



Does It Pay To Work During Study? The Effect Of Student Employment On Later Hiring Chances

Stijn Baert, Eddy Omey, Olivier Rotsaert and Dieter Verhaest



Does It Pay To Work During Study? The Effect Of Student Employment On Later Hiring Chances *SE*

Stijn Baert, Eddy Omey, Olivier Rotsaert and Dieter Verhaest

Why would it (not) pay?

What's not cool about the literature?

What's cool about our study?

What did we do?

What did we find?

Why would it (not) pay?



Why it may not pay:

Human capital (indirect):
time-use trade-off between
working and studying
(Becker, 1964; 1965)



heory

Why it may pay:

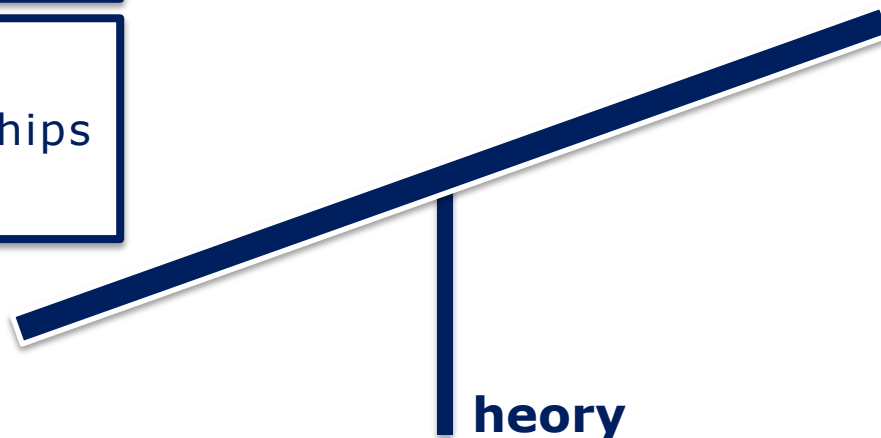
Human capital (direct):
relevant work experience,
practical life skills, labour
market abilities and business
exposure (Painter II, 2010)

Signalling: screening device
of intrinsic work motivation
(Spence, 1973)

Network: market
information and relationships
(Granovetter, 1973)

Why it may not pay:

Human capital (indirect):
time-use trade-off between
working and studying
(Becker, 1964; 1965)



What's not cool about the literature?

2.1 Literature: SE & later labour market (LM) outcomes

- **European** studies: positive effects of SE during secondary and tertiary education on later labour market (LM) outcomes, albeit only for particular groups of student workers.
 - Females in Alam et al. (2013).
 - Individuals with a student job related to their field of study in Geel and Backes-Gellner (2002).
 - Short-run effect in Häkkinen (2006).
- **US** studies: positive, zero and negative effects.
 - Positive relationship in Light (1999; 2001) and Molitor and Leigh (2005).
 - Zero effects in Ruhm (1997).
 - Zero and negative effects in Hotz et al. (2002).
- **Canadian** studies: zero effect (Parent, 2006; Peng and Yang, 2008).

2.2 Unclear *whether* SE affects later LM outcomes

- Doubtful whether results can be given causal interpretation:
endogeneity problem.
 - Naively estimated effects may reflect variation in factors such as ability and motivation.
 - Unobservable to the researcher but may influence both the likelihood of SE experience and the probability of later LM success.
 - Mentioned contributions use old school instrumental variables estimation techniques at best.
 - Local unemployment rate as instrument.
 - Problematic since students may already start job search during their last school year(s), and thus LM conditions during education may affect transition to work success at least indirectly via their drop-out decisions and (hence via) their human capital accumulation.
 - One exception: Hotz et al. (2002): semi-structural approach.
 - Identification is achieved from assumption that unobservable determinants of LM outcomes are, after controlling for SES, orthogonal to accumulated schooling at age 13.

2.3 Unclear *why* and *when* SE affects later LM outcomes

- Ruhm (1997): “In particular, it is important to better understand the mechanisms by which the [student] employment raises economic attainment, the role of job characteristics of the positions held by in-school youths, and the nature and sources of demographic group differences in the returns to student employment.”
- Anno 2015: still no serious attempts to fill this gap.
- **Why**-question.
 - No study has tested empirical power of aforementioned theoretical channels (human capital theory, signaling theory and social network theory).
- **When**-question.
 - Little is known about effect heterogeneity by qualitative aspects of SE (e.g., relation to field of study) and of later LM outcomes (e.g., job match quality).

What's cool about our study?

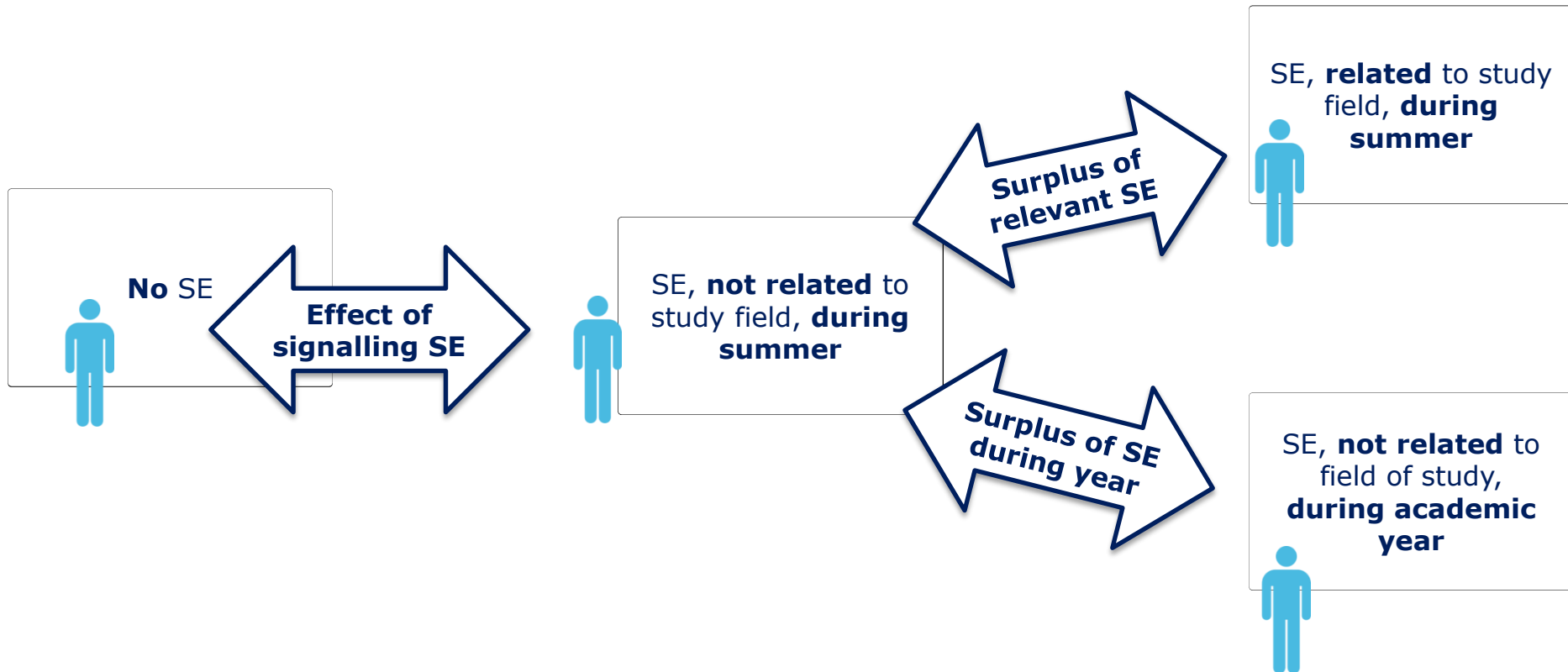
- Cool with respect to **whether**-question.
 - Endogeneity is no issue given design of randomised experiment.
 - Treatment of SE is randomly assigned.
- Cool with respect to **why**-question.
 - Only the signalling channel may explain our results.
 - Subjects are, by construction, equal in terms of human capital and network.
- Cool with respect to **when**-question.
 - We estimate heterogeneous treatment effects.
 - Qualitative aspects of SE.
 - Qualitative aspects of later employment (offered contracts).

What did we do?

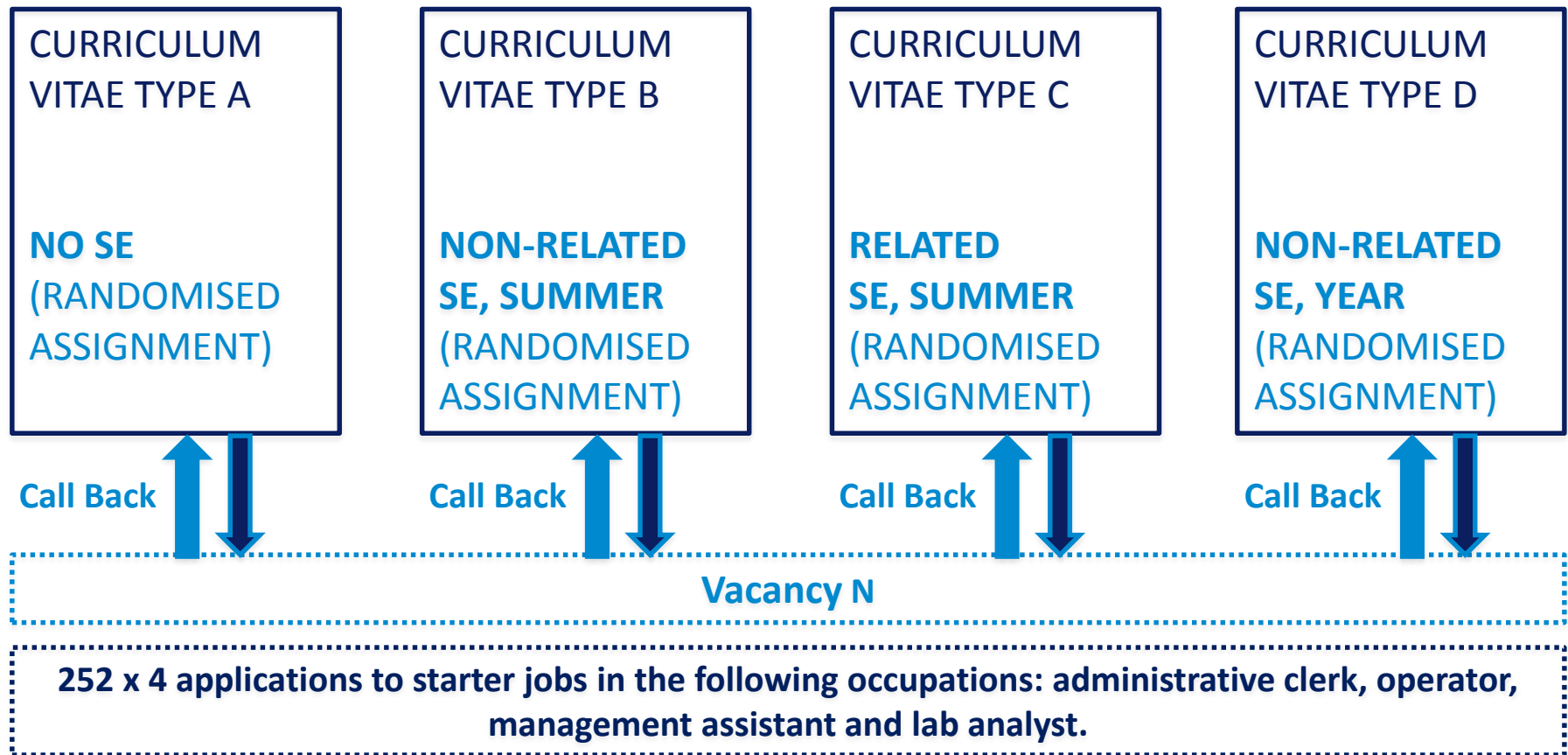
4.1 Correspondence experiment

- Fictitious job applications are sent to real job openings.
 - These applications differ only by a ground for discrimination.
 - By monitoring the subsequent callback, unequal treatment is identified.
- “Golden standard” to identify unequal treatment in the LM.
 - Employer discrimination is disentangled from supply side determinants of LM outcomes.
 - Selection on unobservable characteristics is not an issue.
- Recent applications: Kroft et al. (2013, Quarterly Journal of Economics) and Eriksson et al. (2014, American Economic Review).

4.2 Experimental identities




4.3. Experimental data gathering



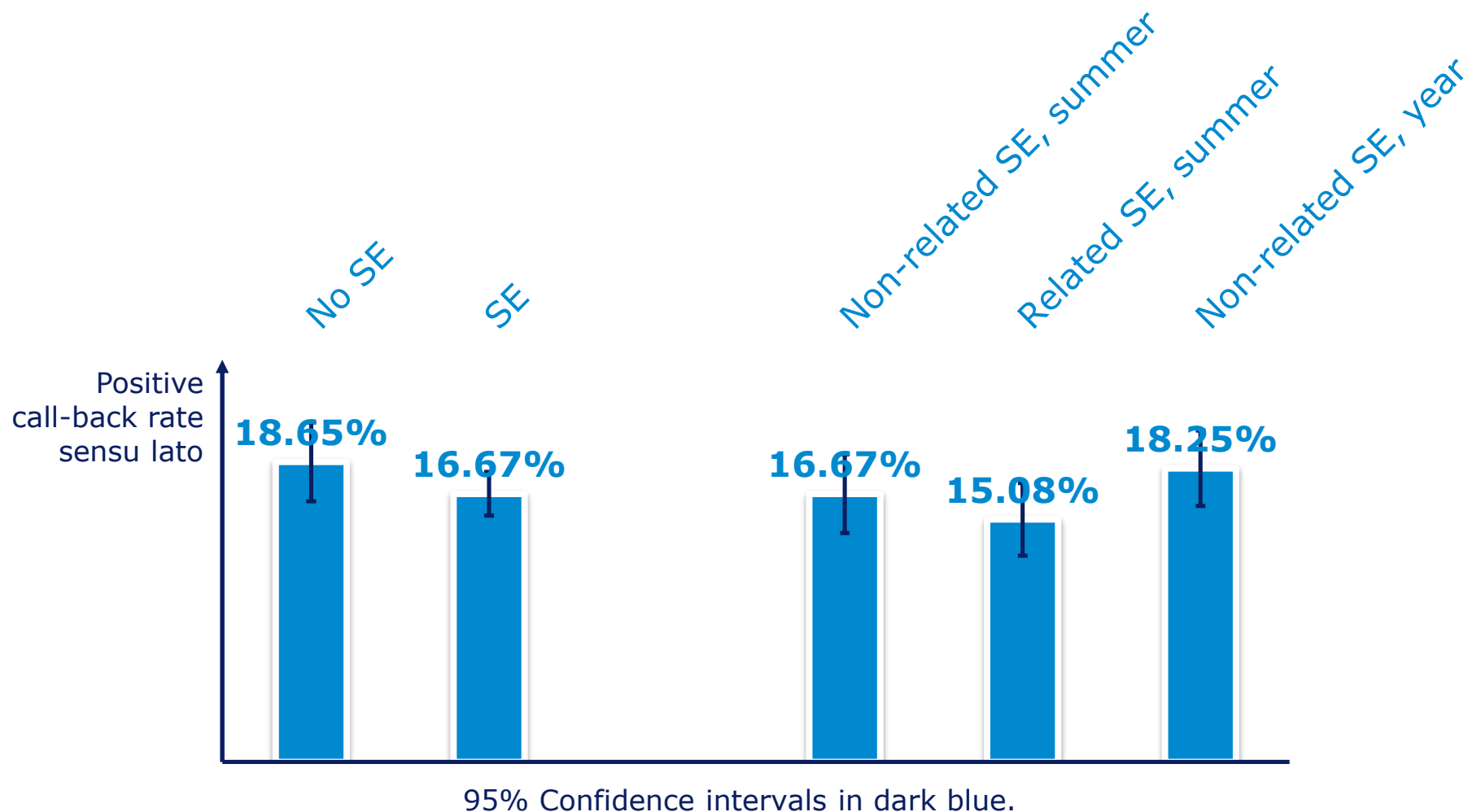
4.4 Descriptive analysis: probability of interview

Positive
call-back rate
sensu stricto



95% Confidence intervals in dark blue.

4.4 Descriptive analysis: probability of positive reaction



4.5 Regression analysis

Positive call-back sensu stricto: job interview invitation

SE	-0.008 (0.016)
SE x Relevant SE	0.027 (0.025)
SE x SE during year	-0.003 (0.023)
SE x High-educated	-0.055* (0.033)
SE x Industrial occupation	-0.032 (0.035)
SE x Temporary contract	-0.022 (0.044)
SE x Part-time contract	-0.012 (0.023)
SE x Male recruiter	-0.017 (0.029)
Vacancy fixed effects	Yes

Except for "SE", all variables are normalised by subtracting their mean among the population of candidates mentioning SE. Standard errors, corrected for clustering at the vacancy level, are in parentheses. *** (**) ((*)) indicates significance at the 1% (5%) ((10%)) level.

What did we find?

Why would it (not) pay?

Human capital, signalling & social network

What's not cool about the literature?

No answer to whether, why & when

What's cool about our study?

Answer to whether, why & when

What did we do?

Experiment with random assignment of (ir)relevant SE (during year/summer)

What did we find?

No causal effect of revealed SE on hiring chances at all