Employers’ willingness to invest in the training of temporary workers
A stated preferences experiment

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Temporary workers and training

Temporary workers participate less often in training
- Training gap w.r.t. permanent workers: 22 p.p. (ROA LLL survey)

This potentially harms their (long-term) labour market perspectives

Potential mechanism: lower willingness to invest among employers
- HC theory (Becker, 1964)
Lower willingness to invest?

Existing studies do not provide direct evidence...

- Lack of employer-funded training — e.g. Forrier & Sels, 2003; Fouarge et al., 2012; Sauermann, 2006
- Set of personal, employer and job characteristics does not explain the gap — Jonker and de Grip, 1999
- Gap remains after controlling for selection into organisations that do not provide training — Oosterbeek, 1996; Albert et al., 2005
- Temp workers more often pay for training themselves (own money/own time) — e.g. Finegold et al., 2005; Forrier & Sels, 2003; Jonker de Grip, 1999; Sauermann, 2006; ROA, 2018

... since these findings are equilibrium outcomes (i.e. also reflecting employee preferences)
We use a stated preferences experiment to...

1. Measure employers’ willingness to invest in employees with different types of contracts
2. The conditions under which this willingness to invest can be improved (these conditions are cost/benefit-related)
   - Financial contribution
   - Repayment agreement
Stated preferences experiment
Stated preferences experiment

• Representative sample among Dutch employers \((N=1.032)\)
  - Respondent responsible for training policy
  - \(\geq 5\) employees

• Paired conjoint study:
  - 2 hypothetical employees
  - Characteristics of the employee and training are randomised
  - Select one of the 2 employees to invest in
    - €2000; 16 hours
  - 3 rounds
Profiles differed on four attributes:

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of contract</td>
<td>1. Permanent</td>
</tr>
<tr>
<td></td>
<td>2. Temporary for 2 years with prospect of a permanent contract</td>
</tr>
<tr>
<td></td>
<td>3. Temporary for 2 years without prospect of a permanent contract</td>
</tr>
<tr>
<td>Transferability of training</td>
<td>1. Exclusively in your own organisation</td>
</tr>
<tr>
<td></td>
<td>2. In your own industry and other organisations in your sector of industry</td>
</tr>
<tr>
<td></td>
<td>3. In your own organisation and other organisations within and outside your sector of industry</td>
</tr>
<tr>
<td>Financial contribution</td>
<td>1. € 0,-</td>
</tr>
<tr>
<td></td>
<td>2. € 200,-</td>
</tr>
<tr>
<td></td>
<td>3. € 400,-</td>
</tr>
<tr>
<td>Repayment agreement</td>
<td>1. No repayment agreement (0%)</td>
</tr>
<tr>
<td></td>
<td>2. 50% in case of voluntary resignation within one year</td>
</tr>
<tr>
<td></td>
<td>3. 100% in case of voluntary resignation within one year</td>
</tr>
</tbody>
</table>
Example of a choice task

Which of these 2 employees do you prefer to offer the training?

<table>
<thead>
<tr>
<th></th>
<th>Employee A</th>
<th>Employee B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of contract</td>
<td>Permanent</td>
<td>Temporary for 2 years with prospect to get a permanent contract</td>
</tr>
<tr>
<td>Transferability of</td>
<td>In your own organisation and other</td>
<td>Exclusively in your own organisation</td>
</tr>
<tr>
<td>training</td>
<td>organisations within and outside your</td>
<td></td>
</tr>
<tr>
<td></td>
<td>sector</td>
<td></td>
</tr>
<tr>
<td>Financial contribution</td>
<td>200 euros</td>
<td>0 euros</td>
</tr>
<tr>
<td>Repayment agreement</td>
<td>No repayment agreement</td>
<td>Repayment agreement of 50% in case leaves the organisation voluntary within 1 year</td>
</tr>
</tbody>
</table>

- Employee A
- Employee B
Causal effects and external validity

Exogenous variation in attributes
Employees otherwise identical +

Identification of causal effects

Potential problem: external validity
- Realistic setting
- Keep decision tasks clear and manageable
- Studies show consistency between SP experiments and actual behaviour/field experiments

Lawrence et al., 2006; Telser & Zweifel, 2007; Henkens et al., 2009; Karpinska et al., 2011; Hainmueller et al., 2015; Wiswall & Zafar, 2018
Empirical strategy

• Mixed logit models
  - Do not assume independence of irrelevant alternatives
  - Allow for random taste variation

• 3 rounds → clustered standard errors

• Interactions between contract and financial contribution/repayment agreement
Results
Willingness to invest

Contract type
- Permanent
- Temporary for 2 years with prospect of a permanent contract
- Temporary for 2 years without prospect of a permanent contract

Transferability of training
- Exclusively in your own organisation
- In your organisation and other organisations in your sector
- In your organisation and other organisations within and outside your sector

Financial contribution employee
- 0 euros
- 200 euros
- 400 euros

Repayment agreement training costs
- No repayment agreement applies
- Employee has to pay back 50% of all training costs in case of a voluntary resignation within 1 year
- Employee has to pay back 100% of all training costs in case of a voluntary resignation within 1 year
Willingness to invest

Employers are clearly less willing to invest in temporary workers
Willingness to invest

Gap is widest between temporary workers with and without prospect
Willingness to invest

**Contract type**
- Permanent
- Temporary for 2 years with prospect of a permanent contract
- Temporary for 2 years without prospect of a permanent contract

**Transferability of training**
- Exclusively in your own organisation
- In your organisation and other organisations in your sector
- In your organisation and other organisations within and outside your sector

Employers are somewhat less willing to invest in transferable skills
Willingness to invest

**Contract type**
- Permanent
- Temporary for 2 years with prospect of a permanent contract
- Temporary for 2 years without prospect of a permanent contract

**Transferability of training**
- Exclusively in your own organisation
- In your organisation and other organisations in your sector
- In your organisation and other organisations within and outside your sector

**Financial contribution employee**
- 0 euros
- 200 euros
- 400 euros

**Repayment agreement training costs**
- No repayment agreement applies
- Employee has to pay back 50% of all training costs in case of a voluntary resignation within 1 year
- Employee has to pay back 100% of all training costs in case of a voluntary resignation within 1 year
Compensatory impact financial contribution

Employers are indifferent between investing in temporary workers *with* prospect who contribute financially and investing in permanent workers who do not contribute financially

Irrespective of the financial contribution made, employers always have a preference to invest in permanent workers or temporary workers *with* prospect over temporary workers *without* prospect
Compensatory impact repayment agreement

A (stricter) repayment agreement among temporary workers can in some cases be used to close the gap between permanent workers and temporary workers with prospect

A repayment agreement cannot be used to close the gap with permanent workers, however
Conclusion

• Substantial gap in the willingness to invest in temporary vs. permanent workers
• Lower willingness to invest in general skills

→ Underinvestment in HC development of temporary workers?

• Financial contribution and repayment agreement have a limited effect on closing this gap
Suggestions or questions?

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