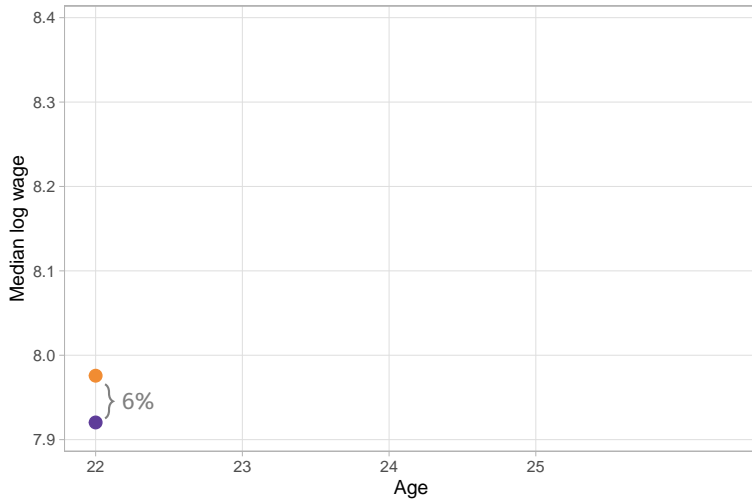


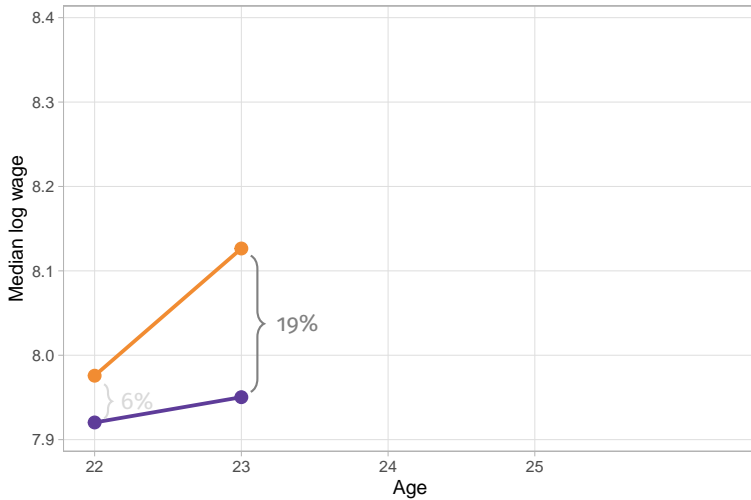
Job Mobility Within and Across Occupations

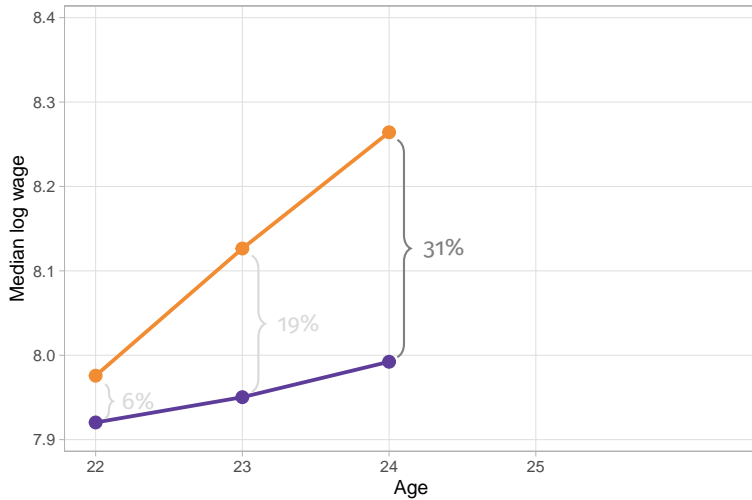
Attila Gyetvai

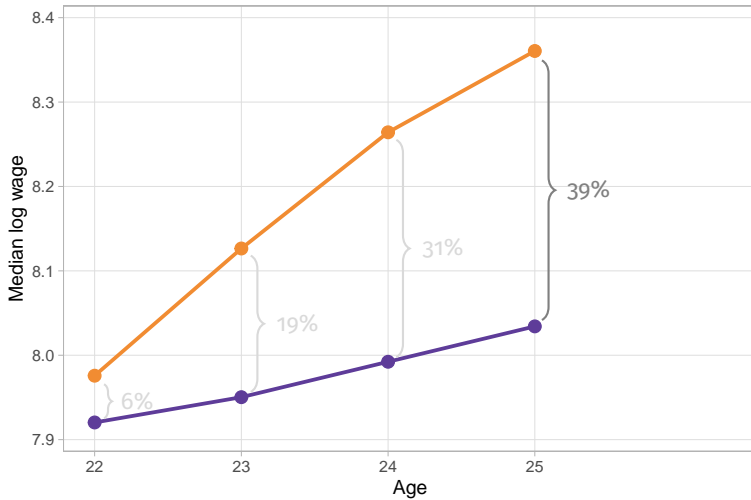
Bank of Portugal & IZA

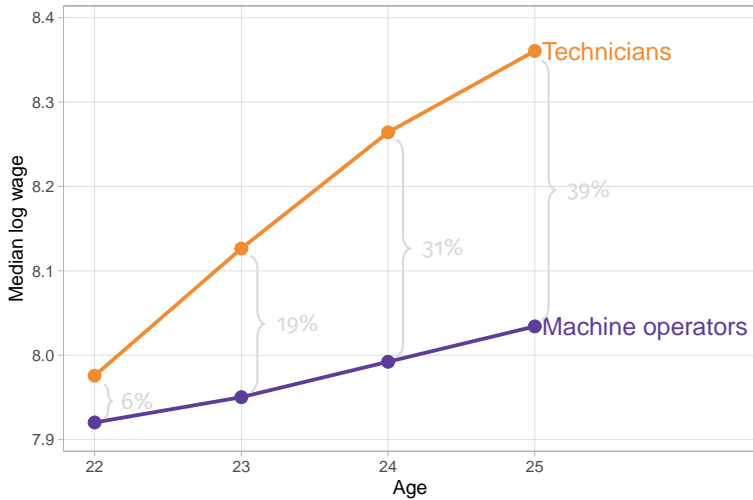
ESEM 2022











Research Questions

How do occupations capture diverging wage trajectories?

How does occupational mobility impact life cycle wage inequality?

What I do & find

I document large occupational differences in wage trajectories

- Hungarian linked administrative data across employers and occupations

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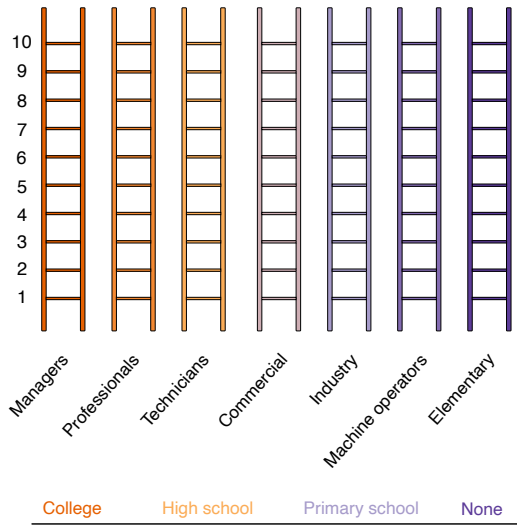
I uncover substantial occupational heterogeneity in sources of mobility

- Wage offers, labor market frictions, compensating diff'tls, switching costs

I tie occupational mobility to life cycle wage inequality

- 94% fit of inequality profile via crossing expected wage trajectories

Occupational ladders and skill levels



4-digit occs.

J2J transitions

Wage trajectories

Modeling framework

Individuals work in a job (occupation a , wage i), enjoy flow utility u_{ai}

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Individuals work in a job (occupation a , wage i), enjoy flow utility u_{ai}

They may receive promotions/demotions to another wage w at rate χ_{ai}^{aw}

They may separate from their job at rate δ_a

They may receive a job offer from occupation b at rate λ_a^b

- Wage offer is drawn from $f^b(\cdot)$
- Stochastic switching cost $\tilde{c}_a^b \implies$ Accept offer if $V_{bj} - \tilde{c}_a^b > V_{ai}$

Value functions

Employed in occupation a earning wage i :

$$\left(\sum_o \lambda_a^o + \sum_w \chi_{ai}^{aw} + \delta_a + \rho \right) V_{ai} = u_{ai} + \mathbb{E}_w [\chi_{ai}^{aw} V_{aw}] + \delta_a V_N \\ + \mathbb{E}_{o,w,\tilde{c}} [\lambda_a^o \max\{V_{ow} - \tilde{c}_a^o, V_{ai}\}]$$

Value functions

Employed in occupation a earning wage i :

$$\left(\sum_o \lambda_a^o + \sum_w \chi_{ai}^{aw} + \delta_a + \rho \right) V_{ai} = u_{ai} + \mathbb{E}_w [\chi_{ai}^{aw} V_{aw}] + \delta_a V_N \\ + \mathbb{E}_{o,w,\tilde{c}} [\lambda_a^o \max\{V_{ow} - \tilde{c}_a^o, V_{ai}\}]$$

Not employed:

$$\left(\sum_o \lambda_N^o + \rho \right) V_N = u_N + \mathbb{E}_{o,w,\tilde{c}} [\lambda_N^o \max\{V_{ow} - \tilde{c}_N^o, V_N\}]$$

Identification in a nutshell

Identifying assumption: (cf. Arcidiacono, Gyetvai, Jardim, and Maurel, 2021)

- $\tilde{c}_a^o \sim \text{Logistic}(c_a^o) \longrightarrow$ I express the model in terms of CCPs

Identification in a nutshell

Identifying assumption: (cf. Arcidiacono, Gyetvai, Jardim, and Maurel, 2021)

- $\tilde{c}_a^o \sim \text{Logistic}(c_a^o) \longrightarrow$ I express the model in terms of CCPs

I match observed hazards of switching jobs to the structural parameters:

$$\text{hazard} = \text{Pr}(\text{offer arrives}) \times \text{Pr}(\text{acceptance})$$

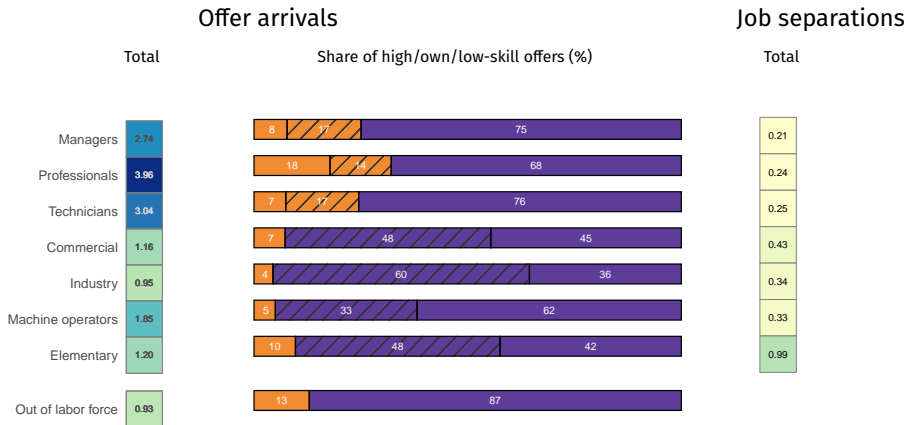
Separating **offers** from **choices**:

- If offers arrive fast, workers wait for a better-paying job
 \implies more transitions at high wages
- If workers prefer an occupation, they switch to any job regardless of wage
 \implies transitions at all wages

Identification

Estimation

High-skill: more & better offers than low-skill

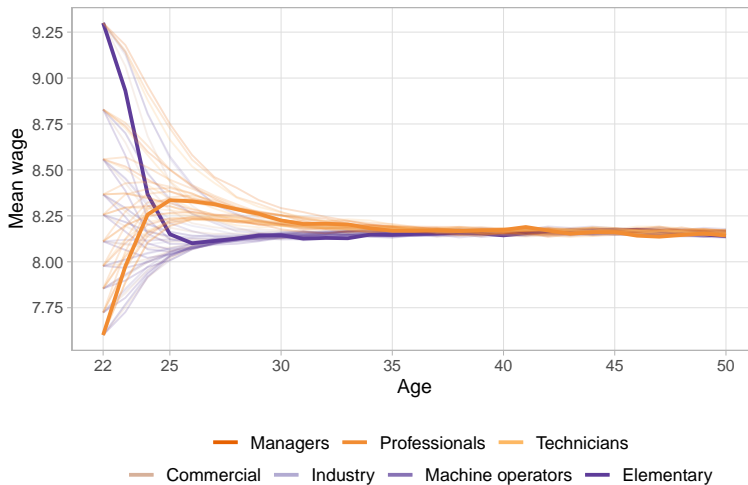


Data

More results

Two types

Simulating ex ante wage trajectories

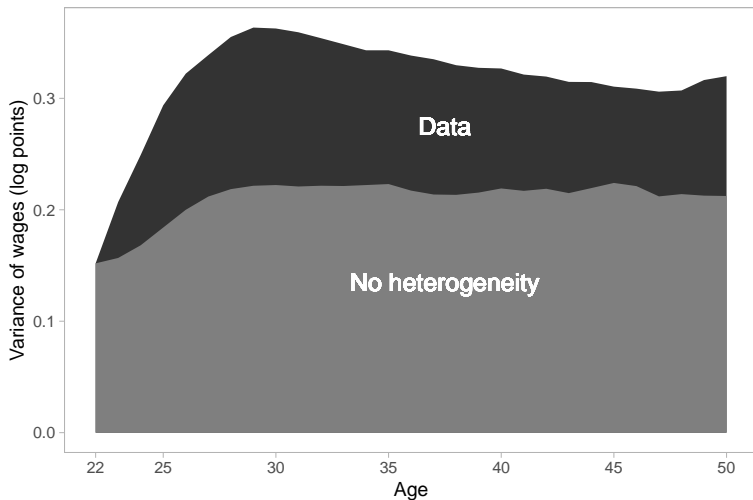


Procedure

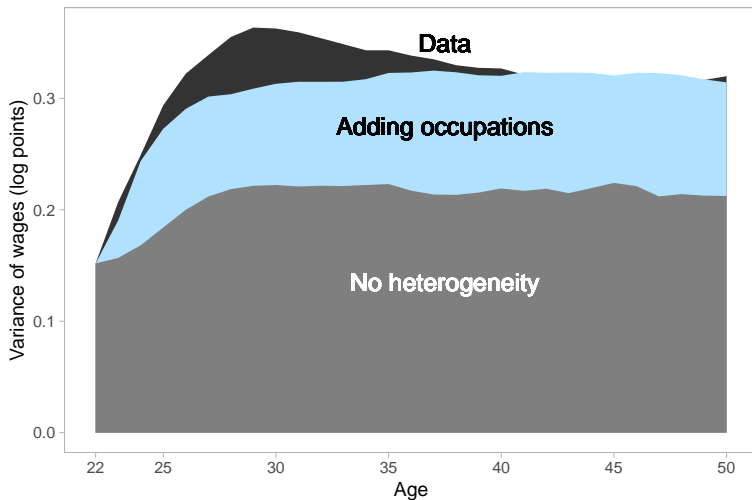
Crossing

Two types

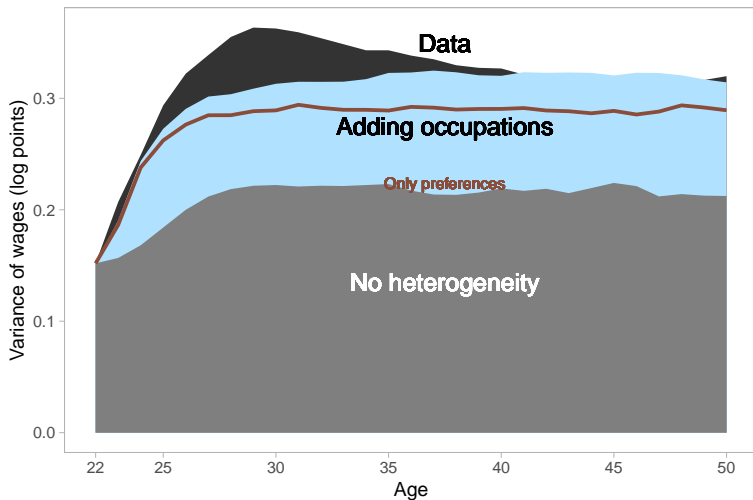
Fitting life cycle wage inequality



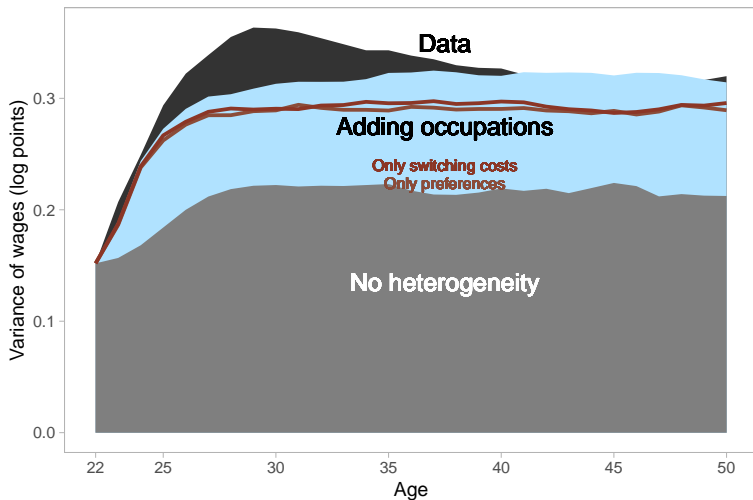
Fitting life cycle wage inequality



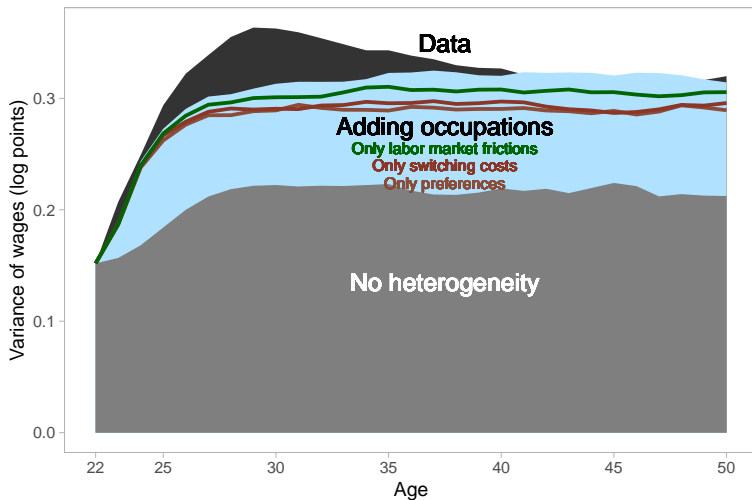
Fitting life cycle wage inequality



Fitting life cycle wage inequality



Fitting life cycle wage inequality



Research Questions

How do occupations capture diverging wage trajectories?

Wage offers

Non-wage amenities

Labor market frictions

Non-pecuniary job switching costs

How does occupational mobility impact life cycle wage inequality?

It fits wage dispersion via diverging paths

attilagyetvai.com

Additional Slides

Literature

Occupational mobility and wage inequality

Juhn, Murphy, and Pierce (1993); Kambourov and Manovskii (2009a,b); Groes, Kircher, and Manovskii (2015); Bayer and Kuhn (2020)

Occupational choice

Miller (1984); Siow (1984); McCall (1990); Antonovics and Golan (2012)

Heterogeneity in job search

Postel-Vinay and Robin (2002); Cahuc, Postel-Vinay, and Robin (2006); Jolivet, Postel-Vinay, and Robin (2006); Sullivan (2010); Sullivan and To (2014); Taber and Vejlin (2020)

Compensating differentials

Rosen (1986); Sorkin (2018); Arcidiacono, Hotz, Maurel, and Romano (2020)

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- Antonovics, K. and L. Golan (2012). Experimentation and Job Choice. Journal of Labor Economics 30(2), 333–366.
- Arcidiacono, P., A. Gyetvai, E. Jardim, and A. Maurel (2021). Conditional Choice Probability Estimation of Continuous-Time Job Search Models. Working Paper.
- Arcidiacono, P., V. J. Hotz, A. Maurel, and T. Romano (2020). *Ex Ante* Returns and Occupational Choice. Journal of Political Economy 128(12), 4475–4522.
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- Kambourov, G. and I. Manovskii (2009a). Occupational Mobility and Wage Inequality. Review of Economic Studies 76(2), 731–759.
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- Sullivan, P. and T. To (2014). Search and Non-wage Job Characteristics. Journal of Human Resources 49(2), 472–507.
- Taber, C. and R. Vejlin (2020). Estimation of a Roy/Search/Compensating Differential Model of the Labor Market. Econometrica 88(3), 1031–1069.
- Verner, E. and G. Gyöngyösi (2020). Household Debt Revaluation and the Real Economy: Evidence from a Foreign Currency Debt Crisis. American Economic Review, forthcoming.

2003–2010, 50 percent de facto random sample of population

- 5 million individuals, 900 thousand firms
- Data come from various administrative branches
- Sample: males, age 22–50 → 2 million spells

- 1 (Virtually) continuous-time data
- 2 Reliable occupational classification → high vs. low-skill occupations

Used in DellaVigna, Lindner, Reizer, and Schmieder (QJE 2017),
Harasztosi and Lindner (AER 2019), Verner and Gyöngyösi (AER 2020)

Skill levels and most frequent occupations

Data

1-Managers

College+HS

Dept. managers, wholesale
Supervisors, manufacturing
General managers, bus. orgs.

2-Professionals

College

Sales representatives
Engineers
Software developers

3-Technicians

High school

Wholesale clerks
Technical assc. professionals
Computer assc. professionals

4-Commercial

Primary

Shop assistants
Security guards
Waiters

5-Industry

Primary

Metal workers
Stock clerks
Mechanics

6-Machine operators

Primary

Heavy truck drivers
Assemblers
Forklift operators

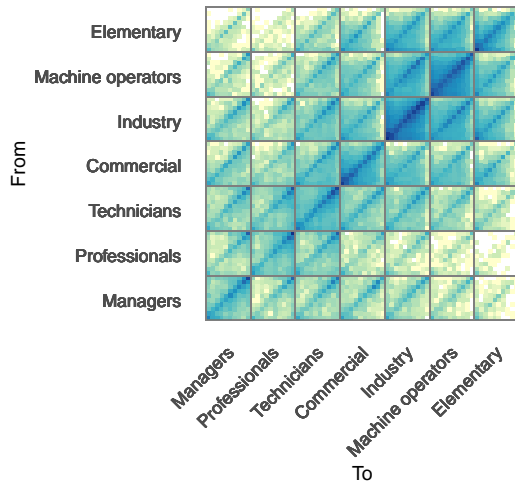
7-Elementary

None

Laborers and helpers
Janitors
Manual material movers

Observed job-to-job transitions

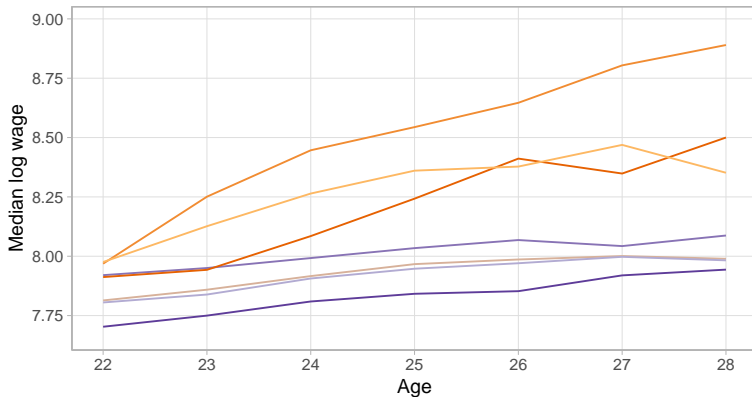
Data



Occupations capture diverging wage trajectories

Data

By initial occupations



Managers Professionals Technicians
Commercial Industry Machine operators Elementary

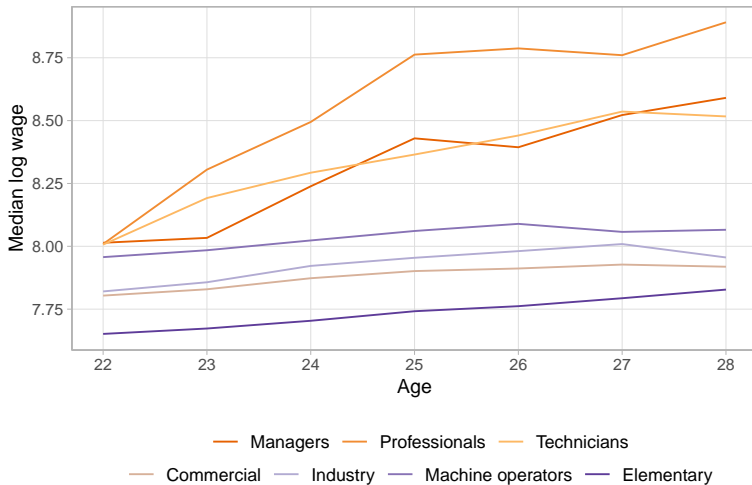
Current occs.

◀ Back

Occupations capture diverging wage trajectories

Data

By current occupations



◀ Back

Continuous-time on-the-job search across occupations with random offers

Workers in occupation a making wage i receive offers from (o, w)

Opportunities

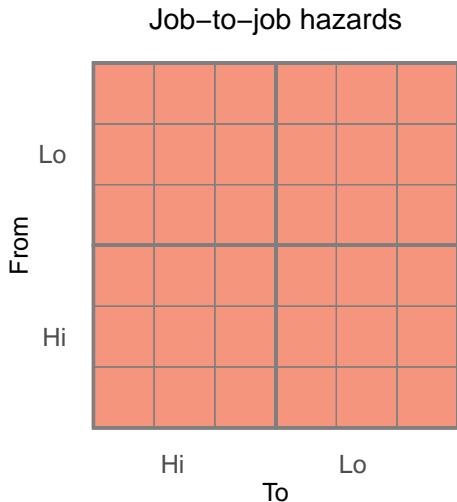
λ_a^o offer arrival rates
 f^{ow} pmf. of offered wages
 δ_a job separation rates

Choices

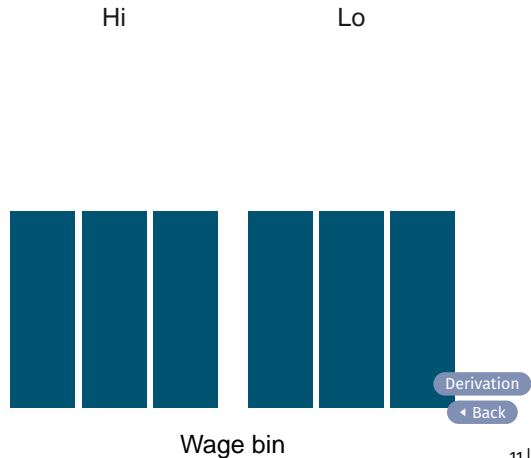
u_{ai} flow utilities
 \tilde{c}_a^o switching costs

Identifying variation

Hazards across destination jobs

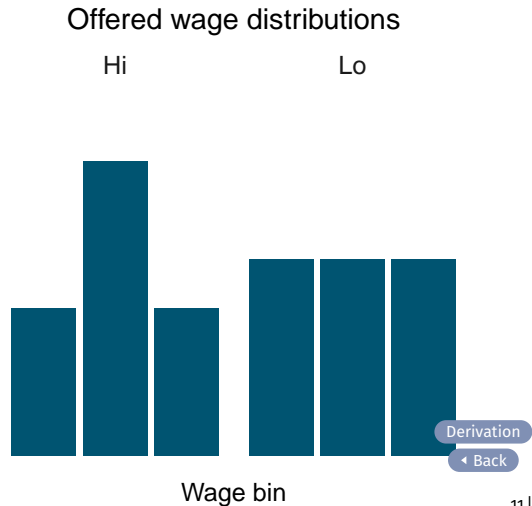
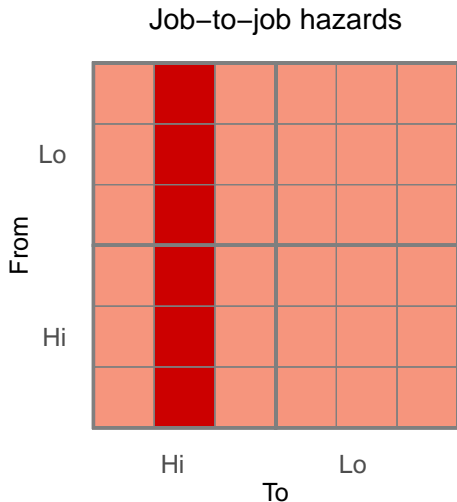


Offered wage distributions



Identifying variation

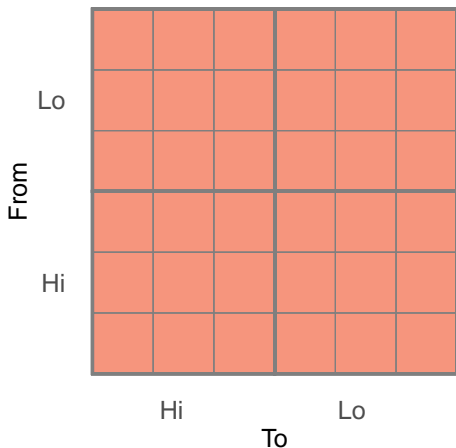
Hazards across destination jobs



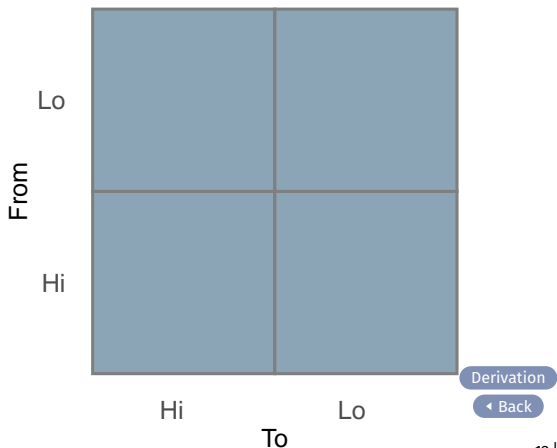
Identifying variation

Hazards across origin and destination occupations at high wages

Job-to-job hazards



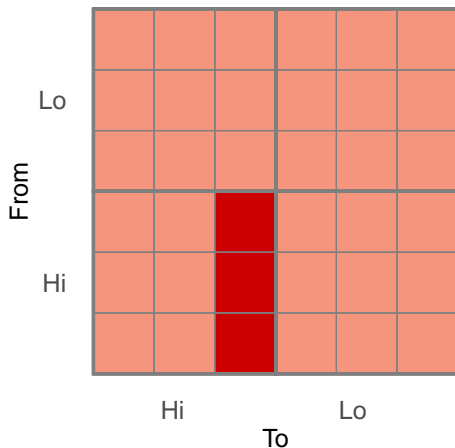
Offer arrival rates



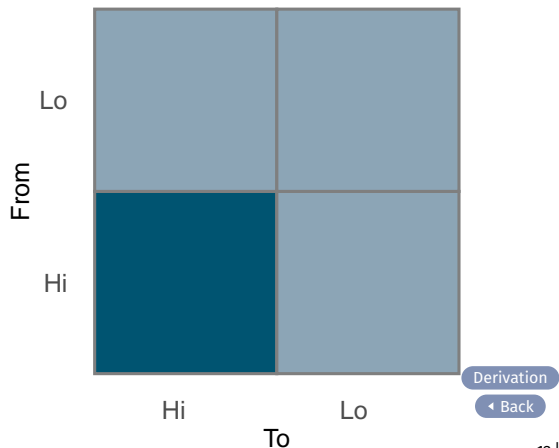
Identifying variation

Hazards across origin and destination occupations at high wages

Job-to-job hazards



Offer arrival rates

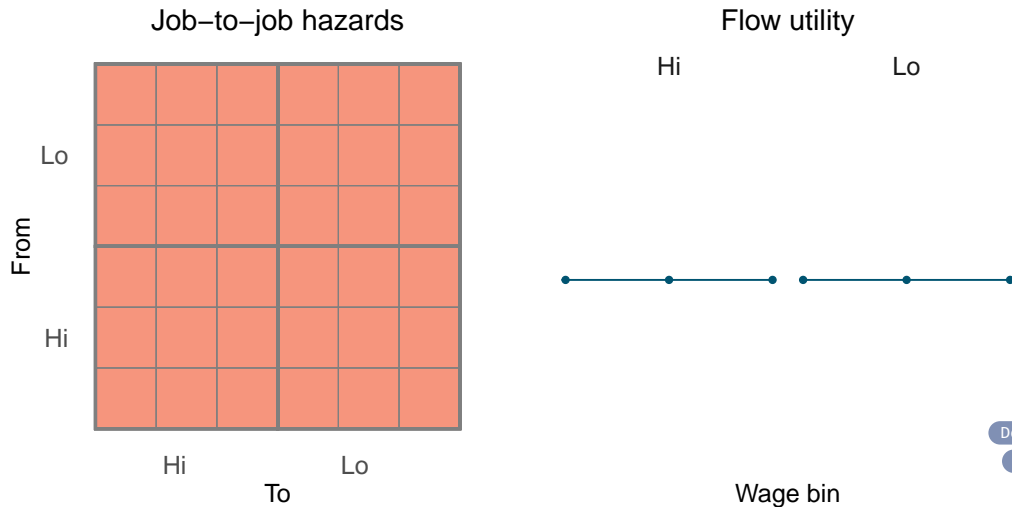


Derivation

◀ Back

Identifying variation

Hazards across origin and destination jobs



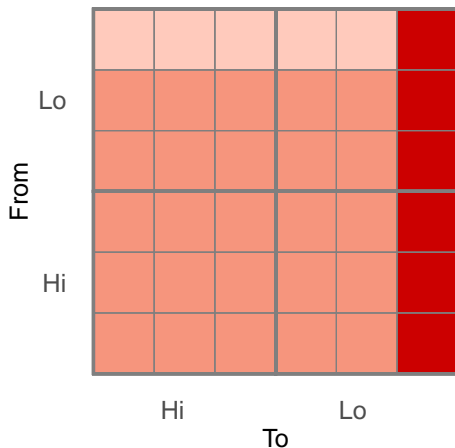
Derivation

◀ Back

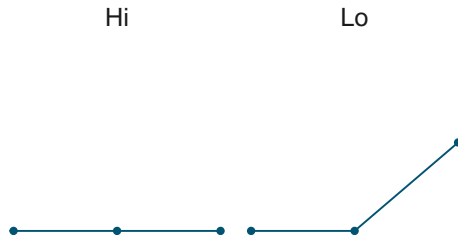
Identifying variation

Hazards across origin and destination jobs

Job-to-job hazards



Flow utility



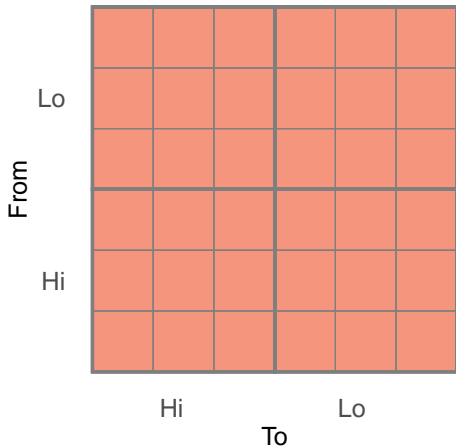
Derivation

◀ Back

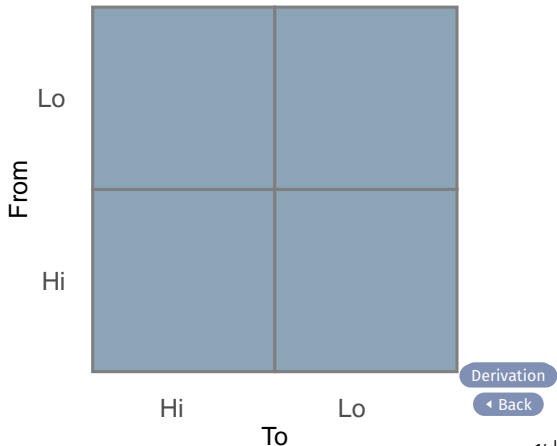
Identifying variation

Hazards across origin and destination occupations at all wages

Job-to-job hazards



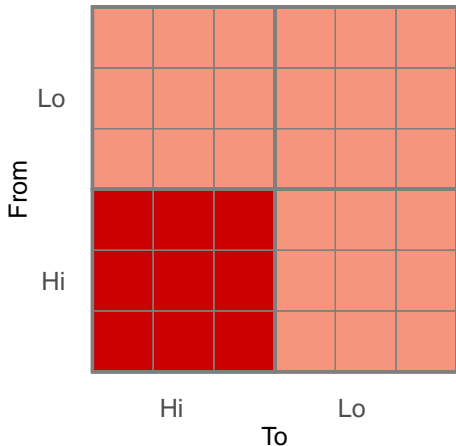
Switching costs



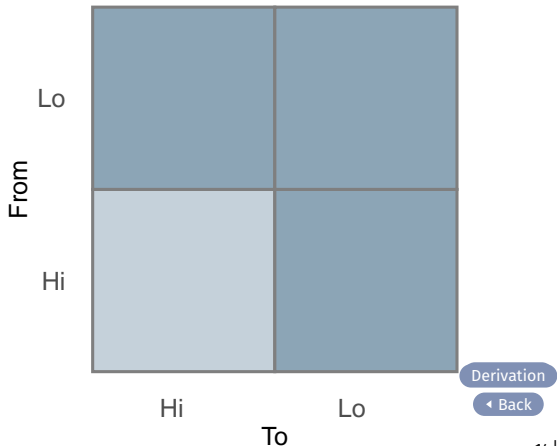
Identifying variation

Hazards across origin and destination occupations at all wages

Job-to-job hazards



Switching costs



Derivation

◀ Back

Note that $p_{ai}^{ai} = p_{aj}^{aj}$ for all a, i, j :

$$p_{ai}^{ai} = \frac{\exp(V_{ai} - V_{ai} - c_a^a)}{1 + \exp(V_{ai} - V_{ai} - c_a^a)} = \frac{\exp(-c_a^a)}{1 + \exp(-c_a^a)}$$

Therefore

$$\frac{h_{ai}^{ai}}{h_{aj}^{aj}} = \frac{\lambda_a^a p_{ai}^{ai} f^{ai}}{\lambda_a^a p_{aj}^{aj} f^{aj}} = \frac{f^{ai}}{f^{aj}}$$
$$\Rightarrow f^{ai} = \frac{h_{ai}^{ai}}{\sum_w h_{aw}^{aw}}$$

Identification

Estimation

Idea: the odds of accepting an offer plus its reverse needs to be equal for all wages

Log odds of accepting offers can be written in two ways:

- 1 Plugging in structural parameters for CCPs:

$$\tilde{\lambda}_{ai}^{bj} = \log \left(\frac{p_{ai}^{bj}}{1 - p_{ai}^{bj}} \right) = \log \left(\frac{h_{ai}^{bj}}{\lambda_a^b f^{bj} - h_{ai}^{bj}} \right)$$

► Only unknown is $\lambda_a^b \implies \tilde{\lambda}_{ai}^{bj} \equiv \tilde{\lambda}_{ai}^{bj}(\lambda_a^b)$

- 2 Plugging in value functions for CCPs:

$$\tilde{\lambda}_{ai}^{bj} = \log \left(\frac{p_{ai}^{bj}}{1 - p_{ai}^{bj}} \right) = V_{bj} - V_{ai} - c_a^b$$

First, offer arrives from same occupation:

$$\begin{aligned}\tilde{\lambda}_{ai}^{aj} &= V_{aj} - V_{ai} - c_a^a \\ \implies \tilde{\lambda}_{ai}^{aj} + \tilde{\lambda}_{aj}^{ai} &= \tilde{\lambda}_{ak}^{a\ell} + \tilde{\lambda}_{a\ell}^{ak} \implies \lambda_a^a \text{ identified from any } (i, j, k, \ell) \text{ 4-tuple}\end{aligned}$$

Next, offer arrives from another occupation:

$$\begin{aligned}\tilde{\lambda}_{ai}^{bj} &= V_{bj} - V_{ai} - c_a^b \\ \implies \tilde{\lambda}_{ai}^{bj} + \tilde{\lambda}_{bj}^{ai} &= \tilde{\lambda}_{ak}^{b\ell} + \tilde{\lambda}_{b\ell}^{ak} \implies \lambda_a^b, \lambda_b^a \text{ identified from any two } (i, j, k, \ell),\end{aligned}$$

(i', j', k', ℓ') 4-tuples

Idea: having identified the offered wages and arrival rates, CCPs map to hazards

By the hazard definition,

$$h_{ai}^{bj} = \lambda_a^b p_{ai}^{bj} f^{bj}$$
$$\Rightarrow p_{ai}^{bj} = \frac{h_{ai}^{bj}}{\lambda_a^b f^{bj}}$$

Idea: remaining parameters come from changes across wages vs. occ's

Plug the structural parameters in the values in the log odds:

$$\begin{aligned}\tilde{\lambda}_{ai}^{bj} &= V_{bj} - V_{ai} - c_a^b \\ &= \frac{1}{\rho + \delta_b} \left(u_{bj} - \sum_{o,w} \lambda_b^o \log(1 - p_{bj}^{ow}) f^{ow} \right) \\ &\quad - \frac{1}{\rho + \delta_a} \left(u_{ai} - \sum_{o,w} \lambda_a^o \log(1 - p_{ai}^{ow}) f^{ow} \right) \\ &\quad + \frac{\delta_b - \delta_a}{(\rho + \delta_b)(\rho + \delta_a)} V_N - c_a^b\end{aligned}$$

This expression is linear in u_{bj} , u_{ai} , V_N , and c_a^b

We can write this in matrix form as

$$\kappa = A\theta \quad \implies \quad \theta = A^+ \kappa$$

Additional structure: relative symmetry along skill content

Skill content of origin occupation	Elementary (1)	α_1^5	α_1^4	α_1^3	α_1^2	α_1^2	α_1^2	α_1^2	
	Machine operators (2)	α_2^5	α_2^4	α_2^3	α_2^2	α_2^2	α_2^2		
	Industry (2)	α_2^5	α_2^4	α_2^3	α_2^2	α_2^2			
	Commercial (2)	α_2^5	α_2^4	α_2^3	α_2^2				
	Office clerks (2)	α_2^5	α_2^4	α_2^3					
	Technicians (3)	α_3^5	α_3^4						
	Professionals (4)	α_4^5							
	Managers (5)								
		Managers (5)	Professionals (4)	Technicians (3)	Office clerks (2)	Commercial (2)	Industry (2)	Machine operators (2)	Elementary (1)
		Skill content of destination occupation							

I estimate the structural parameters by MLE Likelihood

Competing risks model with exponential hazards and two-sided censoring

I impose the model structure on the hazards:

$$L(\mathbf{h}, \delta) = L \left(\underbrace{\lambda f}_{\text{Pr(offer arrives)}} \times \underbrace{p(\lambda, f, u, c, \delta)}_{\text{Pr(acceptance)}}, \delta \right)$$

CCPs come from iterating the value functions to a fixed point VFI

I add more structure to flow utilities

- Common log wage profile, shifted by occupations
- I translate the estimates to compensating differentials

Likelihood contribution of worker n 's spell s with duration t_s :

$$L_{ns}(h, \delta) = \prod_{a,i} \prod_{b,j} \left[\left(h_{ai}^{bj} \right)^{\mathbb{1}(b_s=b, j_s=j)} \exp \left(-h_{ai}^{bj} t_s \right) \right]^{\mathbb{1}(a_s=a, i_s=i)} \\ \times \prod_a \left[(\delta_a)^{\mathbb{1}(EN_s)} \exp(-\delta_a t_s) \right]^{\mathbb{1}(a_s=a)}$$

Full likelihood:

$$L(h, \delta) = \prod_n \prod_{s=1}^{S_n} L_{ns}(h, \delta)$$

Imposing structure:

$$L(f, \lambda, u, c, \delta) = \prod_n \prod_{s=1}^{S_n} L_{ns}(\lambda f p(\lambda, f, u, c, \delta), \delta)$$

$m + 1$ th iteration:

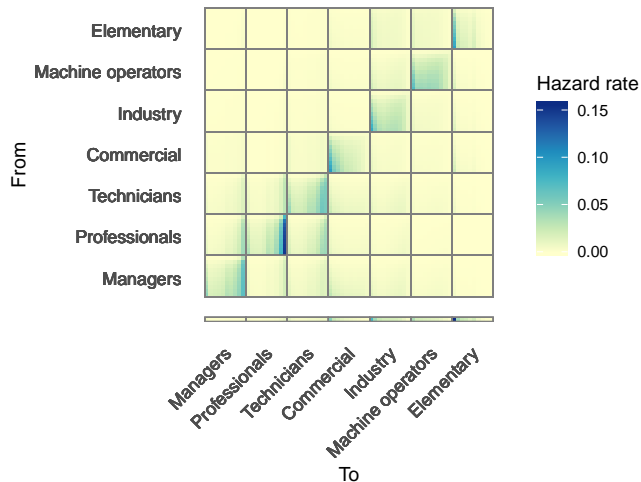
$$\left(\sum_o \lambda_a^o + \delta_a + \rho \right) V_{ai}^{(m+1)} = u_{ai} + \delta_a V_N^{(m)} + \sum_o \lambda_a^o \left(V_{ai}^{(m)} \right) \\ + \sum_{o,w} \lambda_a^o \log \left(1 + \exp \left(V_{ow}^{(m)} - V_{ai}^{(m)} - c_a^o \right) \right) f^{ow}$$

I calculate the CCPs as

$$p_{ai}^{bj} = \frac{\exp(V_{bj} - V_{ai} - c_a^b)}{1 + \exp(V_{bj} - V_{ai} - c_a^b)}$$

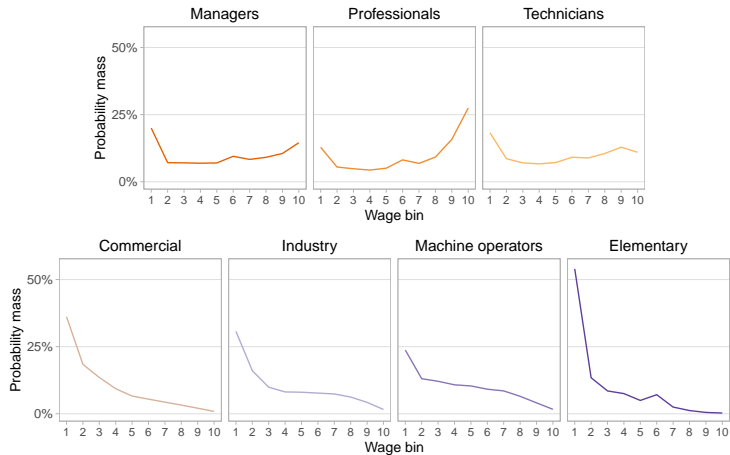
Hazards (opportunities and choices)

Estimates



Offered wages (opportunities)

Estimates



[More results](#)

[Two types](#)

Offer arrival rates (opportunities)

Estimates

From	Elementary	0.04	0.07	0.01	0.34	0.10	0.07	0.58	1.20
	Machine operators	0.01	0.06	0.02	0.55	0.24	0.61	0.35	1.85
	Industry	0.01	0.01	0.02	0.11	0.57	0.06	0.16	0.95
	Commercial	0.03	0.01	0.05	0.56	0.07	0.04	0.41	1.16
	Technicians	0.12	0.11	0.52	1.48	0.36	0.12	0.34	3.04
	Professionals	0.29	0.57	0.41	1.87	0.57	0.15	0.11	3.96
	Managers	0.47	0.08	0.14	1.33	0.30	0.15	0.27	2.74
	Out of labor force	0.02	0.04	0.06	0.13	0.24	0.15	0.29	0.93
		Managers	Professionals	Technicians	Commercial	Industry	Machine operators	Elementary	Total
		To							

Mean switching costs (choices)

Estimates

From	Elementary	5.87	9.36	1.79	2.68	0.31	0.43	0.86
	Machine operators	0.15	6.05	0.01	1.43	0.08	0.04	0.36
	Industry	0.04	2.95	0.00	0.75	0.03	0.09	0.26
	Commercial	0.03	0.59	0.00	0.10	0.83	1.57	2.25
	Technicians	0.02	0.00	0.05	0.11	0.20	0.44	0.23
	Professionals	0.02	0.06	0.06	0.11	0.54	1.12	1.05
	Managers	0.06	0.07	0.11	0.18	0.30	1.03	0.62
	Out of labor force	0.27	0.54	0.88	0.37	0.37	0.37	0.00
		Managers	Professionals	Technicians	Commercial	Industry	Machine operators	Elementary
		To						

More results

Two types

How much would a median-wage worker in occupation a have to be compensated to become an machine operator?

$$\psi_a + \beta \log \bar{w}_a = \psi_{\text{MO}} + \beta \log w_a^{\text{MO}}$$

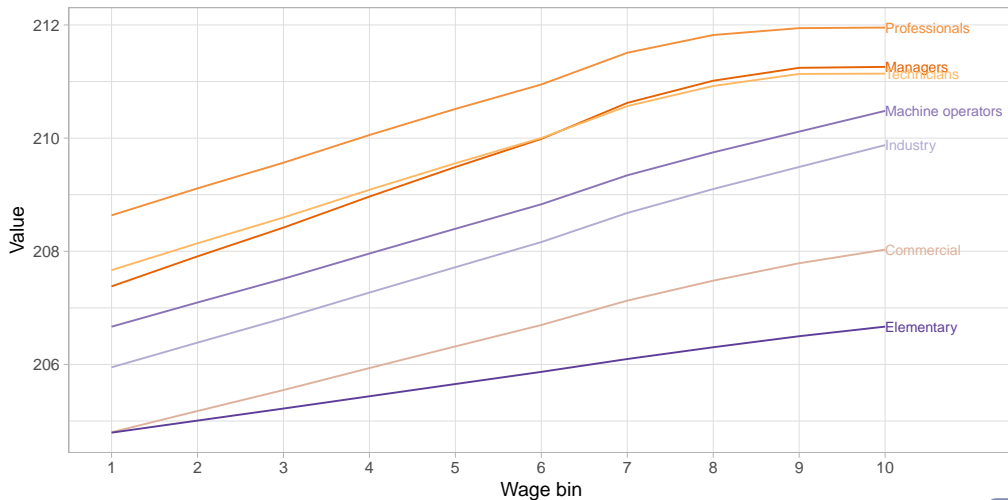
Occupation	β	ψ_a	$w_a^{\text{MO}} / \bar{w}_a$
Managers	1.42	-1.49	0.26
Professionals		-1.83	0.21
Technicians		-1.21	0.32
Commercial		0.72	1.26
Industry		0.84	1.36
Machine operators		0.40	–
Elementary		5.07	26.52

More results

Two types

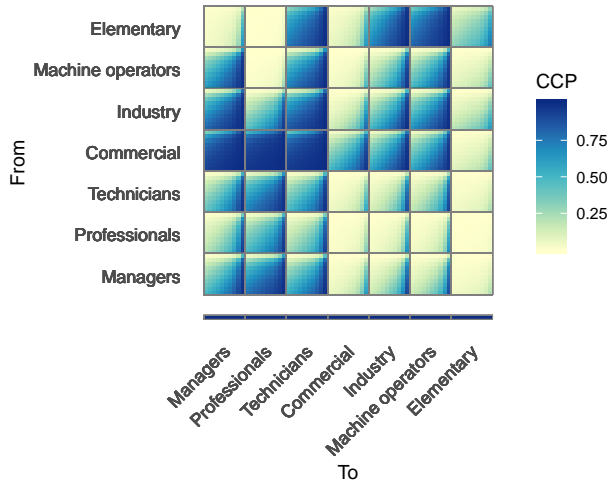
Value functions

Estimates

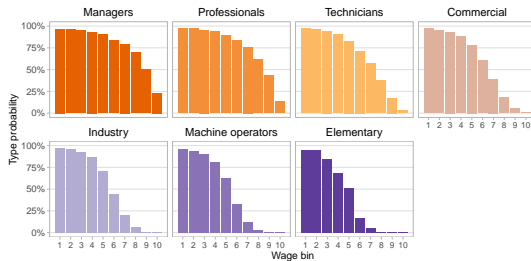


[More results](#)

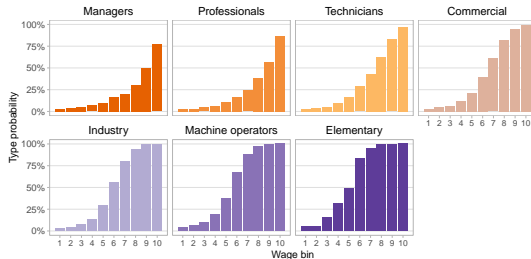
[Two types](#)



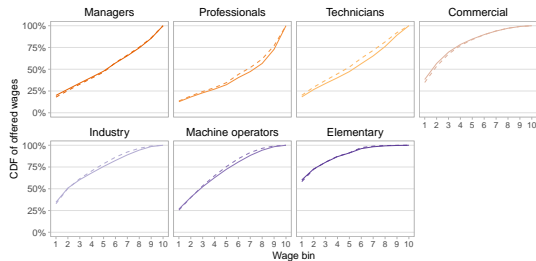
Type 1



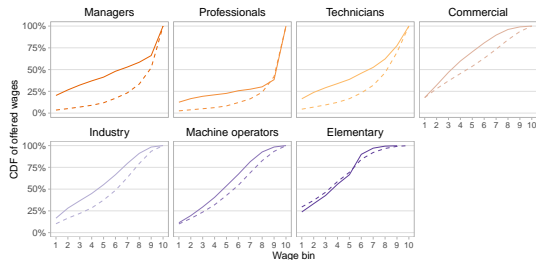
Type 2



Type 1



Type 2



Solid: offered wages. Dashed: accepted wages.

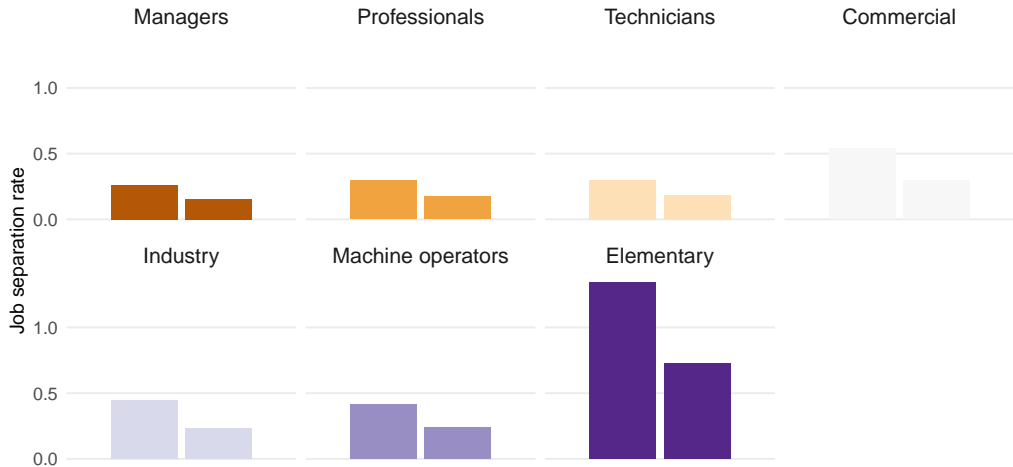
Offer arrival rates (opportunities)

Estimates

		Type 1								Type 2							
From	Elementary	0.04	0.08	0.01	0.38	0.12	0.08	0.62	1.34	0.03	0.06	0.01	0.27	0.09	0.06	0.48	0.99
	Machine operators	0.01	0.07	0.03	0.64	0.27	0.67	0.42	2.12	0.00	0.05	0.02	0.45	0.20	0.54	0.28	1.54
	Industry	0.01	0.01	0.02	0.13	0.54	0.07	0.19	0.98	0.01	0.01	0.02	0.09	0.58	0.06	0.13	0.89
	Commercial	0.03	0.01	0.06	0.59	0.08	0.05	0.47	1.29	0.02	0.01	0.04	0.47	0.06	0.03	0.33	0.96
	Technicians	0.13	0.13	0.56	1.71	0.43	0.14	0.42	3.51	0.09	0.09	0.44	1.17	0.29	0.09	0.28	2.46
	Professionals	0.34	0.64	0.48	2.18	0.68	0.18	0.13	4.63	0.24	0.48	0.34	1.47	0.46	0.12	0.09	3.20
	Managers	0.53	0.09	0.16	1.53	0.36	0.18	0.33	3.19	0.40	0.06	0.11	1.06	0.25	0.12	0.22	2.22
Out of labor force		0.02	0.03	0.06	0.13	0.22	0.12	0.28	0.85	0.03	0.04	0.07	0.14	0.29	0.20	0.28	1.06
		Managers	Professionals	Technicians	Commercial	Industry	Machine operators	Elementary	Total	Managers	Professionals	Technicians	Commercial	Industry	Machine operators	Elementary	Total
		To															

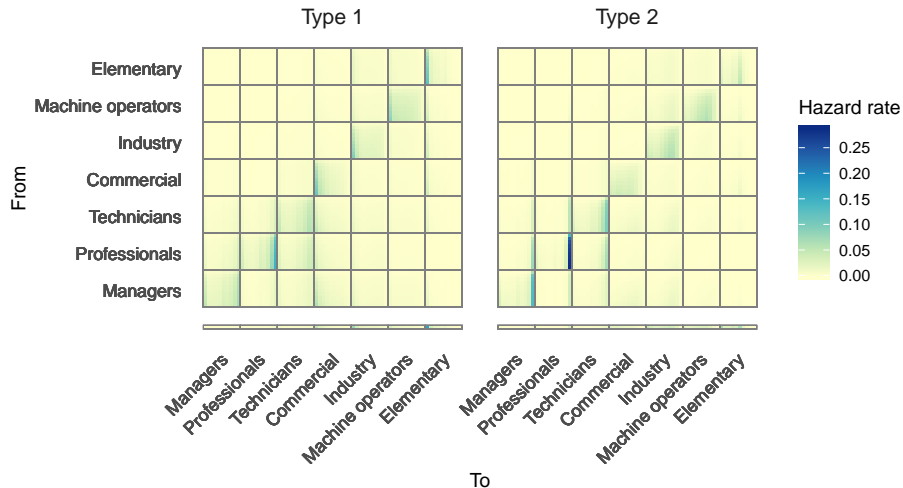
Job separation rates (opportunities)

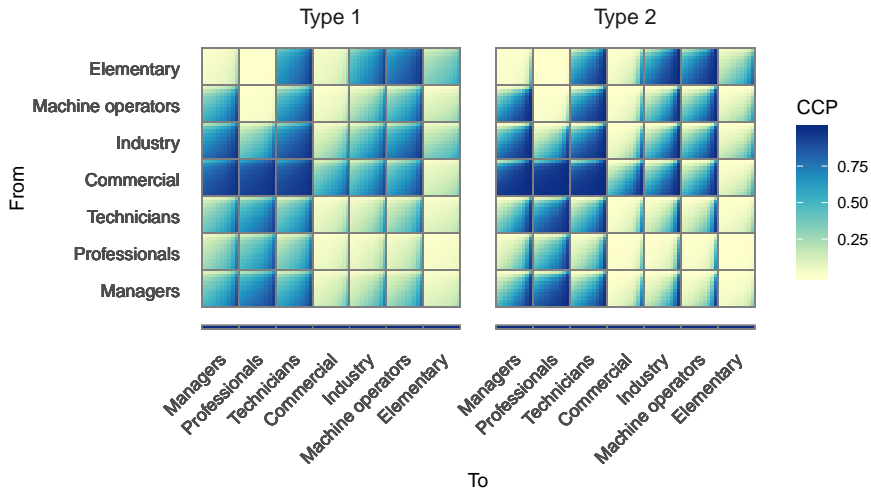
Estimates



Hazards (opportunities and choices)

Estimates





Mean switching costs (choices)

Estimates

		Type 1							Type 2						
From	Elementary	5.00	8.75	1.43	2.66	0.26	0.37	0.73	7.00	10.90	2.13	2.92	0.35	0.50	1.00
	Machine operators	0.12	5.45	0.01	1.26	0.07	0.03	0.30	0.18	6.91	0.01	1.69	0.10	0.05	0.44
	Industry	0.03	2.50	0.00	0.65	0.02	0.07	0.21	0.05	3.43	0.00	0.92	0.03	0.11	0.31
	Commercial	0.02	0.49	0.00	0.08	0.67	1.30	2.10	0.03	0.69	0.00	0.12	1.00	1.84	2.58
	Technicians	0.02	0.00	0.04	0.09	0.16	0.35	0.19	0.03	0.01	0.07	0.13	0.24	0.53	0.28
	Professionals	0.02	0.05	0.04	0.09	0.44	0.96	0.91	0.03	0.08	0.07	0.13	0.65	1.31	1.23
	Managers	0.05	0.06	0.09	0.14	0.24	0.83	0.52	0.07	0.09	0.13	0.22	0.36	1.21	0.75
Out of labor force		0.32	0.66	1.04	0.45	0.45	0.45	0.00	0.22	0.44	0.71	0.30	0.30	0.30	0.00
		Managers	Professionals	Technicians	Commercial	Industry	Machine operators	Elementary	Managers	Professionals	Technicians	Commercial	Industry	Machine operators	Elementary
To															

Compensating differentials (choices), value functions

Estimates

Occupation	Flow utilities						Values					
	Type 1			Type 2			Type 1			Type 2		
	β	ψ_a	Comp. diff.	β	ψ_a	Comp. diff.	Full	Min	Max	Full	Min	Max
Managers	1.14	-1.78	0.14	1.46	-1.14	0.37	21.3	165.2	167.4	20.9	230.8	235.2
Professionals		-2.18	0.10		-1.43	0.30	22.6	166.2	168.1	21.6	232.5	235.9
Technicians		-1.42	0.19		-0.92	0.43	20.4	165.6	167.8	20.5	231.1	235.1
Commercial		0.80	1.34		0.55	1.18	15.8	163.2	165.3	17.9	227.9	232.3
Industry		0.97	1.56		0.65	1.26	15.6	164.0	166.4	17.9	229.5	234.5
Machine operators		0.46	1.00		0.31	1.00	16.5	164.9	167.4	18.4	229.8	234.5
Elementary		6.06	136.20		4.02	12.58	10.5	163.5	164.6	14.0	228.2	230.7
Out of the labor force		-	-		-	-	84.9	-	-	178.4	-	-

I simulate workers' wage paths through occupations

- 1 Take the distribution of initial jobs at age 22
- 2 Draw durations using the hazard estimates until age 50
- 3 Calculate the mean and variance of log wages at each age

I run the simulation for various sets of hazards:

Baseline

No occupational heterogeneity

Only wage offers

Only labor market frictions

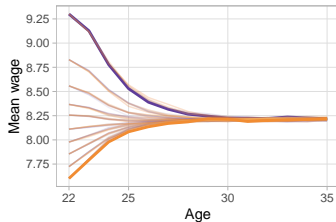
Only non-wage amenities

Only switching costs

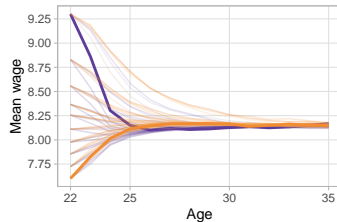
Why do wage trajectories cross?

Career paths

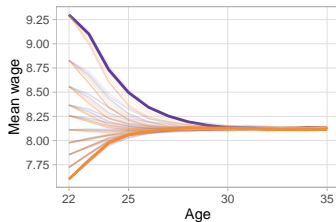
1. Only wage offers



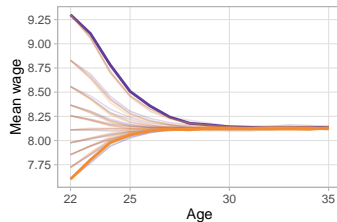
2. Only labor market frictions



3. Only amenities



4. Only switching costs



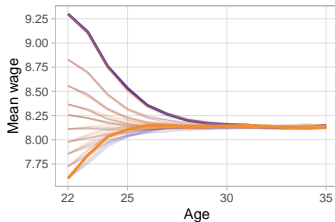
Managers
Commercial
Professionals
Industry
Technicians
Machine operators
Elementary

Two types

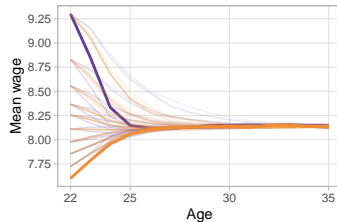
◀ Back

Why do wage trajectories cross?

2.a Only offer arrival rates



2.b Only job separation rates

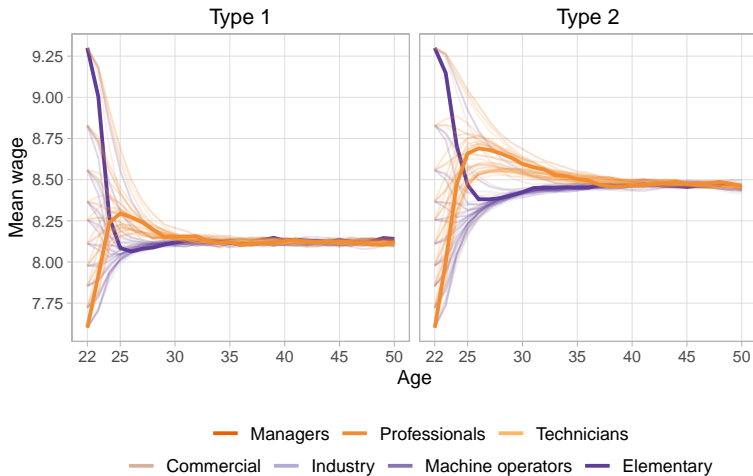


Managers
Commercial
Professionals
Industry
Technicians
Machine operators
Elementary

Two types

◀ Back

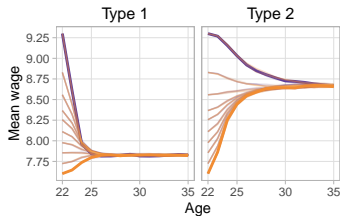
Ex ante wage trajectories (two types)



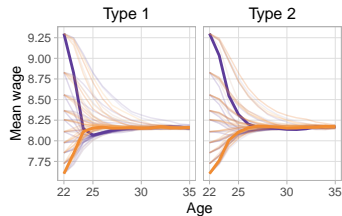
Why do wage trajectories cross? (two types)

Career paths

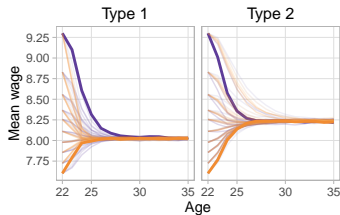
1. Only wage offers



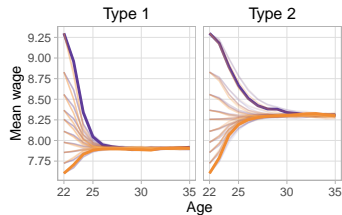
2. Only labor market frictions



3. Only amenities



4. Only switching costs



Commercial — Managers — Professionals — Technicians — Elementary
Industry — Machine operators

◀ Back