DR. STIJN BAERT

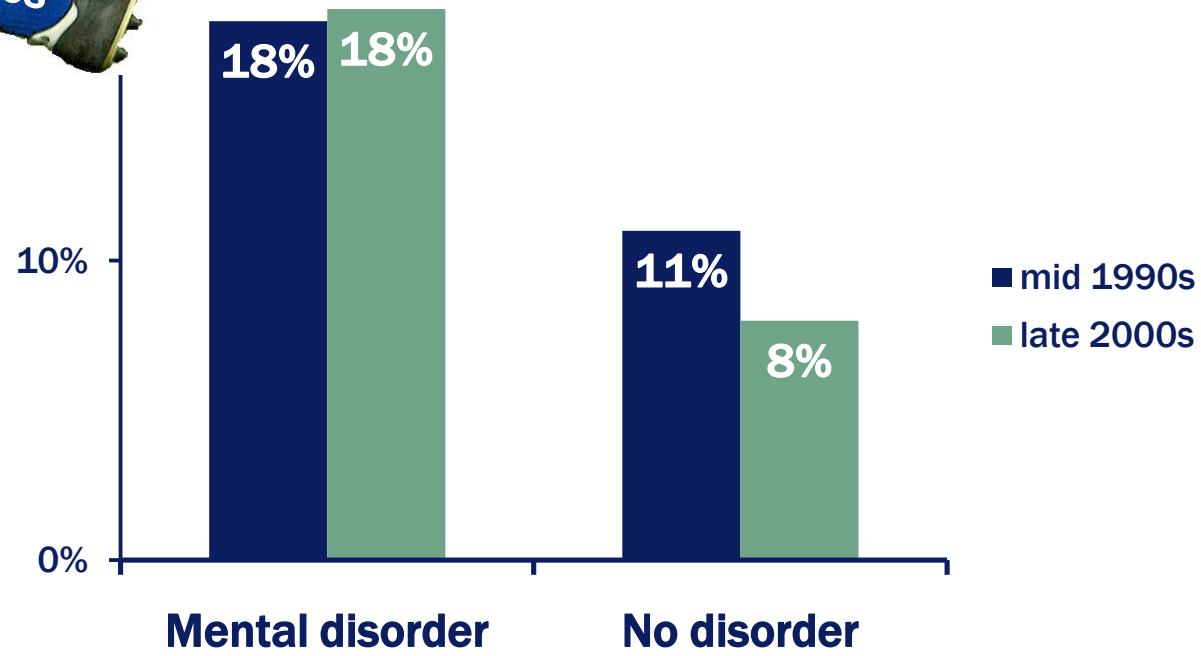# WAGE SUBSIDIES AND HIRING CHANCES FOR THE DISABLED: SOME CAUSAL EVIDENCE

Potential explanations for gaps

- **Differences in supply side endowments**

- **Differences in supply side preferences and behaviour**

- **Differences in demand side preferences and behaviour**

Wage subsidies

Unemployment rate in Belgium
(OECD, 2013)

- mid 1990s
- late 2000s

Mental disorder — 18%, 18%

No disorder — 11%, 8%

10%

0%

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Effect of wage subsidies on hiring chances for the disabled?

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Flemish Supporting Subsidy ("VOP")

- Wage subsidy amounting 40% (first year), 30% (second year) or 20% (later) of gross wage of eligible disabled employees.
- Granted for five years but renewable afterwards.

Effect of wage subsidies on hiring chances for the disabled?

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Flemish Supporting Subsidy ("VOP")

- Wage subsidy amounting 40% (first year), 30% (second year) or 20% (third year) of gross wage of eligible disabled employee.
- Granted for five years but extendable afterwards.

Effect of wage subsidies on hiring chances for the disabled?

Positive! Financial incentive for hiring disabled

Negative! Signalling effect

Negative! Red tape

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Roadmap

1. Motivation

2. Research question

3. Literature review

4. Research methodology

5. Research results

6. Conclusion

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Literature review

- **Gupta & Larsen (2010, Denmark)**
  - Positive effect of FlexJob scheme
    - Wage subsidies: ⅓, ½ or ⅔ of the wage.
    - Special working conditions (reduced working hours, adapted working conditions, restricted job demands).
    - Unlimited in duration.
  - Selection problem: subsidised jobs were mainly granted to disabled with relatively good characteristics.

- **Deuchert & Kauer (2013, Switzerland)**
  - No effect of Einarbeitungszuschuss ("training subsidy").
    - Wage subsidies: 180 days.
  - Small scale stated choice experiment.
    - Very large standard errors of within estimations (only 51 individuals with on average 7.5 applications on average).

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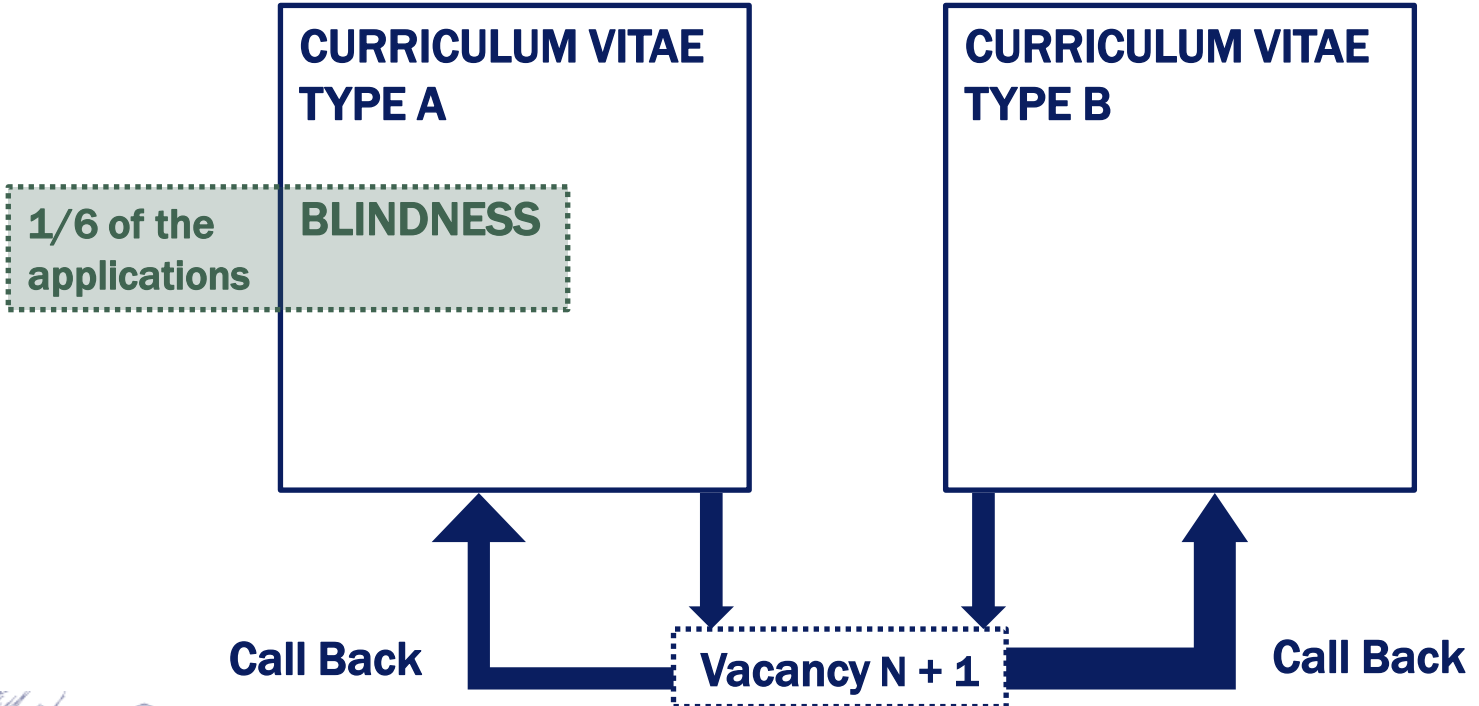GENT

Correspondence methodology

- **Pairs of fictitious job applications are sent to real job openings.**

  - Both applications differ only by the disability status of the candidate.

  - By monitoring the subsequent callback, unequal treatment is identified.

- **"Golden standard" to identify discrimination in the labour market**

  - Employer discrimination is disentangled from supply side determinants of LM outcomes.

  - Selection on unobservable characteristics is not an issue.

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Research design

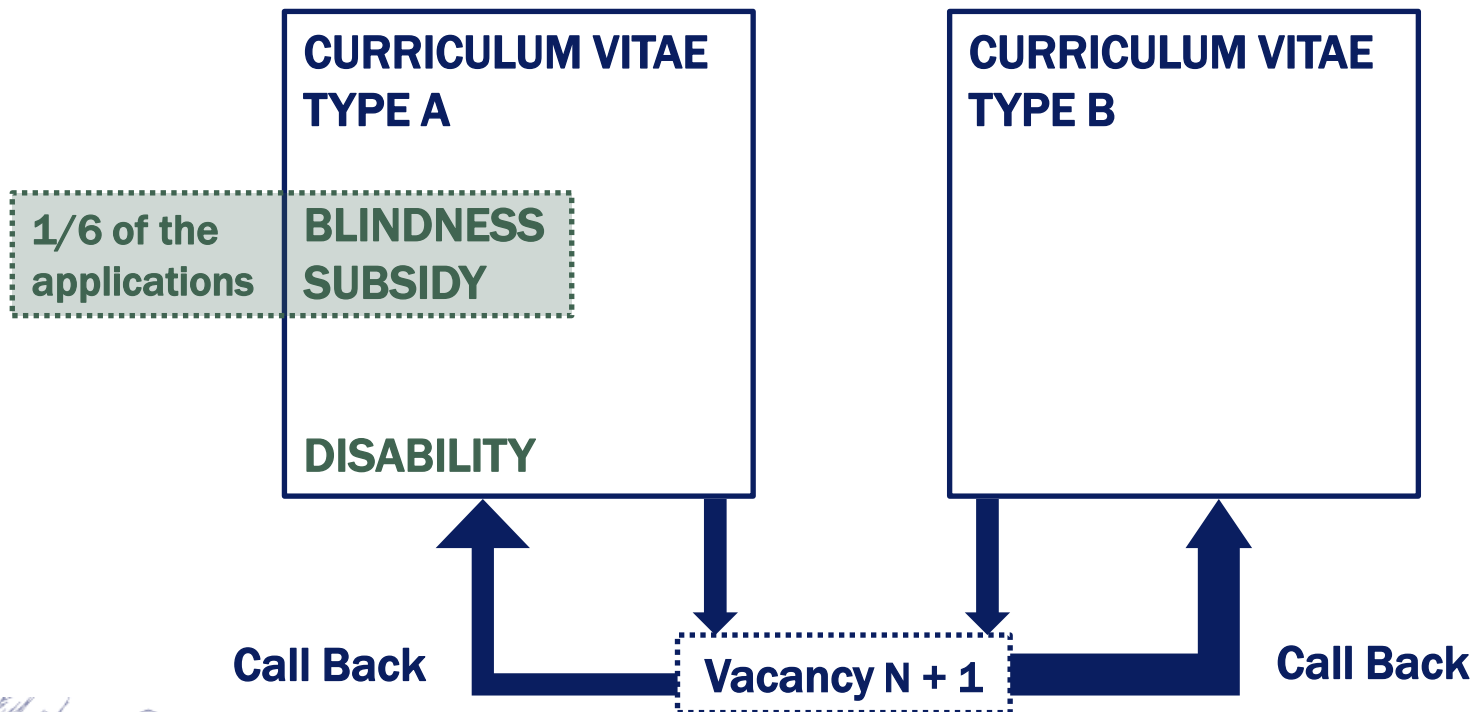| CURRICULUM VITAE TYPE A	CURRICULUM VITAE TYPE B
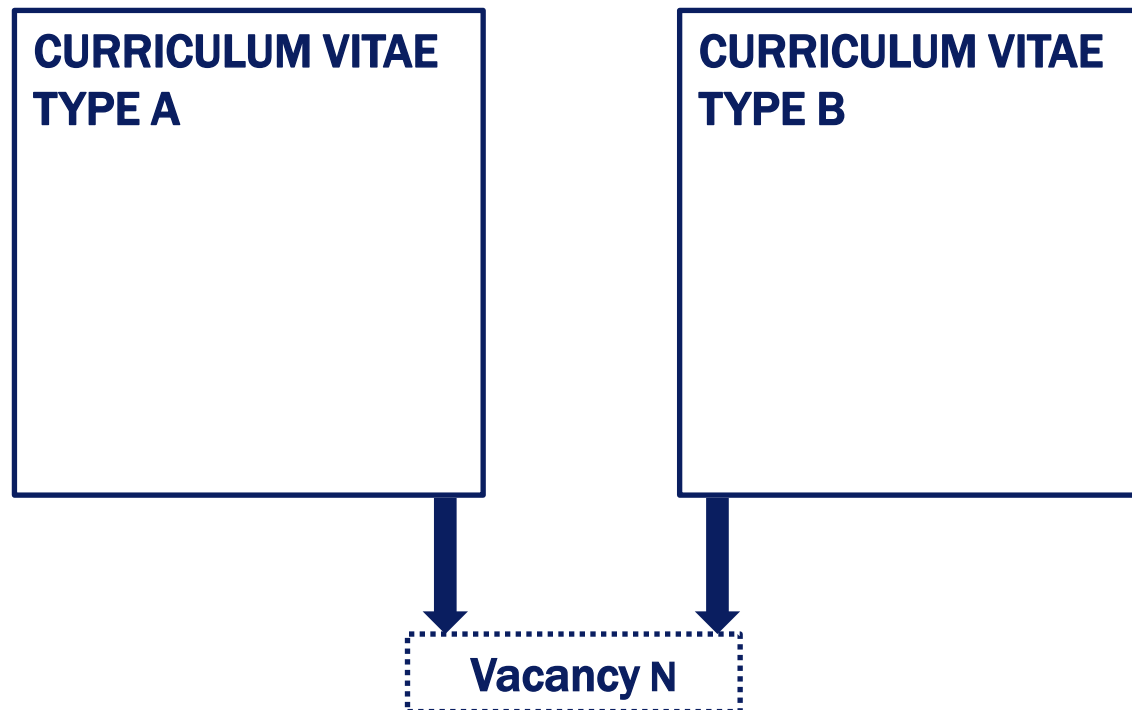
Vacancy N

Based on **Vacancy** content: disabled candidates expected to be as productive as candidates without a disability, possibly subject to limited (and subsidised) adjustments to the workplace (such as a Braille keyboard for the computer, interpreter hours or a place for a guide dog).

Research design

CURRICULUM VITAE TYPE A	**CURRICULUM VITAE TYPE B**

1/6 of the applications **BLINDNESS**
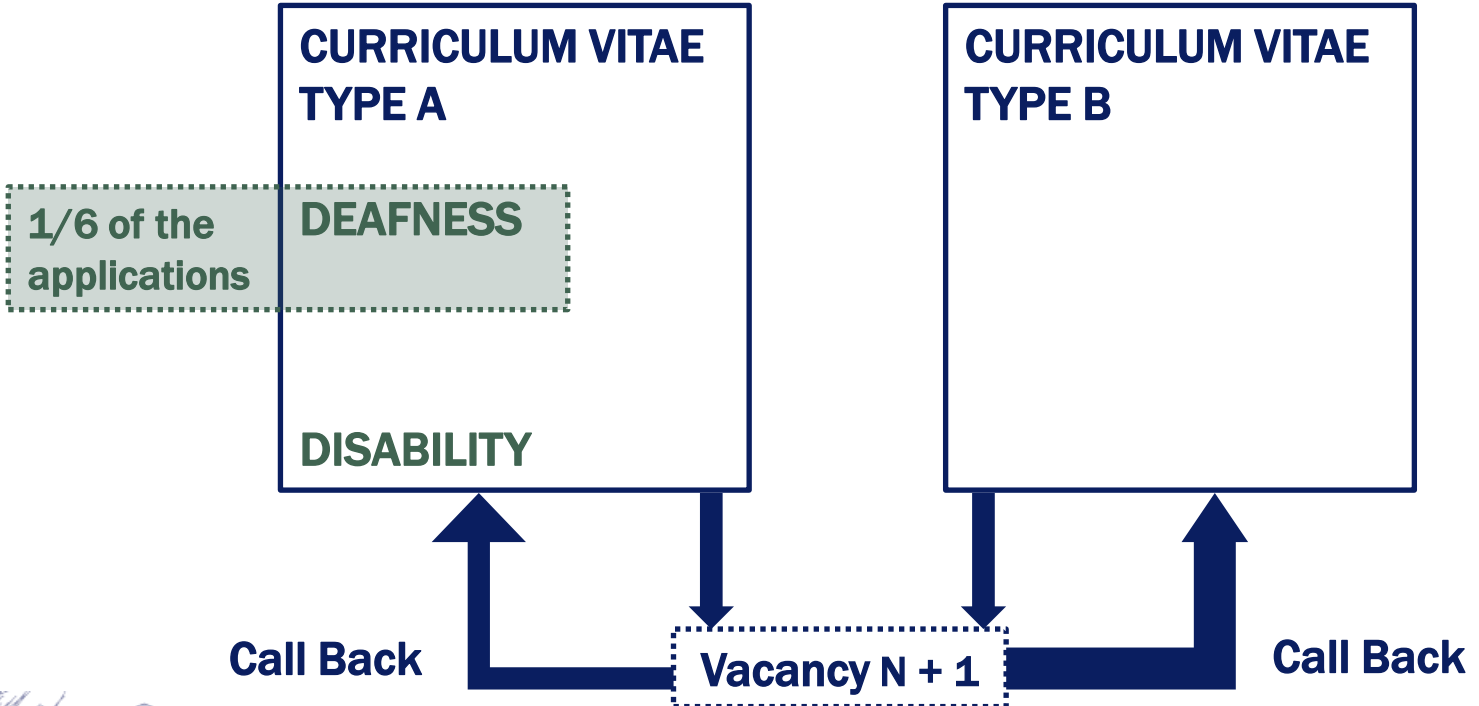
Call Back **Vacancy N + 1** **Call Back**

"In view of a job interview I want to report that I am a blind. Therefore I am always accompanied by a guide dog. However, my disability does not make me less productive." Retaken in resume and technological tools hold by the disabled mentioned.

Research design

Research design

CURRICULUM VITAE TYPE A	**CURRICULUM VITAE TYPE B**

1/6 of the applications

DEAFNESS

DISABILITY

Call Back **Vacancy N + 1** **Call Back**

"As you can read in my resume, I am deaf. Do not let this put you off. I am a very good lip reader, and I have learned to find in all sorts of situations creative solutions. During a job interview, I will be accompanied by an interpreter." Retaken in resume and subsidised interpreter hours mentioned.

Research design

Research design

CURRICULUM VITAE TYPE A	CURRICULUM VITAE TYPE B

1/6 of the applications

AUTISM

DISABILITY

Call Back

Vacancy N + 1

Call Back
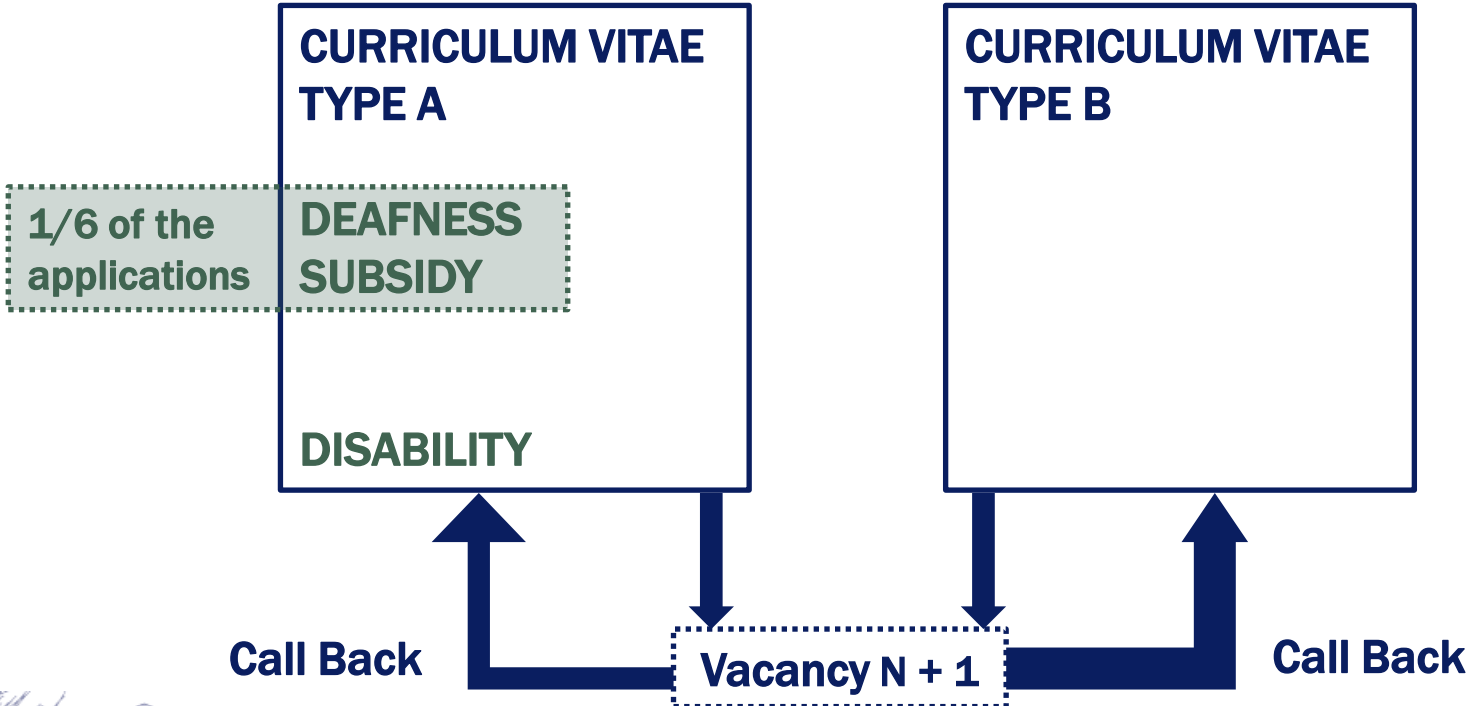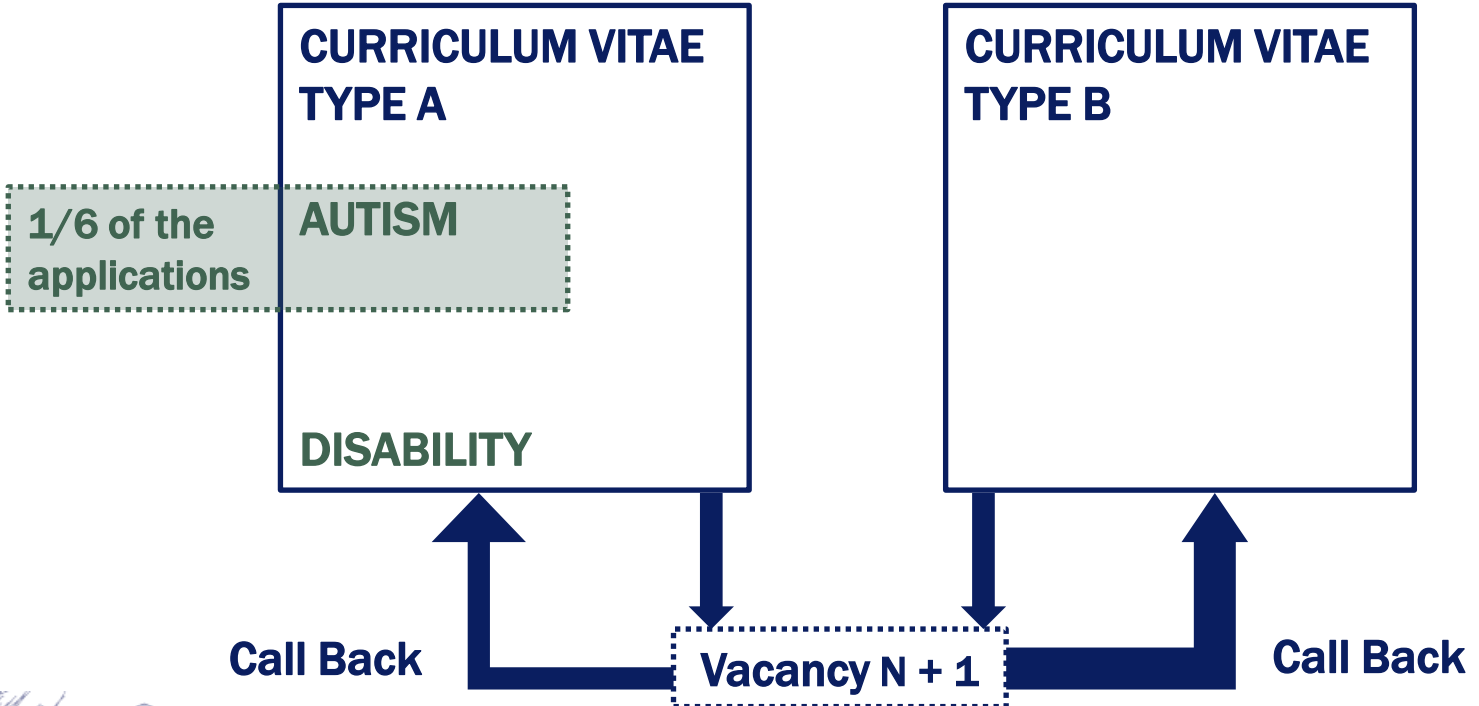
"In view of a job interview I would like to report that I am a person with autism and that therefore I benefit from regularity and structure, but this certainly does not mean that I do not love challenge in my work." Retaken in resume.

Research design

1/6 of the applications	

CURRICULUM VITAE TYPE A

AUTISM SUBSIDY

DISABILITY

CURRICULUM VITAE TYPE B

Call Back   **Vacancy N + 1**   **Call Back**
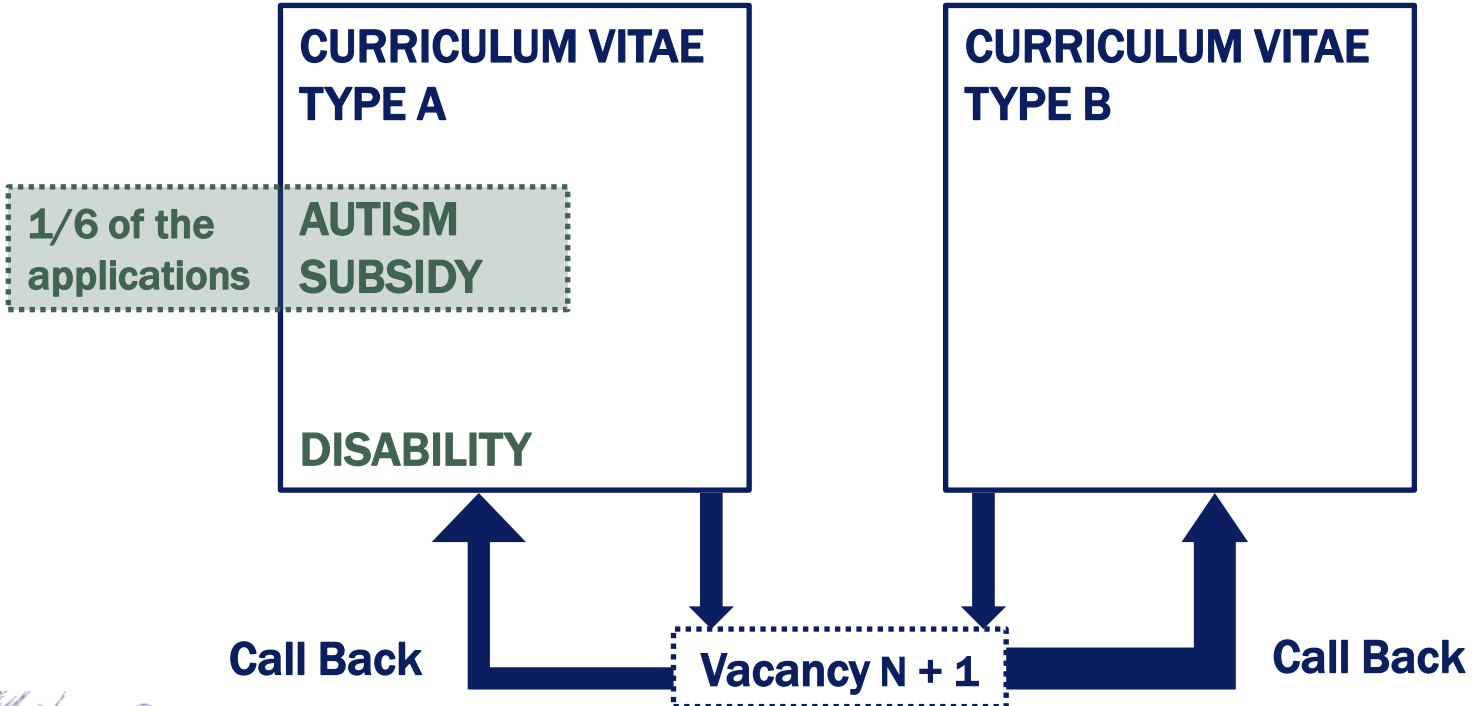
768 x 2 applications: administrative clerk, **accountant**, **informatician** and **teleseller** for blindness; **chemist**, **electrician**, **carpenter** and informatician for deafness; administrative clerk, accountant, carpenter and informatician for autism.

Data description (1)

Descriptive statistics: invitation for job interview			
	Call back No disability	Call back Disability	Call back ratio	t-value
All vacancies	0.15	0.07	**2.09*****	6.34

Standard errors are corrected for clustering of the observations at the vacancy level. *** indicates significance at the 1% significance level., ** at the 5% significance level. and * at the 10% significance level.

Descriptive statistics: any positive reaction			
	Call back No disability	Call back Disability	Call back ratio	t-value
All vacancies	0.25	0.13	**1.94*****	8.29

Standard errors are corrected for clustering of the observations at the vacancy level. *** indicates significance at the 1% significance level., ** at the 5% significance level. and * at the 10% significance level.

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Data description (2)

Descriptive statistics: invitation for job interview			
	Call back No disability	Call back Disability	Call back ratio	t-value
All vacancies	0.15	0.07	2.09***	6.34
Blindness			2.44***	3.21
Deafness			1.97***	3.91
Autism			2.13***	4.15

Standard errors are corrected for clustering of the observations at the vacancy level. *** indicates significance at the 1% significance level., ** at the 5% significance level. and * at the 10% significance level.

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Data description (3)

Descriptive statistics: any positive reaction				
	Call back No disability	**Call back Disability**	**Call back ratio**	**t-value**
All vacancies	0.25	0.13	**1.94*****	8.29
Blindness			**2.29*****	4.61
Deafness			**1.75*****	4.96
Autism			**2.04*****	4.90

Standard errors are corrected for clustering of the observations at the vacancy level. *** indicates significance at the 1% significance level., ** at the 5% significance level. and * at the 10% significance level.

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Reason for inviting non-disabled and not inviting disabled
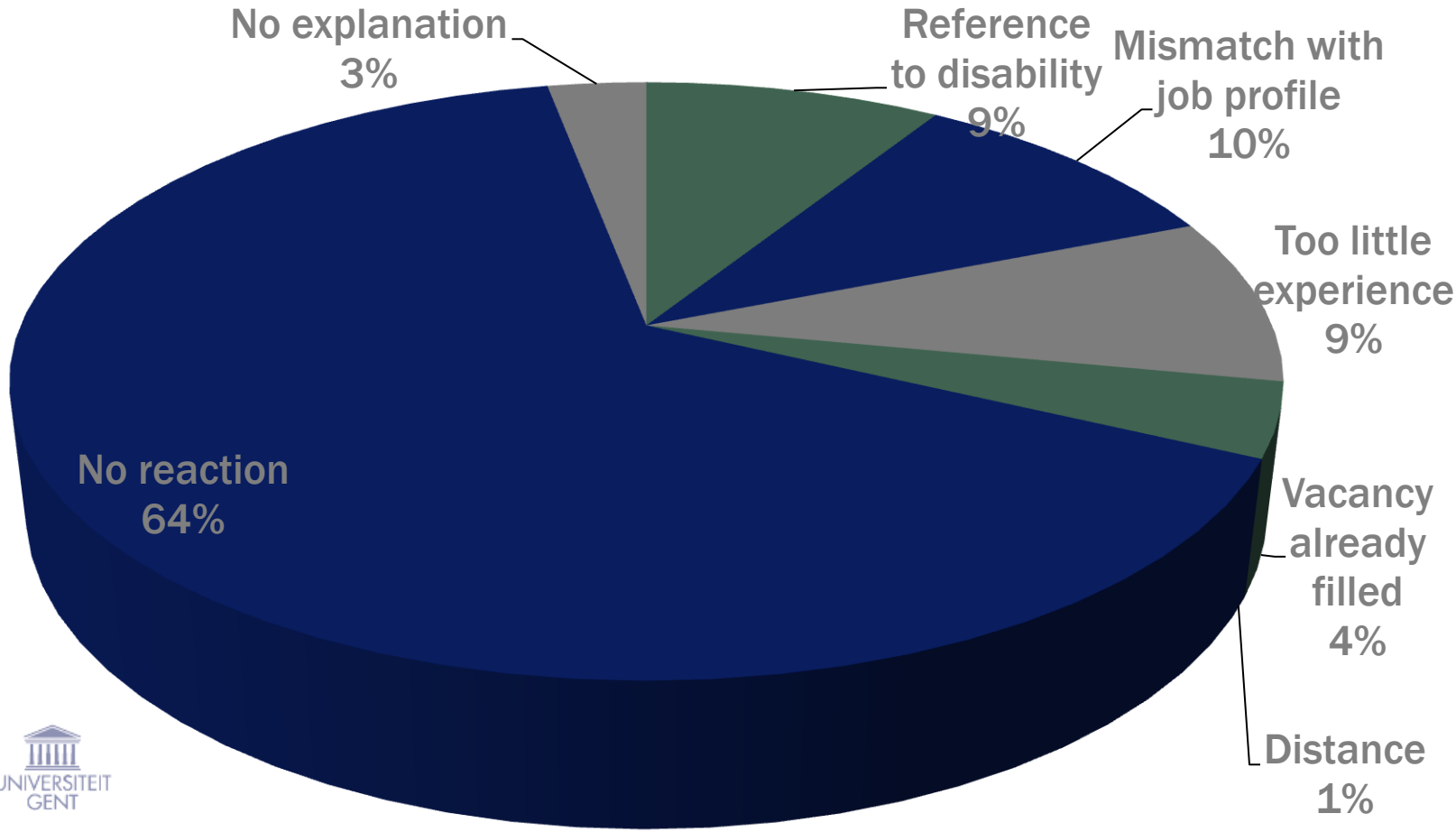
Main analysis (1)

Main analysis: invitation for job interview				
	Call back No disability	Call back Disability	Call back ratio	t-value
All vacancies	0.15	0.07	**2.09*****	6.34
Subsidy			**2.42*****	4.95
No subsidy			**1.83*****	3.98

Standard errors are corrected for clustering of the observations at the vacancy level. *** indicates significance at the 1% significance level., ** at the 5% significance level. and * at the 10% significance level.

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Main analysis (2)

Main analysis: any positive reaction				
	Call back No disability	Call back Disability	Call back ratio	t-value
All vacancies	0.25	0.13	1.94***	8.29
Subsidy			1.98***	5.90
No subsidy			1.90***	5.82

Standard errors are corrected for clustering of the observations at the vacancy level. *** indicates significance at the 1% significance level., ** at the 5% significance level. and * at the 10% significance level.

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Robustness checks (1)

Robustness check: invitation for job interview				
	Call back No disability	Call back Disability	Call back ratio	t-value
Blindness				
Subsidy			2.67***	2.97
No subsidy			2.00	1.34
Deafness				
Subsidy			2.17***	2.71
No subsidy			1.82***	2.81
Autism				
Subsidy			2.62***	3.27
No subsidy			1.80**	2.58

Standard errors are corrected for clustering of the observations at the vacancy level. *** indicates significance at the 1% significance level., ** at the 5% significance level. and * at the 10% significance level.

Robustness checks (2)

Robustness check: linear probability model regressions: invitation for job interview	
Disability * blindness	-0.18*** (0.03)
Disability * deafness	-0.16*** (0.03)
Disability * autism	-0.10*** (0.03)
Disability * wage subsidy (norm.)	-0.01 (0.02)
Disability * high educated (norm.)	-0.04 (0.02)
Disability * extensive application (norm.)	-0.01 (0.02)
Disability * recruiter female (norm.)	-0.01 (0.03)
Disability * recruiter unknown sex (norm.)	0.00 (0.04)
Disability * living in region of employer (norm.)	-0.04 (0.03)

Other included variables: extensive application, recruiter female, recruiter unknown sex, living in region of employer. Normalised variables are normalised by subtracting with the sample mean. Standard errors are corrected for clustering of the observations at the vacancy level. *** indicates significance at the 1% significance level., ** at the 5% significance level. and * at the 10% significance level.

Robustness checks (3)

Heteroskedastic probit model

- Critique (Heckman and Siegelman, 1993): differences in variance of unobs. characteristics can generate spurious evidence of discrimination.

- Solution: heteroskedastic probit.

  - Allows variance of error term to vary with (i) disability and (ii) disability * wage subsidy eligibility.

    - Signaling effect of wage subsidy eligibility.

  - Identification by assuming that two variables have same effect on callback of disabled (with or without wage subsidy) and non-disabled.

    - Extensive application.

    - Living in region of employer.

Conclusion

- Likelihood to get a positive response to a job application, being a disabled candidate, is not positively influenced by revealing wage subsidy eligibility in Belgium.

- Ergo: at least in this stadium of the recruitment process, this wage subsidy instrument does not sort the desired effect.

- Apparently, the positive financial stimulus implied by the subsidy is compensated by signaling effects (subsidies as a signal for lower productivity) and the fear of red tape.

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