### Reemployment effects from increased activation: Evidence from times of crisis

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#### Outline

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#### Disclaimer

- Research project conducted with financial support from the European Union
- Sole responsibility lies with the author and the Commission is not responsible for any use that may be made of the information contained herein

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#### Themes

Current high levels of unemployment raise interest on evaluation of *activation* programmes

- This project evaluates the impact of a large activation programme implemented in Portugal from early 2012
  - The programme involved a number of ESF-supported active labour market policies
- Counterfactual impact evaluation methodology used: Regression Discontinuity Design
- Importance of *capacity building* in evaluation methods and of collaboration between public administration and research centres

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#### Activation literature

Activation programmes tend to increase transitions to employment (shorter unemployment durations)

- 'Stick and carrot' approach (including 'threat effects')
- But programmes so far evaluated implemented in good times
  - Effects can be weaker or stronger in bad labour markets
- References: Dolton and O'Neill (JoLE, 2002), Black et al (AER, 2003), van den Berg and van der Klaauw (IER, 2006), Graversen and van Ours (JPubEc, 2008), Petrongolo (JPubEc, 2009), Cockx and Dejemeppe (LabEc, 2012), etc
- Mixed evidence from previous CIE work on PT ALMPs (Porto and Lisbon Unis)

#### Convocatórias programme

Compulsory participation of unemployment benefit recipients (UBRs) in jobcentre meetings:

- Measure included in the public employment service reform programme (RCM 20/2012 - 6.1 and 6.2 - March 2012)
- Two UBR targets: aged 45+ years old or registered for 6+ months
- Jobcentre caseworkers had discretion as to meeting content and follow-up:
  - Some combination of job search monitoring, counseling, job interviews, and (ESF-funded) ALMPs (traineeships, job subsidies, workfare, self-employment incentives, and training)
  - New (ESF-funded) job subsidy, from February 2012 (*Estímulo 2012*)

Background of relatively generous UBs, relatively soft monitoring and depressed labour market

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IEFP (the Public Employment Service)

- Monthly data on all unemployed individuals enrolled in jobcentres by Feb 2012 and all newly registered unemployed (March 2012 to March 2013)
- Record of most PES activities conducted, including Convocatórias
- Several individual-level variables (gender, age, schooling, etc)

Data

- 4 million observations, 960k UBRs, 80k programme participants
- II (the Social Security data agency)
  - Monthly data on wages and UBs of all individuals recorded in PES data set, employed or unemployed (Feb 2012 to Feb 2013)

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Characteristics of the unemployed, by month of participation

Year	Month			Schooling		
of participation		Age	Female	years	Married	Obs
2012	Mar	36.27	.44	7.30	.47	7588
	Apr	35.87	.45	7.68	.49	16931
	May	34.34	.50	10.28	.45	16492
	Jun	34.41	.56	11.78	.42	12657
	Jul	34.32	.53	10.63	.42	6696
	Aug	34.15	.50	9.70	.42	4921
	Sep	34.02	.49	9.75	.42	4781
	Oct	34.54	.51	9.76	.43	4649
	Nov	34.16	.51	10.33	.40	2294
	Dec	34.71	.50	9.67	.44	419
2013	Jan	34.83	.52	9.98	.51	1364
	Feb	35.15	.54	10.29	.49	1273
	Mar	34.30	.55	11.20	.47	775
Tota		34.85	.50	9.62	.45	80840

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#### Key variables

- Main outcome variable: reemployment probability
  - Dummy variable equal to one if the individual becomes reemployed over the following month
- Treatment variable: having participated in Convocatórias
  - Dummy variable equal to one if the individual is treated in that month
- 'Forcing' variable: (centered) UB duration
- Eligibility variable: UB duration equal or higher than 6 months
- 'Explanatory' variables: age; gender; marital status; foreigner dummy; max potential UB duration; schooling; daily UB amount; jobcentre dummies; calendar month dummies

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#### Main data set

- Selection criteria UBRs...
  - on regular UB
  - not older than 44
  - at least one year of potential UB duration
  - UB spell at between the first and twelfth month
- 711,849 (individual-month) observations, corresponding to 111,588 individuals.
- 24% participated in *Convocatórias*.

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- Unemployed are eligible to participate in the programme when they reach an UB duration of at least 6 months
- Identification based on the discontinuity of the treatment around the threshold of UB duration of 6 months
- Identifying assumptions (RDD as a local randomized experiment):
  - The forcing variable (UB duration) is continuous around the threshold
  - The probability of treatment is discontinuous at the threshold
  - There are no other discontinuities at the threshold
  - The outcome variable is a continuous function of the forcing variable around the threshold

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#### Probability of treatment and number of observations



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### 'Fuzzy' RDD

$$Y_{it} = \alpha + \beta D_{it} + S(\widetilde{Z}_{it}) + \delta X_{it} + \epsilon_{it}$$
(1)

- $\widetilde{Z}_{it}$  is the (centered) forcing variable for individual *i* in month *t*,  $D_{it}$  is the treatment dummy,  $E_{it}$  is the eligibility dummy,  $Y_{it}$  is the reemployment dummy,  $X_{it}$  are the covariates,  $S(\widetilde{Z}_{it})$  is a polynomial function of the forcing variable
- For capacity reasons, *Convocatórias* was implemented gradually, setting up a fuzzy design (we use an eligibility instrument for *D<sub>it</sub>*, in a '2SLS' framework)
- Next: graphical evidence (solid lines: predicted values from regression of reemployment on forcing variable, estimated separately on each threshold side)

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#### Discontinuity in the reemployment probability



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(Graphical and econometric) results are positive and significant: participating in *Convocatórias* increases the reemployment probability

- Downward trend in reemployment probabilities as UB duration increases but jump upwards in dependent variable at the threshold UB level
- Results are robust to different specifications of the polynomial function
- We also study the impact of the programme on:
  - Transitions to non-claimant unemployment: no significant effects
  - Future wages: no significant effects

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#### Robustness checks

We find evidence of robustness in different tests:

- We find no discontinuities in other variables at the threshold
- Similar results for different subsamples of unemployed individuals, regions and time-periods
- Similar results under clustering of standard errors across discrete values of the forcing variable
- Falsification test: replication of the analysis for 2011 generates no 'effects' (third data set)

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#### Different specifications, different dependent variables

		Treatment e	effect on:		1st stage
	Reemploym't	Transitions		Income	results -
Polynomial	probability	out of	to non-subsidy	level	eligibility
function		unemploym't	unemploym't		effect
Linear	0.021***	0.024***	0.003	0.007	0.130***
	(0.007)	(0.008)	(0.004)	(0.021)	(0.001)
Quadratic	0.083***	0.078***	-0.003	-0.012	0.114***
	(0.009)	(0.008)	(0.004)	(0.026)	(0.001)
Cubic	0.039***	0.046***	0.007*	0.017	0.133***
	(0.009)	(0.010)	(0.004)	(0.027)	(0.002)
Linear	0.041***	0.042***	0.001	0.002	0.106***
spline	(0.009)	(0.009)	(0.004)	(0.022)	(0.001)
Quadratic	0.092***	0.094**	0.002	0.225**	0.110***
spline	(0.040)	(0.041)	(0.012)	(0.107)	(0.001)
Outcome mean	0.04	0.06	0.02	0.05	_
Obs.	615,089	615,089	615,089	604,390	-

Standard errors in parentheses; \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

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#### Conclusions

CIE of novel activation programme, in times of crisis:

- RD approach
- Two large, longitudinal, individual-level datasets
- Programme had positive and significant effects on reemployment
- Results robust to different specifications and several checks
- (Back-of-the-envelope) financial impact of the programme of 240 million euros

#### Literature summary

Paper	Country	Year	UR	Intervention	Outcome(s)	Meth.	Results
Dolton and O'Neill, 2002	UK	89	7.1	Job search counselling interview ( <i>Restart</i> )	Unemployment rate	RE	<b>↓ by 5 p.p.</b>
Klepinger et al. 2002	US	94	6.1	Job search monitoring or workshop	UB paid and number of weeks on UB	RE	↓ by \$115 and one week
Van den Berg et al, 2004	Netherl.	94	6.2	Sanctions (temporary benefit reduction)	Welfare to work transi- tion	Dur	↑ by more than 140%
Black et al, 2003	US	94- 96	5.7	Mandatory employ- ment and training services	UB paid, number of we- eks on UB and subse- quent earnings	RE	↓ by \$143, 2.2 weeks and ↑ by \$1050, res- pectively
Geerdsen, 2006	Denmark	95- 97	6.1	Compulsory labour market programmes	Employment transitions	QE	<b>↑ by 145%</b>
Manning, 2009	UK	96	7.9	Increase in job search requirements and admi- nistrative hurdle ( <i>Job- seeker's Allowance</i> )	Transitions out of unemployment, to employment and to non-subsidized unem- ployment	DID	↑ by 6%, no effect and ↑ by 6.7%, res- pectively
Petrongolo, 2009	UK	96	7.9	Increase in job search requirements and admi- nistrative hurdle (JSA)	Likelihood of a spell on incapacity benefits and of positive earnings	DID	↑ by 2.5-3% and ↓ by 4- 5%, respecti- vely

The methods are random experiment (RE), difference-in-differences (DID), quasi-experiment (QE), matching (Ma) and regression discontinuity design (RDD).

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#### Literature summary (cont.)

Paper	Country	Year	UR	Intervention	Outcome(s)	Meth.	Results
Borland et al, 2007	Australia	97- 98	8.6	Work-search moni- toring (JobSeeker Diary)	Out of unemployment transitions and UB du- ration	Ma	↑ by 5.1 p.p and ↓ by 6%, respectively
Blundell et al, 2004	UK	98	6.1	Job assistance and wage subsidies (New Deal for Young People)	Employment transiti- ons	DID	<b>∱ by 5 р.р.</b>
McVicar, 2008	N. Ire- land	99- 05	4.5	Suspension of mo- nitoring	Transitions out of unemployment, to employment and other benefits	QE	↓ by 17%, 26% and 8%, respectively
Hagglund, 2011	Sweden	04	7.4	Active placement efforts	Transitions out of unemployment, to employment and other exits	RE	↑ by 51%, 43% and 54%, respectively
Cockx et al, 2012	Belgium	04- 05	8.5	Monitoring of job search efforts	Transitions to employ- ment, training and out of labour force	RDD	↑ by 9 p.p., no ef- fect and no effect, respectively
Graversen et al, 2008	Denmark	05- 06	4.4	Mandatory activa- tion programme	Transitions to employ- ment	RE	<b>↑ by 30%</b>
Crepon et al, 2013	France	07- 08	8	Job placement as- sistance	Transitions to stable employment and dis- placement effects	RE	↑ by 11% but at expense of eligible non-treated indivi- duals
Boone et al, 2009	Netherl.	-	-	Benefit sanction	Job acceptance proba- bility	RE	↑ from 1.4 p.p. to 50 p.p.

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#### Activation strategies - summary

	Belgium	Netherlands	Germany			
Registration and benefit entitlement						
Entitlement to benefits	Before registration	Before registration	Simultaneously with re- gistration			
Placement efforts at initial re- gistration	Referrals to vacancies	Assessment of work rea- diness+referrals	Referrals to vacancies			
Detailed registration interview	Yes, at first contact	Yes, at first contact	Yes, within a fortnight			
Confirmation of status	Declarations (monthly)	Declarations (monthly)	Declaration of relevant changes			
	Job search rec	uirements	•			
Frequency of reporting	Depends on age and on results of previous inter- views	No face-to-face contact monthly	Intensive interview 6 ti- mes a year			
Number of actions to be re- ported	Not specified	4	Not specified			
	Services provided by the Pul	blic Employment Service	·			
Use of direct referrals	1 to 3/year/unemployed	No estimate	No estimate			
Collective information sessi- ons	Mandatory participation	No information	No information			
Individual action plans	2 to 9M	1M for hard to place cli-	Within 1 week to 1M af-			
		ents	ter registration			
Participation in ALMPs						
Compulsory or voluntary entry	Compulsory if referred	Compulsory	Voluntary			
Job-search verification during participation	Yes	No	No			

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### Activation strategies - summary (cont.)

	United States	Danemark	Swit zer land			
Registration and benefit entitlement						
Entitlement to benefits	Before registration Wai-	Simultaneously with re-	Before registration Wai-			
	ting period: 7 days	gistration	ting period: 5 days			
Placement efforts at initial re-	Referrals to vacancies	None	Referrals to vacancies			
gistration						
Detailed registration interview	Yes, within 3 weeks (tar-	Yes, within a month	Yes, within a fortnight			
	geted)					
Confirmation of status	Declarations (fortnigh-	Declarations (monthly)	In-person attendance			
	tly)		(monthly)			
	Job search req	uirements				
Frequency of reporting	No face-to-face contact	Intensive interview	In-person counselling in-			
	(fortnightly)	(Once every 3 months)	terview (monthly)			
Number of actions to be re-	10	Not specified	Between 4 to 10			
ported						
	Services provided by the Put	olic Employment Service				
Use of direct referrals	No estimate	1 to 3/year/unemployed	6 to 8/year/unemployed			
Collective information sessi-	Targeted to unemployed	No information	Mandatory participation			
ons	likely to exhaust benefits		(early in spell)			
Individual action plans	Rare	Within 9M/6M	Within the first 3M			
		(adults/youth)				
Participation in ALMPs						
Compulsory or voluntary entry	Voluntary	Compulsory at 9M for	Compulsory only if refer-			
		30-60 and 6M for others	red			
Job-search verification during	Yes	No	Yes			
participation						

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### Activation strategies - summary (cont.)

	United Kingdom	Portugal					
F	Registration and benefit entitlement						
Entitlement to benefits	Simultaneously with registra-	Simultaneously with registra-					
	tion	tion					
Placement efforts at initial re-	Referrals to vacancies	Referrals to vacancies					
gistration							
Detailed registration interview	Yes, within a week	Yes, at first contact					
Confirmation of status	In-person attendance (fort-	In-person attendance (fort-					
	nightly)	nightly)					
	Job search requirements						
Frequency of reporting	In-person counselling inter-	Variable					
	view (fortnightly)						
Number of actions to be re-	10	Not specified					
ported							
Services	provided by the Public Employmer	nt Service					
Use of direct referrals	6 to 8/year/unemployed	1 to 3/year/unemployed					
Collective information sessi-	Non existent	Mandatory participation					
ons		(early in spell)					
Individual action plans	Within 1 week to 1M after re-	Within 6M/3M					
	gistration	(adults/youth)					
Participation in ALMPs							
Compulsory or voluntary entry	Compulsory at 10M for youth	Compulsory only if referred					
	and 622M for 25-49						
Job-search verification during	No	Νο					
participation							

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#### Unemployment exit probabilities by (centered) UB duration



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# Transitions to non-subsidized unemployment by (centered) UB duration



### Income level in following month by (centered) UB duration



### Reemployment probabilities by (centered) UB duration and month (April to July 2012)



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## Reemployment probabilities by (centered) UB duration and month (August to November 2012)



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# Mean values of background variables, by (centered) UB duration



୬ ଏ ୯ 29 / 30

# Falsification test: reemployment probabilities, by (centered) UB duration, 2011

