Employment Outcomes of Temporary Agents and Unemployed over the Business Cycle

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TA and unemployment in Austria

Source: Statistics Austria (2019). The share of temporary agents is computed as a fraction of the annual total number of employed people, in Austria. Unemployment rate according to the national definition. The shaded areas denote recessions.
Temporary Agency Work

- TA can help reduce asymmetric information and its costs (Abraham and Taylor, 1996).
- TA jobs can be used as a screening device (Jahn and Rosholm, 2018).
- Start a short-term employment with limited initial investment (Autor, 2009).
- Inability of finding and starting a regular job (Kvasnicka, 2009).

Source: Hakansson et al., 2012.
Temporary agency employment is related to precariousness in terms of career perspectives, development of working relations, stability, and smaller earnings (Risak, 2019).

Creation of a segmented labour market with low-wage, less stable TA jobs (Kvasnicka, 2009).

High turnover and reduced investment in training (Autor, 2009).

There is concern that temporary agency employment is exploitative (Autor, 2009, and Elcioglu, 2010).
1 Are temporary agents better off than similar unemployed people?

2 views:
- dead-end: Crowding out of productive job search (Kvasnicka, 2009);
- stepping-stone: Acquisition of skills and contact with potential employers (Kvasnicka, 2009).

2 outcomes:
- annual gross earnings of the first and second year after TA/unemployment spell;
- duration until starting a regular job.

2 Does an effect of TA employment vary over the business cycle?

3 Is an effect of TA different for men and women?
The empirical literature investigating whether agency employment is a bridge into regular jobs has not yet come to a consensus [...] While some studies find evidence of agency employment acting as a springboard into regular jobs, other studies find opposite results. (Jahn and Rosholm, 2018)

Jahn and Rosholm (2018) study the cyclicality of TA employment:

- during economic upturns, TAs are less likely to start a regular job;
- during downturns, former TAs are more likely to start a regular job than similar unemployed workers;
- TAs have a considerable earnings advantage over the unemployed.
- The largest (+) effect with low unemployment.
This is the first assessment of the stepping-stone effect of TA employment in Austria.

Why is this important? Growth of temporary agency and atypical employment vs regular employment.

The debate on temporary agency work at EU level led to the introduction of the *principle of equal treatment* for TAs.

BUT an evaluation of the policy is still missing.
Data

- Previous 5 years used to construct LM history.
- Men and women aged 25-55, selected from inflow into TA job or unemployment.
- About 490,000 people in each year, approx. 10% of which are TAs.

Descriptive statistics

- TA work is male-dominated (around 20% are women).
- The share of foreigners is greater in the TA samples.
- TAs are relatively better educated and younger.
Survival Probability to Regular Job, 2005

Note: Kaplan-Meier survival plot. The y-axis gives the probability of remaining in the status, by time (days). N TAs = 37,012. N unemployed = 482,776.
Survival Probability to Regular Job

Unemployed

The Model

I estimate a linear probability model (LPM) of the form,

\[ y_i = \beta_0 + \beta_1 TA_i + X_i^T \gamma + u_i, \]

where \( y_i = 1 \) if the individual \( i \) started a job within a certain duration.

\( TA_i = 1 \) if the person was a temporary agent in 2005, 2010 or 2015, and equal to 0 otherwise.

The matrix \( X \) includes person \( i \)’s labour market history \([t-5, t)\), demographic, and employment information.

I use six different \( y_i \).
Marginal Effect of TA Employment, 2005

Note: circles represent the estimated difference between unemployed and TAs, the model specification is in parentheses. (1) univariate - full sample; (2) univariate - reduced sample; (3) multivariate - reduced sample. The whiskers delimit the 95% confidence interval.
Main Findings

- TAs are less likely than the unemployed to start a regular job within 6 months.

- After 6 months, they are more likely than the unemployed to start a regular job.

- Results are robust to changes in sample size and to the inclusion of covariates.
Marginal Effect of TA Employment, 2010

Note: circles represent the estimated difference between unemployed and TAs, the model specification is in parentheses. (1) univariate - full sample; (2) univariate - reduced sample; (3) multivariate - reduced sample. The whiskers delimit the 95% confidence interval.
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Other results

<table>
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*Note: N Events = 578,654*

- Women are less likely than men to start a regular job
- TAs are more likely to start a regular job during economic downturns
The probability of starting a regular job is the lowest between 1-3 months for TAs.

Up to 6 months women are less likely to start a regular job than men (1 to 7 percentage points).

There are no relevant gender differences for TAs with regard to the probability of starting a regular job.

The negative marginal effects for TAs are the largest in 2005 (in absolute terms).

The results are robust to sample definition and inclusion of covariates.

The lock-in effect is only temporary, after 6 months TAs have a greater probability of starting a regular job.
I estimate the log-linear model of gross earnings:

\[ \log(y_{it+j}) = \beta_0 + \beta_1 TA_{it} + \beta_2 TA_{it+j} + X_{it+j}^T \gamma + u_{it+j}, \]

where \( y_{it+j} \) are the annual gross earnings of person \( i \) at time \( t+j \).

\( t = 2005, 2010 \) or \( 2015, j = 1 \) or \( 2 \).

\( \beta_1 \) = earnings differential between a \( TA \) and a person from the unemployed group.

\( X \) includes demographic variables as gender, education, marital status, age, and nationality. Indicators for industry and region of employment are also comprised.
Marginal effects, TA - earnings

Note: circles represent the estimated difference between unemployed and TAs, multivariate model. The whiskers delimit the 95% confidence interval.
Results

- The TA-effect varies with the inclusion of demographic, LM variables.
- The marginal effect is not constant over the BC, i.e., it is greatest during downturns.
- On average, TAs earn 2 to 8% more than similar unemployed people.
- On average, TA women earn more than similar unemployed women (10 to 20%).
- BUT, as I do not observe the number of hours worked, it is not possible to conclude that this is due to a temporary agency job.
1 Are TAs better off than the unemployed?
   They have longer duration until a regular job (and fewer start a regular job).
   TAs earn more than similar unemployed in the first and second year after the TA/unemployment spell.

2 Variation over the BC?
   Yes, the stepping-stone effect is greater during periods of higher unemployment.

3 Differences between men and women?
   Yes, but small and varying over time.
Future Work

Temporary agency work is non-random. Alternative models to control for self-selection include

- matching models,
- panel regressions with person’s FE.

Qualitative analysis (job satisfaction, search-related stress, etc.)

[Abraham and Taylor, 1996]  

[Autor, 2009]  

[Elcioglu, 2010]  

[Hakansson et al., 2012]  
[Jahn and Rosholm, 2018]

[Kvasnicka, 2009]

[Risak, 2019]

[Zweimüller et al., 2009]