

Is contracting-out intensive placement services more effective than provision by the PES?

Evidence from a randomized field experiment



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Motivation

- Placement services
- Basic task: Job search assistance
 - OECD countries until late 1990s: Monopoly of public employment services (PES)
 - European commission 1998: Urged members to open market to private providers
- Intensive services
- Aimed at “hard-to-place” unemployed; lower caseload than in standard services, more frequent meetings, in-house training
- Our contribution
- Empirical analysis of a field experiment:
Random assignment of “hard-to-place” into two groups receiving intensive services
- contracted-out to private providers (default in Germany since 2008)
 - provided in-house by the PES

Contracting-out on quasi-markets

- Contracting out
- Demand side: One state agency specifies tasks and purchases services
 - Supply side: Several private providers compete for contracts
 - Ex-ante competition through auction-like bidding process
- Potential gains
- Efficiency (Bartlett/Le Grand 1993)
 - Flexibility, innovations (Bruttel 2005)
- Potential problems
- Number of potential providers
 - Contract design and monitoring
 - Transaction specific investments
 - Cream-skimming and parking

Empirical evidence on the effectiveness of contracting-out

Studies for
Germany
(PS matching)

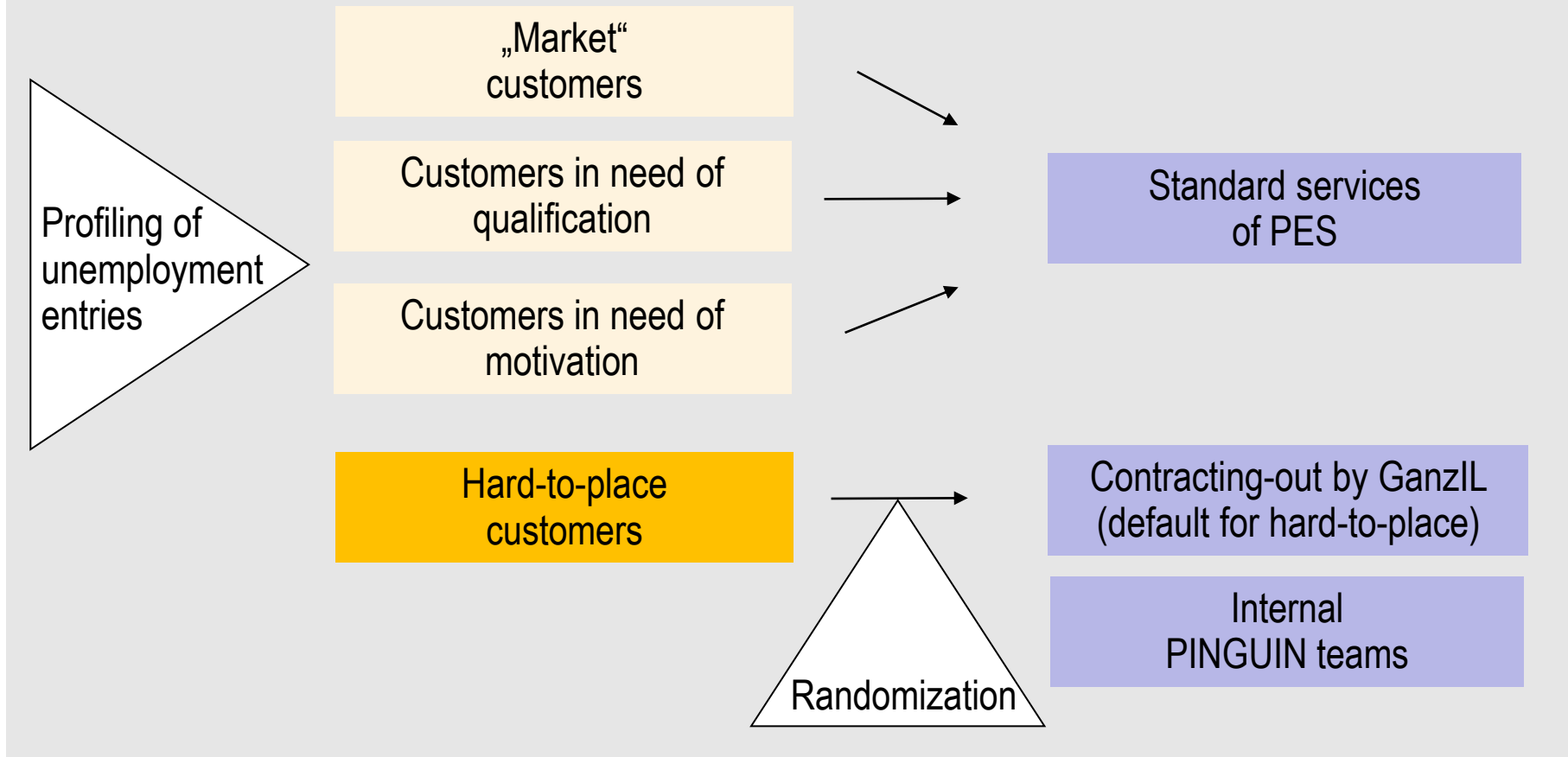
- Winterhager (2006a/2006b/2008), WZB/infas (2006) for unemployment insurance recipients: No or very short-term effects
- Bernhard/Wolff (2008) for welfare benefit recipients: Positive effects only for some groups of “hard-to-place”

Few
experimental
studies

- Benmarker et al. (2009) for unemployed (young/immigrants/disabled) in Sweden: No effects
- Behaghel/Crepon/Gurgand (2012) for France: Positive impact of intensive job search assistance on exit rates to employment, which is twice as large for the public compared to the private program (during 6 months after assignment)

The field experiment

Randomization process



Contracting-out of “hard-to-place” unemployed in Germany

Placement
services in
Germany

- Traditionally delivered by PES
- Since 1998, option of contracting-out
- From 2008 to 2010, caseworkers should assign unemployed profiled as “hard-to-place” to a private provider (after 4 months of unemployment)

GanzIL*
program

- Contract duration of two years, treatment duration of 8 months
- Free choice of treatment, but minimum contact frequency (every 2 weeks)
- Fixed pay component: 700-990 Euros
(covers also commuting costs remuneration of assigned unemployed)
- Two performance pay components: 150-1500 Euros
(in regular job for 3/ for 6 months)
- Negotiated re-employment rate: 20-30 percent;
fine of at least 1000 Euro per “missing” re-integration

**)“Ganzheitliche Integrationsleistungen für Arbeitslose mit Aktivierungs- und Unterstützungsbedarf sowie multiplen Vermittlungshemmnissen und geringen Integrationschancen”*



Introduction of in-house teams for “hard-to-place”

PINGUIN project*

- In-house team of caseworkers, discretion in time allocation and choice of services
- Low caseloads (aimed at 1:40), fixed budget for activation and qualification programs (600 Euros per unemployed)

The field experiment

- Random assignment of entries of “hard-to-place” unemployed in two agencies to a) contracted-out services, b) in-house PINGUIN teams
- Assignment tool for caseworkers: EMu** computer program
- Timing of assignment: After profiling took place, immediately (Agency 1) or 4 months (Agency 2) after unemployment registration
- Assignment duration: 8 months
- Project duration: Unemployment entries March 2009 to December 2010

*) “Projekt interne ganzheitliche Unterstützung zur Integration im SGB III”; **) “Elektronischer Muenzwurf”

Electronic coin toss (EMu)

The screenshot shows a Microsoft Internet Explorer browser window displaying a web application. The address bar shows the URL <http://www.bartem.de>. The browser's title bar reads "BA Intranet - Startseite - Microsoft Internet Explorer bereitgestellt von IT-Systemhaus -BA- V002".

The main content area features a form titled "Kundenerfassung" (Customer Registration). The form includes the following fields and controls:

- Kundennummer: ***: Text input field.
- Vorname: ***: Text input field.
- Zuname: ***: Text input field.
- Geburtsdatum: ***: Text input field.
- Teilnahme/Absagegrund:** Dropdown menu with "Teilnahme" selected.
- Verteilungsmonat:** Dropdown menu with "November 2008" selected.
- Wiedervorlage/Grund:** Large text area.
- Verteilungsgruppe:** Text input field.

At the bottom of the form, there are four buttons: "Verteilen", "Suchen/Bearbeiten", "Eingabemaske leeren", and "Programm beenden". A red status message "verbunden..." is visible above the buttons.

The browser's status bar at the bottom shows "Lokales Intranet", "100%", and the time "10:36". The taskbar includes icons for "Start", "Posteingang - Micros...", "Windows Explorer", "Dokument1 - Microsof...", "Internet Explorer", and "Kundenerfassung".



Data, variables, and descriptives

Data and variables

Data

- EMu data base
- TrEffeR data base (similar to IEB): Periods of registered job search, registered unemployment, employment, participation in labor market programs
- IAB data on sanctions, benefit receipt and employment characteristics

Sample

- Entries into unemployment in two agencies between April 2009 and February 2010
- Around 1,400 individuals, observed for 18 months

Outcome variables

- Cumulated days in a) registered unemployment, b) employment subject to social security contributions, c) other status (mainly withdrawal from the labor market), measured since the day of random assignment
- Shares
- Several employment characteristics (information available until 12/2010)

Distribution of individual characteristics

<i>Dummy variable means and differences in means</i>	Agency 1 (East)			Agency 2 (West)		
	C	I	Δ	C	I	Δ
No benefit receipt	0.28	0.33	0.05	0.10	0.12	0.02
Women	0.63	0.65	0.01	0.47	0.50	0.03
Foreign nationality	0.06	0.04	-0.01	0.24	0.24	0.00
Age >40	0.15	0.18	0.03	0.18	0.18	0.00
Age 40-49	0.13	0.15	0.02	0.15	0.20	0.06
Age 50-59	0.48	0.48	0.00	0.48	0.41	-0.07
Age 60 and older	0.24	0.19	-0.04	0.20	0.20	0.01
No secondary degree	0.03	0.06	0.02	0.23	0.22	-0.01
No vocational training	0.07	0.08	0.02	0.25	0.21	-0.04
Number of observations	414	412		254	280	
MSB before matching	7.1			6.7		
MSB after matching	1.2			1.9		

C = Contracted-out, I = In-house, **) $\alpha = 0.01$, *) $\alpha = 0.05$

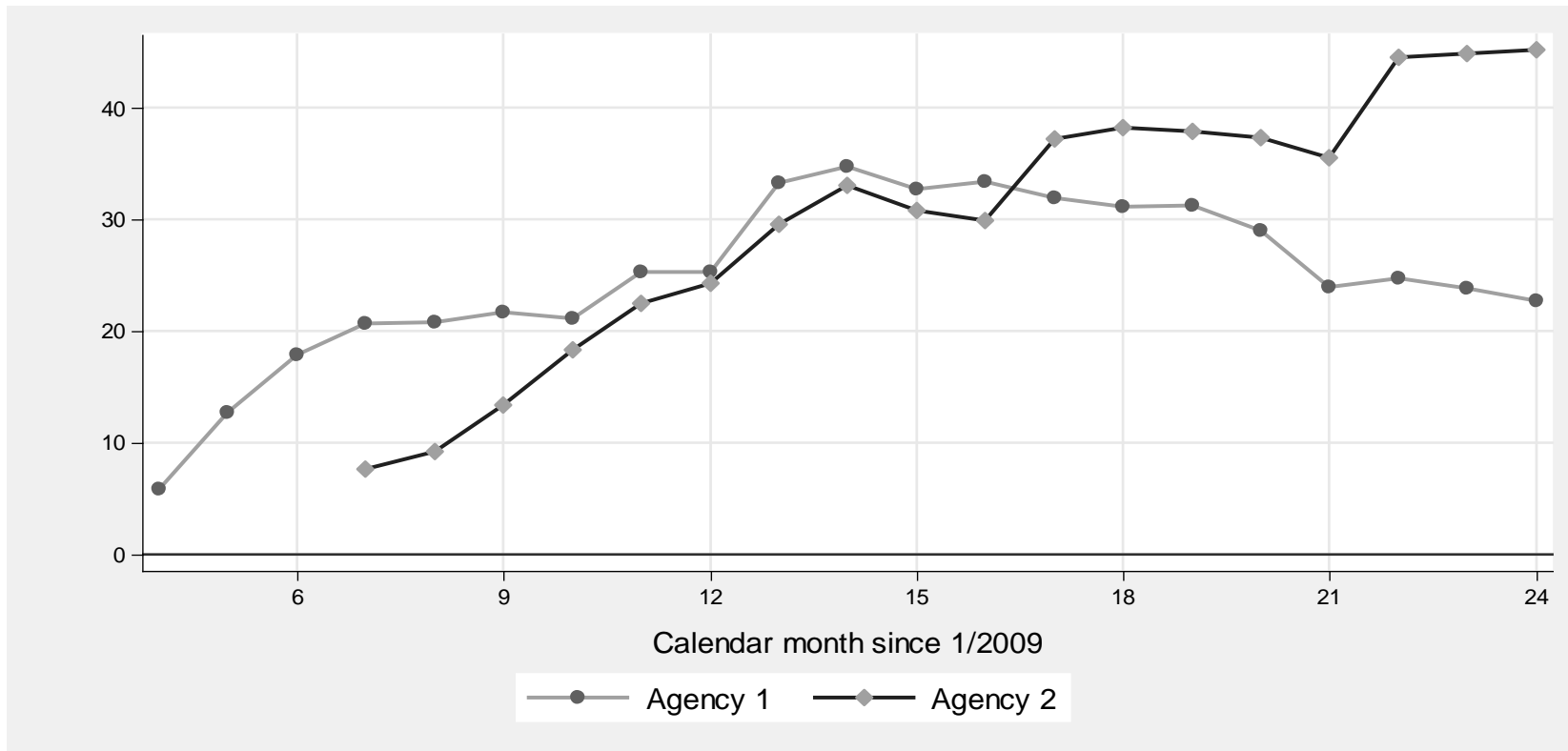
Participation in programs after the assignment took place

<i>Means and differences in means</i>	Agency 1 (East)			Agency 2 (West)		
	C	I	Δ	C	I	Δ
Private placement services ("GanzIL")	0.82	0.00	-0.82**	0.78	0.00	-0.78**
"GanzIL" registration withdrawn	0.07			0.07		
No "GanzIL" registration	0.11			0.14		
Days until start of "GanzIL"	55			42		
Self employment subsidy	0.01	0.02	0.01	0.02	0.01	-0.01
Wage subsidy	0.05	0.06	0.01	0.03	0.06	0.03
Qualification program	0.03	0.07	0.04**	0.02	0.03	0.01
Short activation program	0.06	0.28	0.22**	0.11	0.31	0.20**
Public employment scheme	0.00	0.01	0.00	0.00	0.00	0.00
Other	0.00	0.01	0.01	0.01	0.00	-0.01
Cut-off period from benefits#	0.01	0.03	0.02	0.05	0.08	0.03
Number of observations	414	412		254	280	

C = Contracted-out, I = In-house, **) $\alpha = 0.01$, *) $\alpha = 0.05$

#) Within 8 months after assignment; excluding sanctions due to severance payments

Average caseloads in in-house services over time



Contract structure “Ganzil”

	Agency 1 (East)		Agency 2 (West)
Fixed pay component	500	800	700
1st performance pay component	482	179	50
2nd performance pay component	482	179	50
Malus component	500	1000	500
Risk component	386	179	40
Minimum re-employment rate	22	22	15
Number of observations	326	40	170

Estimated parameters

Average effects of intention to treat

- | | |
|-----------------------|---|
| Notation | <ul style="list-style-type: none"> • $Z_i = 0$ = individual i is assigned to a private provider • $Z_i = 1$ = individual i is assigned to the internal PINGUIN team • Y_i^0 = labor market result of individual i if assigned to a private provider, • Y_i^1 = labor market result of individual i if assigned to in-house team |
| Parameter of interest | <ul style="list-style-type: none"> • Random assignment implies
$E[Y^0 Z=1] = E[Y^0 Z=0]$ and $E[Y^1 Z=1] = E[Y^1 Z=0]$ • $E[Y^1 Z=1] - E[Y^0 Z=0]$ measures the causal effect of Z on Y |
| Complication | <ul style="list-style-type: none"> • Compliance around 100% for in-house services, but only around 80% for taking up assignment to private provider • Difference in means displays the effect of an in-house treatment versus a likely assignment to a private provider (intention to treat) |
| Balanced? | Due to remaining covariate imbalances: Additional statistical matching |

Instrumental variable estimator?

Additional
notation

- $Z_i = 0$ = individual i is assigned to a private provider
 $Z_i = 1$ = individual i is assigned to the internal in-house team
- $T_i = a$ = individual i does not show up at private provider
(drops out or receives standard services of FEA)
 $T_i = b$ = individual i does show up at private provider
 $T_i = c$ = individual i does show up at in-house team (perfect compliance)

Use Z as an
instrument for T ?

- $Y_i = a + bT_i$
- The choice between $T = a$ and $T = b$ is probably not exogenous
- While Z is correlated with T and uncorrelated with Y ,
 Z provides no information on the choice between $T = a$ and $T = b$

Causal effects of internal services

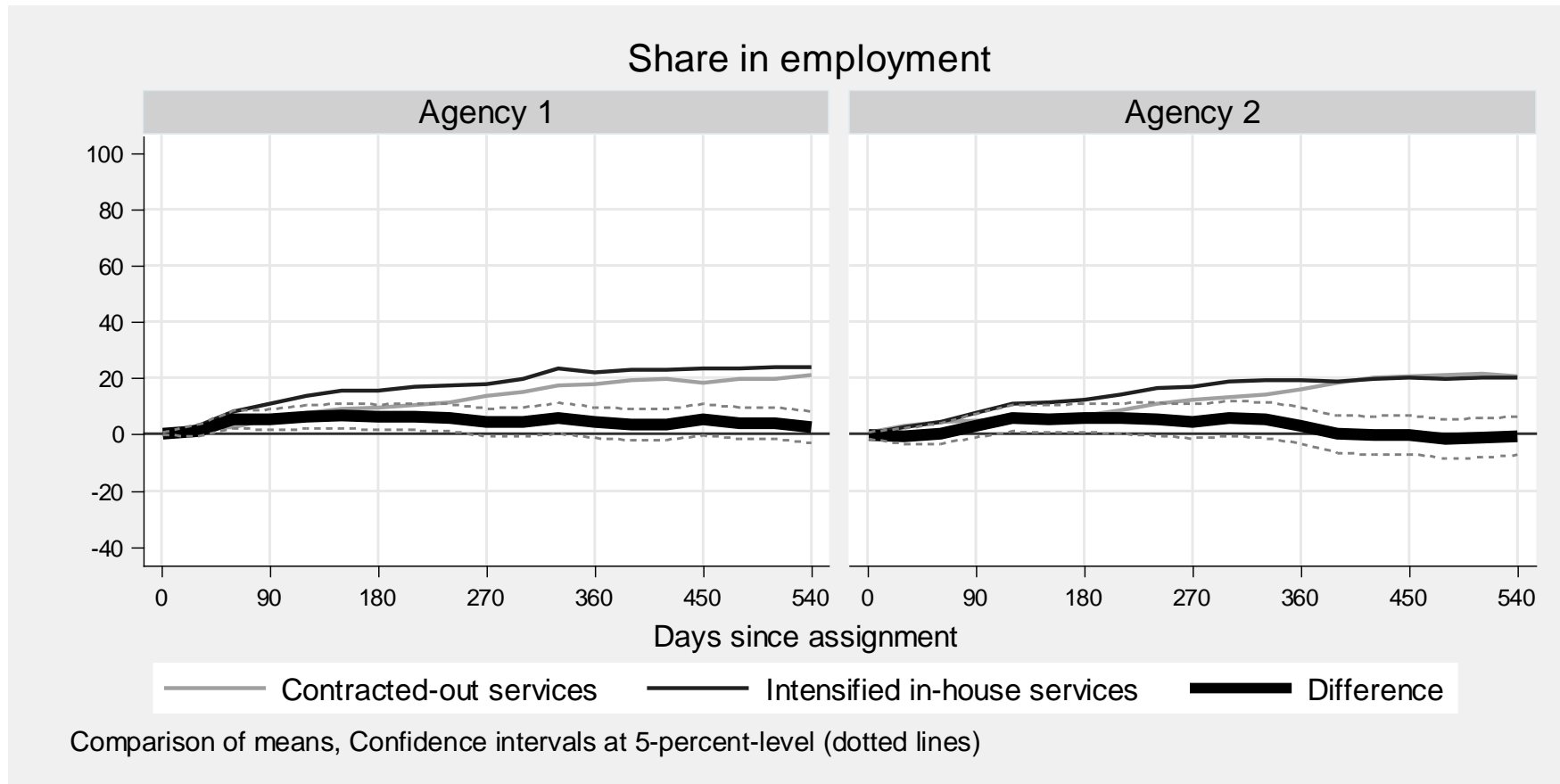
Positive cumulated effects of in-house treatment

<i>Cumulated days, 18 months after assignment</i>	Agency 1 (East)			Agency 2 (West)		
	Unem- ployed	Employed	Withdrawn	Unem- ployed	Employed	Withdrawn
Without matching						
Constant	373**	70**	99**	358**	65**	118**
Intensive in-house	-70**	24*	47**	-37*	13	25
Observations	826			534		
R2	0.036	0.007	0.020	0.011	0.002	0.006
After matching[#]						
Constant	365**	71**	106**	350**	67**	124**
Intensive in-house	-62**	22*	41**	-27	11	17
Observations	818			552		
R2	0.028	0.006	0.015	0.006	0.002	0.003

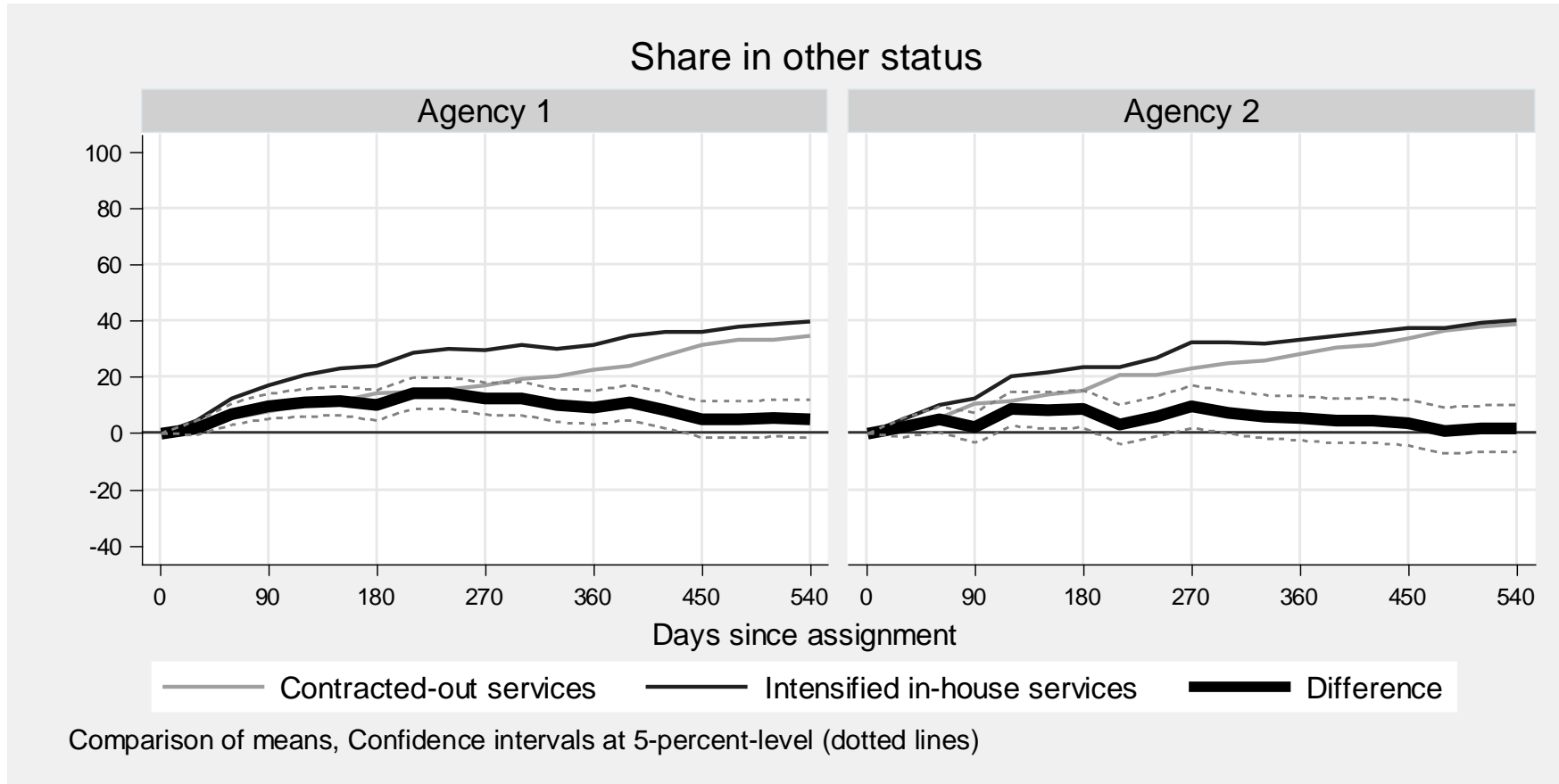
OLS estimates; reference persons are those assigned to contracted-out services;

** $\alpha = 0.01$, * $\alpha = 0.05$; #) radius matching with a caliper of 0.05

Individuals were in fact hard-to-place!



Substantial share of withdrawals



Few significant differences in quality of first job

	Daily wage rate	Share part-time work	Share unskilled labor	Share temp work agency
<i>Agency 1 (East)</i>				
Constant	39**	0.33**	0.24**	0.23**
Intensive in-house	-4	-0.06	0.12*	-0.01
Obs. controls	130			
Obs. treated	111			
R2	0.008	0.005	0.016	0.083
<i>Agency 2 (West)</i>				
Constant	42**	0.33**	0.40**	0.27**
Intensive in-house	-2	-0.07	0.10	-0.07
Obs. controls	76			
Obs. treated	63			
R2	0.002	0.006	0.011	0.072

OLS estimates; reference persons are those assigned to contracted-out services;
only individuals who took up a job; information available until 12/2010; **) $\alpha = 0.01$, *) $\alpha = 0.05$

Stronger effects for non-benefit recipients

<i>Cumulated days, 18 months after assignment</i>	Agency 1 (East)			Agency 2 (West)		
	Unem- ployed	Employed	Withdrawn	Unem- ployed	Employed	Withdrawn
Constant	394**	73**	73**	367**	69**	105**
<i>Non-benefit recipient</i>	-77**	-13	94**	-85*	-39	124**
Intensive in-house	-47**	17	31*	-31	7	25
<i>Interaction term</i>	-56*	23	35	-38	55	-19
Observations	826			534		
R2	0.111	0.008	0.118	0.048	0.006	0.054

OLS estimates; reference persons are those assigned to contracted-out services;

** $\alpha = 0.01$, * $\alpha = 0.05$, #) radius matching with a caliper of 0.05

Some further aspects

Are effects related to restrictions faced by private providers?

- Participation in further programs
- Performance pay component is paid only for re-integrations taking place without the help of any other labor market program
 - Include dummy and interaction for further program participation (descriptive)
 - Does not seem to drive results: Negative selection of participants; stronger treatment effects; interaction terms not significant
- Transaction costs
- Time-gap between leaving FEA and taking up private placement services of around 40 days
 - Include dummy and interaction for exit within 60 days (descriptive)
 - Might play a role: Weaker treatment effects; interaction terms mostly not significant
- Contract structure
- Fixed component too high and performance pay component too low? (see discussion in Behaghel/Crepon/Gurgand 2012)

Are effects related to imperfect compliance or Hawthorne effects?

Imperfect
compliance in
control group

Non-compliance might result from selection (early exit), threat effects, or “sabotage” of caseworkers

- Include dummy and interaction for non-compliance (descriptive)
- Does not seem to drive results: Positive selection of non-compliers; stronger treatment effects

Hawthorne

Additional monitoring and extended team interaction might have induced members of teams to spend extra effort during the start period of the project (furthermore, caseloads were particularly low during this period)

- Include dummy and interaction for entry until 9/2009
- Does not seem to play a role

A very basic cost-benefit analysis

	Agency 1 (East)			Agency 2 (West)		
	C	I	Δ	C	I	Δ
Entries 4/2009 to 2/1012						
A) Costs of intensive services*	476	1113	-636	528	1454	-926
B) Fixed budget expenditures		149	-149		123	-123
C) Unemployment benefits	5989	4557	1432	8021	7218	803
D) Unemployment insurance contributions	90	105	-15	86	100	-14
A + B + C – D = Fiscal costs for PES	6375	5714	662	8463	8695	-232
Entries 9/2009 to 2/2010						
A) Costs of intensive services*	544	944	-400	532	1047	-515
B) Fixed budget expenditures		149	-149		123	-123
C) Unemployment benefits	6489	4734	1755	8338	7618	720
D) Unemployment insurance contributions	100	126	-26	98	111	-13
A + B + C – D = Fiscal costs for PES	6933	5702	1232	8772	8678	94

C = Contracted-out, I = In-house;

*) Computed from monthly factual caseloads for internal services and from contract structures and labor market results for contracted-out services

Conclusions

Who should provide placement services?

Key results

- Compared to contracting-out, in-house provision of intensive services by the PES reduced cumulated days in unemployment by one to two month (during an observation period of 18 months)
 - ⇒ In line with results of Behaghel/Crepon/Gurgand (2012) for France
- Difference results partly from higher withdrawal rates of treated persons from the labor market (in particular non-benefit recipients)

But ...

- Effects seem to fade out at the end of the observation period
- Simple comparison of labor market outcomes does not cover all relevant aspects
- Even with intensive services, employment rates did not exceed 20 percent

Backup

Additional estimates

	Agency 1 (East)			Agency 2 (West)		
	Unemployed	Employed	Other	Unemployed	Employed	Other
I Constant	362**	70**	109**	341**	70**	130**
<i>Further program</i>	81**	-1*	-77**	101**	-28	-73**
Intensive in-house	-104**	30	76**	-56**	5	53**
<i>Interaction term</i>	45	-14	-34	-3	35	-34
R2	0.101	0.008	0.083	0.071	0.005	0.072
II Constant	399**	60**	83**	388**	50**	104**
<i>Exit within 60 days</i>	-271**	103**	167**	-250**	134**	116**
Intensive in-house	-41**	6	36**	-35*	19	17
<i>Interaction term</i>	22	27	-41	41	-72*	30
R2	0.283	0.092	0.111	0.205	0.060	0.083
III Constant	415**	56**	70**	399**	58**	85**
<i>Non-complier</i>	-236**	78**	160**	-188**	35	152**
Intensive in-house	-111**	38**	76**	-77**	20	58**
R2	0.155	0.027	0.087	0.102	0.007	0.074
IV Constant	372**	76**	93**	348**	77**	116**
<i>Entry until 9/2009</i>	3	-13	13	20	-23	2
Intensive in-house	-71**	39**	37*	-27	11	18
<i>Interaction term</i>	3	-33	22	-19	2	14
R2	0.036	0.019	0.026	0.012	0.008	0.007