

A Counterfactual Impact Evaluation of a self-employment subsidy

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Outline

- Introduction
- Research question
- Description of programme
- Data and design
- Challenges
- Implications, conclusions, and future work

Research question

- What's the effect of the intervention on employment outcome?
- What would have happened if people hadn't participated in the programme?
- How successful are participants (compared to similar non-participants) at x months later?
This will lead to an estimate of how much is due to participation.

Back To Work Enterprise Allowance (BTWEA)

- Self-employment incentive for LTU
- 2-year retention of jobseeker payment (1st year at 100%, 2nd at 75%)
- For approved self-employment business plan
- Requirement: in receipt of Jobseeker's Benefit or Jobseeker's Allowance for 12 months.*

* changed to 9 months in Budget 2017

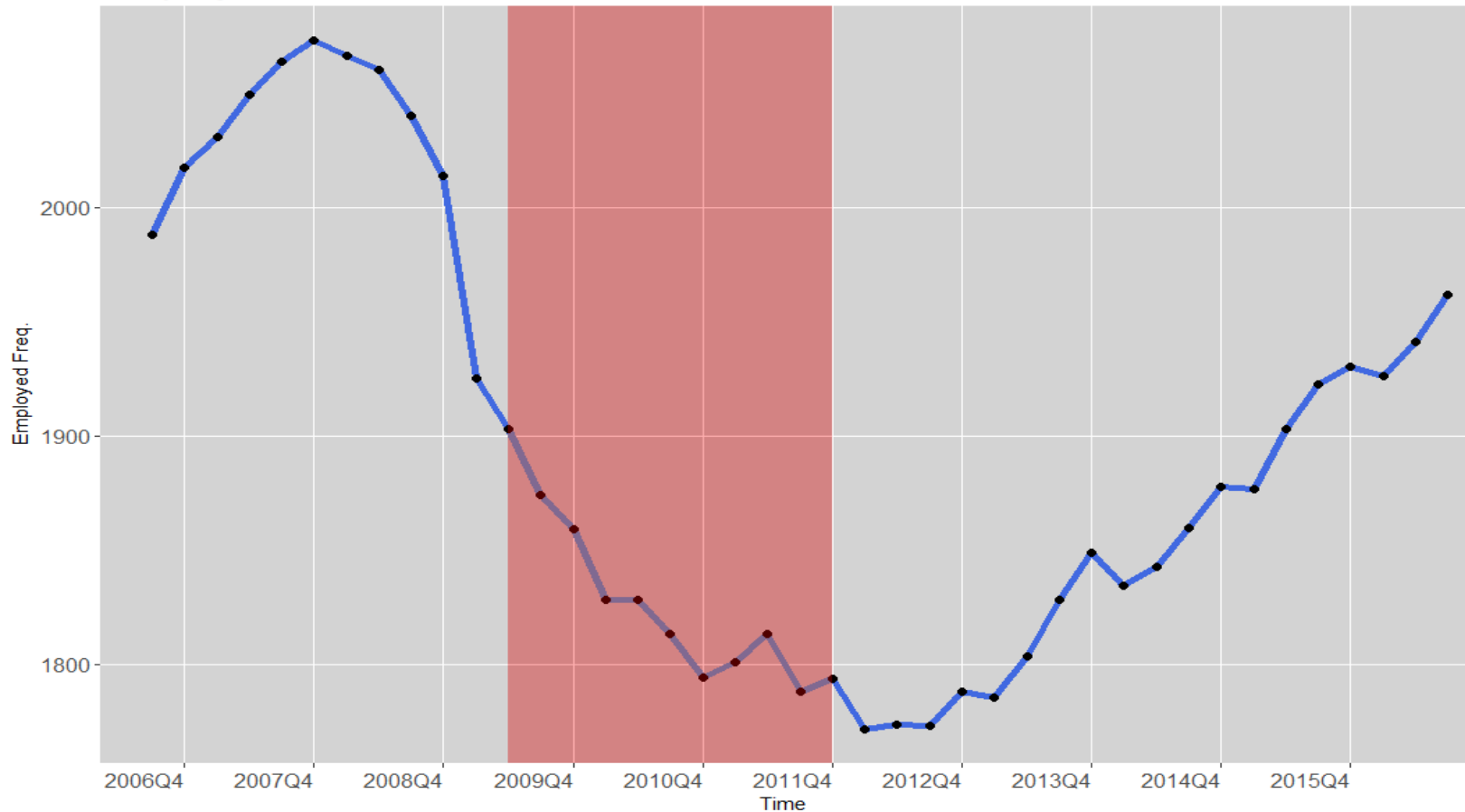


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Labour market context for entry

Employment, '000s, 2006-2016-Source: QNHS, CSO



Jobseekers Longitudinal Database

- Jobseekers Longitudinal Dataset (JLD) - data originated as point in time, but now linked in an episodic, longitudinal, dataset of individuals' journey through unemployment, employment, training.
- Demographic and labour market characteristics
- >14 million records



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Sample selection process

	<u>BTWEA participants</u>	<u>Comparison group</u>
No. of episodes	40,929	9,866,838
No. of individuals	39,839	1,765,487
No. of episodes 30Apr2009-31Dec2011	10,844	1,349,133
No. of individuals 30Apr2009-31Dec2011	10,623	821,896
No. of individuals (Full UA or UB)	10,623	727,793
No. of individuals (excluding other training)	8,582	564,302

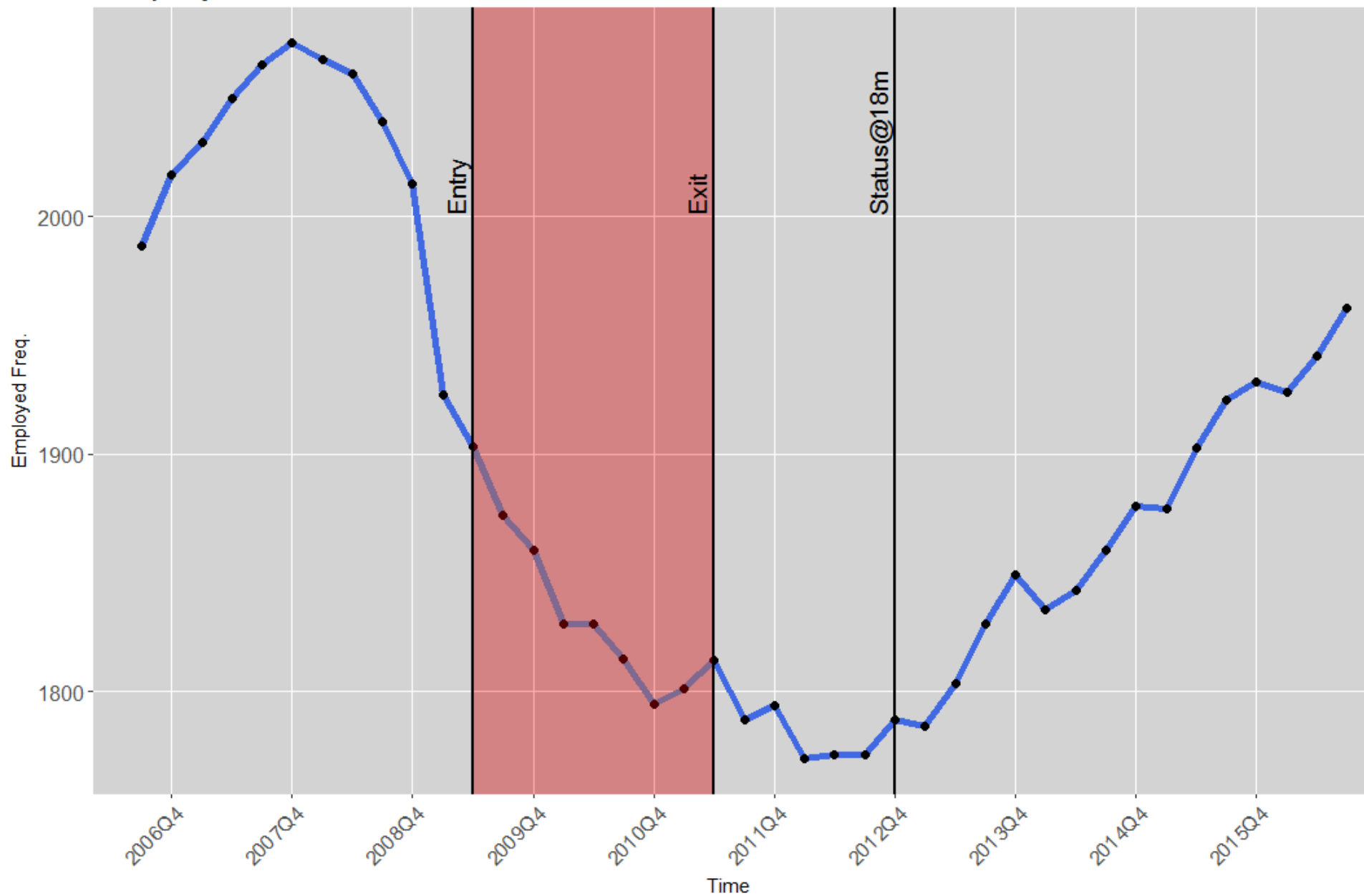


Identification strategy

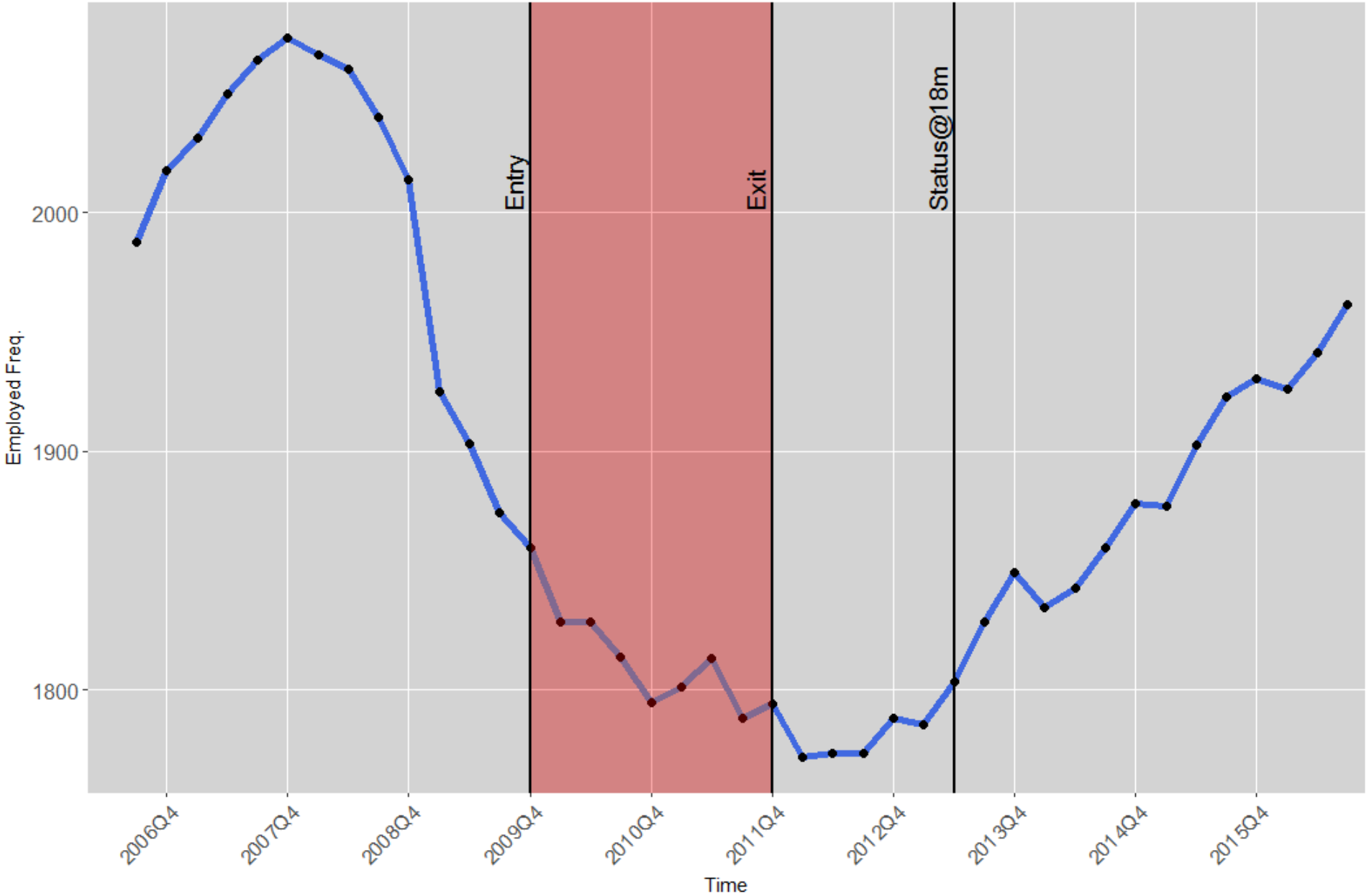
- Monthly cohort building: at the end of each month – new cohort of potential participants and potential comparison candidates for the next month
- Logistic regression → identify characteristics of participation
- Propensity Score Matching: Develop score for likelihood of participation and match between treatment and comparison group
- Compare binary (employment or unemployment) outcomes of matched samples of participants and non-participants, who are competing in the same labour market at 18 months post-programme completion



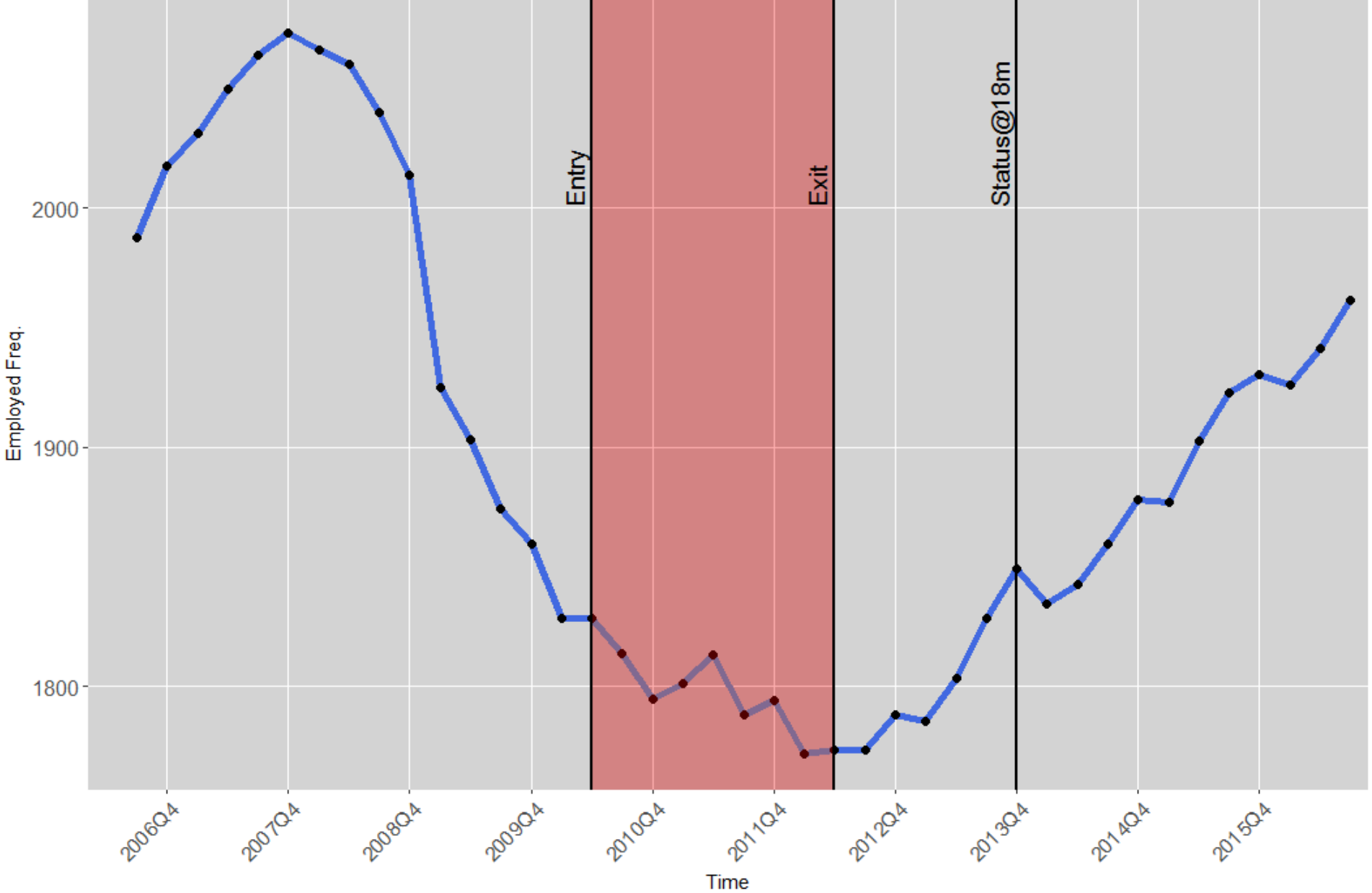
Employment, '000s, 2006-2016-Source: QNHS, CSO



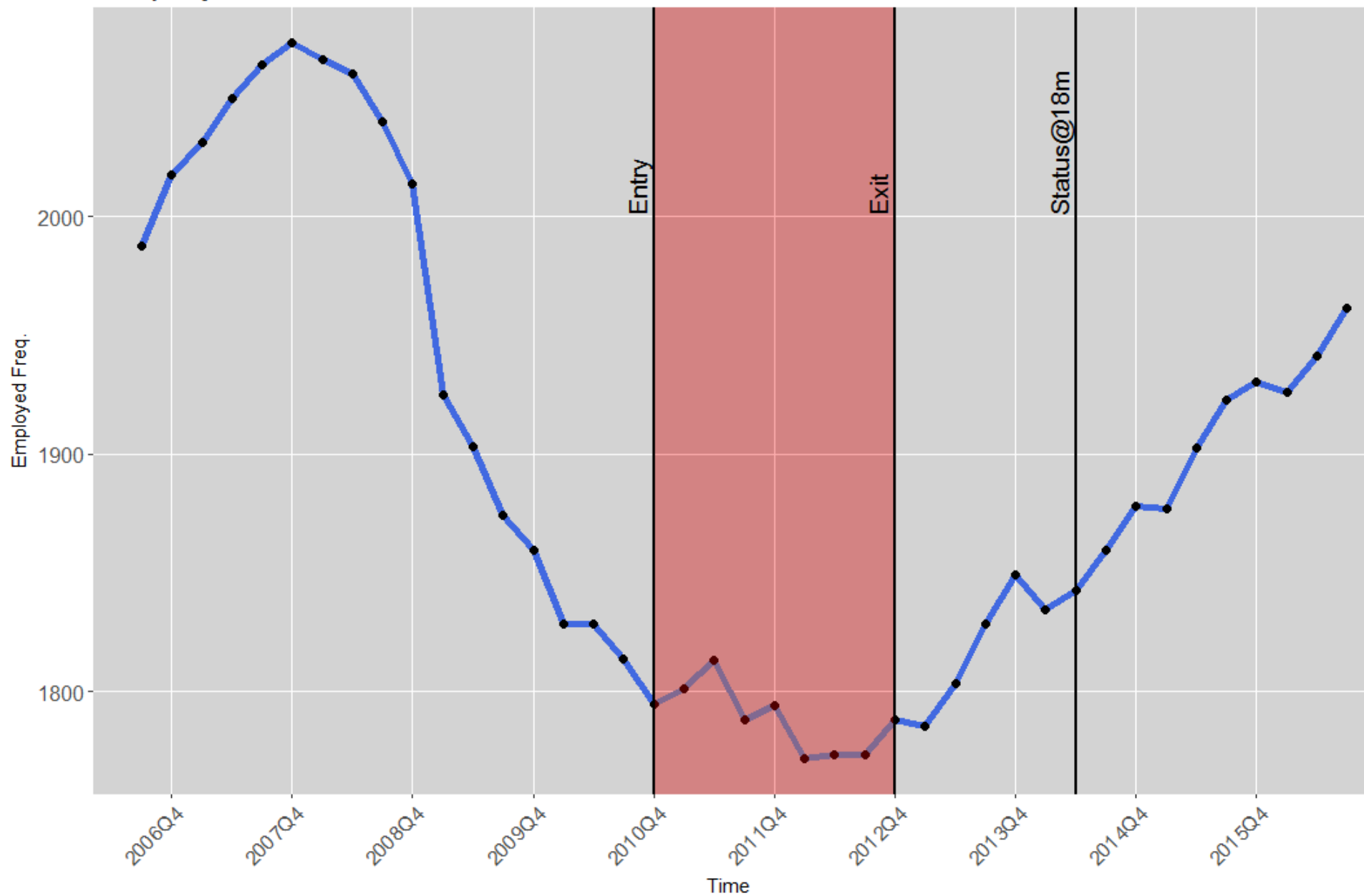
Employment, '000s, 2006-2016-Source: QNHS, CSO



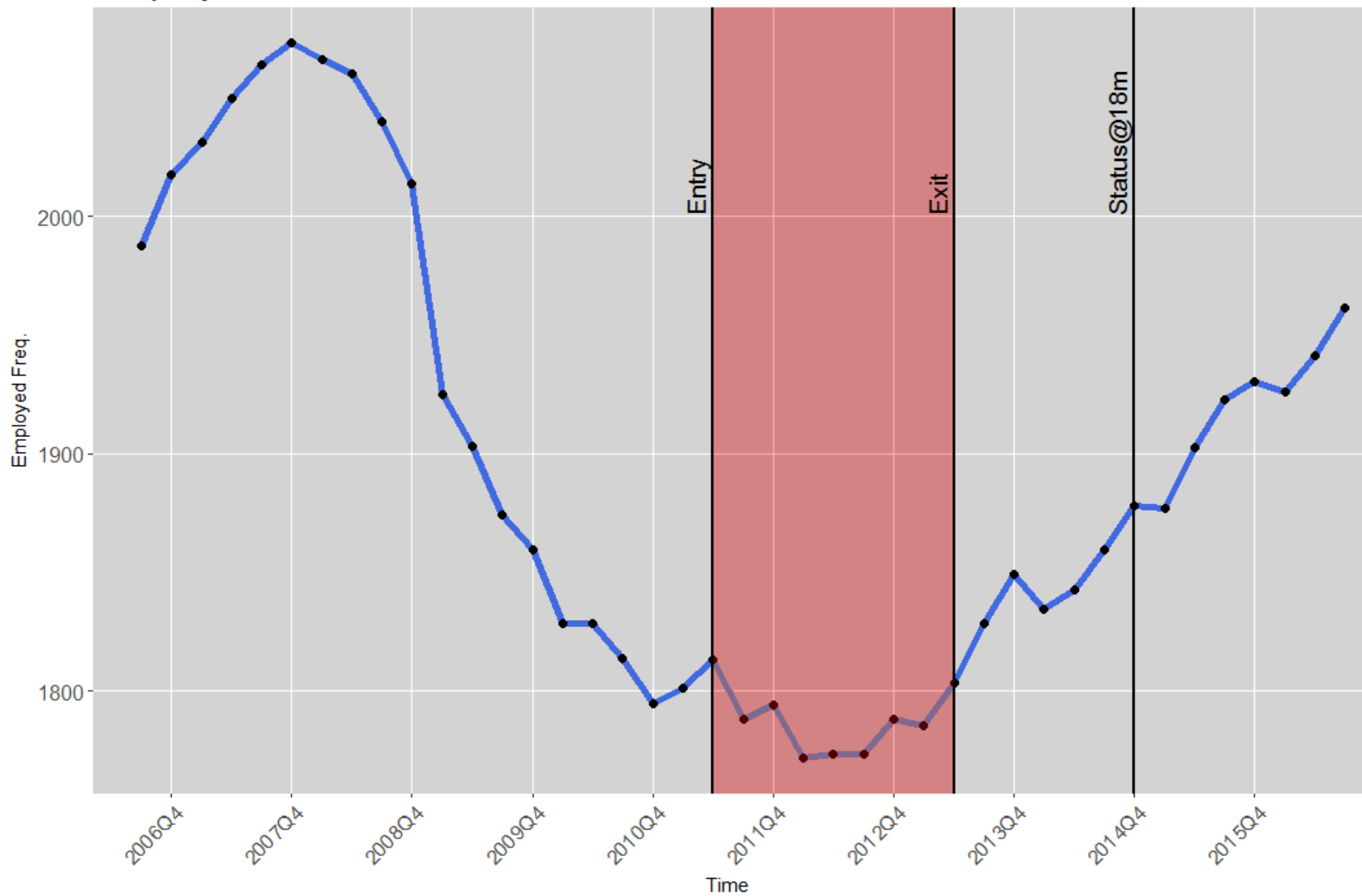
Employment, '000s, 2006-2016-Source: QNHS, CSO



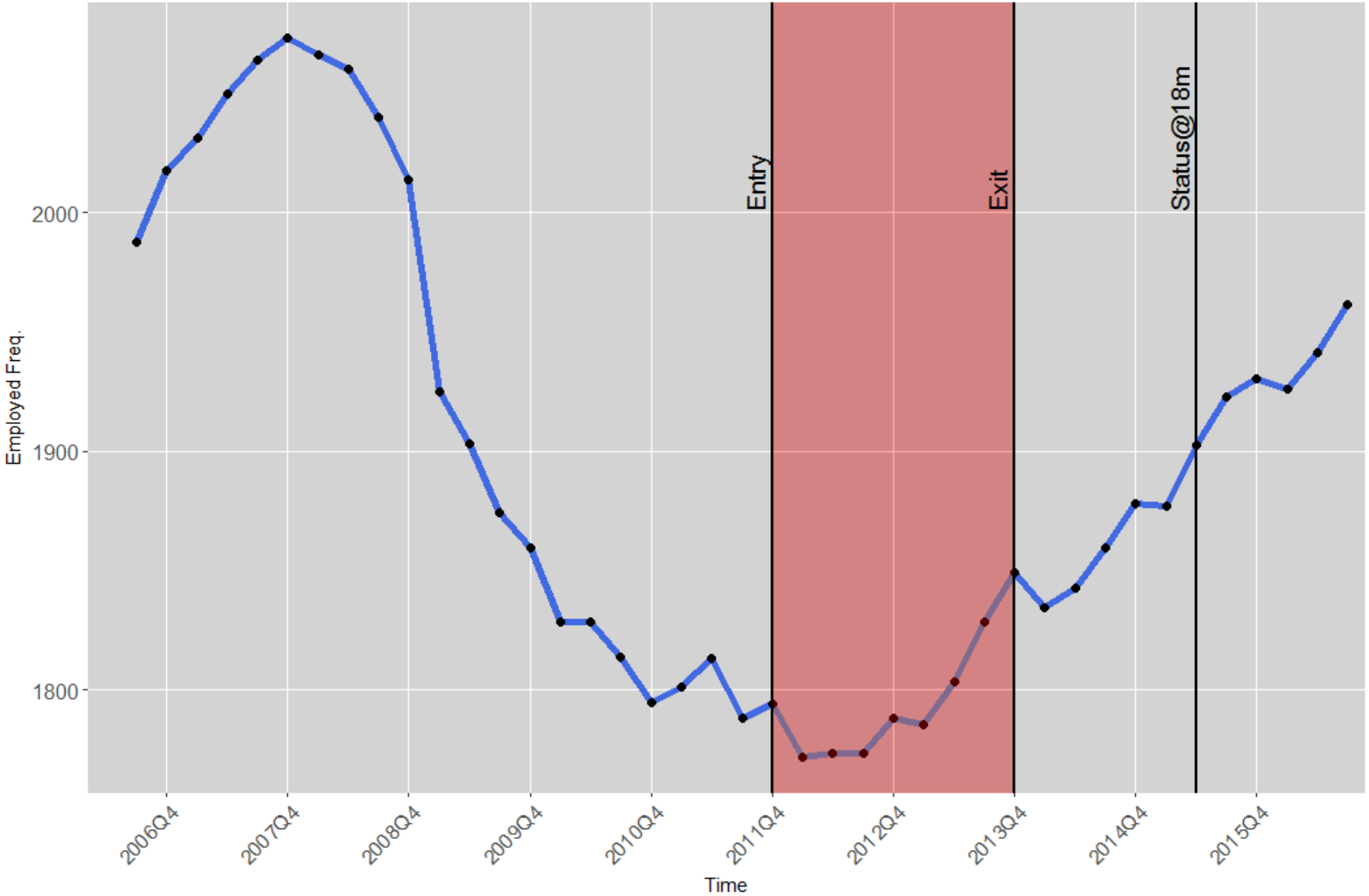
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Challenges of the evaluation

- Data: documentation of application and approval process, description of business activity and sector
- Selection - Assignment to treatment and comparison groups is non-random; could it be related to labour market outcomes in a systematic fashion?

Rationale for matching

- What if these BTWEA participants are different and their preference for participation in this programme is correlated with labour market outcomes?
- What if there is something unobserved that separates people who do well in the labour market from those whose outcomes are worse?
- In essence, addressing this question means you must be comparing like with like and the next few slides address how we dealt with that.



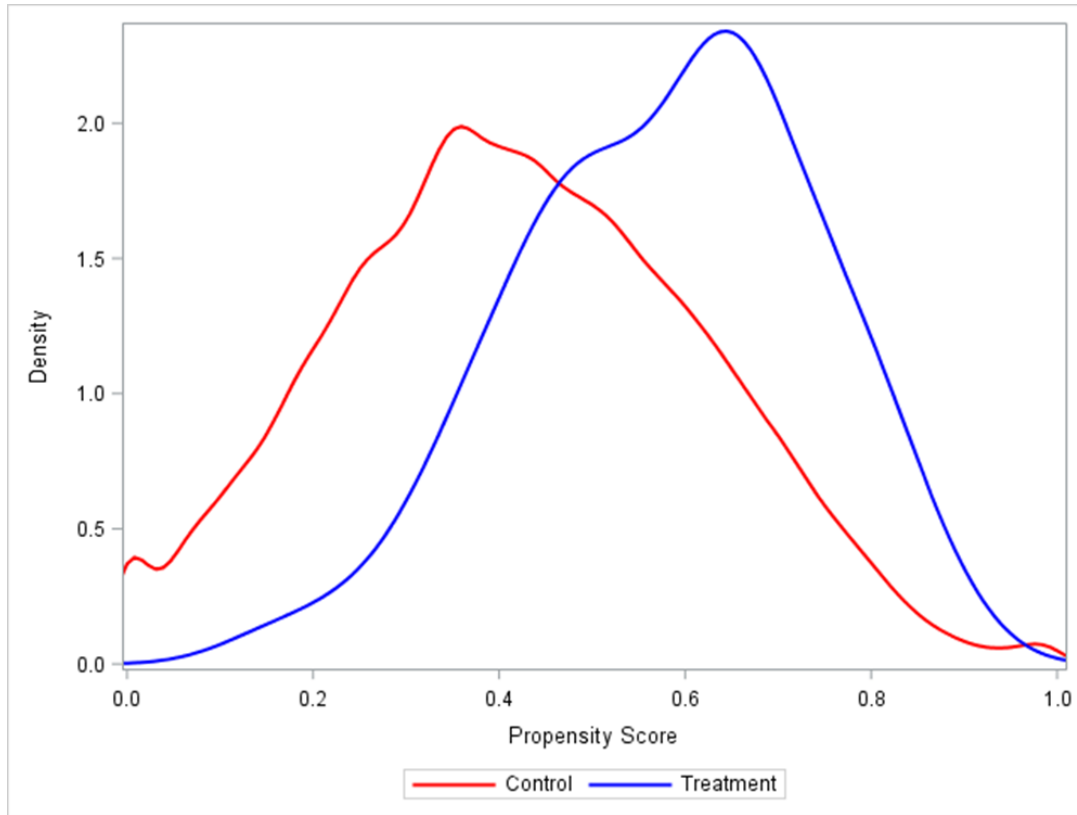
Assumptions underlying the use of Propensity Score Matching (1)

Unobserved characteristics:

- Unobserved characteristics must not be the underlying reason for receipt of treatment
- The treatment group must not benefit from treatment in a different way to how comparison cases would have benefitted, conditional on the likelihood of treatment



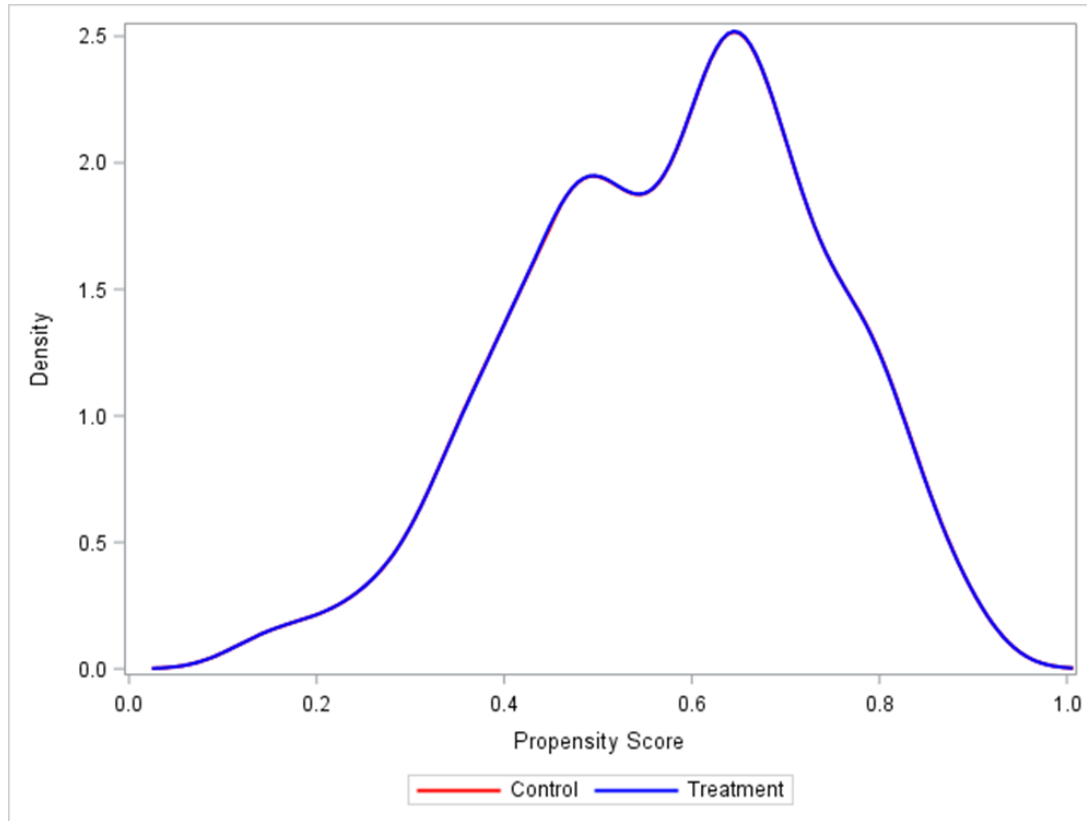
Assumptions underlying the use of Propensity Score Matching (2)



Sample month: August 2011

The distributions of propensities for treatment in both groups must permit the pairing of individuals (i.e there must be some overlap)

Distribution of propensity scores



The distributions of propensities for treatment in both groups converge after matching

Sample month: August 2011



Age and earnings - pre and post matching

		Pre-match		Post-match		
Treatment	N Obs	Variable	Mean	N Obs	N	Mean
0	216,692	Average earnings	14,010	1,205	1,205	16,737
1	241	Average earnings	17,106	241	241	17,106
0		Age this Month	37.24		1,205	35.53
1		Age this Month	35.95		241	35.95



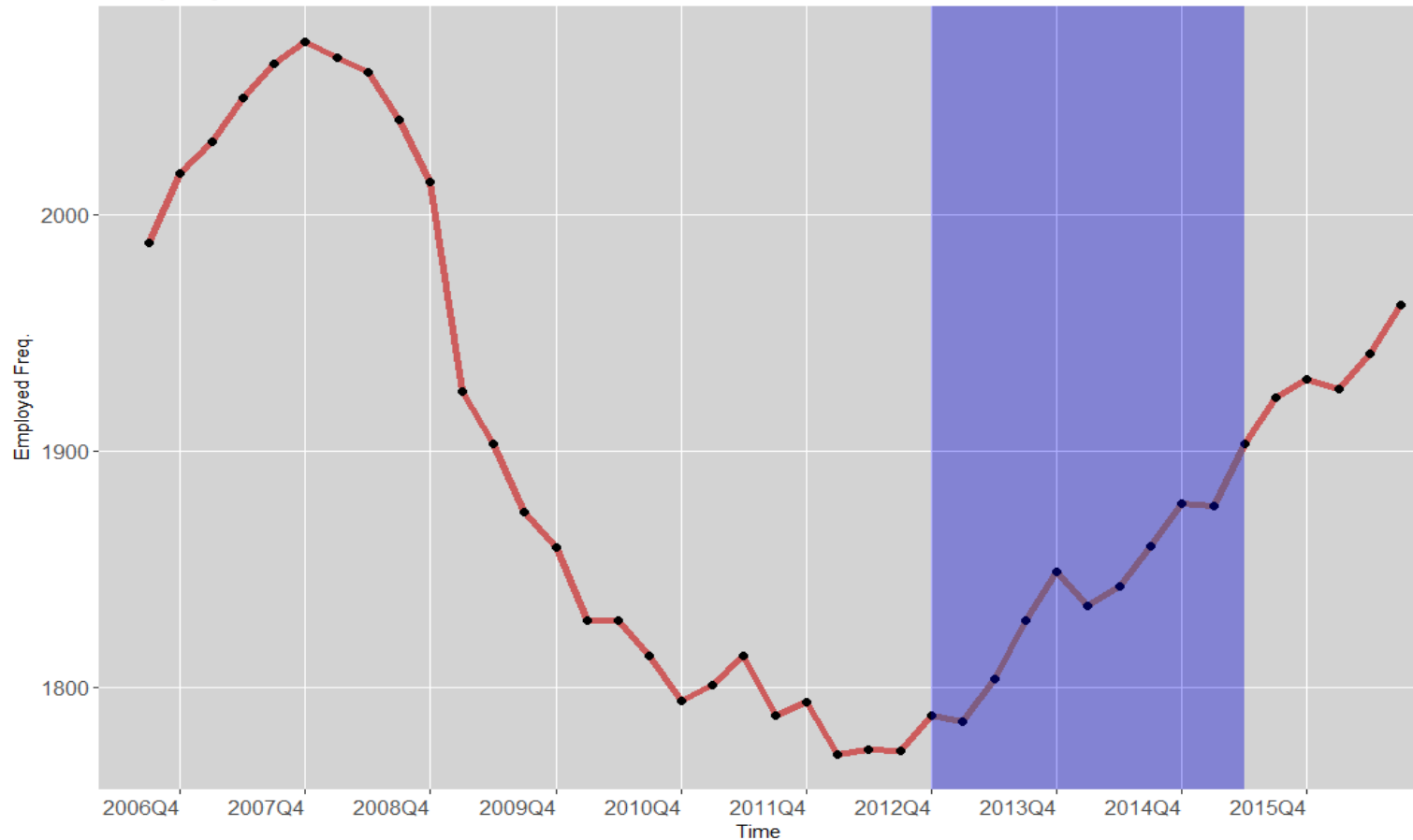
Refining results to compare a subset expressing interest in self-employment

- Refine by comparing only those with an interest in becoming self-employed
 - Unemployed people meeting case officers – for next steps, choose from:
 - ❖ Participate in Literacy/Numeracy Training Supports
 - ❖ Participate in Career Guidance
 - ❖ Job Searching
 - ❖ Explore Training/Education
 - ❖ ***Explore option of Self Employment***
- [...]
- ❖ Source Work Experience



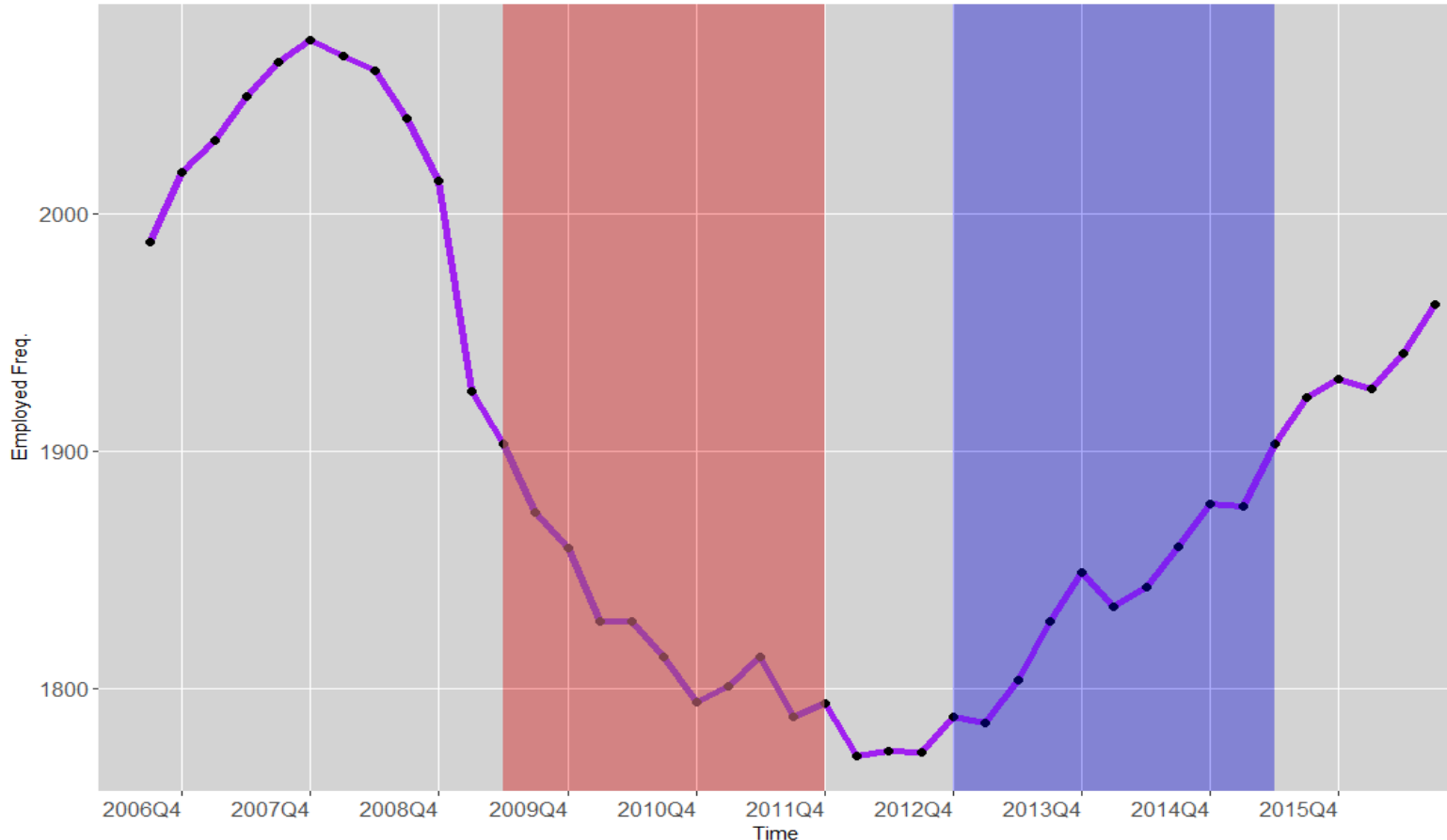
Labour market context for outcomes

Employment, '000s, 2006-2016-Source: QNHS, CSO



Labour market context for outcomes

Employment, '000s, 2006-2016-Source: QNHS, CSO



Implications

- To what extent did it depend on labour market conditions of 2009-2014 (entry mid-2009 to end-2011, exit mid-2011 to end-2013)?
- Possible deadweight, displacement, substitution effects (business reacts to increase in demand by subcontracting to recipients of a start-up incentive rather than taking on new employees)



Further possible work

- Sectoral analysis
- For later periods, include interaction with wider reforms of social welfare system
- Compare to enterprises generated from employment or inactivity (algorithm matching on firm-level characteristics those set up out of inactivity with similar enterprises supported by BTWEA)
- Analysis of qualitative survey results may give further insights



Final points

- This is our first in-house counterfactual impact evaluation, with support from CRIE and the Labour Market Council sub-group on evaluation
- Preliminary results will be published later this month as part of the Department's BTWEA policy review



Questions

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