JobPath_report

May 27, 2020

1 Introduction

This evaluation of the JobPath service is being carried out in the context of a partnership between the Statistics and Business Intelligence Unit of the Department of Employment Affairs and Social Protection and the Directorate for Employment, Labour and Social Affairs of the Organisation for Economic Co-operation and Development (OECD). The final outputs of the project will be:

1. the publication of a DEASP report,
2. the publication of a joint DEASP-OECD report with methodological extensions and background as well as additional results, and
3. regular quarterly publication of updated outcome statistics for JobPath participants using the same methodology as in the published reports.

In this evaluation, we use cluster analysis to segment the Live Register into seven groups of people with similar labour market histories, and then compare the outcomes of those who received the JobPath service with other eligible people within each cluster.

The evaluation examines the labour market history of JobPath participants and compares them to people who did not receive the JobPath service, selecting only those of the latter group that closely resemble the former. This means the two groups are extremely similar but for one factor – one group received the JobPath service. By comparing the outcomes of the two groups at later stages, we can estimate the impact on jobseekers of receiving the JobPath service.

JobPath is the first intensive job-search assistance service provided to long-term unemployed people where payments are directly related to employment outcomes achieved. As well as providing evidence on whether JobPath enhanced the labour market outcomes of long-term unemployed people, this evaluation will provide an insight into the broader question of whether intensive case management of long-term unemployed people works, by comparing outcomes of those undergoing intensive case management and those who did not receive a similar service.

This paper analyses the impact of JobPath on improving the employment outcomes of longterm unemployed people for those who participated in Q1 2016. The measures by which we assess the employment outcomes to have changed are twofold:

- the amount of money earned in earnings from employment compared to the amount of money received in social welfare payments in the 2017 calendar year
- the number of weeks of insurable employment in the 2017 calendar year

These measurements of labour market outcomes are distinct from the job sustainment fee paid to JobPath providers (see section 3), which is not considered in this analysis. Job sustainment fees are

paid by the Department of Employment Affairs and Social Protection to the JobPath contractors only under certain circumstances. Although these fees are indicative of positive outcomes for the individuals concerned, they are not, of themselves an objective indicator of an enhanced labour market outcome compared to other individuals who did not participate in JobPath. This evaluation seeks to answer the question 'has JobPath had a differential impact on jobseeker employment outcomes.

The paper is structured as follows: Section 1 outlines the social protection system, the extent of its coverage in Ireland, as well as providing an overview of the Department of Employment Affairs and Social Protection (IS IT INTRODUCTION OR WILL THERE BE A NEW SECTION), its contracted services, and the policy background as set out in Pathways to Work; Section 2 describes the labour market context of this evaluation; Section 3 explains how JobPath works and the volume of referrals to the service; Section 4 reviews the relevant literature; Section 5 describes the data used for the evaluation; Section 6 presents the evaluation approach; Section 7 reports on labour market outcomes; and Section 8 provides the policy implications and future directions.

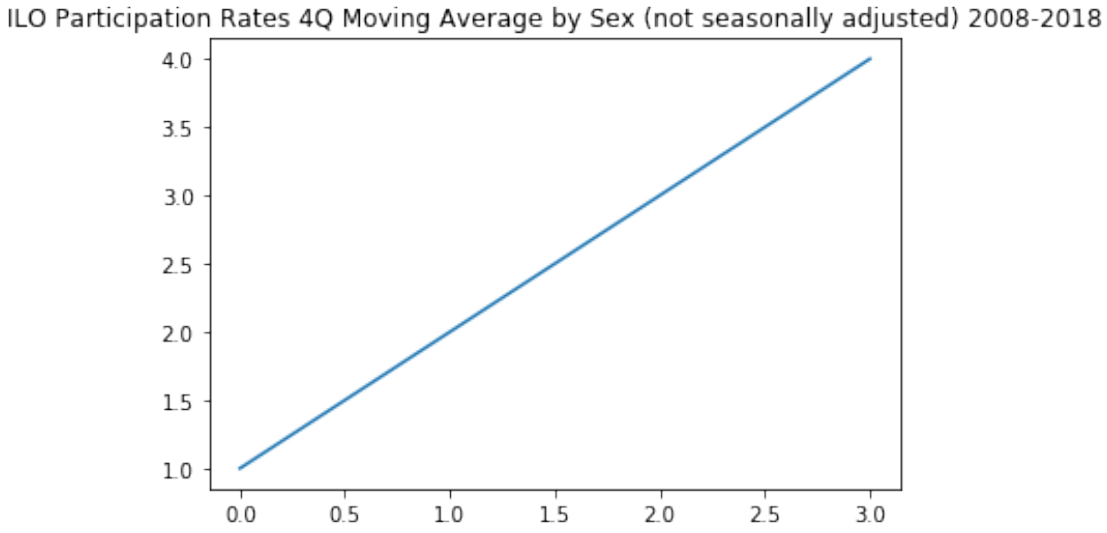
2 Irish Labour Market Context

An essential component of deriving useful policy lessons from an evaluation of a labour market programme is interpreting outcomes in light of the employment context. This section presents a number of indicators that set the context for employment outcomes for those availing of the JobPath service, using data on employment and unemployment. This section gives an illustration of the Irish economy in the crisis and post-crisis period, with the period in which JobPath operates (mid-2015 onwards) shaded in all figures.

2.1 Labour Force Participation

The labour force participation rate measures those in the labour force (people working or seeking work) relative to the entire working age population (those aged 15 years or over). Ireland's overall participation rate stood at 67.4% in the third quarter of 2007 and dipped to a crisis low of 61.1% in the first quarter of 2013. Participation now stands at 62.3%, as of the second quarter of 2018, below the level seen prior to the financial crisis.

The crisis was most severe for men in the labour force, with participation falling from a pre-crisis high of 77.2% in 2006 Q3 to a low point of 68.3% in the first quarter of 2012. The male participation rate has been relatively immobile in recent years, sitting at 69% as of the third quarter of 2018. I THINK THIS GRAPH SHOULD NOT BE BY SEX BUT SHOW A GENERAL TREND. IF NOT BY SEX, THIS PARAGRPAH NEEDS TO BE DELETED.

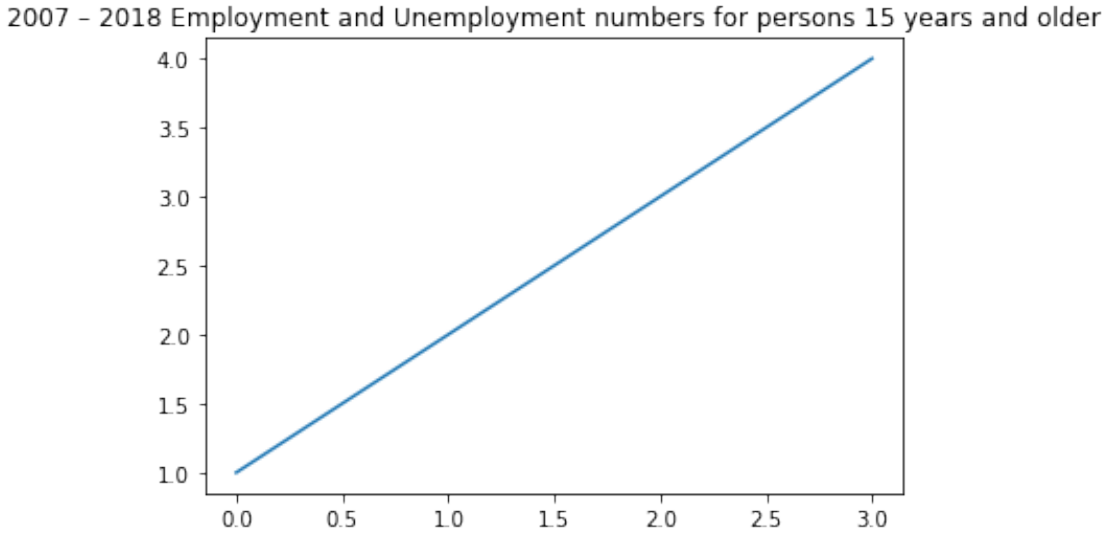


Female participation started from a much lower base, with a pre-crisis high of 57.7% in the third quarter of 2007. It fell slightly at the onset of the crisis but has remained constant in recent years, staying within the range of 54.2% to 56.1% from 2010 to present. IF WE MAKE THE GRAPH WITHOUT SEX, THIS PARAGRAPH NEEDS TO BE DELETED

The vacancy rate – the proportion of unfilled job vacancies in an economy – tells a similar story of continued improvement in labour market prospects. Looking at all economic sectors in Ireland, the vacancy rate in Ireland was at its lowest from Q3 to Q4 of 2009, 0.3%. From the end of 2009, the vacancy rate increased steadily and, since 2015 Q1, has remained in the range of 0.9%-1.2%. Ireland's Q3 2018 vacancy rate of 1.1% is below the EU average of 2.2% [Eurostat, 2018].

2.2 Employment and Unemployment

To date, JobPath has operated in a labour market of continuing improvement in employment prospects. After the post-crisis drop in employment levels, reaching a low of 1,863,500 in Q1 of 2012, total employment has continued on the path to recovery in recent years. Figures for Q3 of 2018 put overall employment at 2,273,500, slightly higher than the pre-crisis high of 2,252,500 (Q3 of 2007).



Although the absolute value for the number of people employment is higher, the employment rate, which measures proportion of the working age population in employment, has yet to return to previous highs. Q3 2007, represented the pre-crisis high for the Irish employment rate (72.5%). During the crisis, the employment rate reached its lowest point in Q1 2012, dropping to 59.3%. The recovery in the employment rate has continued since then, most recently measuring 69.1% in Q3 of 2018.

2.3 Earnings and Vacancy Rates

In addition to the estimate of the number of people in employment or unemployment at a point in time and the count of unemployment benefit recipients, average annual earnings is another indicator of demand for labour. A reduction in average earnings occurred in the aftermath of the crisis, with a small increase seen in 2012, before falling slightly again in 2013. However, there was a significant recovery in average earnings from 2014 onwards. In the period 2014 to 2017, nominal growth in average annual earnings was 2.4%, representing an increase from €36,046 to €37,646, with average annual earnings growing by 1.97% in 2017. Average annual earnings for all workers are presented in Table 3 below.

Recent increases in annual earnings have been experienced by both full-time and part-time workers. These two groups saw a fall in average earnings in 2010 and 2011, before increases since then have been moderate. Both categories have seen consistent gains from 2014 to present. In the ten-year period from 2008 to 2017, full-time and part-time workers experienced nominal growth of 5.02% and 10.27% respectively in average earnings. These increases have not been eroded by inflation, as evidenced in the tables below, which shows earnings at, or slightly above, the levels of inflation from 2013-2017.

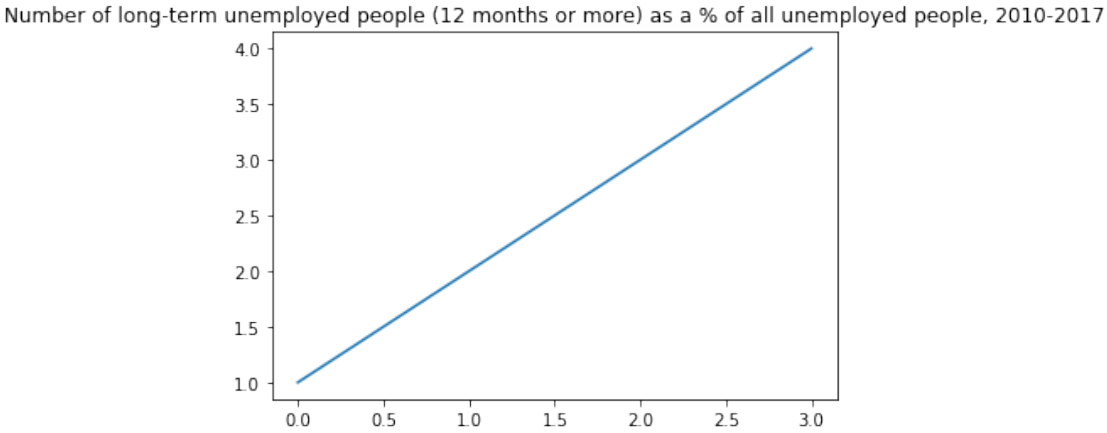
	Annual Earnings Percentage Change	col2
0	1	3
1	2	4

	Table 4: Average CPI Percentage Change	col2
0	1	3
1	2	4

2.4 Profile of Long-Term Unemployed Jobseekers

Duration on the Live Register (i.e., unemployment CHECK WITH HUGH IF THIS IS TRUE) is a salient factor for this evaluation, both in terms of the effects of long-term unemployment on likely re-entry to employment and as a qualifying criterion for referral to the JobPath service.

Following the initial onset of the economic crisis, widespread job losses led to an increase in short-term unemployment. This temporarily reduced the share of long-term unemployment (unemployed for one year or more). However, the absence of an immediate recovery meant a large proportion of the first wave of unemployed people became long-term unemployed. Long-term unemployment rose sharply in the recession, with the share of unemployed people made up by the long-term unemployed increasing from just under 25% to over 60% in 2012. The number of long-term unemployed people, as a percentage of all unemployed people, is now at 34.9% as of Q3 2018, having fallen from a high point of 61.9% in Q1 2011. fig **??**



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The share of long- term unemployment, or the number of people unemployed for one year or more as a percentage of the total labour force (aged 15-74), increased consistently from the onset of the crisis and reached a peak of 9.8% in Q1 2012. The increase in long-term unemployment applied to both men and women. In Q1 2007, the share of long-term unemployment stood at 1.6% and 1% for men and women respectively, dramatically increasing to 12.3% and 6.7% by Q1 2012. Since then, the share of long-term unemployment has been on a downward trend, reaching 2.07% in Q3 of this year (the male and female values are 2.23% and 1.90% respectively). SIMILAR TO ABOVE. I BELIEVE NO NEED FOR THE SEX DISCUSSION. THIS PARAGPRAH NEEDS TO BE DELETED

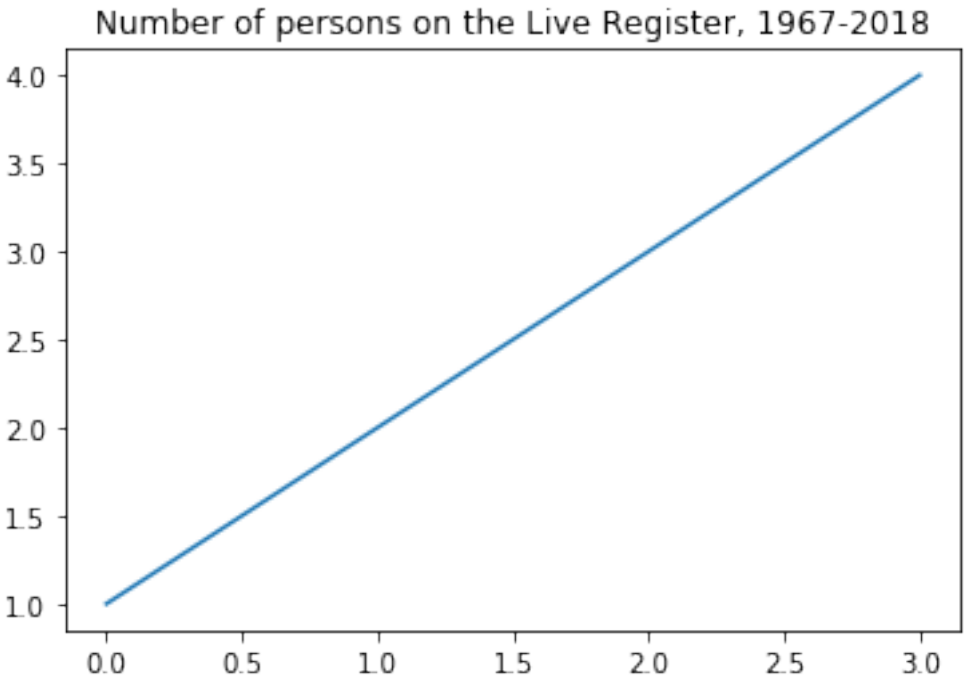
The persistence rate refers to the rate at which short-term unemployed people become long term unemployed. This is a measure of the extent to which intervention can prevent the slide from short-term unemployment (which includes frictional unemployment as a result of churn in the workforce) into the more damaging long-term unemployment. Ireland's persistence rate was 30.1% at the end of March 2013 and has seen consistent reductions since Q3 2013, reaching 24.2% in Q1 2018. This continued contraction of the persistence rate further indicates the continuing recovery of the Irish labour market. table **??**

	Persistence Rates (12 months rolling average)	col2
0	1	3
1	2	4

2.5 Summary

This section outlines the labour market context for the introduction of JobPath, outlining the dramatic collapse in employment that occurred through 2009-2011. A share of those who lost jobs in this period became long-term unemployed in the years that followed. The response of the PES for this cohort included the contracted provision of employment services through the JobPath model. The JobPath service has operated in a period of improving employment prospects. While the long-term unemployed remain at a disadvantage compared to the short-term unemployed, the period since mid-2015 has seen increased demand for labour. Under these favourable economic circumstances, the extent to which those who participated in JobPath fared better or worse than those who did not receive the service is the subject matter of this evaluation.

While this section recounts labour market developments in the years preceding the introduction of JobPath, a broader view of the Irish labour market shows the rapid increase in the number of people seeking unemployment payments from 2009 was not an isolated incident. As a small open economy, Ireland is subject to the effects of the global economic cycle. Although the most recent recession was deeper and more damaging than previous recessions, Figure 10 shows a history of volatility in the number of people on the Live Register.



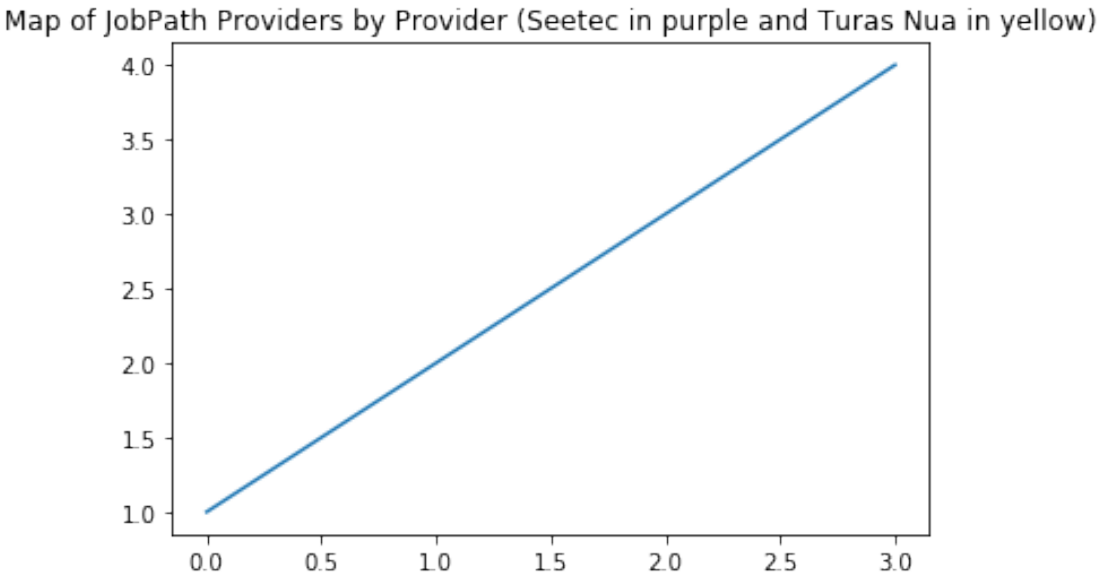
Responding to these shocks, and preventing that slide into long-term unemployment, is part of the function of the Irish PES. The next section outlines one of the approaches of the PES to accessing additional capacity to address rapid increases in the number of jobseekers needing its services.

3 JobPath: Referral and Operation

3.1 The JobPath Service

This section describes how JobPath works as part of the Irish Public Employment Service, outlines the scope and scale of JobPath and provides statistics on referrals over the period of operation to date, 2015-2018. It also illustrates the journey of JobPath referrals (including temporary pauses and cancellations) in 2016 and 2017, the two years for which we have full year data.

On 20 July 2015 the roll-out of JobPath began, with Seetec and Turas Nua assigned to two contract areas based on the divisional structure of the Department, as seen in Figure 11 below (with Seetec covering the northern divisions and Turas Nua the southern divisions). JobPath services are provided through a network of offices in 90 locations across the country, with Seetec operating in 49 locations and Turas Nua in 41 offices (see Table 33 in appendix). The 90 service delivery locations include 57 full-time locations, 12 part-time locations, and 21 outreach offices.



The overall cost of JobPath is determined by the number of people who participate in the programme and, for those who find employment, the duration they remain in employment. Contractors are paid an initial referral fee and further payments are made on a sliding scale when jobseekers remain in employment for 13, 26, 39, or 52 weeks once the contractors can verify the employment duration with the co-operation of the jobseeker. This structure aims to reward sustainable employment where the client remains in employment for at least 12 months. Table 6 below shows how JobPath providers can potentially receive €3,718 per client. In practice, the progression rate to sustained employment for long-term unemployed people means the average cost per JobPath client is currently €780. This average cost compares favourably to costs of other forms of activation such as LES, Job Clubs and Intreo, although exact cost comparisons can be difficult to quantify, particularly for Intreo. The total amount claimed in fees by the two companies in 2015 was €1.2 million, in 2016 was €28.6 million and in 2017 was €58.5 million.

	Average potential payment per JobPath Participant	col2
0	1	3
1	2	4

These two contractors work with jobseekers referred by the Department of Employment Affairs and Social Protection to provide job coaching and advisory services. Participants on JobPath receive intensive individual support from the contracted providers to help them address barriers to employment and to assist them in finding jobs. During this time, jobseekers have access to a personal advisor who works with them over two phases. In the first phase, of 12 months duration, the personal advisor provides practical assistance in searching, preparing for, securing and sustaining employment.

The second phase starts if the jobseeker is successful in finding work and the personal advisor continues to work with the jobseeker for a further period of up to 12 months. In addition to these two phases, jobseekers may also undertake training while on JobPath and this may extend the engagement period for up to a further six months.

JobPath contractors also provide a free service for employers by means of dedicated recruitment and initial training support. They will work with the Department and with each other to ensure that a co-ordinated approach is adopted regarding engagement with employers. In addition, in-work support for jobseekers is provided, especially during the critical first few weeks, to ensure that people have the best chance of making the transition from unemployment to employment.

Once jobseekers start JobPath, they will receive the following services:

- Assessment of client skills, competencies, and aptitudes,
- Development of a Personal Progression Plan (PPP) for each client and the review of this plan on regular basis,
- Assistance with job-search,
- Development of the jobseeker's curriculum vitae,
- Development of job interview skills,
- Training, education, and employment experience up to 26 weeks
- Support in the transition to employment, including a period of "in-employment" guidance/counselling,
- Access to computers, the internet, and other facilities to aid clients in their search for employment, with support on how to use these tools,
- Supports to develop key skills to assist clients to sustain employment, e.g. team working, organisation and time management skills,
- Support to deal with other issues that may make it harder for clients to find sustain employment, for example, support with managing a health/disability related condition or advice on managing finances,
- Other services or supports to enhance the client's prospects of securing sustainable employment.

After referral, an initial one-to-one meeting is held with a personal advisor. Clients and personal advisors prepare a personal progression plan covering:

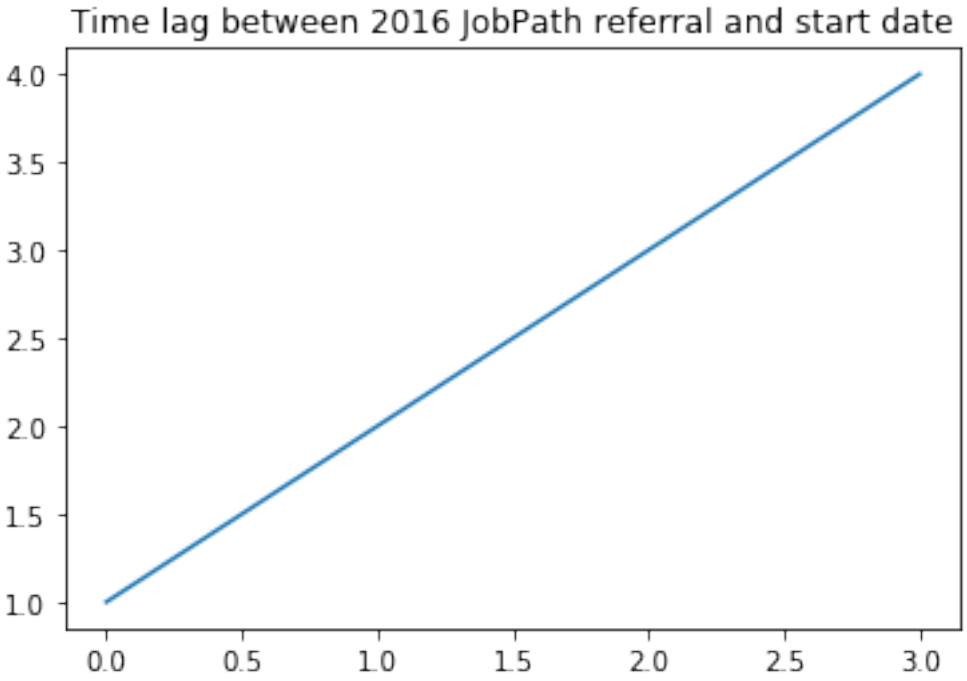
- Contact information of client and advisor,
- Details of the client's skills, competencies, and aptitudes,
- Fields of work that are appropriate for the client,
- Barriers to employment facing the client and the agreed actions to overcome such barriers.
- The client's job/employment goals,
- An agreed set of skills training, education, and development goals and actions,
- An agreed set of potential employment related experience interventions,
- All actions to be taken by the client during the first 13 week in-employment support period.

3.2 Referral to JobPath

Referrals to JobPath come from the long-term unemployed cohort of the jobseeker population. Within the JobPath contract, a provision is also made to select unemployed people who are at high risk of long-term unemployment. For the purpose of JobPath selection, all long-term unemployed jobseekers on the Live Register, aged between 18 and 61 years old inclusive, are categorized into groups based on duration of unemployment (i.e. 1-2 years, 2-3 years, etc.). Selection for referral to JobPath is by stratified random sampling using the categories above. In addition to ensuring equity in the selection, the objective of this process is to guarantee that people referred to JobPath are representative of the long-term unemployed people on the Live Register.

	The number of jobseekers referred to JobPath	col2
0	1	3
1	2	4

Table 7 shows the number of jobseekers referred to the programme (including duplicate referrals)[1], from July 2015 to September 2018, by quarter, contractor and length of time on the Live Register. Shortly after receiving notification from the Department of referral to JobPath, jobseekers begin engagement with the JobPath provider. For the vast majority of jobseekers referred to JobPath, there is a short lag between initial notification of referral to JobPath and commencement (the client's interview date), which is the first direct engagement with JobPath (see Figure 12).[2] The same information for 2017 is in the appendix. Figure 13 and Figure 14 below outline what can happen after a jobseeker is referred to JobPath – the charts refer to 2016 and 2017, the years for which full year data are available



In total, 76,409 jobseekers were referred to JobPath in 2016, with 45,654 of those completing the programme (59.7% of those referred). The completed status can refer to two separate groups of clients. First, it applies to anyone who has completed phase 1 (the initial minimum one-year period of JobPath engagement) but remains on the Live Register. Second, jobseekers referred to JobPath who secure employment after working with the provider progress to phase 2, which is the "in work support" phase of JobPath. The JobPath service provider will continue to offer support to the client until they complete 52 weeks in employment, at which point they will have completed phase

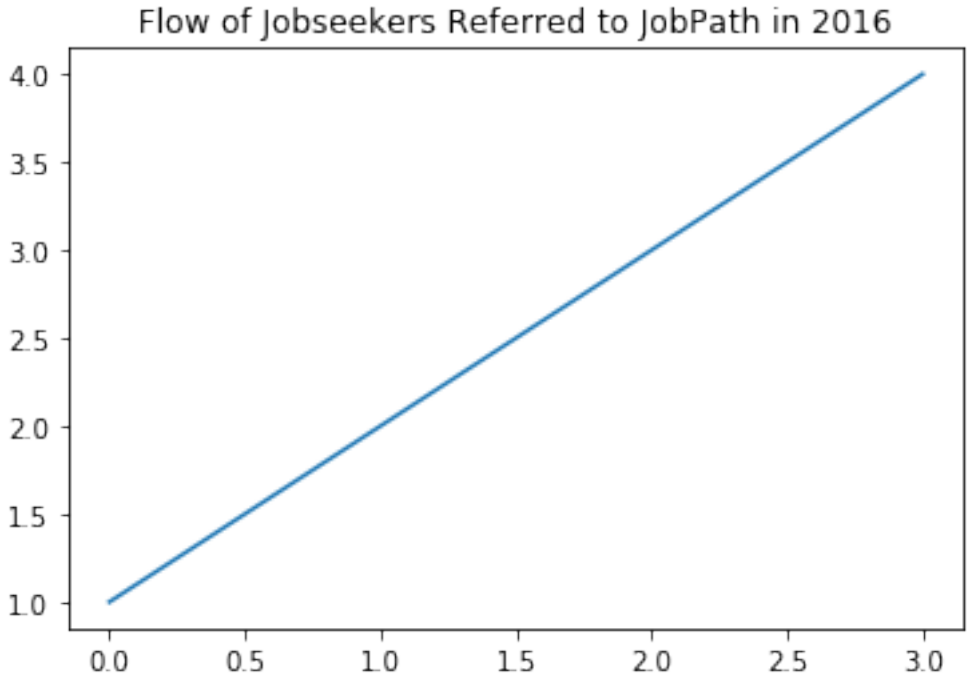
[1] A jobseeker whose referral is cancelled by the Department as a result of no longer meeting the eligibility criteria for participation with the service, may be referred at a later date should their circumstances change and they become eligible for referral again.

[2] This report evaluates the outcomes of those who were engaged with JobPath; future updates will also examine the impact of being referred to JobPath for those who were referred but did not commence the programme.

2 of JobPath. Therefore, the 'started (but not yet completed)' status includes people who have completed phase 1 of JobPath and are in employment and still in phase 2.

A PARAGRAPH ABOUT NON-COMPLIANCE - When jobseekers are referred to JobPath, they have to participate in the programme unless they have a valid reason such as health problems or parental leave. People who are referred but do not attend the programme face a benefit sanction. Those who do not meet with their personal advisors XX days after the referral cannot receive weekly unemployment insurance until they attend the programme. This mechanism ensures (physical) participation in the programme. However, if jobseekers fail to do things that they should do (e.g., preparing a CV, looking for jobs, going to interviews), there is no punishment mechanism. NEEDS TO BE CHANGED Like many other job-search assistance programmes in various countries, this is a shortcoming to keep in mind.[3]

When jobseekers are referred to JobPath, they do not always progress directly to starting the programme. Some of those referrals may have their referral paused before starting (13 in 2016) for a variety of reasons; including health and maternity reasons. Some jobseekers may have the referral cancelled by the Department before starting, (7,970 jobseekers or 10.4% of total referrals). The main reasons for these cancellations can be seen in Figure 13 and Figure 14, with the category of "Others" including people not yet being ready for JobPath activation and those whose status is "No Longer in Payment", meaning the claim has been closed and no closure reason identified.



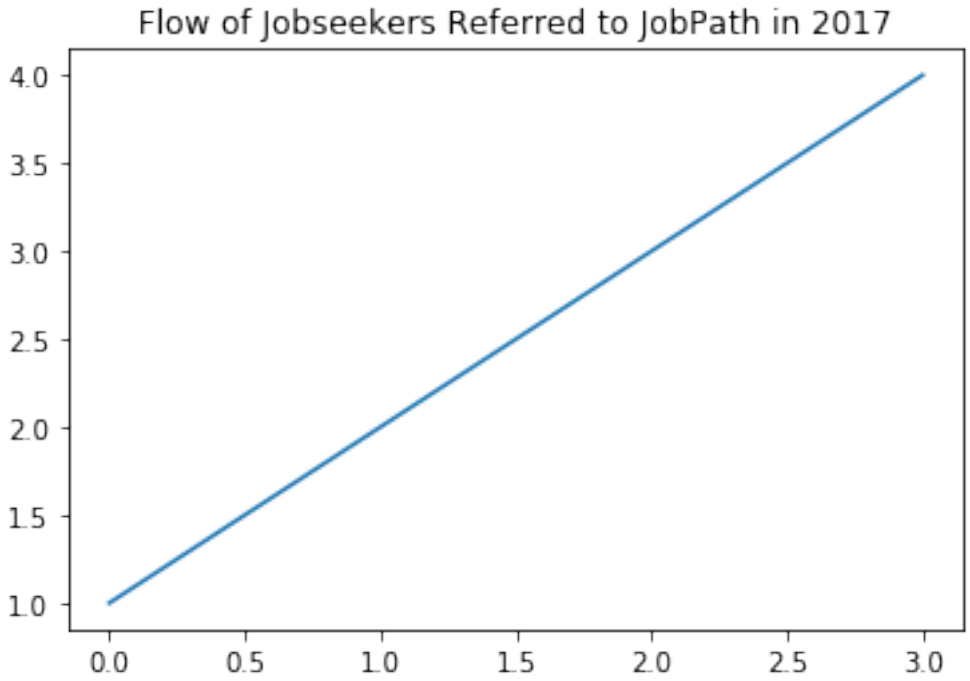
Among those who were cancelled before starting JobPath, 3,544 (43.59%) can be classified as "Claim Closed". Claim Closed can be broken down into two different types:

[3]People may not follow the rules when they attend JobPath. But, there are such people among those who receive assistance from public services. Since the allocation to JobPath is random, this issue (i.e., not following the rules such as preparing a CV does not create a concern for the sake of this evaluation.

- Claim Closed (Not in Employment),
- Claim Closed (To Employment Pre-Start of Programme).

When those referred to JobPath close their Jobseeker's Allowance or Jobseeker's Benefit claims for any reason other than starting a job, such as moving to another payment stream such as Disability Allowance) they are placed in the "Not in Employment" category. Where jobseekers start work prior to JobPath registration or the first interview with the JobPath provider, they are placed in the "Employment Pre-Registration" category. JobPath providers do not receive any fees in respect of people who commence employment before registering with the service.

From those referred in 2016, a total of 65,868 started JobPath (86.2% of those referred). However, a variety of factors can lead to jobseekers not completing the programme. Some 91 of those referred had their referral paused after starting. As is the case for those who were paused before starting, these people can resume the programme when ready. Some 8,514 jobseekers had their referral cancelled after starting, the reasons for which are outlined above. Finally, 11,609 people in 2016 started on JobPath, but had yet to complete it by year end.



In the 2017 calendar year, 88,335 people were referred to the programme. Some 5,494 jobseekers were referred, have not cancelled or paused and were yet to start by year-end, with 87 jobseekers pausing before starting and 8,052 cancelling before starting. Of those who cancelled before starting, the largest proportion (43.57%) came from those with a closed claim.

In 2017, a total of 74,702 jobseekers started on JobPath. After starting on JobPath, 7,402 people had their engagement cancelled and 1,088 people paused. Some 41,552 of those who started JobPath are still receiving the service, but have not yet completed, and 24,660 jobseekers referred to JobPath within the calendar year of 2017 completed the programme.

There are two ways in which people may be referred to JobPath multiple times. First, if a jobseeker has completed a year with the JobPath service continues to meet the criteria for long-term unemployment and is not engaged in other activation supports and services, they become eligible for selection for a second period of activation with the JobPath service after four to six months. Second, if a jobseeker has the referral cancelled by the Department as a result of no longer meeting the eligibility criteria for participation with the service, they may be referred again at a later date should their circumstances change and they become eligible for referral again.

4 Literature Review

To understand how to frame the JobPath evaluation, this section sets out how other research has addressed the challenges of evaluation and what techniques may assist us in coming to a judgment on the impact of JobPath. This section outlines other studies of interest where:

- The research question is what assistance is effective in helping unemployed people (particularly long-term) return to employment
- The subject of the evaluation is a contracted public employment service – much of the research on this topic compares simultaneous public and private provision of employments services, which is not directly relevant to Ireland.
- The means of overcoming the challenges of evaluation employs some form of cluster analysis to differentiate between different groups or addresses the issue of a dynamic treatment environment, with multiple successive treatment periods and repeated selections of treatment groups.
- The policy context of the evaluation is the Pathways to Work 2016-2020 strategy or the dataset used is the Jobseekers Longitudinal Dataset.

Combined, these topics demonstrate the complexity associated with the evaluation. The published research summarised here underpins the methodology that was developed and applied in this case.

4.1 Which Employment Programmes Work?

The specific barriers to employment faced by the long-term unemployed are addressed in a number of papers and available results were summarised in the OECD (2015). Card et al. (2017) conduct a meta-analysis of recent studies of active labour market programmes, finding average impacts are close to zero in the short run but become more positive two to three years after completion. The meta-analysis also points to the ideal measurement time, with impact varying by type of programme, and finding larger impacts for participants who enter from long-term unemployment. They also find active labour market programmes more likely to show positive impacts in a recession.

Spermann (2015) gives an overview of steps Germany has taken to respond to those who are long-term unemployed and offers a differentiated three-pillar approach centred on preventing and reducing long term unemployment. The pillars are as follows:

- preventing unemployment, beginning with quality education, good written and spoken language skills, and investment in vocational training.
- minimising short-term unemployment from turning into long-term, specifically using professional competency diagnostics to make jobseekers' strengths more appropriate to the labour

market.

- maximising outflow to employment and education through realistic target setting.

Spermann (2015) stresses the importance of ensuring that target and goal setting reflects jobseekers' needs and abilities. This involves allowing multiple work activities, such as employment, training, social integration, as valid targets that will eventually lead to employment rather than solely focusing on immediate job placement. While Spermann stresses the importance of these three pillars for responding to long-term unemployment, he notes that without an increase in case managers and investment in high quality training, activation measures suggested by these pillars will not be successful. Overall, Spermann argues that an increase in better trained case managers paired with taking steps to deal with the structural causes of long-term unemployment (health, addiction, lack of skills, etc.) are imperative to implement the three pillars of differentiated activation.

Nie and Struby (2011) examine data for 20 OECD countries from 1998-2008 and use a regression model to compare the impact of passive and active labour market programmes, concluding that training and job-search assistance were more effective in reducing unemployment than other ALMPs.

Hamilton (2002) examines the effect of 11 mandatory welfare-to-work programmes across the U.S, finding employment-focused programmes more effective than education and training.

Kelly et al. (2011) examine evidence from a number of international studies and report that job-search assistance services appeared to have positive impacts, particularly when linked to payment sanctions. It also identified apparent deficiencies in the Irish services (linked to the separation of FÁS and the then Department of Social Protection) and concluded that the evidence in respect of the impact of training programmes was mixed. Specifically, short-term job specific training and job-search training appear to have positive impacts, while longer term general training is associated with negative impacts. With respect to state employment schemes such as Community Employment, the evidence indicates participation in such schemes is associated with an increased risk of long-term unemployment.

4.2 Evaluating Contracted Public Employment Services

This section explores the breadth of research conducted on contracted Public Employment Services and its impacts in a variety of countries and institutional settings.

4.2.1 Characteristics of Outsourced Programmes

Governments have outsourced employment programmes, especially in job-search assistance form, since the late 1990s and beginnings of 2000s (Behagel et al. 2014). In general, companies or enterprises provide individual counselling about how to search and apply for jobs, prepare for interviews, and offer training that will increase the prospectus of employment. These programmes are generally implemented in economically developed countries such as the Netherlands, Sweden, and the US.

Outsourced programmes mostly target hard-to-place long-term unemployed jobseekers. However, the criteria to participate in varies by programme. For example, while in Germany individuals who were unemployed for at least four months attended in a job-search assistance programme (Krug and

Stephan 2016), for a similar programme in Belgium, people who were unemployed for at least 21 months were invited to participate in (Cockx and Baert 2015). Moreover, some programmes further limit the criteria of inclusion than just long-term unemployment and focus on more disadvantaged jobseekers. For example, in Sweden, a contracted programme focused on disabled with impaired capacity, immigrants who are unemployed for at least 6 months, and adolescents who are under 25 years with an unemployment spell of at least three months (Bennmarker et al. 2013). In addition, some programmes are aimed at groups that are not traditionally unemployed and those which public services have limited experience with. For instance, in Denmark, a job-search assistance programme targeted highly educated unemployed individuals (Rehwald et al. 2017).

Programmes vary in terms of spatial coverage. Some programmes are implemented in a small portion of the country as seen in Switzerland—job-search assistance programme only in Geneva—(Cottier et al. 2015)—and France—a programme effective in only four regions out of 22—(Behagel et al. 2014). On the other hand, some programmes are implemented in the whole country as observed in the programme aimed at highly-educated unemployed jobseekers in Denmark (Rehwald et al. 2017).

Another aspect that outsourced programmes vary is to whom they are contracted. Programmes can be contracted to one company or enterprise (e.g., Switzerland (Cottier et al. 2015)), two organizations (e.g., Germany (Krug and Stephan 2016)), or multiple providers (e.g., Belgium (Cockx and Baert 2015)). In addition, programmes can be contracted to for-profit firms (e.g., France (Behagel et al. 2014)), non-profit companies (e.g., Switzerland (Cottier et al. 2015)), or a mixture of them (e.g., Belgium (Cockx and Baert 2015)).

The design of outsourced programmes is similar to each other. Payment to private companies is done in two installments. The first is a fixed payment after the referral of an unemployed individual to the company and the second is after a certain time of employment of the person who is referred to the programme. The split of payment changes by programme. For example, in Denmark, following the referral, only 25% of the total amount was paid (Rehwald et al. 2017), whereas, in Belgium, this amount was 70%. Conditioning a large amount of payment on successful employment has advantages and disadvantages. If companies are paid after employment, they will have incentives to place jobseekers in employment. However, the quality of jobs will be questionable. Because the payment is dependent on employment, companies will encourage individuals to take any job that they can find. On the other hand, if most of the payment is done after referral, employment prospectus of jobseekers will not incentivise companies as much as when the payment is dependent on employment. However, the quality of jobs is more likely to be higher in this case as companies are more likely to find the right job for unemployed individuals.

4.2.2 Effectiveness of Outsourced Programmes

Studies on the effectiveness of outsourced programmes point to the inefficiency of private companies although the evidence is mixed. For example, a comparison of outsourced programmes to the public ones in France concludes that 6 months after the referral, attending public programmes increased the probability of exit to employment by 10.2% points whereas the effect of private programmes was short at 4.5% points (Behagel et al. 2014). Similarly, in Germany, people who were assigned to public programmes reduced the time in unemployment by one to two months compared to individuals who were assigned to private providers (Krug and Stephan 2016). The case in Denmark is not different as well. A counterfactual evaluation of outsourcing suggests no statistical difference

between private and public services in terms of the probability of finding employment (Rehwald et al. 2017). However, this study highlights private providers delivering more intense, employment-oriented, and earlier services.

The only notable exception in terms of the effectiveness of outsourcing is a job-search assistance programme aimed at long-term unemployed individuals in Belgium. The analysis underlines a small but significant difference between private and public programmes. One year after referral to the private providers, the employment rate of individuals increased 2.8% compared to those who were referred to public programmes (Cockx and Baert 2015).

Most studies examine how outsourced programmes affect the employment prospectus of jobseekers in the short term. An analysis of a job-search assistance programme in Geneva, Switzerland highlights the changing effect of private providers over time in the next five years after referral to the programme. In the first six months, the private provider places people in jobs earlier than public services. However, in the next two years, this initial gain dissipates completely and becomes negative. In addition, privately placed individuals leave jobs quickly and earn between 10% and 17% less than public counterparts.

Existing studies generally make the difference between public and private providers. However, private services can be delivered by for-profit or non-profit organizations and due to the differences between them, their effect may vary. A study exploits variation in providers in Belgium and examines whether for-profit organizations are more successful than non-profit ones in terms of placing people in jobs. The analysis cannot find any significant difference between these two types of private providers (Cockx and Baert 2015).

Previous studies generally compare public and private providers at a general-level without distinguishing different characteristics of jobseekers. However, depending on demographics or characteristics, the effectiveness of programmes may vary. For example, in Sweden, while private providers increase the probability of employment for immigrants, they perform worse for adolescents compared to public services (Bennmarker et al. 2013). Furthermore, the effectiveness of programmes may also vary by location. For example, in Denmark, a job-search assistance programme for highly educated unemployed people was more successful in Aarhus than other cities (Rehwald et al. 2017).

In addition to analysing changes in employment situation and duration of unemployment, studies also compared private and public providers in terms of the cost-benefit analysis. Studies adopt different approaches in their calculations. For example, in their analysis of outsourcing in France, Behagel et al. (2014) only looked at unemployment insurance payments and concluded that private providers were costlier than public ones as individuals who were referred to private programmes spent more time as unemployed. In the case of Denmark, Rehwald et al. (2017) find that private providers are as costly as public providers. In the Swiss outsourcing example, Cottier et al. (2015) took into account both service costs and unemployment insurance payments. This analysis found outsourcing cheaper than public services in the short and long run.

Existing studies generally underline the inefficiency of outsourcing. Why cannot private providers outperform public ones? Previous research offers various explanations for this question. Firstly, private providers might be less experienced than public providers and mastering counselling services may require time. Since public providers have offered counselling services to jobseekers for a long time, due to long experience, they might be better than private providers (Behagel et al. 2014). Second, the payment structure of the programme may also affect companies' performance. If the conditional payment on successful employment is large, private providers will try to select or spend more time on individuals that have a higher chance of employment—cream-skimming. If the fixed

payment is large, they will try to place as many jobseekers as possible in jobs to maximize their profit—parking. Both cases undermine the advantages of market discipline (Behagel et al. 2014, Cottier et al. 2015). Third, while conditional payment may encourage private providers to increase their efficiency, performance incentives in the public sector may motivate public officers to put additional effort. Thus, incentives in both public and private providers may cancel each other and may not show any significant difference (Krug and Stephan 2016). Finally, due to professional capacity differences, jobseekers who are assigned to private companies may spend more time on job-search activities, while those who are referred to public services may spend more time in training and internships, which might be more advantageous in terms of employment.

In addition to the impact of labour market programmes, studies also highlight the threat effect. Previous research indicates that after people are notified to attend a labour acitivation programme, there is a significant increase in employment, which suggests the effectiveness of the threat of training than the training itself (Black et al. 2003, Rosholm and Svarer 2008).

An important caveat to keep in mind in the analysis of job-search assistance programmes is the displacement effect. Treatment may increase jobseekers' probability of employment but those who are not treated may be worse off. Some individuals increasing their job-search effort may impose negative externalities on others. For instance, in certain regions of France, young graduates who were unemployed for at least 6 months were referred to private companies for job-search assistance. Crepon et al. (2013) examine the effect of this programme.[4] The analysis suggests that people who were assigned to the programme were more likely to find a job than others in their regions. The control group (those who were not assigned to the programme in regions where the programme was run) were less likely to secure a job than jobseekers in regions where the programme was not implemented. Even though job-search assistance programmes may increase the likelihood of employment for people who attended programmes, it may have negative externalities for those who do not participate.

In conclusion, outsourcing job-search assistance programmes seem to be inefficient from the perspective of government and cost-benefit analysis. Private providers are in general as expensive as public providers and do not outperform public services in placing unemployed people in jobs. An important aspect of outsourcing job-search programmes is that programmes are designed for a particular group of jobseekers in particular locations. Each programme has its unique aspects. Therefore, each programme should be analysed within its context considering its peculiarities.

THREAT EFFECT The threat of a sanction in case of non-participation to the programme (Black, Smith, Berger and Noel 2003; Geerdsen 2006; Geerdsen and Holm 2007; Rosholm and Svarer 2008; Van den Berg, Bergemann and Caliendo 2009) or the sanction itself (van den Berg, Van der Klaauw and van Ours 2004; Abbring, van den Berg and van Ours 2005; Lalive, van Ours and Zweimüller 2005; Svarer 2011; van der Klaauw and van Ours 2013) from Cockx

[4]This study does not compare the efficiency of public and private providers.

5 Data

5.1 The Jobseekers Longitudinal Dataset and Additional Administrative Datasets

The Jobseekers Longitudinal Dataset (JLD) is an administrative dataset that tracks social welfare claims, activation and training, and employment histories over time, covering people with jobseeker or one parent family claims since 2004. It draws together payment and administrative data from the Department of Employment Affairs and Social Protection and data from SOLAS and the Revenue Commissioners. It has its origins in efforts to make best use of the sizeable volume of data collected or generated by the Department and to structure the recording of episodes of unemployment and training in a meaningful way.

The JLD is an innovative database that combines DEASP, Revenue and SOLAS data to produce a uniquely detailed view of the Irish labour market from the height of the economic boom to deep crisis and recovery. It contains information on a claimant's sex, age, marital status, nationality, educational attainment, previous occupation, employment and unemployment histories (duration and number of episodes), unemployment training history (type, duration and number of episodes), benefit type (JA, JB), spousal earnings (to qualify for an adult dependent allowance), number of child dependents, family payment type (i.e. adult and child dependent allowances, adult only, etc.) and geographic location. Through the development of the JLD, administrative data events are linked to episodes of welfare or work, thus enabling the better ex ante and ex post analysis of jobseekers.

The process of developing the Jobseekers Longitudinal Database (JLD) was initially informed by a 2011 overview commissioned by the DEASP with University College Dublin (Harmon, Morrin and Murphy 2011) of the DEASP's management of the Live Register and more generally its use and collection of data relating to the labour market. The report provided a great deal of insight into strategies to improve data collection and noted many challenges such as the duplication of data in various IT systems, missing information (i.e. education levels, reasons for signing off, destination of employment, etc.), a lack of a longitudinal reporting process, and the lack of a centralized and integrated data infrastructure. Therefore, in 2012, a rich analytical database consisting of approximately 13 million individual episodes of welfare and work since 2004 was developed to form the JLD.

The dataset takes operational data from a range of sources and rearranges them into a view of each individual's periods of unemployment, employment, and training. The data are structured in a way that bears some relation to a panel dataset but with important distinctions. To reflect the individual experience of employment and unemployment, the data are re-arranged as a series of episodes, with one episode beginning when the person begins a spell of unemployment and ending when the person moves to employment or another activation or training programme. The next episode begins when the person's employment or training status changes again. In this way, it differs from panel data in that observations are not recorded at a fixed point but at points of transition from one status to another.

One of the advantages of restructuring the administrative data of the Department in this way is that it retains some element of the individual's experience of unemployment. When a client of the Department of Employment Affairs and Social Protection moves from Jobseekers Benefit to Jobseekers Allowance, it is treated as an exit from the former and an entry to the latter on the Live

Register. In the JLD, contiguous periods on Jobseekers Benefit and Jobseekers Allowance can be linked and represented as one episode of unemployment, which is arguably a better representation of the experience of the absence of work, regardless of whether it is on a social insurance or social assistance programme of income support.

The JLD has been used for a variety of analytical tasks and published evaluations. For this exercise, it was supplemented by DEASP data on earnings from employment (collected on behalf of the DEASP by the Revenue Commissioners for PRSI purposes) social welfare payments data, and social welfare status data. This means the analysis is informed by a wider understanding of a person's labour market status before and after becoming eligible for referral to JobPath.

For earnings from employment data, what appear to be data entry errors are excluded by dropping observations where:

- earnings per week were greater than €352 and
- the proportion of total PRSI per week to earnings per week is less than 3.5%

Where the JLD only captures jobseeker and One-parent Family Payment status (payments such as Jobseekers Allowance, Jobseekers Benefit, casual jobseekers), this evaluation is enhanced by data on receipt of other weekly social welfare payments such as Disability Allowance and Carers Allowance, as well as in-work benefits such as the Working Family Payment (previously Family Income Supplement).

5.2 Description of Data

Throughout the paper, results are estimated in respect of Q1 2016. All open claims on the Live Register in Q1 2016 are divided into treatment and control groups (those who receive the JobPath service and those who do not). The sample size is trimmed according to the follow steps:

- Removing those over the age of 60 (accounting for operational activation practices)
- Removing those with durations of unemployment under 365 days to capture only those in long-term unemployment
- Removing those who have already received the JobPath service

	Adjustments made to the Live Register to make the JobPath sample size	col2
0	1	3
1	2	4

For comparison, the Live Register figures for January, February and March are outlined in Table 9. The published Live Register figures differ slightly in that claimants over 65 are excluded from the Live Register but appear on the JLD (see exclusions, Table 8, above). Also, the Live Register includes claims pending at the time of publication, whereas any claims that have been dropped subsequently, or not awarded, will not appear on the JLD.

	Live Register Figures for Q1 2016	col2
0	1	3
1	2	4

A straightforward measurement of the average outcome for those who participate in JobPath (the treatment group) and those who do not (the control group) will give an estimate of the impact of JobPath if the treatment and control groups are balanced. In other words, if the two groups

look similar on the basis of the data we record before commencement of JobPath, the impact can be measured by comparing the average outcome for each group. However, if the two groups look different before commencement, then such a measurement could reflect existing differences and not the impact of JobPath.

Some descriptive statistics of the two groups will indicate to what extent they differ prior to the treatment.

	Personal Characteristics of the Control and Treatment groups	col2
0	1	3
1	2	4

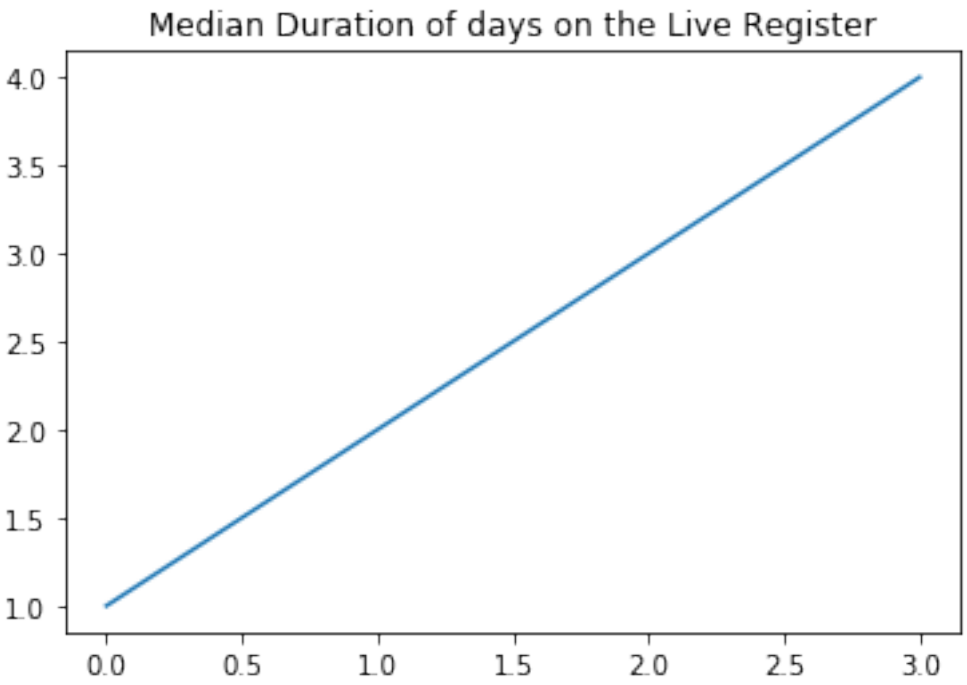
While the personal characteristics of the control and treatment groups are relatively similar (Table 10), it is evident from Table 12 that there are differences in the mean earnings of the two groups. More specifically, the mean earnings of the control group are higher than the treatment group and the mean duration in days of unemployment for the treatment group is slightly higher than the control group.

	Labour Market history of the Control and Treatment groups	col2
0	1	3
1	2	4

Furthermore, while Table 12 suggests the Live Register history of both groups is relatively similar, the Treatment group has, on average, received a higher total in social welfare payments from 2013 to 2015. As evident in Table 12 this trend continues with the treatment group having a higher mean of social welfare payments in 2017 and significantly lower mean earnings in 2017.

	Social welfare payment history of the Control and Treatment groups	col2
0	1	3
1	2	4

Finally, as the evaluation examines outcomes across a period of an improving labour market, it is worth highlighting the changing profile of the Live Register and, particularly, the changing profile of those eligible for referral to JobPath. Figure 15 outlines the increase in the median duration of days on the Live Register for each quarter after the sample has been adjusted (see Table 8). The value increases from 880 in Quarter 2 of 2014 to 1,025 in Quarter 3 of 2016. In general, those with shorter durations of unemployment have a higher chance of finding employment whereas those eligible for JobPath in the later periods have been unemployed for longer durations, which suggests they face greater barriers to finding employment.



6 Evaluation approach

6.1 Impact of referral to JobPath - the announcement effect

once you are invited, in the short term are you gonna close your claim. timing changes by individual

6.2 Referral to JobPath and subsequent exits from unemployment claims to illness and disability payments

6.3 JobPath starters versus non-starters - unweighted comparison

comparison of means

6.4 JobPath starters versus non-starters

6.5 Weighting diagnostics

ipw

6.6 Early or late intervention?

timing FE

6.7 Other LTU referral channels

merge with referral to LES

6.8 Removal from referral population

explain in which cases people will be removed.

6.9 Referral to LES

7 Outcomes

One of the main challenges in counterfactual impact evaluation is to operationalize the right outcome and to select the right control group in the analysis. Previous studies have adopted various approaches in the operationalization of the dependent variable such as binary employment status, wage, and duration in the unemployment insurance system until the exit (Card et al. 2010, 2017). In general, the choice for the outcome is driven by data availability (Schmieder & Von Wachter 2016). Therefore, rather than employing the right outcome in the analysis, scholars have to pick the best one among what they have at hand.

A meta-analysis of over 200 recent econometric evaluations of active labour market programmes suggests that almost half of the studies programmes use a binary employment/unemployment status as their dependent variable (Card et al. 2010). However, in general, this dichotomous approach is insufficient to capture the complicated dynamics of labour markets. For example, when the binary approach is used, the situation of part-time workers is unclear. Coding them as employed or unemployed will not reflect the reality of labour markets and dropping them from the analysis will induce bias. To overcome relevant shortcomings, some researchers go beyond the dichotomous approach. For example, in the comparison of private and public employment services in Germany, Krug and Stephan (2016) use the days in employment, unemployment, and other categories as their outcomes in the main discussion. As a secondary analysis, they also support their argument by looking at variation in unemployment benefits and earnings. Similarly, another study that examines the effectiveness of outsourcing job-search assistance in Geneva looks at employment without unemployment benefits, unemployment with unemployment benefits, and unemployment without unemployment benefits (Cottier et al. 2015).

Using a categorical variable (e.g., employment, unemployment, and others) is a praiseworthy improvement compared to the binary approach. In some settings, this way of operationalization might capture variation in labour market outcomes. However, in the Irish case, it is insufficient to properly examine the impact of interventions. Due to the wide-ranging and complex nature of the Irish social welfare system, and the comprehensive set of supports it offers, it is always envisaged that some individuals may, at once, be in employment and also receiving social welfare support. For example, casual jobseekers are in employment while also receiving a partial jobseeker payment in

respect of the days they are not employed. Furthermore, depending on part-time workers' duration of employment, the amount of unemployment benefits that they receive varies. For instance, a person who is working five hours a week and another one who is working for 15 hours a week will receive different amounts of benefits.

Thanks to high-quality data available at JLD, we are not bounded by a binary dependent variable. Through a rationalist lens, we approach the outcome from both the department's and jobseekers' perspectives. For the former, we are interested in the dependency of jobseekers on the department benefits (i.e., unemployment benefits). Total amounts received in social welfare support are a strong indication that people are in need of income assistance. From the jobseekers' perspective, we look at income as the earnings of people in employment, when examined over a reasonable period of time, can give a useful indication of their labour market success. Therefore, the outcome measures account for the possibility of individuals receiving earnings from employment and social welfare payments in the same year, and possibly at the same time. This includes individuals receiving the Back to Work Enterprise Allowance, Back to Work Family Dividend or Working Family Payment, who are in employment while also receiving a weekly social welfare payment.

Another important aspect to consider in counterfactual impact evaluation is temporal dynamics. While some interventions are successful in the short term, some are helpful in the long run. Therefore, studies examine the effect of interventions at different time intervals (e.g., short, medium, and long term). In general, the short-term is considered up to one year, medium-term one to two years, and long-term two years or more (Card et al. 2010, 2017). Here, given the timeframe of the intervention, we analyse short-term effects of JobPath (one year after referral to JobPath), but in the future, medium and long term effects will also be examined.

Sample selection is a critical step in the counterfactual impact evaluation process. To estimate the impact of an intervention, treatment and control groups should be very similar to each other. Criteria for sample selection vary by intervention as different programmes target different populations. For example, a reform in the unemployment insurance benefits system in Hungary affected people 25-49 years old from 2005 onwards. In the analysis of this reform, DellaVigna et al. (2017) limit their control group to 25-49 years old people who received unemployment insurance before 2005. Similarly, in the comparison of public and private providers of employment services, Rehwald et al. (2017) limit their control group to unemployed people with university degrees because these people were the target of the intervention. Therefore, in this study, the control group consists of people who are eligible for JobPath but not assigned to the programme. More specifically, our sample covers only long-term unemployed people (12 months or longer) and short-term unemployed people are excluded as they cannot be referred to JobPath.

7.1 Claim duration

7.2 Earnings from employment

7.3 Decile movement

7.4 Share of time in labour market statuses

7.5 Exits to disability and illness payments

7.6 Comparative results for providers

7.7 Cost-benefit analysis

7.8 PRSI and fees paid in respect of jobseekers

7.9 Heterogenous Effect - Cluster modelling

One of the novel features of this evaluation is the use of cluster analysis to interpret the results of the impact of JobPath. This recognises that jobseekers are not a homogenous group. Any programme or service can be expected to have a different impact on different jobseekers and what works particularly well for some will work less well for others.

The cluster analysis has two functions:

- It provides new information about the population of the Live Register at any given point in time (not restricted to those eligible for JobPath), and
- It aids in enriching and nuancing the estimate of how JobPath affects different cohorts.

An important feature of this exercise is that it uses an unsupervised approach to generating clusters. Statistics on jobseeker numbers and unemployment are often reported in respect of how jobseekers fit pre-determined criteria (for example, whether the duration of unemployment is over 12 months, whether they are under 25 years).

It is, of course, useful to track over time the number of people with durations over 12 months and to compare absolute levels for different age categories. In certain circumstances, however, this approach of deterministic grouping can be a somewhat blunt analytical instrument. For example, those with 11 months' duration may be quite similar to people with 13 months' duration but a strict categorisation by duration places them in separate categories.

In contrast, the cluster analysis approach does not start out by deciding how many categories of jobseeker exist or by specifying any characteristics a cluster should have. Instead, probabilistic modelling is used to segment the Live Register into cohorts. A rich dataset is compiled and a clustering algorithm calculates the optimal number of clusters, so that each cluster is, to the greatest extent possible, internally consistent (individuals in the same cluster are similar to each other) and distinct from other clusters (individuals in one cluster are different from those in other clusters).

The result is a set of clusters using all of the available data to describe the jobseeker population (not just those eligible for JobPath). The labour market data takes five years of claims and earnings

from employment data to construct a labour market history for each individual. This probabilistic approach means each jobseeker is assigned to the cluster to which he or she is closest, as there are no explicit membership criteria. For each cluster created in this process, we describe the cluster as having a higher share of jobseekers with certain characteristics: NOTE: I ASSUME WE ARE GONNA RUN THIS ANALYSIS AGAIN AND RESULTS MIGHT CHANGE

- Younger Casual Claimants
- Younger Professionals
- Intermittent Labour Market Attachment
- Shorter Durations
- Older, With Strong Employment History
- Self Employed
- Longer Durations

The clustering approach is as follows:

- At the beginning of each quarter, from the entire Live Register population, create a set of clusters that include people who are similar, based on personal and labour market characteristics (such as age, sex, location, family structure, previous occupation, previous earnings) and employment, welfare and training history up to that point in time (duration of unemployment, any episodes of casual employment, participation in activation to date).
- Each cluster will reflect a broad similarity among its members at that point in time. Membership of a given cluster will evolve over time, as individuals who remain unemployed become longer unemployed; those who have increased their skills in the interim become part of a more skilled group etc.

Since each cluster is created using a probabilistic approach, membership of a given cluster changes over time. As new jobseekers join and others leave, the population changes. We can test cluster stability by examining movements of jobseekers and comparing those who remain in the same cluster over time, those who move to another cluster, or those who leave the cluster population (i.e exits from unemployment claims). Detailed findings in the appendix show the cluster populations remaining broadly stable. Only a small share of the population transitions from one cluster to another during the time periods.

In summary, the clustering exercise provides us with a greater understanding of the entire Live Register population (of which the long-term unemployed are one part), and allows us to interpret the impact of JobPath for distinct cohorts (i.e. separate estimates for clusters with a greater share of long-term unemployed people in the 40-50 age group or with a greater share of people with a particular sectoral background).

The clusters are described in further detail next, again using Q1 2016 as a sample quarter, with further detail on the technical processes behind the clustering process at the end of the section and in the appendix.

7.10 Cluster characteristics

TBA

8 Policy implications

9 Conclusions

[DellaVigna et al., 2017]

10 Appendices

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