



Role and Relevance of Public Employment Services for Youth Labour Market Integration

A cross-European Perspective

Sven Broschinski Marie-Luise Assmann

6th European User Conference for EU-Microdata, 2019





Background

- Unprecedented levels of youth unemployment in many European countries
 - e.g. EL 47%, ES 44% in 2016.
- Youth labour market integration has become a key issue in national as well as in EU policy
 - European Youth Guarantee/Youth Employment Initiative
- Public employment services (PES) are referred to as crucial actors in tackling youth unemployment (European Commission, 2017)





Research gap:

- A growing body of literature devoted to the causes and consequences of youth unemployment during the crisis
- However, the actual relevance of PES for youth across Europe is of little empirical interest so far

Research questions:

- 1. What is the actual relevance of PES support to young people with different educational levels for finding a job?
- 2. How do differences in the educational system and in labour market policies shape the relevance of PES support across Europe?





Theoretical framework

- ➤ Information asymmetry (IA) between employer and applicants (Spence 1973; Arrow 1973; Akerlof 1970)
 - IA in particular true for labour market entrants, e.g. youth, due to their rare or even non-existing work experience or references
 - Uncertainty → risk of a mismatch → potential turnover costs
- Reduction of IA via signals which can reduce the uncertainty about the productivity and motivation of a young applicant
 - Signals: Educational certificates, references, recommendations etc.
 - Low-qualified youth are expected to be in a particularly disadvantaged position concerning their possibilities to send strong signals
 - How does PES support might help in particular low-qualified youth?





Job-search with support of PES

- ➤ PES are less successful compared to informal job-search methods → selection bias! (Addison/Portugal 2002; Weber/Mahringer 2008; Bachmann/Baumgarten 2013)
 - PES support is used mostly by already disadvantaged groups
 - Jobs offered by PES are usually of lower quality (Osberg 1993)
- PES can function as 'signal amplifier' or 'signal substitute'
- Lack of comparative studies or studies focusing on youth





School-to-work transition

- Job-search process is usually treated as a black box so far
- ➤ Highlights the crucial role of the educational system as well as labour market policies for youth labour market integration (Breen 2005; Gebel 2017; Gebel/Noelke 2011; Müller/Gangl 2003; Noelke/Gebel/Kogan 2012):
 - Degree of Stratification and standardisation (Allmendinger 1989)
 - Vocational enrolment and work-based learning (Bol/van de Werfhorst 2013; Breen 2005)
 - Expenditures for labour market policies (Russel/O'Connell 2001)
 - Labour market regulation (Gebel/Giesecke 2016)





Hypotheses

H1: Youth who receive PES support are less successful in finding a job, while this negative effect becomes weaker with decreasing educational level

H2a: The higher the degrees of standardisation and stratification, the weaker the negative effect of PES support, especially for low-qualified youth

H2b: The higher the vocational specificity of the educational system, the weaker the negative effect of PES support, especially for low-qualified youth.

H3a: The higher the expenditures for LMS and ALMP, the weaker the negative effect of PES support, especially for low-qualified youths.

H3b: The lower the labour market regulation in a country, the weaker the negative effect of PES support, especially for low-qualified youths





Data and methods

- EU-LFS 2016 ad-hoc module: "Young people on the labour market "
- Age 15-24 respective 15-29 years, NEET or at maximum 11 months in employment, 31 countries, (EU28 + NO, CH, IS).
- Two-level random intercept models
 - Separat models for every macro variable
 - Focus on cross-level interactions





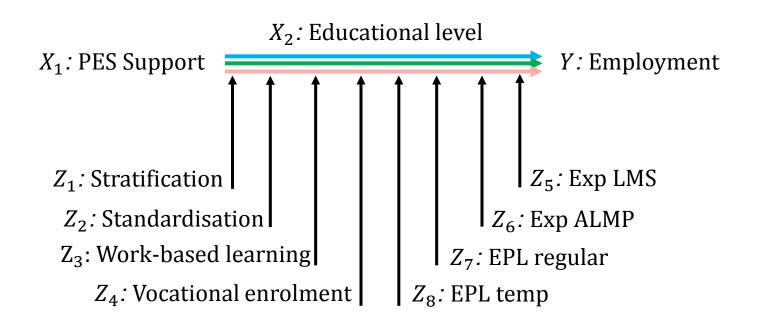
Variables

- Employed (0=NEET, 1=Employed)
- ➤ PES support: "Most helpful type of support for finding a job received from public agencies during the last 12 months"
 - dichotomised (1: support | 0: no support)
- Context variables:
 - Stratification: Index of external differentation (tracking)
 - Standardisation: centralised examination
 - Vocational specificity: share of work-based learning and vocational enrolment
 - Expenditues for labour market policies: LMS and ALMP
 - Labour market regulation: EPL regular and EPL temporary





Micro-macro model



Educational system

Labour market policies





- No clear regime patterns
- Finland: highest recipient rate across Europe
- Balkan and Baltic countries with both lowest registration and recipient rate
- Crisis countries with very low recipient rates despite moderate registration rates
- Registration and recipient rates do not necessary correspond

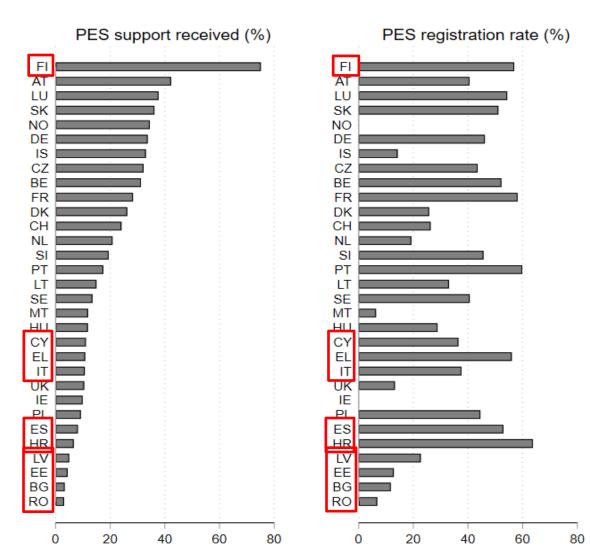


Figure 1: Proportion of young NEETs registered with the PES in 2016 and received support from PES during the last 12 months. Source: EU-LFS ahm 2016, own calculations.





M1: Micro-Model
M2: Country interactions (ref.: AT)

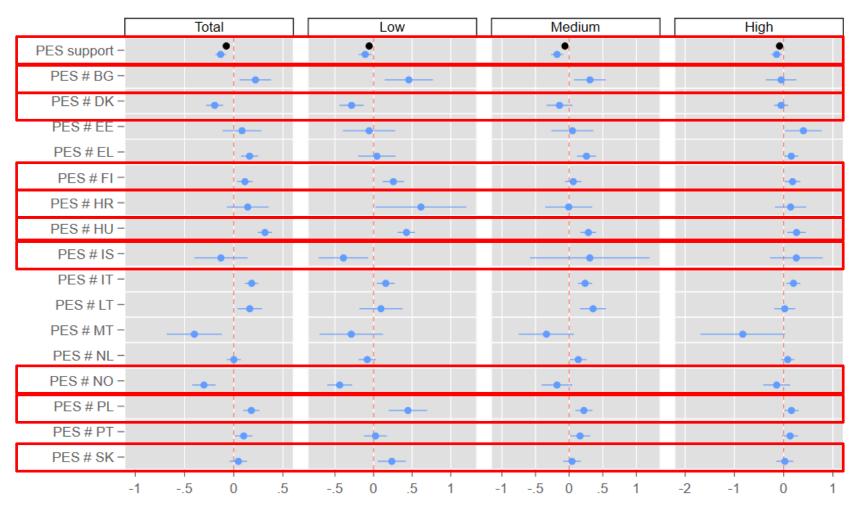


Figure 2: The effect of PES support on employment by educational level. Controlled for gender, migration background, duration since leaving school, work experience. Source: EU-LFS ahm 2016, own calculations.





Country interactions

- Negative effect of PES support weaker for low-qualified youth
- ➤ In Eastern European countries (BG, HR, HU, PL and SK), the effect of PES support for low-qualified youth is positive (compared to AT)
- ➤ In Nordic countries (DK, IS and NO), the negative effect of PES support for low-qualified is much stronger (compared to AT)

→ Exception: Finland!





 Total ◆ Low education ▲ Medium education ■ High education Standardization Stratification Work-based learning Vocational orientation PES support -Tracking -PES#Tracking -Central exams -PES#Exams -Workstud -PES#Workstud -Voc edu -PES#voc edu -.1

0

.1 -.3 -.2 -.1

Figure 3: Cross-level interaction effects of the educational system and PES support on employment. Source: EU-LFS ahm 2016, own calculations. Controlled for all micro variables from Figure 1, GDP and youth unemployment rate...

-.1

-.05

.05

-.1

-.05

0

.05

-.1 -.05

.05





Educational system

- Cross-level interactions only significant for low-qualified!
- A higher degree of stratification weakens the negative effect of PES support by 0.052
- Standardized educational systems also weaken the negative PES support effect by 0.065
- Work-based learning has a quite weak but still significant effect on PES support with 0.003 for each percentage point more work-based learning in the curricula
- Vocational enrolment weakens the negative effect of PES support by 0.009 with each percentage point more graduates in secondary vocational education





 Total ◆ Low education ▲ Medium education ■ High education EPL regular Exp LMS Exp ALMP **EPL** temporary PES support -Exp LMS -PES#Exp LMS Exp ALMP -PES#Exp ALMP -EPL regular -PES#EPL regular -EPL temp -PES#EPL temp -

Figure 4: Cross-level interaction effects of labour market policies and PES support on employment. Source: EU-LFS ahm 2016, own calculations. Controlled for all micro variables from Figure 1, GDP and youth unemployment rate.

-.2 -.1

0

.1

.2

-.1

-.05

2

-6

-3

0

3

6

-1

0

.05





Labour market policies

- Expenditures for LMS have a surprisingly negative effect on PES support with -5.174 for low-qualified
- Expenditures for ALMP have no significant effect on PES support for low-qualified
- ➤ Higher EPL's for regular contracts have a negative impact on the already negative effect of PES support -0.136
- Higher EPL's for temporary contracts seem to have no significant effect





Conclusion

- Tremendous cross-country differences
 - Finland as a "leading example"?
- Low relevance of PES in countries most hit by the crisis
 - Low relevance ← low registration rates ← low incentives?
- Educational systems and labour market policies highly shape the relevance of PES support for low-qualified youth
 - Especially the stratification, standardisation as well as the vocational specificity of the educational system
 - But also the degree of labour market regulation
- ➤ PES support seems especially relevant for disadvantaged labour market groups in countries that make it even more difficult for them to find a job.





Thank you for your attention!

| | - 1. | Central | Work-based | Vocational | Ехр. | Ехр. | EPL | EPL |
|----|-------------|---------|--------------|---------------|---------|----------|---------|-----------|
| | Tracking | Exam | learning (%) | enrolment (%) | LMS (%) | ALMP (%) | regular | temporary |
| AT | 1.817 | 0 | 46 | 37 | 0.030 | 0.099 | 2.12 | 2.17 |
| BE | 1.018 | 0 | 33 | 23 | 0.023 | 0.062 | 2.14 | 2.42 |
| BG | -0.019 | 1 | 15 | 22 | 0.003 | 0.015 | | |
| CH | -0.138 | 0 | 49 | 29 | | | 1.50 | 1.38 |
| CY | | 0 | 16 | 10 | 0.002 | 0.008 | | |
| CZ | 1.621 | 1 | 59 | 48 | 0.024 | 0.060 | 2.87 | 2.13 |
| DE | 1.862 | *1 | 16 | 35 | 0.078 | 0.058 | 2.53 | 1.75 |
| DK | -0.870 | 1 | 18 | 15 | 0.081 | 0.231 | 2.10 | 1.79 |
| EE | | 1 | 26 | 22 | 0.018 | 0.016 | 1.74 | 3.04 |
| EL | -0.474 | 0 | 9 | 15 | 0.000 | 0.008 | 2.07 | 2.92 |
| ES | -1.020 | 0 | 12 | 11 | 0.007 | 0.020 | 1.95 | 3.17 |
| FI | -0.870 | 1 | 71 | 32 | 0.012 | 0.091 | 2.38 | 1.88 |
| FR | -0.474 | 1 | 67 | 26 | 0.024 | 0.064 | 2.60 | 3.75 |
| HR | | | 18 | 50 | 0.004 | 0.023 | 2.32 | 2.88 |
| HU | 1.421 | 1 | 50 | 31 | 0.010 | 0.121 | 1.45 | 2.00 |
| IE | -0.302 | 1 | 13 | 10 | 0.005 | 0.048 | 1.50 | 1.21 |
| IS | -0.805 | 1 | 17 | 5 | | | 2.04 | 1.29 |
| IT | 0.166 | 1 | 18 | 30 | 0.003 | 0.035 | 2.55 | 2.71 |
| LT | | 1 | 35 | 14 | 0.006 | 0.027 | 2.23 | 3.33 |
| LU | 0.700 | 1 | 43 | 1 | 0.010 | 0.078 | 2.28 | 3.83 |
| LV | -0.576 | 1 | 25 | 20 | 0.004 | 0.011 | 2.57 | 1.79 |
| MT | | 1 | 23 | 14 | 0.028 | 0.019 | | |
| NL | 0.937 | 1 | 53 | 27 | 0.035 | 0.075 | 2.84 | 1.17 |
| NO | -1.043 | 1 | 15 | 13 | 0.029 | 0.086 | 2.23 | 3.42 |
| PL | -0.083 | 1 | 30 | 34 | 0.010 | 0.051 | 2.20 | 2.33 |
| PT | -0.327 | 0 | 13 | 14 | 0.004 | 0.038 | 3.01 | 2.33 |
| RO | | 1 | 6 | 38 | 0.008 | 0.003 | | |
| SE | -0.870 | 0 | 38 | 21 | 0.029 | 0.136 | 2.52 | 1.17 |





| | NA - A - | NA - d - L 2 - | NA - 4 - | NA - 2 - | NA - 4 - | NA - 2 - | NA - 4 - | N4 - d - l 2 - l |
|--------------------------------------|-----------------|--|-----------------|--|-----------------|-----------------|-----------------|---------------------------------------|
| | Model 1a | Model 2a | Model 1b | Model 2b | Model 1c | Model 2c | Model 1d | Model 2d |
| | Total | Total | Low | Low | Medium | Medium | High | High |
| Micro-variables | | | | | | | | |
| PES support | -0.08*** (0.01) | -0.13*** (0.03) | -0.06*** (0.01) | -0.11* (0.04) | -0.06*** (0.01) | -0.18*** (0.05) | -0.08*** (0.01) | -0.14** (0.06) |
| Control variables | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Country interaction | | | | | | | | |
| effects (Ref.: AT) | | | | | | | | |
| PES support * BG | | 0.22** (0.08) | | 0.46** (0.16) | | 0.31** (0.12) | | -0.05 (0.16) |
| PES support * DK | | -0.19*** (0.04) | | -0.29*** (0.08) | | -0.14 (0.10) | | -0.05 (0.07) |
| PES support * EE | | 0.08 (0.10) | | -0.06 (0.17) | | 0.05 (0.16) | | 0.40* (0.19) |
| PES support * EL | | 0.16*** (0.04) | | 0.04 (0.12) | | 0.26*** (0.07) | | 0.15* (0.07) |
| PES support * FI | | 0.11** (0.04) | | 0.26*** (0.07) | | 0.06 (0.06) | | 0.18* (0.08) |
| PES support * HR | | 0.14 (0.11) | | 0.61* (0.30) | | -0.01 (0.18) | | 0.14 (0.16) |
| PES support * HU | | 0.32*** (0.04) | | 0.43*** (0.06) | | 0.29*** (0.06) | | 0.26** (0.10) |
| PES support * IE | | -0.19*** (0.06) | | -0.10 (0.12) | | -0.14 (0.08) | | -0.26* (0.12) |
| PES support * IS | | -0.13 (0.14) | | -0.39* (0.16) | | 0.31 (0.45) | | 0.26 (0.27) |
| ₽ E§ §UBB8F t * M⊤ | | 0.180*** (0.13) | | 0.16** (8.96) | | 0.24*** (0.95) | | 0.20.** (0.97) |
| PE§ support * NI | | 0.16 6* (0.04) | | -0: 1 8 (0: 14) | | 0.36.44* (0.68) | | 6.6 2 (6. 11)) |
| PES support * NO | | -0.30*** (0.06) | | -0.44*** (0.08) | | -0.18 (0.12) | | -0.14 (0.14) |
| PES support * PL | | 0.18*** (0.04) | | 0.44*** (0.13) | | 0.22*** (0.06) | | 0.16* (0.07) |
| PES support * PT | | 0.10* (0.05) | | 0.02 (0.08) | | 0.16* (0.08) | | 0.13 (0.08) |
| PES support * SK | | 0.05 (0.04) | | 0.24* (0.09) | | 0.04 (0.07) | | 0.02 (0.09) |
| Constant | 0.83*** (0.01) | 0.84*** (0.02) | 0.74*** (0.02) | 0.76*** (0.03) | 0.73*** (0.02) | 0.76*** (0.02) | 0.84*** (0.02) | 0.85*** (0.03) |





| | | PES support on employment | | | | |
|-------|--------------------------|---------------------------|-----------|-----------|--------------------|--|
| Model | Educational system | Total | Low | Medium | High | |
| | | | | | | |
| 3 a-d | PES support | -0.078*** | -0.068*** | -0.062*** | -0.084*** | |
| | | (0.007) | (0.013) | (0.011) | (0.013) | |
| | Tracking | -0.029 | -0.055+ | -0.017 | -0.015 | |
| | | (0.020) | (0.028) | (0.019) | (0.018) | |
| | PES support * Tracking | 0.021** | 0.052*** | -0.004 | 0.001 | |
| | | (0.007) | (0.012) | (0.011) | (0.013) | |
| | DEC cupport | -0.084*** | -0.105*** | -0.081*** | -0.081*** | |
| | PES support | (0.013) | (0.024) | (0.021) | (0.021) | |
| 4 a-d | Central examinations | -0.078+ | -0.156** | -0.053 | -0.021) -0.092* | |
| 4 a-u | Central examinations | (0.041) | (0.056) | (0.042) | (0.038) | |
| | PES support * Central | 0.012 | 0.065* | 0.025 | -0.003 | |
| | examinations | (0.015) | (0.029) | (0.025) | (0.026) | |
| | Cxaminations | (0.013) | (0.023) | (0.023) | (0.020) | |
| | PES support | -0.078*** | -0.080*** | -0.056*** | -0.082*** | |
| | | (0.007) | (0.013) | (0.011) | (0.013) | |
| 5 a-d | Work-based learning | 0.001 | -0.001 | 0.002+ | 0.001 | |
| | | (0.001) | (0.001) | (0.001) | (0.001) | |
| | PES support * Work-based | 0.000 | 0.003*** | -0.001+ | -0.000 | |
| | learning | (0.000) | (0.001) | (0.001) | (0.001) | |
| | PES support | -0.083*** | -0.079*** | -0.058*** | -0.084*** | |
| 6 a-d | τ 23 σαρρότι | (0.007) | (0.013) | (0.011) | (0.012) | |
| | Vocation enrolment | -0.001 | -0.004 | 0.000 | -0.001 | |
| o a-u | vocation emolinem | (0.001) | (0.002) | (0.002) | (0.001) | |
| | PES support * Vocational | 0.002) | 0.002) | -0.001 | 0.002) | |
| | enrolment | (0.001) | (0.003) | (0.001) | | |
| | enroiment | (0.001) | (0.001) | (0.001) | (0.001) | |

Source: EU-LFS ahm 2016, own calculations. Controlled for all micro variables from Model 1a-d, GDP and youth unemployment rate. Standard errors in parentheses. Legend: + p<0.10, * p<0.05, ** p<0.01, *** p<0.001.





| | | PES support on employment | | | | |
|--------|-----------------------------|---------------------------|-----------|-----------|-----------|--|
| Model | Labour market policies | Total | Low | Medium | High | |
| | | | | | | |
| 7 a-d | PES support | -0.065*** | -0.029* | -0.062*** | -0.075*** | |
| | | (0.007) | (0.013) | (0.011) | (0.012) | |
| | Exp LMS | 2.896** | 3.592** | 2.471** | 2.349* | |
| | | (0.907) | (1.365) | (0.950) | (0.958) | |
| | PES support * Exp LMS | -3.486*** | -5.174*** | -2.929*** | -2.079*** | |
| | | (0.314) | (0.561) | (0.549) | (0.536) | |
| | PES support | -0.068*** | -0.056*** | -0.059*** | -0.076*** | |
| | 1 23 3000011 | (0.007) | (0.013) | (0.011) | (0.013) | |
| 8 a-d | Exp ALMP | 0.975** | 1.384** | 0.832* | 0.694+ | |
| ouu | EXP / LIVII | (0.376) | (0.523) | (0.393) | (0.401) | |
| | PES support * Exp ALMP | -0.559*** | 0.026 | -0.528* | -0.464* | |
| | . 25 support Exp / Livil | (0.142) | (0.275) | (0.259) | (0.222) | |
| | | | | | | |
| | PES support | -0.072*** | -0.049*** | -0.062*** | -0.085*** | |
| | | (0.007) | (0.013) | (0.011) | (0.013) | |
| 9 a-d | EPL regular | 0.061+ | 0.107* | 0.038 | 0.038 | |
| | - | (0.032) | (0.050) | (0.030) | (0.033) | |
| | PES support * EPL regular | -0.036* | -0.136*** | -0.009 | 0.039 | |
| | | (0.014) | (0.025) | (0.022) | (0.029) | |
| | PES support | -0.075*** | -0.057*** | -0.062*** | -0.081*** | |
| 10 a-d | 1 25 30pport | (0.007) | (0.013) | (0.011) | (0.013) | |
| | EPL temporary | -0.032+ | -0.049+ | -0.027 | -0.019 | |
| 10 a-u | Li L temporary | (0.019) | (0.03) | (0.018) | (0.020) | |
| | PES support * EPL temporary | 0.019) | -0.015 | 0.018) | -0.003 | |
| | 1 23 Support Li Licinporary | (0.008) | (0.015) | (0.013) | (0.015) | |

Source: EU-LFS ahm 2016, own calculations. Controlled for all micro variables from Model 1, GDP and youth unemployment rate. Standard errors in parentheses. Legend: + p<0.10, * p<0.05, ** p<0.01, *** p<0.001.