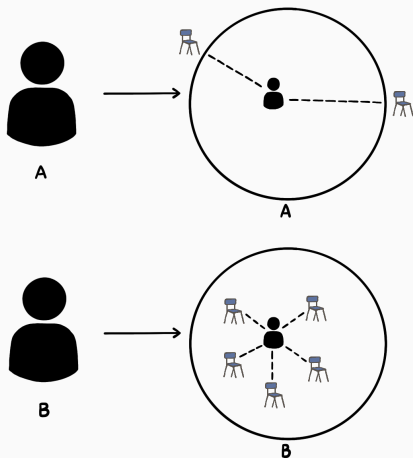# Mismatch of Unemployed Job-seekers and Vacancies
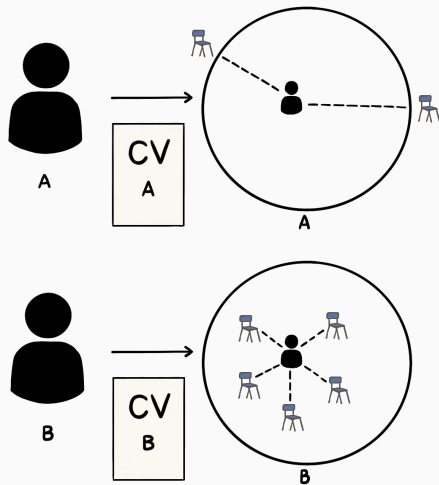
Jonas Maibom
Aarhus University, IZA

Oskar Thorleifsson
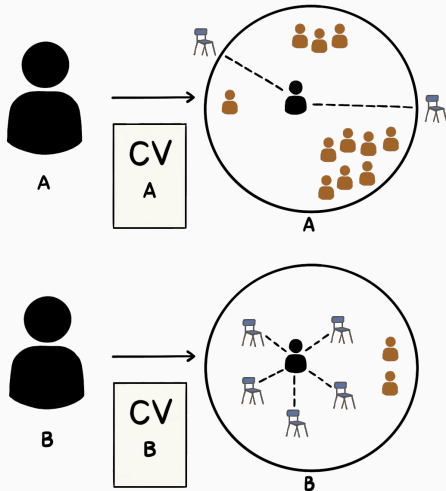Aarhus University

EEA Conference, 26. August 2024

Mismatch with vacancies: To what extent the demand for particular skills is misaligned with the skills of unemployed workers.

Use workers occupational history to proxy for their skills, knowledge, etc.

Compare with the skill requirement of vacancies by measures of occupational relatedness, taking the degree of competition into account.
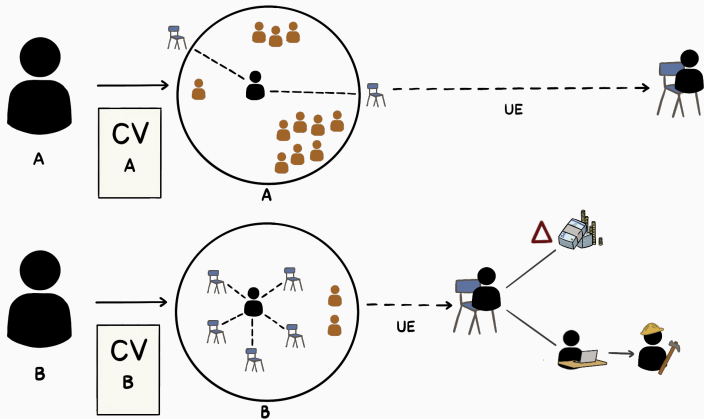
Investigate the role of mismatch with vacancies as a potential driving force of different outcomes.

Address selection issues using different strategies.

Broad vs. narrow search

- Use data on job application logs.
- Do workers that are mismatched with vacancies search differently?
    - E.g., target a broader set of jobs.
- Does this change over time in unemployment?
- Does adopting broader (narrower) search strategies amplify or reduce the impacts of being mismatched with vacancies?
    - DFL decomposition.
    - Counterfactual job-finding probabilities if mismatched workers applied like a comparison group that is better matched with vacancies.

Preview of Findings

- Workers that are mismatched with vacancies suffer larger earnings loss and longer unemployment duration.
- Mismatched workers target lower wage jobs and a broader set of jobs from the first month of UE onwards. Difference to better-matched stable over time in UE.
- Mismatched workers direct a larger share of applications to jobs in non-related occupations. They are, however, not more likely to end up in non-related occupations.
- Gaps in outcomes of mismatched workers and the comparison group are in large part or entirely explained by differences in application behaviour.
  - Does not suggest that they apply differently in a manner that speeds up job finding.

Sample

- Sample of unemployed workers in Denmark constructed from administrative data.
- Period: 2011-2020. Unemployed for at least 4 weeks.
- The measurements of mismatch rely on the pre-unemployment occupation to be a relevant description of workers' skills.
    - Require 12 months in pre-unemployment job / occupation.
    - At least 3 years since education.
- Sample of 237 thousand workers.
- Sub-sample of 22 thousand workers coming from mass layoffs.
    - Defined by an establishment shrinking at least 30% in terms of employment.

Occupational Relatedness

O*NET Measures

- Select three of the O*NET descriptor domains: *skills, knowledge and work activities*
- Distance measure
- Principal components measure
- Clusters of related occupations

Transition-based

- Which direct transitions ($\approx$ EE transitions) are frequently observed in the data.
- Construct a sample of prime-age workers.
- Measure relatedness by transition probabilities.

Mismatch with Vacancies

- Vacancy data encompassing over 90% of listed vacancies.

- Unemployment count by pre-UE occupation.

Primary measure using transition-based measure of occupational relatedness:

- First, define a sub-market as the intersection of a two-digit DISCO occupation and region. Construct:
  $$\theta_{o,r,t} = \frac{v_{o,r,t}}{u_{o,r,t}}$$

- Expand to include related occupations:
  $$\tilde{\theta}_{o,t,r} = \sum_k P(o,k)\theta_{k,t,r}$$

Illustration

Empirical set up

- Treatment is weighted sub-market tightness $\tilde{\theta}_{i,t,r}$ in the start month of UE.

$$y_{i,o,r} = \alpha + \beta\tilde{\theta}_{i,o,r} + \gamma x_{i,o,r} + \epsilon_{i,o,r}$$

Problems:

1. $\tilde{\theta}_{i,t,r}$ not randomly assigned.
2. Systematic differences in recruitment across occupations.

Solution A: pre-UE occupation fixed effects, commute zone f.e., other observables.

Solution B: IV-strategy.

Instrument

- **Instrument**: mass layoffs of others in the same sub-market to region population (occupation mean deviations)

$$\widehat{\frac{\#\text{mass layoffs}}{\text{population}}}_{i,r,o,j\neq i} = \frac{\#\text{mass layoffs}}{\text{population}}_{i,r,o,j\neq i} - \overline{\frac{\#\text{mass layoffs}}{\text{population}}}_{o,j\neq i}$$

- Mass layoff: 30% reduction in employment. Reduction counts at least 5 workers.

- **Exclusion restriction**: Mass layoff of others doesn't affect the outcome other than through $\tilde{\theta}_{i,t,r}$
  - Violated, e.g., by local productivity shocks.

- We think it is a very useful benchmark.

Job Finding and Earnings Difference

SD increase (0.30) in relatedness-weighted sub-market tightness

- $\rightarrow$ 2.4-2.8 pp increased probability of finding a job within 3 months (9-11% of sample average) `Table`
- $\rightarrow$ 1.5-2.0% higher immediate earnings loss (10-11% of sample average) `Table`
    - Earnings loss is larger 3 years after entering UE `Table`

Do mismatched workers apply for different jobs?

Data from 2015-2017. UI recipients are required to log job applications in an online system, *Joblog*.

Data is described and discussed extensively in Fluchtmann et al., 2022 and Maibom et al., 2023.

For this analysis, we adopt a binary treatment definition of mismatch if the worker belongs to the bottom quartile of sub-markets in terms of relatedness-weighted tightness at the point of UE entry.

The comparison group is the top two quartiles of sub-markets at the point of UE entry.

Applications over time in UE

Estimation results of a regression of average applied for wages (share of applications in a related occupation) on UE spell month dummies and individual fixed effects: $y_{i,t} = \alpha_i + \tau_t + \epsilon_{i,t}$
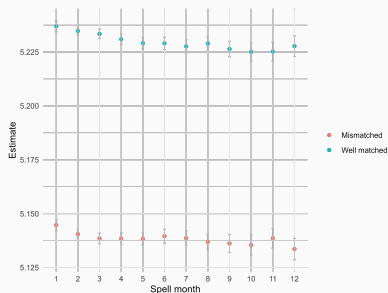
Applied for wages over time in UE.
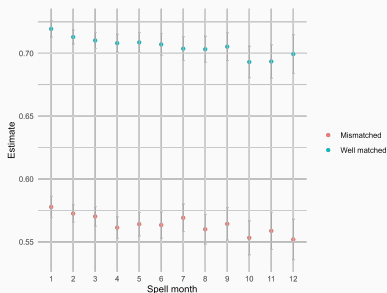
Share of applications to a related occupation.

Even though mismatched workers apply more to non-related occupations, they are not more likely to end up in a non-related occupation. First month applications and outcomes

Decomposition

- We have seen that workers that are mismatched to vacancies apply differently; target lower wage jobs and apply more broadly.

- Does this alleviate adverse outcomes?

DFL decomposition

- Based on counterfactual job-finding probabilities if mismatched workers applied like well-matched.

$$\underbrace{\widetilde{P_x^{MM}}(y) - P^{WM}(y)}_{\text{baseline gap}} = \underbrace{\left[\widetilde{P_x^{MM}}(y) - \widetilde{P_{x,a}^{MM}}(y)\right]}_{\text{explained by applications}} + \underbrace{\left[\widetilde{P_{x,a}^{MM}}(y) - P^{WM}(y)\right]}_{\text{residual}}$$

Decomposition results

Note that $\widetilde{P_x^{MM}(y)} < \widetilde{P_{x,a}^{MM}(y)} \iff$ the part explained by applications is negative.

The observed differences in application behaviour do not seem to translate into faster job finding.

Outcome variable	Gap accounting for observables	Explained by applications	Residual
Finds a job in 3 months	-0.060 (0.012)	-0.038 (0.017)	-0.022 (0.021)
Finds a job in 6 months	-0.038 (0.017)	-0.042 (0.020)	0.004 (0.024)
Earnings difference (pre - post)	-0.061 (0.011)	-0.033 (0.014)	-0.028 (0.016)

The table reports decomposition results of a DFL decomposition of the gap in outcomes for mismatched and well-matched workers. Standard errors are obtained by bootstrapping. For job finding outcomes, the sample consists of 19,166 individuals, thereof 7,629 mismatched. For immediate earnings difference, the sample consists of 13,928 observations, thereof 5,448 mismatched workers. Observables $\mathbf{x}$: Age, age squared, gender, level of education, pre-unemployment industry and pre-unemployment earnings in logs. Applications $\mathbf{a}$: The share of applications in a relation occupation, the share of applications in a related industry, the share of applications to a tighter sub-market, applied for log-wages, applied for firm fixed effect, average applied-for commuting time, share of applications to a downward occupation measured by principal components 1 and 3.

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Conclusion

- Workers that are mismatched to vacancies find a job slower and suffer larger earnings loss, even 3 years after entering UE.

- Mismatched workers adopt different application strategies from the first month of UE and onwards.

- Mismatched workers direct a larger share of applications to a non-related occupations, but are not more likely to have a post-UE job in a non-related occupation.

- Even though mismatched workers apply for lower wage jobs and more broadly, it doesn't seem to translate to faster job-finding.

Thank you!

Appendix

Job finding in 3 months

Dependent Variable:						
	Finds a Job Within 3 Months (indicator)					
	OLS				2SLS	
	Entire Sample		Displaced		Entire Sample	
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Weighted Sub-Market Tightness	0.0236***	0.0241***	0.0163***	0.0279***	0.0447***	0.0460***
	(0.0052)	(0.0028)	(0.0063)	(0.0061)	(0.0062)	(0.0054)
Fixed-effects						
Level of Education	Yes	Yes	Yes	Yes	Yes	Yes
Age (dummy for each value)	Yes	Yes	Yes	Yes	Yes	Yes
Female	Yes	Yes	Yes	Yes	Yes	Yes
Commuting Area	Yes	Yes	Yes	Yes	Yes	Yes
Pre-Unemployment Occupation (4 digit)		Yes		Yes		Yes
Fit statistics						
Observations	237,038	237,038	21,630	21,630	237,038	237,038
F-test (1st stage), Weighted Sub-Market Tightness					22,691.6	40,284.2
Wald (1st stage), p-value, Weighted Sub-Market Tightness					2.47×10^{-14}	4.81×10^{-14}
Mean dep. var.	0.2656	0.2656	0.2651	0.2651	0.2656	0.2656

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*
Weighted sub-market tightness is standardised w.r.t. sample standard deviation (0.30).
The instrument is mass layoffs to population (occupation mean dev.).

Back First stage Quarter f.e.

Immediate earnings difference

Dependent Variable:				Log Post Earnings − Log Pre Earnings					
			OLS					2SLS	
		Entire Sample			Displaced			Entire Sample	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Variables									
Constant	3.334***			3.621***			3.343***		
	(0.1426)			(0.1826)			(0.1435)		
Weighted Sub-Market Tightness	0.0168***	0.0155***	0.0149***	0.0215***	0.0189***	0.0204***	0.0194***	0.0203***	0.0212***
	(0.0044)	(0.0031)	(0.0016)	(0.0048)	(0.0038)	(0.0034)	(0.0059)	(0.0051)	(0.0054)
Log Pre Earnings	−0.3451***	−0.4278***	−0.5211***	−0.3753***	−0.4585***	−0.5353***	−0.3464***	−0.4294***	−0.5214***
	(0.0137)	(0.0125)	(0.0121)	(0.0175)	(0.0163)	(0.0154)	(0.0140)	(0.0126)	(0.0122)
Fixed-effects									
Level of Education		Yes	Yes		Yes	Yes		Yes	Yes
Age (dummy for each value)		Yes	Yes		Yes	Yes		Yes	Yes
Female		Yes	Yes		Yes	Yes		Yes	Yes
Commuting Area		Yes	Yes		Yes	Yes		Yes	Yes
Pre-Unemployment Occupation (4 digit)			Yes			Yes			Yes
Fit statistics									
Observations	163,832	163,832	163,832	14,907	14,907	14,907	163,832	163,832	163,832
R²	0.16657	0.21812	0.26449	0.20000	0.25966	0.32208	0.16649	0.21788	0.26427
Within R²		0.20492	0.23121		0.24285	0.25834		0.20467	0.23097
F-test (1st stage), Weighted Sub-Market Tightness							15,896.8	15,687.9	28,200.7
Wald (1st stage), p-value, Weighted Sub-Market Tightness							1.73×10^{-14}	3.6×10^{-15}	4.87×10^{-15}
Mean dep. var.	−0.1546	−0.1546	−0.1546	−0.1819	−0.1819	−0.1819	−0.1546	−0.1546	−0.1546

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
Signif. Codes: ***: 0.01, **: 0.05, *: 0.1
Weighted sub-market tightness is standardised w.r.t. sample standard deviation (0.30).
The instrument is mass layoffs to population (occupation mean dev.).
The corresponding first stage is reported in 4.

First Stage

Dependent Variable:			Weighted Sub-Market Tightness			
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Constant	1.742***			-3.264***		
	(0.0611)			(0.7515)		
Mass Layoffs to Population weighted (mean dev.)	-130,290.5***	-120,391.3***	-115,865.5***	-130,366.5***	-120,566.6***	-115,801.0***
	(17,058.8)	(15,791.4)	(15,372.2)	(16,997.3)	(15,322.2)	(14,787.7)
Log Pre Earnings				0.4906***	0.3191***	0.0434***
				(0.0732)	(0.0563)	(0.0102)
Fixed-effects						
Level of Education		Yes	Yes		Yes	Yes
Age (dummy for each value)		Yes	Yes		Yes	Yes
Female		Yes	Yes		Yes	Yes
Commuting Area		Yes	Yes		Yes	Yes
Pre-Unemployment Occupation (4 digit)			Yes			Yes
Fit statistics						
Observations	237,038	237,038	237,038	163,832	163,832	163,832
R^2	0.08811	0.22106	0.60476	0.11462	0.23978	0.62093
Within R^2		0.08739	0.14530		0.09737	0.14716
F-test (1st stage)	22,903.2	22,691.6	40,284.2	15,896.8	15,687.9	28,200.7
Wald (1st stage), p-value	2.22×10^{-14}	2.47×10^{-14}	4.81×10^{-14}	1.73×10^{-14}	3.6×10^{-15}	4.87×10^{-15}

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
Signif. Codes: ***: 0.01, **: 0.05, *: 0.1
The table reports a regression of weighted sub-market tightness on mass layoffs to populations (occupational means subtracted).
The specifications correspond to to 2 and 3

Job-finding   Earnings

First month applications

Dependent Variables:	Applied for wages	Wages post UE job	Appl.to Related Occ. (share)	Post UE in related occ. (indicator)
Model:	(1)	(2)	(3)	(4)
Variables				
Mismatched	-0.0302***	-0.0407***	-0.1040***	0.0029
	(0.0053)	(0.0077)	(0.0263)	(0.0143)
Log Pre Wage	0.1349***	0.3932***	0.0603**	-0.0166
	(0.0053)	(0.0168)	(0.0262)	(0.0220)
Fixed-effects				
Age	Yes	Yes	Yes	Yes
Female	Yes	Yes	Yes	Yes
Level of Education	Yes	Yes	Yes	Yes
Commute area	Yes	Yes	Yes	Yes
Pre-UE industry	Yes	Yes	Yes	Yes
Fit statistics				
Observations	15,171	15,171	16,274	16,274
R^2	0.45174	0.43783	0.07481	0.04770
Within R^2	0.14790	0.22174	0.01885	0.00011

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Wage IV   Related occupation IV   Applied for firm

First month applications: Wages

Dependent Variables:	Applied for wages	Wages post UE job	Mismatched	Applied for wages	Mismatched	Wages post UE job
IV stages			First	Second	First	Second
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Mismatched	-0.0302***	-0.0407***		-0.1042***		-0.0759***
	(0.0053)	(0.0077)		(0.0293)		(0.0253)
Log Pre Wage	0.1349***	0.3932***	-0.2512***	0.1144***	-0.2512***	0.3834***
	(0.0053)	(0.0168)	(0.0459)	(0.0109)	(0.0459)	(0.0176)
Mass layoffs to population (weighted)			46,601.4***		46,601.4***	
			(12,913.7)		(12,913.7)	
Fixed-effects						
Age	Yes	Yes	Yes	Yes	Yes	Yes
Female	Yes	Yes	Yes	Yes	Yes	Yes
Level of Education	Yes	Yes	Yes	Yes	Yes	Yes
Commute area	Yes	Yes	Yes	Yes	Yes	Yes
Pre-UE industry	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	15,171	15,171	15,171	15,171	15,171	15,171
R^2	0.45174	0.43783	0.30490	0.40043	0.30490	0.43520
Within R^2	0.14790	0.22174	0.08175	0.06817	0.08175	0.21810
F-test (1st stage)			792.44		792.44	
F-test (1st stage), Mismatched				792.44		792.44

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

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First month applications: Share of applications to a related occupation

Dependent Variables:	Appl.to Related Occ. (share)	Post UE in related occ. (indicator)	Mismatched	Appl.to Related Occ. (share)	Mismatched	Post UE in related occ. (indicator)
IV stages			First	Second	First	Second
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Mismatched	-0.1040***	0.0029		-0.0609		0.1373*
	(0.0263)	(0.0143)		(0.0592)		(0.0729)
Log Pre Wage	0.0603**	-0.0166	-0.2641***	0.0729**	-0.2641***	0.0227
	(0.0262)	(0.0220)	(0.0421)	(0.0306)	(0.0421)	(0.0318)
Mass layoffs to population (weighted)			46,873.5***		46,873.5***	
			(12,910.1)		(12,910.1)	
Fixed-effects						
Age	Yes	Yes	Yes	Yes	Yes	Yes
Female	Yes	Yes	Yes	Yes	Yes	Yes
Level of Education	Yes	Yes	Yes	Yes	Yes	Yes
Commute area	Yes	Yes	Yes	Yes	Yes	Yes
Pre-UE industry	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	16,274	16,274	16,274	16,274	16,274	16,274
R^2	0.07481	0.04770	0.30842	0.07253	0.30842	0.03439
Within R^2	0.01885	0.00011	0.08619	0.01643	0.08619	-0.01387
F-test (1st stage)			875.39		875.39	
F-test (1st stage), Mismatched				875.39		875.39

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

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First month applications: Applied for firm fixed effect

Dependent Variables:	Applied for FFE	Post-UE FFE	Mismatched	Applied for FFE	Mismatched	Post-UE FFE
IV stages			First	Second	First	Second
Model:	(1)	(2)	(3)	(4)	(5)	(6)
Variables						
Mismatched	-0.0359**	-0.0600***		-0.0221		0.0737
	(0.0158)	(0.0171)		(0.0462)		(0.1004)
Pre-UE FFE	0.0722***	0.1271***	-0.0054	0.0722***	-0.0054	0.1275***
	(0.0091)	(0.0102)	(0.0128)	(0.0091)	(0.0128)	(0.0107)
Mass layoffs to population (weighted)			49,480.9***		49,480.9***	
			(13,508.7)		(13,508.7)	
Fixed-effects						
Age	Yes	Yes	Yes	Yes	Yes	Yes
Female	Yes	Yes	Yes	Yes	Yes	Yes
Level of Education	Yes	Yes	Yes	Yes	Yes	Yes
Commute area	Yes	Yes	Yes	Yes	Yes	Yes
Pre-UE industry	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics						
Observations	14,578	14,578	14,578	14,578	14,578	14,578
R^2	0.08166	0.06603	0.29043	0.08157	0.29043	0.06166
Within R^2	0.00955	0.01548	0.05632	0.00946	0.05632	0.01087
F-test (1st stage)			864.34		864.34	
F-test (1st stage), Mismatched				864.34		864.34

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
Signif. Codes: ***: 0.01, **: 0.05, *: 0.1

Immediate earnings difference - quarter f.e.

Dependent Variables:	Log Post Earnings - Log Pre Earnings		Weighted Sub-Market Tightness	Log Post Earnings - Log Pre Earnings
IV stages			First	Second
Model:	(1)	(2)	(3)	(4)
Variables				
Weighted Sub-Market Tightness	0.0180***	0.0202***		0.0346***
	(0.0036)	(0.0046)		(0.0083)
Log Pre Earnings	-0.4623***	-0.4864***	0.2641***	-0.4675***
	(0.0128)	(0.0161)	(0.0508)	(0.0128)
Mass layoffs to population			-83,318.8***	
			(15,132.5)	
Fixed-effects				
Level of Education	Yes	Yes	Yes	Yes
Age (dummy for each value)	Yes	Yes	Yes	Yes
Commuting Area	Yes	Yes	Yes	Yes
Unemployment Start Quarter	Yes	Yes	Yes	Yes
Pre-UE Industry (4)	Yes	Yes	Yes	Yes
Female	Yes	Yes	Yes	Yes
Fit statistics				
Observations	163,832	14,907	163,832	163,832
F-test (1st stage)			12,665.4	
F-test (1st stage), Weighted Sub-Market Tightness				12,665.4
Wald (1st stage), p-value			3.68×10^{-8}	
Wald (1st stage), p-value, Weighted Sub-Market Tightness				3.68×10^{-8}
Mean dep. var.	-0.1546	-0.1819	1.677	-0.1546

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

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Job finding in 3 months - quarter f.e.

Dependent Variables:	Finds a Job Within 3 Months (indicator)		Weighted Sub-Market Tightness	Finds a Job Within 3 Months (indicator)
IV stages			First	Second
Model:	(1)	(2)	(3)	(4)
Variables				
Weighted Sub-Market Tightness	0.0178***	0.0088		0.0382***
	(0.0050)	(0.0071)		(0.0128)
Mass layoffs to population			-82,036.2***	
			(15,225.3)	
Fixed-effects				
Level of Education	Yes	Yes	Yes	Yes
Age (dummy for each value)	Yes	Yes	Yes	Yes
Commuting Area	Yes	Yes	Yes	Yes
Unemployment Start Quarter	Yes	Yes	Yes	Yes
Female	Yes	Yes	Yes	Yes
Pre-UE Industry (4)	Yes	Yes	Yes	Yes
Fit statistics				
Observations	237,038	21,630	237,038	237,038
F-test (1st stage)			18,031.5	
F-test (1st stage), Weighted Sub-Market Tightness				18,031.5
Wald (1st stage), p-value			7.13×10^{-8}	
Wald (1st stage), p-value, Weighted Sub-Market Tightness				7.13×10^{-8}
Mean dep. var.	0.2656	0.2651	1.679	0.2656

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

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Earnings 0-3 years after UE entry

Dependent Variables:	Yearly earnings year of entering UE (kr.)	Yearly earnings 1st year after entering UE (kr.)	Yearly earnings 2nd year after entering UE (kr.)	Yearly earnings 3rd year after entering UE (kr.)
Model:	(1)	(2)	(3)	(4)
Variables				
Weighted Sub-Market Tightness	3,935.6***	9,801.5***	8,100.3***	5,865.2***
	(668.8)	(989.4)	(987.0)	(1,100.0)
Yearly earnings year before UE (kr.)	0.5965***	0.3528***	0.4057***	0.4058***
	(0.0184)	(0.0145)	(0.0146)	(0.0134)
Fixed-effects				
Pre-Unemployment Occupation (4 digit)	Yes	Yes	Yes	Yes
Age	Yes	Yes	Yes	Yes
Level of Education	Yes	Yes	Yes	Yes
female	Yes	Yes	Yes	Yes
Commuting Area	Yes	Yes	Yes	Yes
Fit statistics				
Observations	204,641	204,641	204,641	181,155
R²	0.52186	0.22099	0.26745	0.26105
Within R²	0.30904	0.08420	0.10014	0.09161
Mean dep. var.	257,079.7	186,111.0	232,448.1	243,449.7

Clustered (Pre-Unemployment Occupation (4 digit)) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*
Monetary amounts are in DKK and are adjusted by CPI to 2008 level.
In the first column, the dependent variable is annual earnings in the calendar year of entering UE.
In the second column, the dependent variable is annual earnings in the calendar year after entering UE and so on.
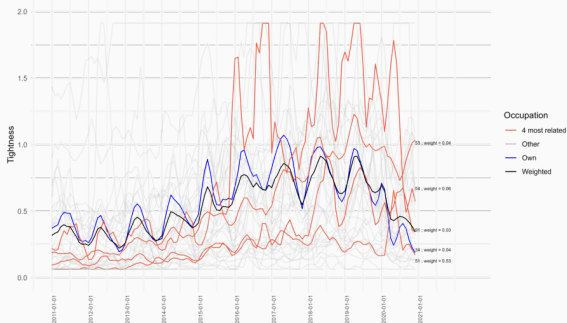Weighted sub-market tightness is standardised with respect to the sample standard deviation (0.30).

1 DKK ≈ 0.20 USD

Back: Summary

Back: Immediate earnings difference

Transition-based weighting scheme

Weighted sub-market tightness for DISCO occupation 51 Work in service in Zealand

The figure compares weighted sub-market tightness (black line) to origin occupation tightness (blue line). It highlights the contribution of the most related 2 digit occupations (red line). They contribute according to the weights specified in the figure. The grey shaded lines show other occupations that contribute with a lower weight.

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