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Getting Grey Hairs in the Labour Market. A Realistic Experiment on Age Discrimination

Potential explanations for gaps

- Differences in supply side productivity.
- Differences in supply side preferences and behaviour.
- Differences in demand side preferences and behaviour.



Do employers discriminate based on age?

Is labour market discrimination based on age heterogeneous by... ... career trajectory? ... gender? ... education level?

1 | Introduction

2 | Research Question

- **3 | Literature Review**
- 4 | The Experiment

5 | Results

6 | Conclusion

3 | Literature Review

3.1 Identifying discrimination by a field experiment

- Pairs of 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.
 - Within-experiment.
- "Gold 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 (on unemployment duration as ground): Kroft et al. (2013, QJE) and Eriksson and Rooth (2014, AER).

3.2 Difference in post-educational years problem





Solution to "difference in post-educational years

problem":



However: design is not realistic.



Solution to "difference in post-

educational years problem":

Older candidate:







4 | The Experiment

4.1 Our solution



Result: study age discrimination in three realistic situations.

In addition: randomisation over gender and age combinations.



576 vacancies for the following occupations: operator, administrative clerk, bar keeper, lab analyst, management assistant and representative.



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5 | Results

5.1 Results: extra call-back younger candidates



Additional interviews Additional positive reactions

*** p < 0.01, ** p < 0.05, * p < 0.10. Based on standard errors clustered at the vacancy level.

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5.2 Vacancy fixed-effects regression analysis

	Probability of invitation	Probability of any positive reaction
Older candidate	-0.031*** (0.010)	-0.047*** (0.014)
Older candidate x More irrelevant employment	-0.078*** (0.025)	-0.079** (0.034)
Older candidate x More inactivity	-0.047* (0.025)	-0.031 (0.034)
Older worker x (Middle-)high educated	0.008 (0.021)	-0.030 (0.030)
Older worker x Vacancy for administrative occupation	-0.003 (0.025)	-0.004 (0.035)
Older worker x Vacancy for vending occupation	-0.052* (0.027)	-0.019 (0.038)
Older worker x 50 years old	0.018 (0.023)	-0.012 (0.032)
Older worker x 12 years older	0.004 (0.051)	-0.047 (0.070)
Older worker x Female	0.021 (0.036)	0.022 (0.049)
First application sent	0.014 (0.010)	0.034** (0.014)
Job application template type B	-0.012 (0.012)	-0.022 (0.016)
Vacancy fixed effects	Yes	Yes

The presented results are linear probability model estimates with standard errors in parentheses. Except for the variable "older candidate", all independent variables are normalized by subtracting their mean among the subpopulation of older candidates. ** (***) indicates significance at the 5% (1%) significance level.

6 | Conclusion

- Randomised field experiment to contribute to the international literature on age discrimination in the labour market.
 - Pairs of fictitious job applications sent to real vacancies.
 - Within-design combined with between-design.
 - Within: Random assignment of older age to one pair member.
 - Between: Randomly sending out of pairs with older worker with more years in (i) inactivity, (ii) irrelevant employment or (iii) relevant employment.
 - Between: Randomly sending out of pairs of males and pairs of females.
 - Study age discrimination in multiple realistic situations.
- Overall: age discrimination in Flemish labour market.
 - Discrimination is lower if older workers have more relevant experience.
 - Taking into account the difference in post-educational years problem is important!
 - This finding contrasts to Neumark et al. (2015).