.9	-1771.1	0.26 (0.792)
Number of Child Dependents:					
Unmatched	0.26555	0.38239	-13.0		-4.76 (0.000)
Matched	0.26555	0.24689	2.1	84.0	0.67 (0.505)
Number of Previous Unemployment Episodes:					
Unmatched	2.0504	1.7633	22.7		9.13 (0.000)
Matched	2.0504	2.0236	2.2	90.7	0.51 (0.608)
Duration of Previous Unemployment:					
Unmatched	1.9884	5.972	-103.5		-30.85 (0.000)
Matched	1.9884	1.969	0.5	99.5	0.32 (0.749)
Number of Previous Employment Episodes:					
Unmatched	1.6343	1.5621	4.4		1.79 (0.074)
Matched	1.6343	1.6144	1.2	72.4	0.36 (0.719)

Contd.

TABLE C.1 Contd.

	Mean		Percentage	Percentage	t-test
Duration of Previous Employment:					
Unmatched	3.2442	4.4825	-22.8		-8.20 (0.000)
Matched	3.2442	3.2736	-0.65	97.6	-0.20 (0.843)
Pre-September/October 2008 Unemployment Training:					
Unmatched	0.29602	0.11831	44.9		21.77 (0.000)
Matched	0.29602	0.29913	-0.6	98.6	-0.15 (0.877)

Source: Authors' analysis.

TABLE C.2 June 2012 SLO BTEA PSM Model - Post Diagnostic Test for Balanced Data II

Sample	Pseudo R2	LR chi2	p>chi2	Mean Bias	Median Bias
Raw	0.212	3623.32	0.000	13.1	7.7
Matched	0.008	33.57	0.992	1.8	1.5

Source: Authors' analysis.

Appendix D

PSM Common Support Condition Test

In PSM, the common support or overlap condition ensures that individuals with the same covariate values have a positive probability of being both a programme (e.g., BTEA scheme) participant and non-participant (Heckman et al., 1999). To check for this, we examined the distributions of the estimated propensity scores of the treatment and control groups to see if there was an overlap between both groups and, therefore, if they could be matched to each other. The results from this work for the June 2012 SLO BTEA closed off the Live Register model are illustrated in Appendix Figures D1 and D2.

As can be seen from Figure D1, quite a proportion of the control group individuals have propensity scores between 0 and 0.1, while it appears that there are none to match the treatment group individuals with propensity scores greater than this. However, if we plot histograms of the control and treatment cases with propensity scores between 0.1 and 0.3 (Appendix Figure D2), which is where the bulk of the treatment cases lie, we can see that there are control cases that span the full range of propensity scores for the treatment individuals. Thus, these figures confirm that there is overlap between the treatment and control groups, and, consequently, that our PSM estimates are based on data that fulfil the common support condition.[82]

[82] Common support graphs for the other models estimated in this report are available from the authors on request.

FIGURE D.1 Distributions of Propensity Scores for SLO Treatment and Control Groups: Closed off Live Register June 2012

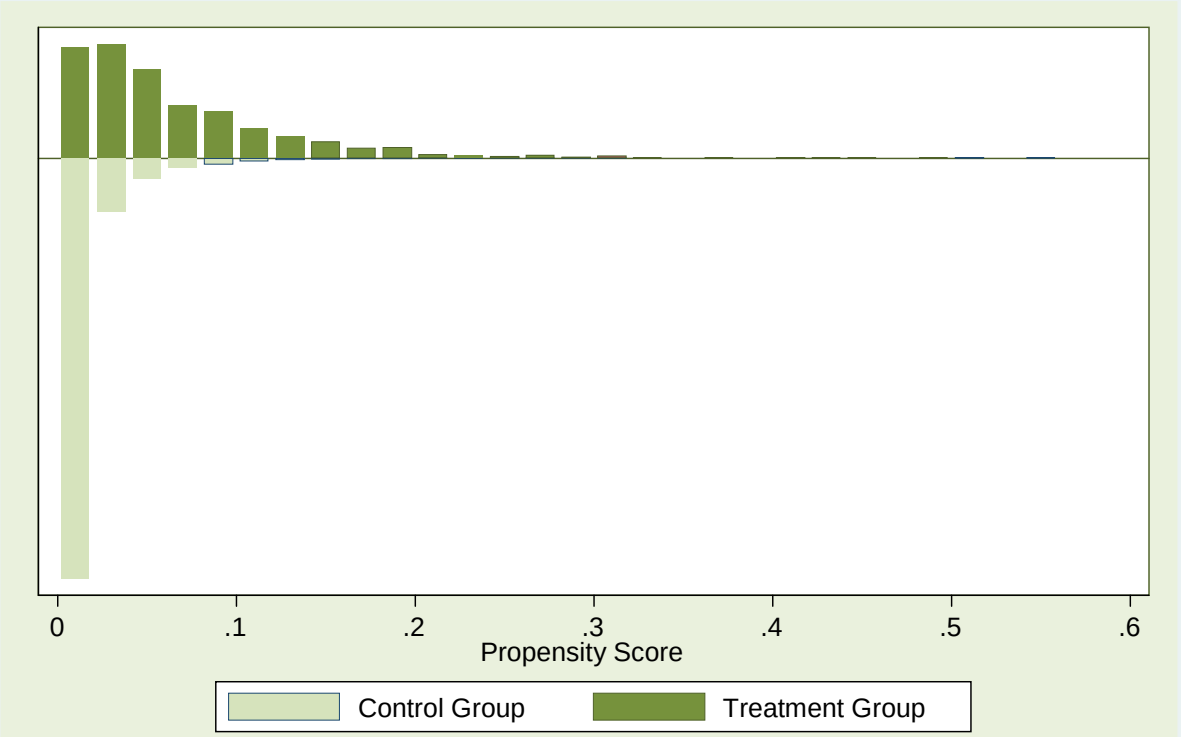
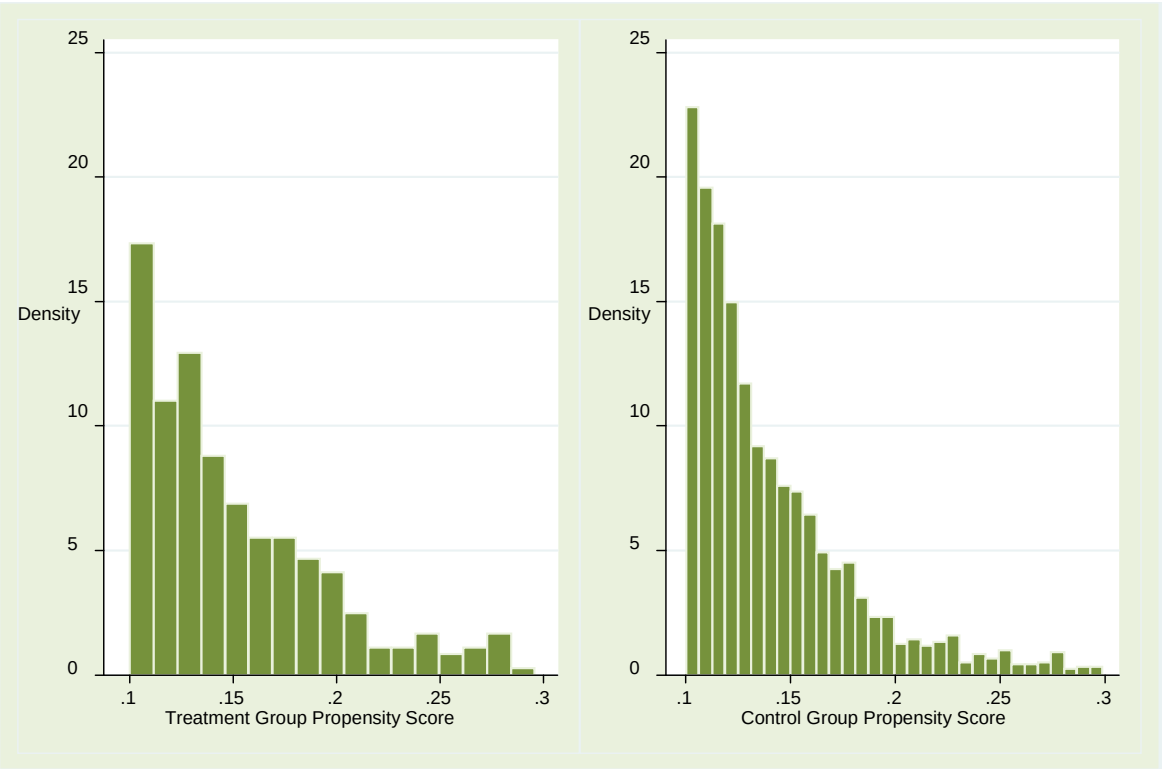


FIGURE D.2 Distributions of Propensity Scores for SLO Treatment and Control Groups with Propensity Scores between 0.1 and 0.3: Closed off Live Register June 2012



Appendix E

Detailed Probit Model Results

TABLE E.1 Probit Model of Closed Off the Live Register for 2008 SLO BTEA Participants by Level of Attendance

	June 2012[1]	June 2014
SLO Participation:		
< 1 Year	-0.220***	-0.223***
	(0.028)	(0.033)
1 Year	-0.280***	-0.220***
	(0.011)	(0.015)
2 Years	-0.297***	-0.290***
	(0.015)	(0.021)
3 Years	-0.333***	
	(0.028)	
3-4 Years[2]		-0.323***
		(0.036)
Personal Characteristics:		
Male	-0.066***	-0.075***
	(0.004)	(0.004)
Age	-0.004***	-0.010***
	(0.001)	(0.001)
Age squared	0.000***	0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	0.024***	0.031***
	(0.005)	(0.005)
Cohabits	-0.092***	-0.067***
	(0.006)	(0.006)
Separated	0.005	0.002
	(0.007)	(0.007)
Widowed	0.221***	0.272***
	(0.016)	(0.013)
Unknown	0.033	0.020
	(0.021)	(0.019)
Nationality (Reference: Non-Irish)		
Irish	-0.035***	-0.050***
	(0.004)	(0.004)
Previous Occupation (Reference: Elementary)		
Clerical	0.019***	0.017***
	(0.007)	(0.006)

Contd.

TABLE E.1 Contd.

	June 2012[1]	June 2014
Skilled Trades	-0.042***	-0.021***
	(0.005)	(0.005)
Other Services	0.018***	0.004
	(0.006)	(0.006)
Sales	0.011*	0.015**
	(0.006)	(0.006)
Operatives	-0.006	-0.007
	(0.005)	(0.005)
Location (Reference: Dublin)		
Carlow	-0.078***	-0.059***
	(0.012)	(0.013)
Cavan	-0.037***	-0.034***
	(0.012)	(0.012)
Clare	-0.047***	-0.038***
	(0.010)	(0.010)
Cork	-0.024***	-0.015***
	(0.006)	(0.006)
Donegal	-0.047***	-0.048***
	(0.007)	(0.007)
Galway	0.001	0.005
	(0.007)	(0.007)
Kerry	-0.012	-0.008
	(0.009)	(0.008)
Kildare	-0.053***	-0.063***
	(0.008)	(0.008)
Kilkenny	-0.060***	-0.043***
	(0.012)	(0.012)
Laois	-0.073***	-0.088***
	(0.011)	(0.011)
Leitrim	-0.028*	0.019
	(0.016)	(0.016)
Limerick	-0.042***	-0.024***
	(0.007)	(0.007)
Longford	-0.053***	-0.060***
	(0.013)	(0.013)
Louth	-0.026***	-0.019**
	(0.008)	(0.008)
Mayo	-0.017*	-0.017*
	(0.009)	(0.009)
Meath	-0.042***	-0.047***
	(0.010)	(0.010)
Monaghan	-0.077***	-0.072***
	(0.013)	(0.013)

Contd.

TABLE E.1 Contd.

	June 2012[1]	June 2014
Location (Reference: Dublin)		
Offaly	-0.062***	-0.090***
	(0.011)	(0.011)
Roscommon	-0.045***	-0.042***
	(0.016)	(0.016)
Sligo	-0.047***	-0.034**
	(0.014)	(0.014)
Tipperary	-0.055***	-0.040***
	(0.008)	(0.008)
Waterford	-0.009	-0.002
	(0.008)	(0.008)
Westmeath	-0.060***	-0.089***
	(0.010)	(0.010)
Wexford	-0.052***	-0.063***
	(0.008)	(0.008)
Wicklow	-0.037***	-0.063***
	(0.009)	(0.009)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	0.014***	0.002
	(0.004)	(0.004)
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	0.023***	0.007
	(0.005)	(0.005)
< €99.00	0.156***	0.081***
	(0.026)	(0.024)
€100.00 - €310.00	0.028*	0.022
	(0.016)	(0.016)
€310.01 - €400.00	0.027***	0.027***
	(0.010)	(0.010)
€401.00 plus	0.040***	0.042***
	(0.008)	(0.007)
ADA Details Unknown	-0.007	0.006
	(0.009)	(0.009)
Number of Child Dependents	-0.007**	-0.003
	(0.003)	(0.003)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	-0.024***	-0.047***
	(0.009)	(0.009)
Adult Dependent Allowance Only	0.055***	0.035***
	(0.008)	(0.008)
Child Dependent Allowance Only	0.043***	0.035***
	(0.009)	(0.008)

Contd.

TABLE E.1 Contd.

	June 2012[(1)]	June 2014
Previous Employment History Information:		
Number of Previous Employment Episodes	-0.002*	0.000
	(0.001)	(0.001)
Duration of Previous Employment (Years)	-0.001**	-0.001***
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	0.002*	-0.007***
	(0.001)	(0.001)
Duration of Previous Unemployment (Years)	-0.068***	-0.050***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.000	-0.003
	(0.005)	(0.004)
Post-October 2008 Unemployment Training	-0.170***	-0.117***
	(0.004)	(0.005)
CSS Dataset Marker	-0.062***	-0.079***
	(0.004)	(0.004)
Observations	134,603	134,484
Pseudo R-squared	0.233	0.175

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[(1)] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

[(2)] Three and four year SLO BTEA level of attendance observations combined into one category as the number of individuals completing an SLO BTEA course over four years was too small to include as a separate category as the estimates produced would not be reliable.

TABLE E.2 Probit Model of Closed Off the Live Register for 2008 TLO BTEA Participants

	June 2012[1]	June 2014[2]
TLO Participation	-0.190***	-0.133***
	(0.021)	(0.020)
Personal Characteristics:		
Male	-0.063***	-0.073***
	(0.004)	(0.004)
Age	-0.004***	-0.010***
	(0.001)	(0.001)
Age squared	0.000***	0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	0.025***	0.032***
	(0.005)	(0.005)
Cohabits	-0.092***	-0.068***
	(0.006)	(0.006)
Separated	0.007	0.004
	(0.007)	(0.007)
Widowed	0.221***	0.272***
	(0.016)	(0.013)
Unknown	0.033	0.020
	(0.021)	(0.019)
Nationality (Reference: Non-Irish)		
Irish	-0.036***	-0.050***
	(0.004)	(0.004)
Previous Occupation (Reference: Elementary)		
Clerical	0.019***	0.018***
	(0.007)	(0.006)
Skilled Trades	-0.043***	-0.021***
	(0.005)	(0.005)
Other Services	0.017***	0.004
	(0.006)	(0.006)
Sales	0.011*	0.016**
	(0.006)	(0.006)
Operatives	-0.008	-0.008
	(0.005)	(0.005)
Location (Reference: Dublin)		
Carlow	-0.076***	-0.054***
	(0.013)	(0.013)
Cavan	-0.039***	-0.034***
	(0.012)	(0.012)
Clare	-0.049***	-0.039***
	(0.010)	(0.010)
Cork	-0.025***	-0.015***
	(0.006)	(0.006)
Donegal	-0.049***	-0.048***
	(0.007)	(0.007)
Galway	-0.001	0.003
	(0.007)	(0.007)
Kerry	-0.011	-0.006
	(0.009)	(0.008)

Contd.

TABLE E.2 Contd.

	June 2012[1]	June 2014[2]
Location (Reference: Dublin)		
Kildare	-0.053***	-0.063***
	(0.008)	(0.008)
Kilkenny	-0.066***	-0.044***
	(0.012)	(0.013)
Laois	-0.074***	-0.088***
	(0.011)	(0.011)
Leitrim	-0.028*	0.019
	(0.016)	(0.016)
Limerick	-0.041***	-0.024***
	(0.007)	(0.007)
Longford	-0.053***	-0.061***
	(0.013)	(0.013)
Louth	-0.028***	-0.021***
	(0.008)	(0.008)
Mayo	-0.019**	-0.020**
	(0.009)	(0.009)
Meath	-0.043***	-0.048***
	(0.010)	(0.010)
Monaghan	-0.077***	-0.073***
	(0.013)	(0.013)
Offaly	-0.066***	-0.092***
	(0.011)	(0.011)
Roscommon	-0.046***	-0.045***
	(0.016)	(0.016)
Sligo	-0.049***	-0.035***
	(0.014)	(0.014)
Tipperary	-0.056***	-0.038***
	(0.008)	(0.008)
Waterford	-0.009	-0.003
	(0.008)	(0.008)
Westmeath	-0.062***	-0.087***
	(0.010)	(0.010)
Wexford	-0.055***	-0.064***
	(0.008)	(0.008)
Wicklow	-0.039***	-0.063***
	(0.009)	(0.009)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	0.015***	0.002
	(0.004)	(0.004)

Contd.

TABLE E.2 Contd.

	June 2012[1]	June 2014[2]
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	0.020***	0.005
	(0.005)	(0.005)
< €99.00	0.158***	0.083***
	(0.026)	(0.025)
€100.00 - €310.00	0.028*	0.022
	(0.016)	(0.016)
€310.01 - €400.00	0.025**	0.027***
	(0.010)	(0.010)
€401.00 plus	0.039***	0.043***
	(0.008)	(0.008)
AD Details Unknown	-0.008	0.005
	(0.009)	(0.009)
Number of Child Dependents	-0.007**	-0.003
	(0.003)	(0.003)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	-0.026***	-0.047***
	(0.009)	(0.009)
Adult Dependent Allowance Only	0.054***	0.037***
	(0.008)	(0.008)
Child Dependent Allowance Only	0.042***	0.035***
	(0.009)	(0.008)
Previous Employment History Information:		
Number of Previous Employment Episodes	-0.002**	-0.000
	(0.001)	(0.001)
Duration of Previous Employment (Years)	-0.001**	-0.001***
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	0.002*	-0.007***
	(0.001)	(0.001)
Duration of Previous Unemployment (Years)	-0.069***	-0.050***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.000	-0.001
	(0.005)	(0.004)
Post -October 2008 Unemployment Training	-0.171***	-0.117***
	(0.004)	(0.005)
CSS Dataset Marker	-0.062***	-0.080***
	(0.004)	(0.004)
Observations	133,402	133,474
Pseudo R-squared	0.235	0.176

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).
[1] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.
[2] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

TABLE E.3 Probit Model of Closed Off the Live Register for 2008 TLO BTEA Participants by Level of Attendance

	June 2012[1]	June 2014[2]
TLO Participation:		
Up to and including 1 Year[3]	-0.163***	-0.128***
	(0.038)	(0.043)
2 Years	-0.121***	-0.078*
	(0.041)	(0.045)
3 Years	-0.269***	-0.160***
	(0.029)	(0.042)
4-5 Years[4]		-0.151***
		(0.034)
Personal Characteristics:		
Male	-0.063***	-0.073***
	(0.004)	(0.004)
Age	-0.004***	-0.010***
	(0.001)	(0.001)
Age squared	0.000***	0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	0.025***	0.032***
	(0.005)	(0.005)
Cohabits	-0.092***	-0.068***
	(0.006)	(0.006)
Separated	0.007	0.004
	(0.007)	(0.007)
Widowed	0.221***	0.272***
	(0.016)	(0.013)
Unknown	0.033	0.020
	(0.021)	(0.019)
Nationality (Reference: Non-Irish)		
Irish	-0.036***	-0.050***
	(0.004)	(0.004)
Previous Occupation (Reference: Elementary)		
Clerical	0.020***	0.018***
	(0.007)	(0.006)
Skilled Trades	-0.043***	-0.021***
	(0.005)	(0.005)
Other Services	0.017***	0.004
	(0.006)	(0.006)
Sales	0.011*	0.016**
	(0.006)	(0.006)
Operatives	-0.008	-0.008
	(0.005)	(0.005)

Contd.

TABLE E.3 Contd.

	June 2012[1]	June 2014[2]
Location (Reference: Dublin)		
Carlow	-0.076***	-0.054***
	(0.013)	(0.013)
Cavan	-0.039***	-0.034***
	(0.012)	(0.012)
Clare	-0.049***	-0.039***
	(0.010)	(0.010)
Cork	-0.025***	-0.015***
	(0.006)	(0.006)
Donegal	-0.049***	-0.048***
	(0.007)	(0.007)
Galway	-0.001	0.003
	(0.007)	(0.007)
Kerry	-0.011	-0.006
	(0.009)	(0.008)
Kildare	-0.053***	-0.063***
	(0.008)	(0.008)
Kilkenny	-0.066***	-0.044***
	(0.012)	(0.013)
Laois	-0.074***	-0.088***
	(0.011)	(0.011)
Leitrim	-0.028*	0.019
	(0.016)	(0.016)
Limerick	-0.041***	-0.024***
	(0.007)	(0.007)
Longford	-0.053***	-0.061***
	(0.013)	(0.013)
Louth	-0.028***	-0.021**
	(0.008)	(0.008)
Mayo	-0.019**	-0.020**
	(0.009)	(0.009)
Meath	-0.043***	-0.048***
	(0.010)	(0.010)
Monaghan	-0.077***	-0.073***
	(0.013)	(0.013)
Offaly	-0.066***	-0.092***
	(0.011)	(0.011)
Roscommon	-0.046***	-0.045***
	(0.016)	(0.016)
Sligo	-0.049***	-0.035***
	(0.014)	(0.014)
Tipperary	-0.056***	-0.038***
	(0.008)	(0.008)

Contd.

TABLE E.3 Contd.

	June 2012[1]	June 2014[2]
Location (Reference: Dublin)		
Waterford	-0.009	-0.003
	(0.008)	(0.008)
Westmeath	-0.062***	-0.087***
	(0.010)	(0.010)
Wexford	-0.055***	-0.064***
	(0.008)	(0.008)
Wicklow	-0.039***	-0.063***
	(0.009)	(0.009)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	0.015***	0.002
	(0.004)	(0.004)
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	0.020***	0.005
	(0.005)	(0.005)
< €99.00	0.158***	0.083***
	(0.026)	(0.025)
€100.00 - €310.00	0.028*	0.022
	(0.016)	(0.016)
€310.01 - €400.00	0.025**	0.027***
	(0.010)	(0.010)
€401.00 plus	0.039***	0.043***
	(0.008)	(0.008)
ADA Details Unknown	-0.008	0.005
	(0.009)	(0.009)
Number of Child Dependents	-0.007**	-0.003
	(0.003)	(0.003)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	-0.026***	-0.047***
	(0.009)	(0.009)
Adult Dependent Allowance Only	0.054***	0.037***
	(0.008)	(0.008)
Child Dependent Allowance Only	0.042***	0.035***
	(0.009)	(0.008)
Previous Employment History Information:		
Number of Previous Employment Episodes	-0.002**	-0.000
	(0.001)	(0.001)
Duration of Previous Employment (Years)	-0.001**	-0.001***
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	0.002*	-0.007***
	(0.001)	(0.001)

Contd.

TABLE E.3 Contd.

	June 2012[1]	June 2014[2]
Duration of Previous Unemployment (Years)	-0.069***	-0.050***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.000	-0.001
	(0.005)	(0.004)
Post-October 2008 Unemployment Training	-0.171***	-0.117***
	(0.004)	(0.005)
CSS Dataset Marker	-0.062***	-0.080***
	(0.004)	(0.004)
Observations	133,402	133,474
Pseudo R-squared	0.235	0.176

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[1] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.

[2] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

[3]) Those who spent less than a year, or one year, on a TLO BTEA course were combined into one category because the number of individuals for each were too small to include as separate categories for estimation purposes.

[4] Those who completed their TLO BTEA course over four years and five were combined into one category because the number of individuals taking five years was too small to include as separate category for estimation purposed.

TABLE E.4 Probit Model of Exit from Unemployment to the Labour Market for 2008 SLO BTEA Participants

	June 2012[1]	June 2014
SLO Participation	-0.228***	-0.242***
	(0.005)	(0.007)
Personal Characteristics:		
Male	-0.019***	-0.011**
	(0.004)	(0.005)
Age	0.004***	-0.003***
	(0.001)	(0.001)
Age squared	-0.000***	0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	0.029***	0.046***
	(0.005)	(0.005)
Cohabits	-0.063***	-0.057***
	(0.005)	(0.006)
Separated	-0.005	0.002
	(0.008)	(0.008)
Widowed	0.146***	0.282***
	(0.021)	(0.023)
Unknown	0.004	0.014
	(0.022)	(0.024)
Nationality (Reference: Non-Irish)		
Irish	-0.037***	-0.058***
	(0.004)	(0.005)
Previous Occupation (Reference: Elementary)		
Clerical	0.055***	0.064***
	(0.007)	(0.008)
Skilled Trades	-0.018***	0.004
	(0.005)	(0.005)
Other Services	0.036***	0.027***
	(0.006)	(0.007)
Sales	0.031***	0.034***
	(0.007)	(0.007)
Operatives	0.003	0.008
	(0.005)	(0.006)
Location (Reference: Dublin)		
Carlow	-0.057***	-0.041***
	(0.011)	(0.013)
Cavan	-0.053***	-0.057***
	(0.011)	(0.013)
Clare	-0.029***	-0.015
	(0.009)	(0.010)

Contd.

TABLE E.4 Contd.

	June 2012[1]	June 2014
Location (Reference: Dublin)		
Cork	-0.026***	-0.017***
	(0.006)	(0.006)
Donegal	-0.020***	-0.015*
	(0.007)	(0.008)
Galway	0.008	0.009
	(0.007)	(0.008)
Kerry	-0.028***	-0.028***
	(0.008)	(0.009)
Kildare	-0.034***	-0.046***
	(0.007)	(0.008)
Kilkenny	-0.047***	-0.026**
	(0.012)	(0.013)
Laois	-0.052***	-0.072***
	(0.010)	(0.011)
Leitrim	-0.012	0.023
	(0.016)	(0.018)
Limerick	-0.032***	-0.017**
	(0.007)	(0.008)
Longford	-0.044***	-0.054***
	(0.013)	(0.014)
Louth	-0.037***	-0.028***
	(0.008)	(0.009)
Mayo	-0.012	-0.015
	(0.009)	(0.010)
Meath	-0.038***	-0.041***
	(0.010)	(0.011)
Monaghan	-0.056***	-0.059***
	(0.012)	(0.013)
Offaly	-0.061***	-0.090***
	(0.010)	(0.011)
Roscommon	-0.053***	-0.069***
	(0.015)	(0.017)
Sligo	-0.059***	-0.059***
	(0.013)	(0.015)
Tipperary	-0.043***	-0.038***
	(0.008)	(0.009)
Waterford	0.004	0.010
	(0.008)	(0.009)
Westmeath	-0.056***	-0.082***
	(0.009)	(0.010)
Wexford	-0.037***	-0.041***
	(0.007)	(0.008)

Contd.

TABLE E.4 Contd.

	June 2012[1]	June 2014
Location (Reference: Dublin)		
Wicklow	-0.018**	-0.036***
	(0.009)	(0.010)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	-0.012***	-0.023***
	(0.004)	(0.004)
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	-0.020***	-0.036***
	(0.005)	(0.006)
< €99.00	0.097***	0.034
	(0.032)	(0.033)
€100.00 - €310.00	0.006	0.018
	(0.016)	(0.018)
€310.01 - €400.00	0.028***	0.037***
	(0.010)	(0.011)
€401.00 plus	0.002	0.003
	(0.007)	(0.008)
AD Details Unknown	0.011	0.036***
	(0.009)	(0.010)
Number of Child Dependents	-0.011***	-0.006
	(0.003)	(0.004)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	-0.013	-0.050***
	(0.010)	(0.010)
Adult Dependent Allowance Only	0.033***	0.003
	(0.009)	(0.010)
Child Dependent Allowance Only	-0.005	-0.015
	(0.009)	(0.010)
Previous Employment History Information:		
Number of Previous Employment Episodes	0.012***	0.015***
	(0.001)	(0.001)
Duration of Previous Employment (Years)	0.002***	0.001***
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	0.003**	-0.004***
	(0.001)	(0.001)
Duration of Previous Unemployment (Days)	-0.066***	-0.064***
	(0.000)	(0.000)

Contd.

TABLE E.4 Contd.

	June 2012[1]	June 2014
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.008*	0.000
	(0.005)	(0.005)
Post -October 2008 Unemployment Training	-0.168***	-0.172***
	(0.003)	(0.004)
CSS Dataset Marker	-0.065***	-0.089***
	(0.004)	(0.005)
Observations	109,887	101,750
Pseudo R-squared	0.274	0.257

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[1] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

TABLE E.5 Probit Model of Exit from Unemployment to the Labour Market for 2008 SLO BTEA Participants by Level of Attendance

	June 2012[1]	June 2014
SLO Participation:		
< 1 Year	-0.213***	-0.263***
	(0.016)	(0.018)
1 Year	-0.225***	-0.219***
	(0.006)	(0.010)
2 Years	-0.229***	-0.263***
	(0.009)	(0.012)
3 Years	-0.252***	
	(0.012)	
3-4 Years[2]		-0.277***
		(0.018)
Personal Characteristics:		
Male	-0.019***	-0.011**
	(0.004)	(0.005)
Age	0.004***	-0.003***
	(0.001)	(0.001)
Age squared	-0.000***	0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	0.029***	0.046***
	(0.005)	(0.005)
Cohabits	-0.063***	-0.057***
	(0.005)	(0.006)
Separated	-0.005	0.002
	(0.008)	(0.008)
Widowed	0.146***	0.282***
	(0.021)	(0.023)
Unknown	0.004	0.014
	(0.022)	(0.024)
Nationality (Reference: Non-Irish)		
Irish	-0.037***	-0.058***
	(0.004)	(0.005)
Previous Occupation (Reference: Elementary)		
Clerical	0.055***	0.064***
	(0.007)	(0.008)
Skilled Trades	-0.018***	0.004
	(0.005)	(0.005)
Other Services	0.036***	0.027***
	(0.006)	(0.007)
Sales	0.030***	0.034***
	(0.007)	(0.007)
Operatives	0.003	0.008
	(0.005)	(0.006)
Location (Reference: Dublin)		
Carlow	-0.057***	-0.041***
	(0.011)	(0.013)
Cavan	-0.053***	-0.057***
	(0.011)	(0.013)

Contd.

TABLE E.5 Contd.

	June 2012[1]	June 2014
Location (Reference: Dublin)		
Clare	-0.029***	-0.015
	(0.009)	(0.010)
Cork	-0.026***	-0.017***
	(0.006)	(0.006)
Donegal	-0.020***	-0.015*
	(0.007)	(0.008)
Galway	0.008	0.009
	(0.007)	(0.008)
Kerry	-0.028***	-0.028***
	(0.008)	(0.009)
Kildare	-0.034***	-0.046***
	(0.007)	(0.008)
Kilkenny	-0.047***	-0.027**
	(0.012)	(0.013)
Laois	-0.052***	-0.073***
	(0.010)	(0.011)
Leitrim	-0.012	0.023
	(0.016)	(0.018)
Limerick	-0.033***	-0.017**
	(0.007)	(0.008)
Longford	-0.044***	-0.054***
	(0.013)	(0.014)
Louth	-0.037***	-0.028***
	(0.008)	(0.009)
Mayo	-0.013	-0.016
	(0.009)	(0.010)
Meath	-0.038***	-0.041***
	(0.010)	(0.011)
Monaghan	-0.056***	-0.059***
	(0.012)	(0.013)
Offaly	-0.061***	-0.090***
	(0.010)	(0.011)
Roscommon	-0.053***	-0.069***
	(0.015)	(0.017)
Sligo	-0.059***	-0.059***
	(0.013)	(0.015)
Tipperary	-0.043***	-0.038***
	(0.008)	(0.009)
Waterford	0.004	0.010
	(0.008)	(0.009)
Westmeath	-0.056***	-0.082***
	(0.009)	(0.010)
Wexford	-0.037***	-0.041***
	(0.007)	(0.008)
Wicklow	-0.018**	-0.036***
	(0.009)	(0.010)

Contd.

TABLE E.5 Contd.

	June 2012[1]	June 2014
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	-0.012***	-0.023***
	(0.004)	(0.004)
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	-0.020***	-0.035***
	(0.005)	(0.006)
< €99.00	0.097***	0.033
	(0.032)	(0.033)
€100.00 - €310.00	0.006	0.018
	(0.016)	(0.018)
€310.01 - €400.00	0.028***	0.037***
	(0.010)	(0.011)
€401.00 plus	0.002	0.004
	(0.007)	(0.008)
ADA Details Unknown	0.011	0.035***
	(0.009)	(0.010)
Number of Child Dependents	-0.011***	-0.006*
	(0.003)	(0.004)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	-0.012	-0.049***
	(0.010)	(0.010)
Adult Dependent Allowance Only	0.033***	0.003
	(0.009)	(0.010)
Child Dependent Allowance Only	-0.005	-0.015
	(0.009)	(0.010)
Previous Employment History Information:		
Number of Previous Employment Episodes	0.012***	0.015***
	(0.001)	(0.001)
Duration of Previous Employment (Years)	0.002***	0.001***
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	0.003**	-0.004***
	(0.001)	(0.001)
Duration of Previous Unemployment (Days)	-0.066***	-0.064***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.008*	0.000
	(0.005)	(0.005)
Post-October 2008 Unemployment Training	-0.168***	-0.172***
	(0.003)	(0.004)
CSS Dataset Marker	-0.065***	-0.089***
	(0.004)	(0.005)
Observations	109,887	101,750
Pseudo R-squared	0.274	0.257

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[1] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

[2] Three and four year SLO BTEA level of attendance observations combined into one category as the number of individuals completing an SLO BTEA course over four years was too small to include as a separate category as the estimates produced would not be reliable.

TABLE E.6 Probit Model of Exit from Unemployment to the Labour Market for 2008 TLO BTEA Participants

	June 2012[1]	June 2014[2]
TLO Participation	-0.151***	-0.130***
	(0.015)	(0.017)
Personal Characteristics:		
Male	-0.018***	-0.011**
	(0.004)	(0.005)
Age	0.004***	-0.003***
	(0.001)	(0.001)
Age squared	-0.000***	0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	0.030***	0.046***
	(0.005)	(0.005)
Cohabits	-0.064***	-0.059***
	(0.005)	(0.006)
Separated	-0.004	0.003
	(0.008)	(0.008)
Widowed	0.144***	0.279***
	(0.021)	(0.023)
Unknown	0.003	0.014
	(0.022)	(0.024)
Nationality (Reference: Non-Irish)		
Irish	-0.037***	-0.058***
	(0.004)	(0.005)
Previous Occupation (Reference: Elementary)		
Clerical	0.056***	0.064***
	(0.007)	(0.008)
Skilled Trades	-0.019***	0.004
	(0.005)	(0.005)
Other Services	0.036***	0.028***
	(0.006)	(0.007)
Sales	0.031***	0.034***
	(0.007)	(0.007)
Operatives	0.002	0.007
	(0.005)	(0.006)
Location (Reference: Dublin)		
Carlow	-0.056***	-0.034**
	(0.012)	(0.014)
Cavan	-0.054***	-0.057***
	(0.011)	(0.013)
Clare	-0.031***	-0.016
	(0.009)	(0.011)
Cork	-0.027***	-0.016***
	(0.006)	(0.006)
Donegal	-0.020***	-0.015*
	(0.007)	(0.008)
Galway	0.006	0.007
	(0.007)	(0.008)

Contd.

TABLE E.6 Contd.

	June 2012[1]	June 2014[2]
Location (Reference: Dublin)		
Kerry	-0.028***	-0.027***
	(0.008)	(0.009)
Kildare	-0.035***	-0.046***
	(0.007)	(0.008)
Kilkenny	-0.051***	-0.027**
	(0.012)	(0.013)
Laois	-0.053***	-0.072***
	(0.010)	(0.011)
Leitrim	-0.013	0.022
	(0.016)	(0.018)
Limerick	-0.031***	-0.017**
	(0.007)	(0.008)
Longford	-0.047***	-0.055***
	(0.013)	(0.014)
Louth	-0.039***	-0.030***
	(0.008)	(0.009)
Mayo	-0.014	-0.019*
	(0.009)	(0.010)
Meath	-0.040***	-0.043***
	(0.010)	(0.011)
Monaghan	-0.057***	-0.060***
	(0.012)	(0.013)
Offaly	-0.065***	-0.093***
	(0.010)	(0.011)
Roscommon	-0.052***	-0.071***
	(0.015)	(0.017)
Sligo	-0.059***	-0.059***
	(0.013)	(0.015)
Tipperary	-0.042***	-0.036***
	(0.008)	(0.009)
Waterford	0.003	0.008
	(0.008)	(0.009)
Westmeath	-0.057***	-0.081***
	(0.009)	(0.010)
Wexford	-0.040***	-0.042***
	(0.007)	(0.008)
Wicklow	-0.019**	-0.034***
	(0.009)	(0.010)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	-0.012***	-0.023***
	(0.004)	(0.004)
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	-0.021***	-0.036***
	(0.005)	(0.006)
< €99.00	0.098***	0.034
	(0.032)	(0.033)
€100.00 - €310.00	0.007	0.018
	(0.016)	(0.018)

Contd.

TABLE E.6 Contd.

	June 2012[1]	June 2014[2]
€310.01 - €400.00	0.026***	0.035***
	(0.010)	(0.011)
€401.00 plus	0.000	0.004
	(0.007)	(0.008)
AD Details Unknown	0.010	0.034***
	(0.009)	(0.010)
Number of Child Dependents	-0.011***	-0.006*
	(0.003)	(0.004)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	-0.013	-0.048***
	(0.010)	(0.010)
Adult Dependent Allowance Only	0.032***	0.005
	(0.009)	(0.010)
Child Dependent Allowance Only	-0.005	-0.014
	(0.009)	(0.010)
Previous Employment History Information:		
Number of Previous Employment Episodes	0.003**	-0.004***
	(0.001)	(0.001)
Duration of Previous Employment (Years)	-0.066***	-0.064***
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	0.004***	-0.003**
	(0.001)	(0.001)
Duration of Previous Unemployment (Years)	-0.000***	-0.000***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.008*	0.001
	(0.005)	(0.005)
Post -October 2008 Unemployment Training	-0.168***	-0.173***
	(0.003)	(0.004)
CSS Dataset Marker	-0.065***	-0.090***
	(0.004)	(0.005)
Observations	108,958	101,047
Pseudo R-squared	0.276	0.258

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).
[1] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.
[2] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

TABLE E.7 Probit Model of Exit from Unemployment to the Labour Market for 2008 TLO BTEA Participants by Level of Attendance

	June 2012[1]	June 2014[2]
TLO Participation:		
Up to and including 1 Year[3]	-0.147***	-0.143***
	(0.028)	(0.036)
2 Years	-0.095***	-0.080*
	(0.034)	(0.042)
3 Years	-0.194***	-0.130***
	(0.019)	(0.035)
4-5 Years[4]		-0.149***
		(0.027)
Personal Characteristics:		
Male	-0.018***	-0.011**
	(0.004)	(0.005)
Age	0.004***	-0.003***
	(0.001)	(0.001)
Age squared	-0.000***	0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	0.030***	0.046***
	(0.005)	(0.005)
Cohabits	-0.064***	-0.059***
	(0.005)	(0.006)
Separated	-0.004	0.003
	(0.008)	(0.008)
Widowed	0.144***	0.279***
	(0.021)	(0.023)
Unknown	0.003	0.014
	(0.022)	(0.024)
Nationality (Reference: Non-Irish)		
Irish	-0.037***	-0.058***
	(0.004)	(0.005)
Previous Occupation (Reference: Elementary)		
Clerical	0.056***	0.064***
	(0.007)	(0.008)
Skilled Trades	-0.019***	0.004
	(0.005)	(0.005)
Other Services	0.036***	0.028***
	(0.006)	(0.007)
Sales	0.030***	0.034***
	(0.007)	(0.007)
Operatives	0.002	0.007
	(0.005)	(0.006)
Location (Reference: Dublin)		
Carlow	-0.056***	-0.034**
	(0.012)	(0.014)
Cavan	-0.054***	-0.057***
	(0.011)	(0.013)
Clare	-0.031***	-0.016
	(0.009)	(0.011)

Contd.

TABLE E.7 Contd.

	June 2012[1]	June 2014[2]
Location (Reference: Dublin)		
Cork	-0.027***	-0.016***
	(0.006)	(0.006)
Donegal	-0.020***	-0.015*
	(0.007)	(0.008)
Galway	0.006	0.007
	(0.007)	(0.008)
Kerry	-0.029***	-0.027***
	(0.008)	(0.009)
Kildare	-0.035***	-0.046***
	(0.007)	(0.008)
Kilkenny	-0.051***	-0.027**
	(0.012)	(0.013)
Laois	-0.053***	-0.072***
	(0.010)	(0.011)
Leitrim	-0.013	0.022
	(0.016)	(0.018)
Limerick	-0.031***	-0.017**
	(0.007)	(0.008)
Longford	-0.047***	-0.055***
	(0.013)	(0.014)
Louth	-0.038***	-0.030***
	(0.008)	(0.009)
Mayo	-0.014	-0.019*
	(0.009)	(0.010)
Meath	-0.040***	-0.043***
	(0.010)	(0.011)
Monaghan	-0.057***	-0.060***
	(0.012)	(0.013)
Offaly	-0.065***	-0.093***
	(0.010)	(0.011)
Roscommon	-0.052***	-0.071***
	(0.015)	(0.017)
Sligo	-0.059***	-0.059***
	(0.013)	(0.015)
Tipperary	-0.042***	-0.036***
	(0.008)	(0.009)
Waterford	0.003	0.008
	(0.008)	(0.009)
Westmeath	-0.057***	-0.081***
	(0.009)	(0.010)
Wexford	-0.040***	-0.042***
	(0.007)	(0.008)
Wicklow	-0.019**	-0.034***
	(0.009)	(0.010)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	-0.012***	-0.023***
	(0.004)	(0.004)

Contd.

TABLE E.7 Contd.

	June 2012[1]	June 2014[2]
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	-0.021***	-0.036***
	(0.005)	(0.006)
< €99.00	0.098***	0.034
	(0.032)	(0.033)
€100.00 - €310.00	0.007	0.018
	(0.016)	(0.018)
€310.01 - €400.00	0.026***	0.035***
	(0.010)	(0.011)
€401.00 plus	0.000	0.004
	(0.007)	(0.008)
ADA Details Unknown	0.010	0.034***
	(0.009)	(0.010)
Number of Child Dependents	-0.011***	-0.006*
	(0.003)	(0.004)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	-0.013	-0.048***
	(0.010)	(0.010)
Adult Dependent Allowance Only	0.032***	0.005
	(0.009)	(0.010)
Child Dependent Allowance Only	-0.005	-0.014
	(0.009)	(0.010)
Previous Employment History Information:		
Number of Previous Employment Episodes	0.012***	0.014***
	(0.001)	(0.001)
Duration of Previous Employment (Years)	0.002***	0.001***
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	0.003**	-0.004***
	(0.001)	(0.001)
Duration of Previous Unemployment (Years)	-0.066***	-0.064***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.008*	0.001
	(0.005)	(0.005)
Post-October 2008 Unemployment Training	-0.168***	-0.173***
	(0.003)	(0.004)
CSS Dataset Marker	-0.065***	-0.090***
	(0.004)	(0.005)
Observations	108,958	101,047
Pseudo R-squared	0.276	0.258

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[1] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.

[2] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

[3] Those who spent less than a year, or one year, on a TLO BTEA course were combined into one category because the number of individuals for each were too small to include as separate categories for estimation purposes.

[4] Those who completed their TLO BTEA course over four years and five were combined into one category because the number of individuals taking five years was too small to include as separate category for estimation purposed.

TABLE E.8 Probit Model of Exit from Unemployment to an Education, Training or Employment Placement Course for 2008 SLO BTEA Participants

	June 2012[1]	June 2014
SLO Participation	0.025***	0.061***
	(0.004)	(0.009)
Personal Characteristics:		
Male	-0.003***	-0.006***
	(0.001)	(0.001)
Age	0.001***	0.001***
	(0.000)	(0.000)
Age squared	-0.000***	-0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	-0.000	0.002
	(0.001)	(0.002)
Cohabits	-0.003***	-0.005***
	(0.001)	(0.001)
Separated	0.001	0.003
	(0.001)	(0.003)
Widowed	0.021**	0.063***
	(0.009)	(0.020)
Unknown	0.005	0.018*
	(0.005)	(0.010)
Nationality (Reference: Non-Irish)		
Irish	-0.002**	-0.006***
	(0.001)	(0.002)
Previous Occupation (Reference: Elementary)		
Clerical	0.003**	0.010***
	(0.001)	(0.003)
Skilled Trades	0.000	0.000
	(0.001)	(0.001)
Other Services	0.002*	0.003
	(0.001)	(0.002)
Sales	0.004***	0.008***
	(0.001)	(0.002)
Operatives	0.002**	0.003*
	(0.001)	(0.002)
Location (Reference: Dublin)		
Carlow	0.001	-0.002
	(0.002)	(0.004)
Cavan	0.001	0.008
	(0.002)	(0.005)
Clare	-0.001	0.001
	(0.001)	(0.003)

Contd.

TABLE E.8 Contd.

	June 2012[1]	June 2014
Location (Reference: Dublin)		
Cork	-0.000	-0.001
	(0.001)	(0.002)
Donegal	-0.004***	-0.007***
	(0.001)	(0.002)
Galway	0.003**	0.003
	(0.002)	(0.003)
Kerry	-0.001	-0.001
	(0.001)	(0.003)
Kildare	-0.001	-0.004*
	(0.001)	(0.002)
Kilkenny	0.002	-0.007**
	(0.002)	(0.003)
Laois	0.000	0.002
	(0.002)	(0.003)
Leitrim	-0.002	-0.000
	(0.002)	(0.005)
Limerick	0.000	0.004
	(0.001)	(0.003)
Longford	0.001	0.000
	(0.003)	(0.004)
Louth	0.002	0.007**
	(0.002)	(0.003)
Mayo	-0.003**	-0.001
	(0.001)	(0.003)
Meath	0.005**	0.006
	(0.002)	(0.004)
Monaghan	-0.000	-0.001
	(0.002)	(0.004)
Offaly	0.008***	0.007*
	(0.003)	(0.004)
Roscommon	0.001	-0.002
	(0.003)	(0.005)
Sligo	-0.002	-0.004
	(0.002)	(0.004)
Tipperary	0.001	0.002
	(0.002)	(0.003)
Waterford	0.002	0.002
	(0.001)	(0.002)
Westmeath	0.001	0.003
	(0.002)	(0.003)
Wexford	-0.002	-0.003
	(0.001)	(0.002)
Wicklow	-0.001	-0.003
	(0.002)	(0.003)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	0.002***	-0.001
	(0.001)	(0.001)

Contd.

TABLE E.8 Contd.

	June 2012[1]	June 2014
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	-0.001	-0.002
	(0.001)	(0.002)
< €99.00	0.001	0.003
	(0.002)	(0.005)
€100.00 - €310.00	-0.003	-0.001
	(0.007)	(0.005)
€310.01 - €400.00	0.002	0.002
	(0.002)	(0.003)
€401.00 plus	0.002	-0.001
	(0.002)	(0.002)
AD Details Unknown	-0.000	0.000
	(0.002)	(0.003)
Number of Child Dependents	-0.001**	-0.002*
	(0.001)	(0.001)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	0.002	0.002
	(0.002)	(0.003)
Adult Dependent Allowance Only	0.002	0.004
	(0.002)	(0.003)
Child Dependent Allowance Only	0.003	0.004
	(0.002)	(0.003)
Previous Employment History Information:		
Number of Previous Employment Episodes	-0.000***	-0.001
	(0.000)	(0.000)
Duration of Previous Employment (Years)	-0.000***	-0.000**
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	-0.000	-0.002***
	(0.000)	(0.000)
Duration of Previous Unemployment (Years)	-0.002***	-0.002***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.007***	0.018***
	(0.001)	(0.002)
Post -October 2008 Unemployment Training	0.066***	0.178***
	(0.003)	(0.005)
CSS Dataset Marker	0.001	-0.003
	(0.001)	(0.002)
Observations	72,664	64,540
Pseudo R-squared	0.273	0.293

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[1] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

TABLE E.9 Probit Model of Exit from Unemployment to an Education, Training or Employment Placement Course for 2008 SLO BTEA Participants by Level of Attendance

	June 2012[1]	June 2014
SLO Participation:		
< 1 Year	0.048***	0.063**
	(0.016)	(0.025)
1 Year	0.026***	0.064***
	(0.006)	(0.012)
2 Years	0.014**	0.047***
	(0.006)	(0.015)
3 Years	0.035*	
	(0.019)	
3-4 Years[2]		0.093***
		(0.035)
Personal Characteristics:		
Male	-0.003***	-0.006***
	(0.001)	(0.001)
Age	0.001***	0.001***
	(0.000)	(0.000)
Age squared	-0.000***	-0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	-0.000	0.002
	(0.001)	(0.002)
Cohabits	-0.003***	-0.005***
	(0.001)	(0.001)
Separated	0.001	0.003
	(0.001)	(0.003)
Widowed	0.021**	0.063***
	(0.009)	(0.020)
Unknown	0.005	0.019*
	(0.005)	(0.010)
Nationality (Reference: Non-Irish)		
Irish	-0.002***	-0.006***
	(0.001)	(0.002)
Previous Occupation (Reference: Elementary)		
Clerical	0.003**	0.010***
	(0.001)	(0.003)
Skilled Trades	0.000	0.000
	(0.001)	(0.001)
Other Services	0.002*	0.003
	(0.001)	(0.002)
Sales	0.004***	0.008***
	(0.001)	(0.002)

Contd.

TABLE E.9 Contd.

	June 2012[1]	June 2014
Operatives	0.002**	0.003*
	(0.001)	(0.002)
Location (Reference: Dublin)		
Carlow	0.001	-0.002
	(0.002)	(0.004)
Cavan	0.001	0.008
	(0.002)	(0.005)
Clare	-0.001	0.002
	(0.001)	(0.003)
Cork	-0.000	-0.001
	(0.001)	(0.002)
Donegal	-0.004***	-0.007***
	(0.001)	(0.002)
Galway	0.003**	0.003
	(0.002)	(0.003)
Kerry	-0.001	-0.001
	(0.001)	(0.003)
Kildare	-0.001	-0.004*
	(0.001)	(0.002)
Kilkenny	0.002	-0.007**
	(0.002)	(0.003)
Laois	0.000	0.002
	(0.002)	(0.003)
Leitrim	-0.002	-0.000
	(0.002)	(0.005)
Limerick	0.000	0.004
	(0.001)	(0.003)
Longford	0.001	0.000
	(0.003)	(0.004)
Louth	0.002	0.007**
	(0.002)	(0.003)
Mayo	-0.003**	-0.001
	(0.001)	(0.003)
Meath	0.005**	0.006
	(0.002)	(0.004)
Monaghan	-0.000	-0.001
	(0.002)	(0.004)
Offaly	0.008***	0.007*
	(0.003)	(0.004)
Roscommon	0.001	-0.002
	(0.003)	(0.005)
Sligo	-0.002	-0.004
	(0.002)	(0.004)

Contd.

TABLE E.9 Contd.

	June 2012[1]	June 2014
Location (Reference: Dublin)		
Tipperary	0.001	0.002
	(0.002)	(0.003)
Waterford	0.002	0.002
	(0.001)	(0.002)
Westmeath	0.001	0.003
	(0.002)	(0.003)
Wexford	-0.002	-0.003
	(0.001)	(0.002)
Wicklow	-0.001	-0.003
	(0.002)	(0.003)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	0.002***	-0.001
	(0.001)	(0.001)
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	-0.001	-0.002
	(0.001)	(0.002)
< €99.00	0.001	0.002
	(0.006)	(0.010)
€100.00 - €310.00	-0.003	-0.001
	(0.002)	(0.005)
€310.01 - €400.00	0.002	0.002
	(0.002)	(0.003)
€401.00 plus	0.002	-0.001
	(0.002)	(0.002)
ADA Details Unknown	-0.000	0.000
	(0.002)	(0.003)
Number of Child Dependents	-0.001**	-0.002*
	(0.001)	(0.001)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	0.003	0.002
	(0.002)	(0.003)
Adult Dependent Allowance Only	0.002	0.004
	(0.002)	(0.003)
Child Dependent Allowance Only	0.003	0.004
	(0.002)	(0.003)
Previous Employment History Information:		
Number of Previous Employment Episodes	-0.000***	-0.001
	(0.000)	(0.000)
Duration of Previous Employment (Years)	-0.000***	-0.000**
	(0.000)	(0.000)

Contd.

TABLE E.9 Contd.

	June 2012[1]	June 2014
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	-0.000	-0.002***
	(0.000)	(0.000)
Duration of Previous Unemployment (Years)	-0.002***	-0.002***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.007***	0.018***
	(0.001)	(0.002)
Post-October 2008 Unemployment Training	0.066***	0.177***
	(0.003)	(0.005)
CSS Dataset Marker	0.001	-0.002
	(0.001)	(0.002)
Observations	72,664	64,540
Pseudo R-squared	0.273	0.293

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[1] Due to lock-in issue, SLO 4-year course participants were excluded from the June 2012 analysis.

[2] Three and four year SLO BTEA level of attendance observations combined into one category as the number of individuals completing an SLO BTEA course over four years was too small to include as a separate category as the estimates produced would not be reliable.

TABLE E.10 Probit Model of Exit from Unemployment to an Education, Training or Employment Placement Course for 2008 TLO BTEA Participants

	June 2012[1]	June 2014[2]
TLO Participation	0.041***	0.097***
	(0.011)	(0.018)
Personal Characteristics:		
Male	-0.003***	-0.006***
	(0.001)	(0.001)
Age	0.001***	0.001***
	(0.000)	(0.000)
Age squared	-0.000***	-0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	-0.000	0.002
	(0.001)	(0.002)
Cohabits	-0.003***	-0.005***
	(0.001)	(0.001)
Separated	0.001	0.003
	(0.001)	(0.003)
Widowed	0.020**	0.060***
	(0.009)	(0.019)
Unknown	0.004	0.016*
	(0.004)	(0.009)
Nationality (Reference: Non-Irish)		
Irish	-0.002***	-0.006***
	(0.001)	(0.002)
Previous Occupation (Reference: Elementary)		
Clerical	0.003**	0.011***
	(0.001)	(0.003)
Skilled Trades	-0.000	-0.000
	(0.001)	(0.001)
Other Services	0.002	0.003
	(0.001)	(0.002)
Sales	0.004***	0.009***
	(0.001)	(0.003)
Operatives	0.002*	0.003*
	(0.001)	(0.002)
Location (Reference: Dublin)		
Carlow	0.002	0.000
	(0.003)	(0.004)
Cavan	0.001	0.008*
	(0.002)	(0.005)
Clare	-0.002	0.000
	(0.001)	(0.003)

Contd.

TABLE E.10 Contd.

	June 2012[1]	June 2014[2]
Location (Reference: Dublin)		
Cork	-0.000	-0.001
	(0.001)	(0.002)
Donegal	-0.004***	-0.006***
	(0.001)	(0.002)
Galway	0.003**	0.004
	(0.002)	(0.003)
Kerry	-0.001	0.001
	(0.001)	(0.003)
Kildare	-0.001	-0.003
	(0.001)	(0.002)
Kilkenny	0.001	-0.008***
	(0.002)	(0.003)
Laois	0.001	0.002
	(0.002)	(0.003)
Leitrim	-0.002	0.000
	(0.002)	(0.005)
Limerick	0.000	0.003
	(0.001)	(0.003)
Longford	0.002	0.001
	(0.003)	(0.004)
Louth	0.002	0.006**
	(0.001)	(0.003)
Mayo	-0.003**	-0.002
	(0.001)	(0.003)
Meath	0.005**	0.007*
	(0.002)	(0.004)
Monaghan	-0.000	-0.001
	(0.002)	(0.004)
Offaly	0.007***	0.007*
	(0.003)	(0.004)
Roscommon	0.001	-0.002
	(0.003)	(0.005)
Sligo	-0.002	-0.003
	(0.002)	(0.004)
Tipperary	0.002	0.003
	(0.002)	(0.003)
Waterford	0.002	0.003
	(0.001)	(0.002)
Westmeath	0.000	0.004
	(0.002)	(0.003)
Wexford	-0.002*	-0.002
	(0.001)	(0.002)

Contd.

TABLE E.10 Contd.

	June 2012[1]	June 2014[2]
Location (Reference: Dublin)		
Wicklow	-0.000	-0.003
	(0.002)	(0.003)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	0.002***	-0.001
	(0.001)	(0.001)
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	-0.001	-0.003*
	(0.001)	(0.002)
< €99.00	0.002	0.003
	(0.006)	(0.010)
€100.00 - €310.00	-0.004*	-0.003
	(0.002)	(0.005)
€310.01 - €400.00	0.002	0.002
	(0.002)	(0.003)
€401.00 plus	0.001	-0.001
	(0.001)	(0.002)
AD Details Unknown	-0.001	0.000
	(0.001)	(0.003)
Number of Child Dependents	-0.001**	-0.002*
	(0.001)	(0.001)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	0.002	0.003
	(0.002)	(0.003)
Adult Dependent Allowance Only	0.001	0.005
	(0.002)	(0.003)
Child Dependent Allowance Only	0.003	0.004
	(0.002)	(0.003)
Previous Employment History Information:		
Number of Previous Employment Episodes	-0.001***	-0.001*
	(0.000)	(0.000)
Duration of Previous Employment (Years)	-0.000***	-0.000**
	(0.000)	(0.000)
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	-0.000	-0.002***
	(0.000)	(0.000)
Duration of Previous Unemployment (Years)	-0.002***	-0.002***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.007***	0.019***
	(0.001)	(0.002)

Contd.

TABLE E.10 Contd.

	June 2012[1]	June 2014[2]
Post -October 2008 Unemployment Training	0.063***	0.174***
	(0.003)	(0.005)
CSS Dataset Marker	0.001	-0.002
	(0.001)	(0.002)
Observations	71,842	63,915
Pseudo R-squared	0.278	0.297

Source: Authors' analysis.

Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[1] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.

[2] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

TABLE E.11 Probit Model of Exit to Education, Training or Employment Placement Course for 2008 TLO BTEA Participants by Level of Attendance

	June 2012[1]	June 2014[2]
TLO Participation:		
Up to and including 1 Year[3]	0.055**	0.099***
	(0.022)	(0.038)
2 Years	0.071***	0.162***
	(0.026)	(0.047)
3 Years	0.012	0.058*
	(0.010)	(0.030)
4-5 Years[4]		0.085***
		(0.028)
Personal Characteristics:		
Male	-0.003***	-0.006***
	(0.001)	(0.001)
Age	0.001***	0.001***
	(0.000)	(0.000)
Age squared	-0.000***	-0.000***
	(0.000)	(0.000)
Marital Status (Reference: Single)		
Married	-0.000	0.002
	(0.001)	(0.002)
Cohabits	-0.003***	-0.005***
	(0.001)	(0.001)
Separated	0.001	0.003
	(0.001)	(0.003)
Widowed	0.020**	0.060***
	(0.009)	(0.019)
Unknown	0.004	0.016*
	(0.004)	(0.009)
Nationality (Reference: Non-Irish)		
Irish	-0.002***	-0.006***
	(0.001)	(0.002)
Previous Occupation (Reference: Elementary)		
Clerical	0.003**	0.011***
	(0.001)	(0.003)
Skilled Trades	-0.000	-0.000
	(0.001)	(0.001)
Other Services	0.002	0.003
	(0.001)	(0.002)
Sales	0.004***	0.009***
	(0.001)	(0.003)
Operatives	0.002*	0.003*
	(0.001)	(0.002)

Contd.

TABLE E.11 Contd.

	June 2012[1]	June 2014[2]
Location (Reference: Dublin)		
Carlow	0.002	0.000
	(0.003)	(0.004)
Cavan	0.001	0.008*
	(0.002)	(0.005)
Clare	-0.002	0.000
	(0.001)	(0.003)
Cork	-0.000	-0.001
	(0.001)	(0.002)
Donegal	-0.004***	-0.006***
	(0.001)	(0.002)
Galway	0.004**	0.004
	(0.002)	(0.003)
Kerry	-0.001	0.001
	(0.001)	(0.003)
Kildare	-0.001	-0.003
	(0.001)	(0.002)
Kilkenny	0.001	-0.008***
	(0.002)	(0.003)
Laois	0.001	0.002
	(0.002)	(0.003)
Leitrim	-0.002	0.000
	(0.002)	(0.005)
Limerick	0.000	0.003
	(0.001)	(0.003)
Longford	0.002	0.001
	(0.003)	(0.004)
Louth	0.002	0.006**
	(0.001)	(0.003)
Mayo	-0.003**	-0.002
	(0.001)	(0.003)
Meath	0.005**	0.007*
	(0.002)	(0.004)
Monaghan	-0.000	-0.001
	(0.002)	(0.004)
Offaly	0.007***	0.007*
	(0.003)	(0.004)
Roscommon	0.001	-0.002
	(0.003)	(0.005)
Sligo	-0.002	-0.004
	(0.002)	(0.004)

Contd.

TABLE E.11 Contd.

	June 2012[1]	June 2014[2]
Location (Reference: Dublin)		
Tipperary	0.002	0.003
	(0.002)	(0.003)
Waterford	0.002	0.003
	(0.001)	(0.002)
Westmeath	0.000	0.004
	(0.002)	(0.003)
Wexford	-0.002*	-0.002
	(0.001)	(0.002)
Wicklow	-0.000	-0.003
	(0.002)	(0.003)
Benefit Type Information:		
Jobseeker's Payment (Reference: Jobseeker's Benefit)		
Jobseeker's Allowance	0.002***	-0.001
	(0.001)	(0.001)
Spousal Earnings to Qualify for an Adult Dependent (AD) Allowance (Reference: Nil)		
Not Applicable	-0.001	-0.003*
	(0.001)	(0.002)
< €99.00	0.002	0.003
	(0.006)	(0.010)
€100.00 - €310.00	-0.004*	-0.003
	(0.002)	(0.005)
€310.01 - €400.00	0.002	0.002
	(0.002)	(0.003)
€401.00 plus	0.001	-0.001
	(0.001)	(0.002)
ADA Details Unknown	-0.001	0.000
	(0.001)	(0.003)
Number of Child Dependents	-0.001**	-0.002*
	(0.001)	(0.001)
Family Type (Reference: Neither Type of Allowance)		
Both Adult and Child Dependent Allowances	0.002	0.003
	(0.002)	(0.003)
Adult Dependent Allowance Only	0.001	0.005
	(0.002)	(0.003)
Child Dependent Allowance Only	0.003	0.004
	(0.002)	(0.003)
Previous Employment History Information:		
Number of Previous Employment Episodes	-0.001***	-0.001*
	(0.000)	(0.000)
Duration of Previous Employment (Years)	-0.000***	-0.000**
	(0.000)	(0.000)

Contd.

TABLE E.11 Contd.

	June 2012[1]	June 2014[2]
Previous Unemployment History Information:		
Number of Previous Unemployment Episodes	-0.000	-0.002***
	(0.000)	(0.000)
Duration of Previous Unemployment (Years)	-0.002***	-0.002***
	(0.000)	(0.000)
Unemployment Training History Information:		
Pre-October 2008 Unemployment Training	0.007***	0.019***
	(0.001)	(0.002)
Post-October 2008 Unemployment Training	0.063***	0.174***
	(0.003)	(0.005)
CSS Dataset Marker	0.001	-0.002
	(0.001)	(0.002)
Observations	71,842	63,915
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Notes: Standard errors in parentheses; Level of Significance: *** p<0.01 (1%), ** p<0.05 (5%), * p<0.1 (10%).

[1] Due to lock-in issue, SLO 4-6 year course participants were excluded from the June 2012 analysis.

[2] Due to lock-in issue, TLO 6-year course participants were excluded from the June 2014 analysis.

[3] Those who spent less than a year, or one year, on a TLO BTEA course were combined into one category because the number of individuals for each were too small to include as separate categories for estimation purposes.

[4] Those who completed their TLO BTEA course over four years and five were combined into one category because the number of individuals taking five years was too small to include as separate category for estimation purposed.

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