Downward Rigidity in the Wage for New Hires

Joe Hazell (LSE)
Bledi Taska (Burning Glass Technologies)

Yale
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Importance of Wage Rigidity for New Hires

- If wages are rigid downward, unemployment rises sharply during recessions (Keynes 1936, Hall 2005)
- **Wage for new hires** is particularly important (Pissarides 2009)
- **Limited evidence** of downward rigidity for new hires

Job Composition: Challenge for Measuring New Hire Wage

- Previous work: **average** wage for new hires (e.g. Haefke, Sonntag & van Rens 2013)
- Key challenge: **job composition** (Gertler & Trigari 2009)

$$\Delta\text{average wage} = \Delta\text{job-level wage} + \Delta\text{job composition}$$

  - E.g.: high wage bankers + low wage baristas
  - Share of barista hires rises
  - Average wage for hires falls even if wages do not fall for bankers + baristas
- Previous estimates are **imprecise**

Job-Level Data on the Wage for New Hires

- This paper: online dataset of **wage for new hires** (Burning Glass)
  - Establishment level wages **posted on vacancies** + job titles
  - 15% of total US vacancies during 2010-2021
- Burning Glass tracks other measures of average wage for new hires

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  - Establishment level wages **posted on vacancies** + job titles
  - 15% of total US vacancies during 2010-2021
- Burning Glass tracks other measures of average wage for new hires
- We can measure **job-level** wage:
  - Between successive vacancies of job title and establishment
- Example: a physical establishment of Starbucks
  - Posts vacancies for baristas, pays an hourly wage

Wage for New Hires: Rigid Downward But Flexible Upward

Wage for new hires is **rigid downward but flexible upward**

1. Job level wages rarely change, rise more often than fall
2. Job level wages respond to expansions, do not respond to contractions
3. No downward rigidity in average wage due to job composition
4. Downward wage rigidity $\rightarrow$ state dependent wage flexibility upward

Wage for New Hires: Rigid Downward But Flexible Upward

Wage for new hires is **rigid downward but flexible upward**

1. Job level wages rarely change, rise more often than fall
   - Duration of unchanged wages is 3.3 quarters
   - Conditional on change, increase is $\sim$3 times more likely
2. Job level wages respond to expansions, do not respond to contractions
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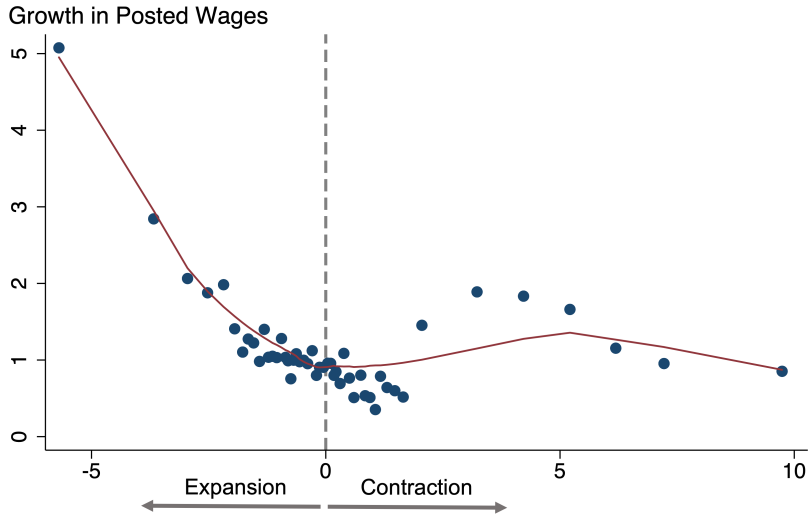

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Literature

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  Contribution: estimated wage rigidity resolves Shimer Puzzle

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- **Worker-level data on wage rigidity for new hires** (Bils 1985; Haefke, Sonntag & van Rens 2013; Gertler, Trigari & Huckfeldt 2020; Grigsby, Hurst & Yildirmaz 2021)
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  Contribution: (i) job-level data (ii) downward constraint (iii) "hockey stick"

- **Downward rigidity and asymmetric unemployment dynamics** (Schmitt-Grohé & Uribe 2016; Chodorow-Reich & Wieland 2020; Dupraz, Nakamura & Steinsson 2021; Guerrieri, Lorenzoni, Straub & Werning 2021)
  Contribution: new evidence on asymmetry

Dataset: Posted Wages in Burning Glass

Burning Glass Data (1/2)

Online vacancies from Burning Glass Technologies:

- Establishment level dataset of vacancies, with job titles, industry + occ info
- Reports posted wage with pay frequency and bonus + overtime pay
- $\sim 1/3$ of vacancies post a range, the rest post point wages
- Time period: 2010-2021Q1

Sample selection:

- Online vacancies are $\sim$80% of total US vacancies
- Only 20% of online vacancies post wages

$\rightarrow$ Our sample (online vacancies with wages) $\sim$15% of total US vacancies

Burning Glass Data (2/2)

Potential concerns with data:

#1 Data overweights certain occupations Details

Solution: occupation reweighting, dataset has granular occupation coverage

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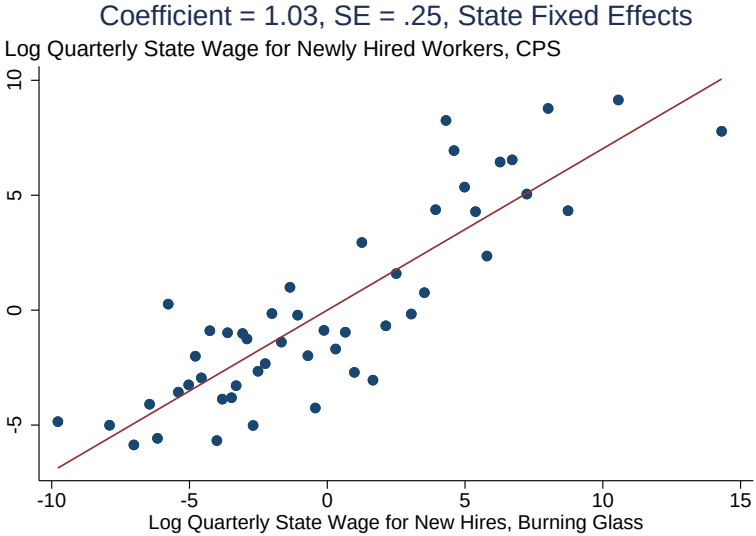
Solution: selection is uncorrelated with business cycles

#3 Wage posted on vacancy may differ from wage for new hire

Solution: compare to new hire wage from **survey** data

Burning Glass Tracks Wage for New Hires from CPS

Additional



Job-Level Wages in Burning Glass

Job-Level Wage for New Hires: Concept

Key advantage of Burning Glass: **job-level** wage for new hires

- Job Level = successive vacancies posted for same job title + establishment

Benefits of job level data:

#1 **Job-level wage** key for unemployment fluctuations in standard model
(e.g. Gertler & Trigari 2009, Gertler et al 2019)

- Analytical derivation in DMP model with heterogeneous jobs (cf. Elsby & Michaels 2013)
Details

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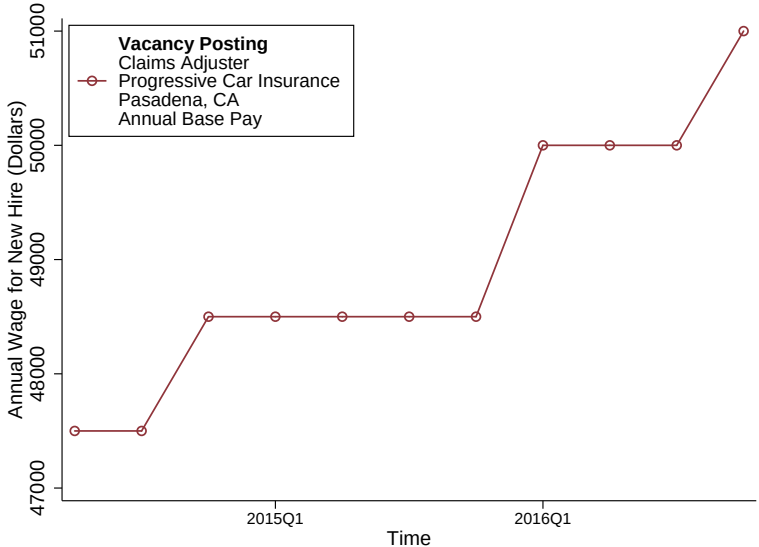
#2 Purge wage changes due to **job composition**

- Regression of log wages on job fixed effect has R squared $> 90\%$
- Our measure of job captures relevant heterogeneity

Example: Job-Level Wages

Measurement Details



Wage for New Hires: Rigid Downward and Flexible Upward

Downward Rigidity for New Hires: Overview

Wage for new hires is rigid downward and flexible upward:

1. **Job-level wages rarely change, rise more often than fall**
2. Job-level wages respond to expansions, do not respond to contractions
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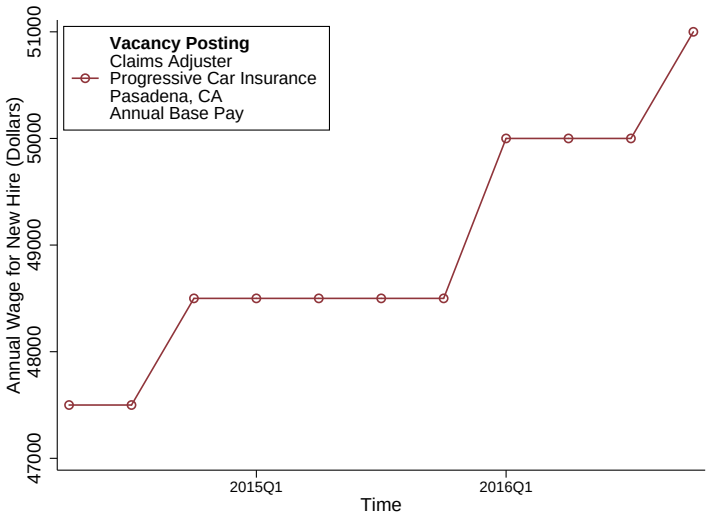
Job-level Wages Rarely Change, Rise More Often Than Fall



Wage for New Hires Changes Infrequently at Job Level

	No weight	Occ. weight	State weight
Duration Unchanged Wages	3.33		
Number of observations	5 667 270		

Annual

Wage for New Hires Changes Infrequently at Job Level

	No weight	Occ. weight	State weight
Duration Unchanged Wages	3.33	3.03	3.42
Number of observations	5 667 270	5 431 959	5 667 270

Annual

Job-Level Wages Rise More Often Than Fall

Job-Level Wages Rise More Often Than Fall

McCrary Test: p value = 0

Details Pre vs. Post 2020

Wage Setting For New Hires vs. Continuing Workers

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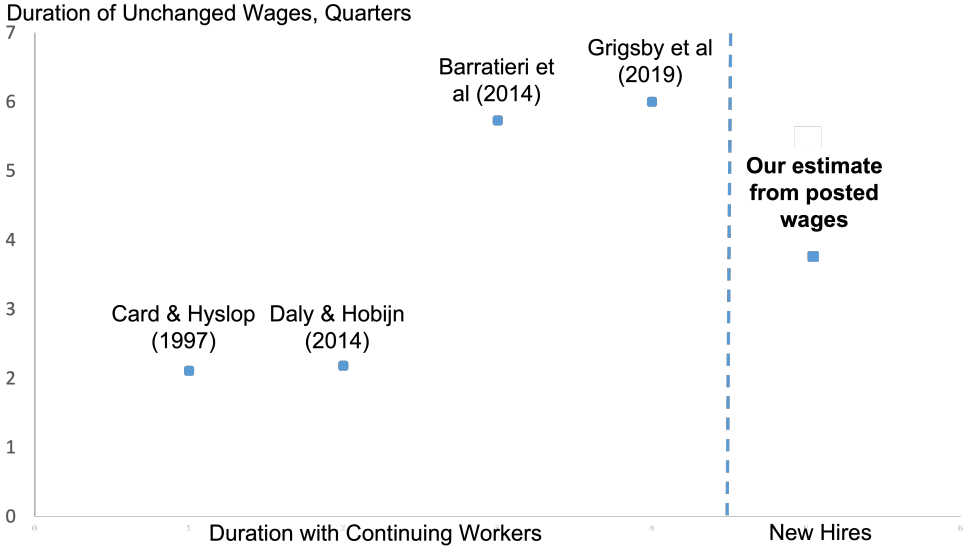

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Job-Level Wage Changes and Unemployment Changes

- Study response of job-level wages to **state** business cycles
  - States are natural labor market (Yagan 2019; Beraja, Hurst & Ospina 2019) Details
- Specification

$$\Delta \log w_{ist} = \alpha + \gamma_t + \beta \Delta U_{st} + \delta I\left[\Delta U_{st} < 0\right] \Delta U_{st} + \varepsilon_{ist}$$

  - w_{ist} = nominal **posted wage**, job i and quarter t
  - U_{st} = quarter-state unemployment, for 2010-2021
  - Difference wages at **job level**
  - Instrument for ΔU_{st} with QCEW employment growth

Wages Respond to Expansions But Not Contractions

Wages Respond to Expansions But Not Contractions

		$\Delta \log w_{ist}$
ΔU_{st}	0.08	
	(0.02)	
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	-0.81	
	(0.14)	
Time Effect	N	
N	5 554 157	

SEs clustered by state

Wages Respond to Expansions But Not Contractions

			$\Delta \log w_{ist}$
ΔU_{st}	0.08	0.11	
	(0.02)	(0.04)	
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	-0.81	-1.50	
	(0.14)	(0.25)	
Time Effect	N	Y	
N	5 554 157	5 554 157	

SEs clustered by state

Wages Respond to Expansions But Not Contractions

	$\Delta \log w_{ist}$			
ΔU_{st}	0.08	0.11	0.15	-0.62
	(0.02)	(0.04)	(0.04)	(0.11)
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	-0.81	-1.50	-1.53	
	(0.14)	(0.25)	(0.25)	
Time Effect	N	Y	Y	Y
State Trend	N	N	Y	N
N	5 554 157	5 554 157	5 554 157	5 545 577

SEs clustered by state

Wages Respond to Expansions But Not Contractions

	$\Delta \log w_{ist}$				
ΔU_{st}	0.08	0.11	0.15	-0.62	0.00
	(0.02)	(0.04)	(0.04)	(0.11)	(0.09)
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	-0.81	-1.50	-1.53		-1.28
	(0.14)	(0.25)	(0.25)		(0.26)
Time Effect	N	Y	Y	Y	Y
State Trend	N	N	Y	N	N
Real Wages	N	N	N	N	Y
N	5 554 157	5 554 157	5 554 157	5 545 577	5 545 577

SEs clustered by state

Identifying Labor Demand Shocks

- Now: wage rigidity with respect to identified labor demand shocks Skip

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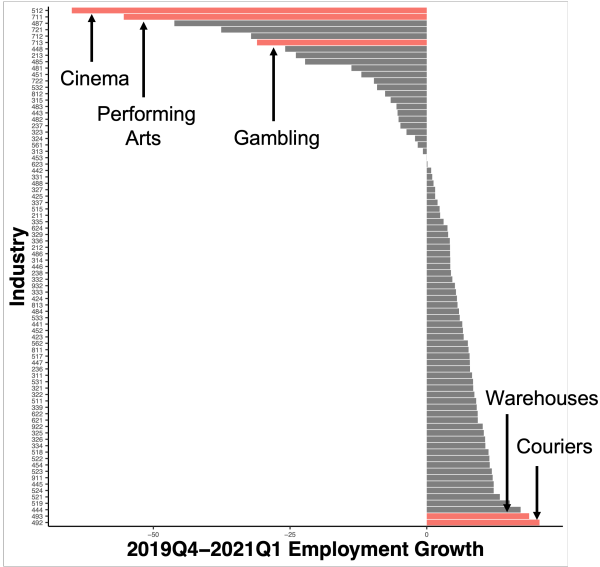
1. Industry "shift share" instrument

$$\Delta \text{labor demand}_{st} = \sum_i \text{state industry share}_{is} \times \Delta \text{national industry employment}_{i,-s}$$

ID assumption: variation in industry employment due to labor demand

Industry Variation Suggests Labor Demand Shocks



Identifying Labor Demand Shocks

- Now: document downward wage rigidity with respect to labor demand shocks

1. Industry "shift share" instrument
   ID assumption: variation in industry employment due to labor demand

2. Labor supply controls: (e.g. UI replacement rate $\times$ CARES Act indicator)
   ID assumption: controls absorb all labor supply shocks

3. Oil shock
   ID assumption: regional response to oil shock uncorrelated with labor supply

(+ All results hold pre-pandemic)

Identifying Labor Demand

	$\Delta \log w_{ist}$			
	Baseline	Industry Shift Share	Labor Supply Controls	Oil Shock
ΔU_{st}	0.11			
	(0.04)			
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	-1.50			
	(0.25)			
Time Effect	Y	Y	Y	Y
N	5 554 157	5 554 157	5 504 321	5 552 670

Identifying Labor Demand

	$\Delta \log w_{ist}$			
	Baseline	Industry Shift Share	Labor Supply Controls	Oil Shock
ΔU_{st}	0.11	0.01	0.06	0.11
	(0.04)	(0.41)	(0.037)	(0.21)
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	-1.50	-1.52	-1.53	-1.21
	(0.25)	(0.63)	(0.26)	(0.43)
Time Effect	Y	Y	Y	Y
N	5 554 157	5 554 157	5 504 321	5 552 670

Downward Rigidity: Robustness and Extensions

- Establishment level results
  - Similar downward rigidity at establishment-level vs. job-level Details
- Further job-level specifications Specifications
  - Similar results pre 2020
- Industry evidence (3 digit) Details
- (Lack of) heterogeneity by occupation Details
- (Lack of) heterogeneity by degree of wage bargaining Details
- No evidence of substitution in response to downward wage rigidity Details
- Downward wage rigidity in calibrated model Details

Downward Rigidity for New Hires: Overview

Wage for new hires is rigid downward and flexible upward:

1. Job-level wages rarely change, rise more often than fall
2. Job-level wages rise during expansions, do not fall during contractions
3. **No downward rigidity in average wage due to job composition** Skip
4. Downward wage rigidity $\rightarrow$ state dependent wage flexibility upward

Job Composition: Average vs. Job-Level Wages

- Economy: I job types, S regions, T periods, wage for hire w_{ist}, share v_{ist}
- Wage growth for new hires:

$$\underbrace{\Delta\overline{\log w_{st}}}_{\substack{\text{average}\\ \text{wage growth}}} \approx \overbrace{\sum_i v_{ist}\Delta \log w_{ist}}^{\substack{\text{job level}\\ \text{wage growth}}} + \underbrace{\sum_i \log w_{ist}\Delta v_{ist}}_{\substack{\text{wage growth from}\\ \text{job composition}}}$$

- Prior work: **average** wage growth from **survey data**

  (e.g. Haefke, Sonntag & van Rens 2013)

- Our paper: **job level** wage growth

Job Composition Raises Variance of Average Wages

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- Variance of average wage growth higher than job-level wage growth
- If composition and job-level wages independent

Regressions with Average Wages Less Precise

- Our benchmark regression:

$$\Delta \log w_{ist} = \delta_{\text{Job Level}} I\left[\Delta U_{st} < 0\right] \Delta U_{st} + \text{controls}_{st} + \text{error}_{st}$$

- Same regression with average wage for new hires:

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For finite states and time periods:

$$\textit{standard deviation}\left[\hat{\delta}_{Average} | \Delta U_{st}\right] > \textit{standard deviation}\left[\hat{\delta}_{Job\ Level} | \Delta U_{st}\right]$$

if job composition and ΔU_{st} are independent

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- Omitted variable bias less important Details

Regressions with Job-Level vs. Average Wages

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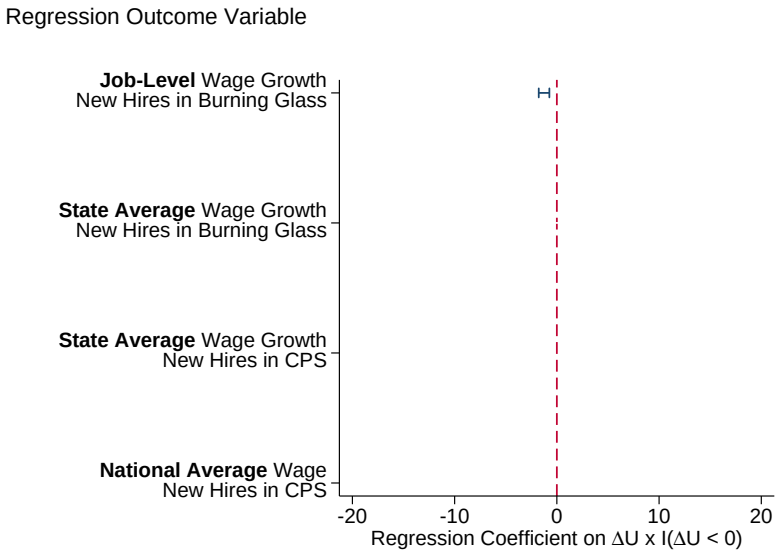

Regressions with Job-Level vs. Average Wages

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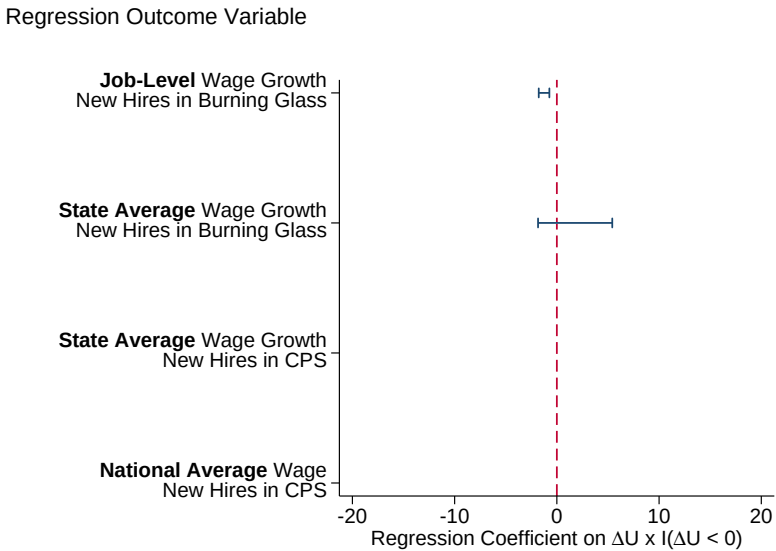
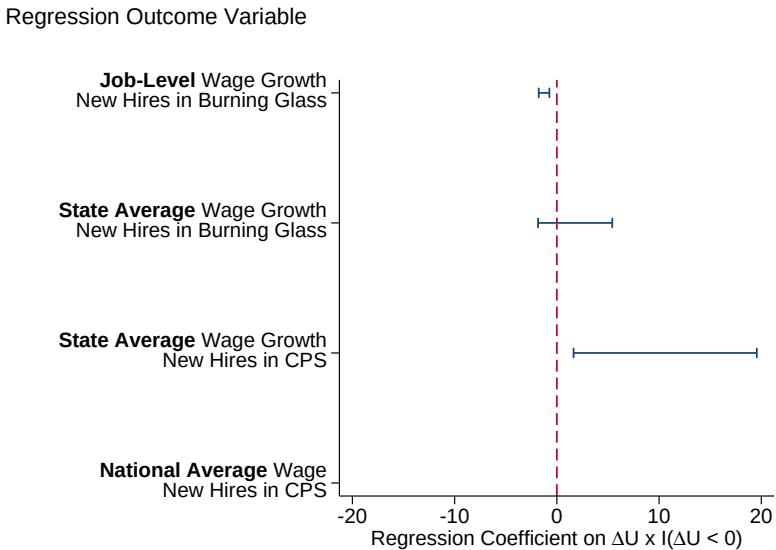


Regressions with Job-Level vs. Average Wages Additional



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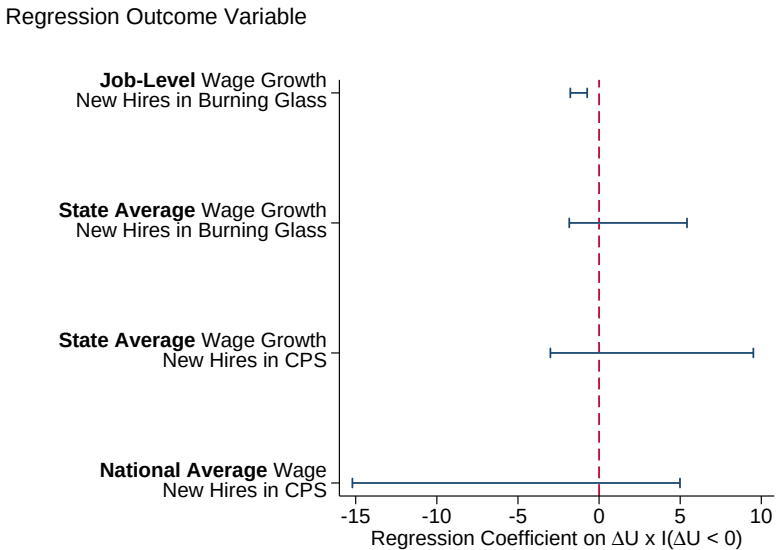

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Downward Rigidity and Wage Flexibility Upward

Standard model of downward wage rigidity in DMP model

$$w_t = \max[w_{t-1}, w_t^*] \quad w_t^* = w^*(y_t) \quad \partial w_t^* / \partial y_t > 0$$

where y_t is revenue product of labor, w_t^* is Nash bargained wage
(cf. Schmitt-Grohé & Uribe; Chodorow-Reich & Wieland; Dupraz, Nakamura & Steinsson)

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Model predicts state dependent wage flexibility upward

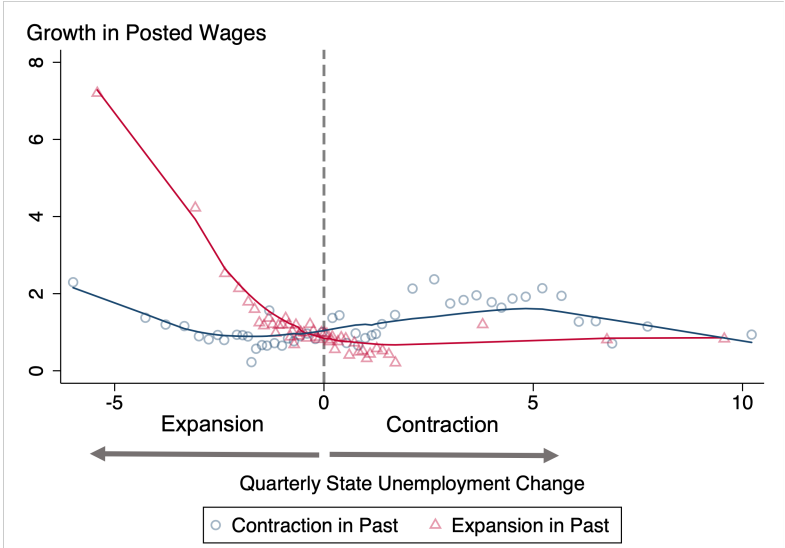
1. Aftermath of large contraction—wages inflexible upward

$$\Delta y_{t-1} << 0 \implies w_t = w_{t-1} > w_t^* \implies \partial w_t/\partial_+ y_t = 0$$

2. Aftermath of large expansion—wages flexible upward

$$\Delta y_{t-1} >> 0 \implies w_t = w_t^* > w_{t-1} \implies \partial w_t/\partial_+ y_t > 0$$

Wage Flexibility Upward is State Dependent



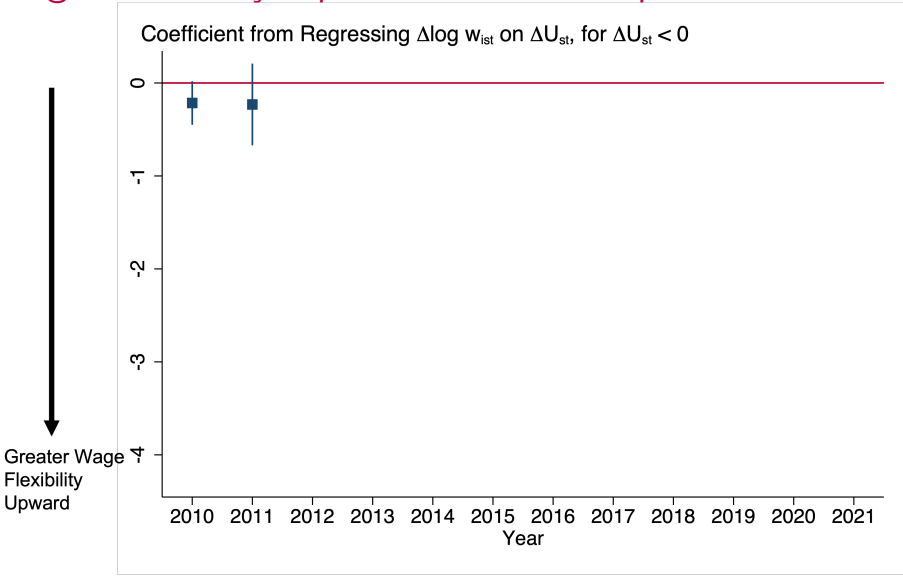
Wage Flexibility Upward: Regression Estimates

- Regression:

$$\Delta \log w_{ist} = \alpha + \gamma_t + \kappa \Delta U_{st} + \varepsilon_{ist}$$

  - Study **wage flexibility upward**: restrict sample to $\Delta U_{st} < 0$
  - $\Delta \log w_{ist}$ = growth in wage for new hires at job-level
  - U_{st} = quarterly state unemployment
- κ is wage flexibility upward
- Estimate regression coefficient κ_y separately for every year

Wage Flexibility Upward is State Dependent



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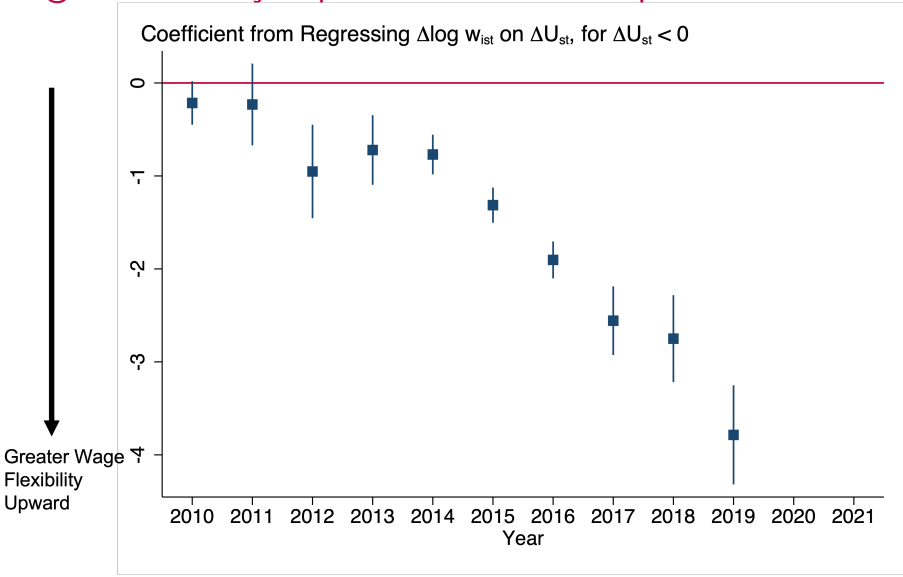

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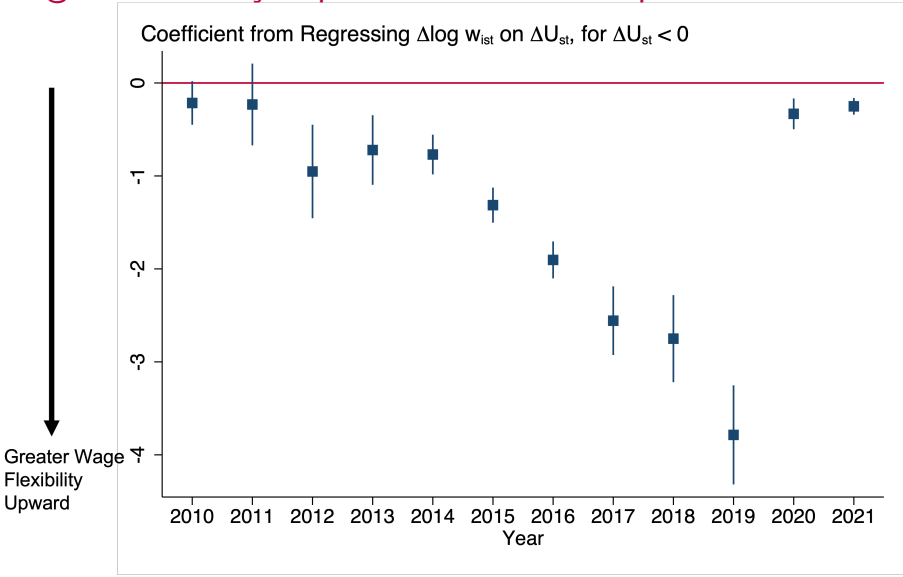

State Dependent Wage Flexibility—Implications

- Estimates of average wage cyclicality hard to interpret
- "Missing wage growth" during 2010-2014 after the Great Recession
- Wage growth may accelerate further after pandemic recession

Conclusion

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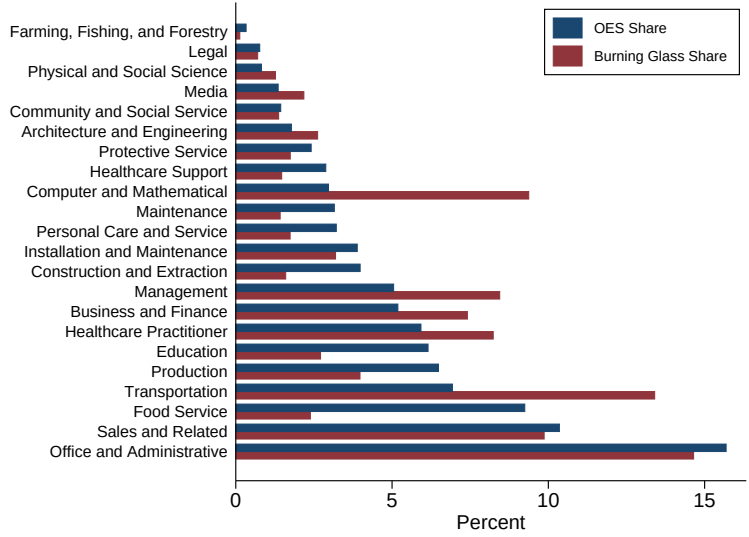
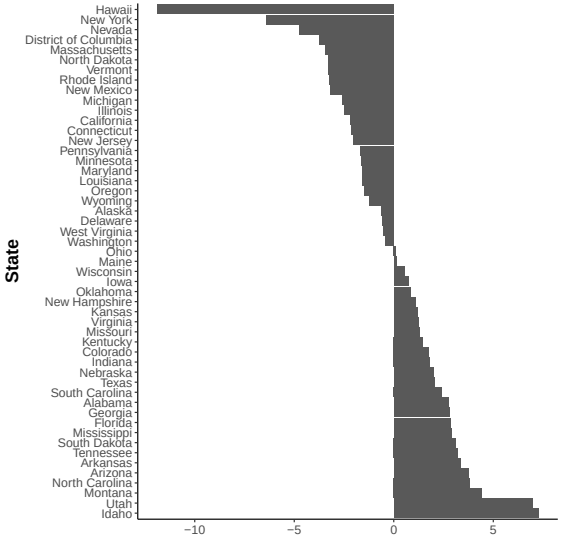
Occupation Shares in Burning Glass

Return



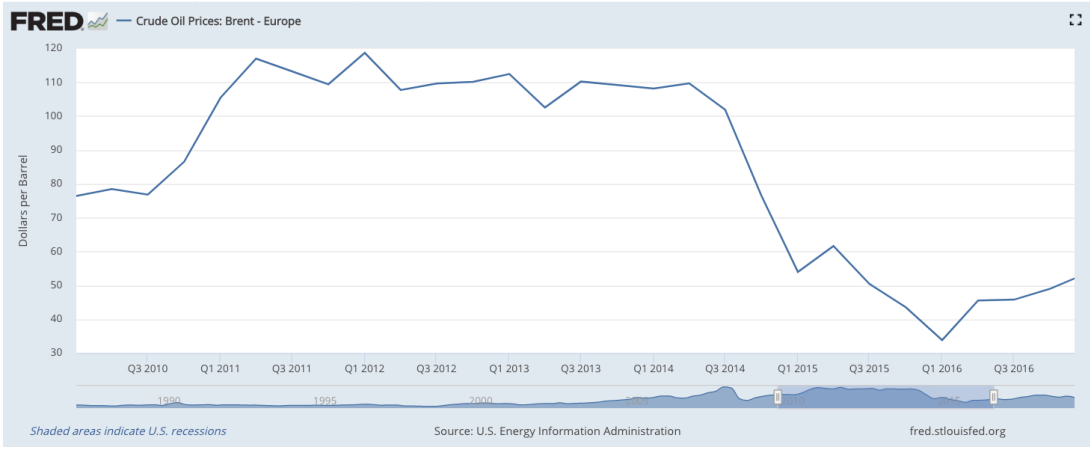
Regional Business Cycles

Return



Oil Price

Return



Further Job-Level Specifications (1/2) Return

	Coefficient $\Delta U_{st} \times I(\Delta U_{st} < 0)$	S.E.	N
Baseline	-1.501	(0.250)	5 554 157
Occupation weight	-1.617	(0.288)	5 324 569
Control for fill rate	-1.437	(0.292)	3 605 634
No bonuses	-1.760	(0.304)	5 344 277
Region weight	-1.618	(0.275)	5 554 157
Seasonal dummy	-1.854	(0.298)	5 554 157
Seasonal (X-11)	-1.923	(0.310)	5 554 157

Further Job-Level Specifications (2/2)

	Coefficient $\Delta U_{st} \times I(\Delta U_{st} < 0)$	S.E.	N
4 quarter diff. only	-1.902	(1.213)	346 077
No wage range	-1.824	(0.321)	2 222 025
No time FE	-0.896	(0.174)	5 554 157
No consecutive quarters	-1.734	(0.288)	2 657 855
Pool across pay category	-1.880	(0.311)	4 406 565
Before 2020	-3.175	(0.301)	3 691 677
Oil shock before 2020	-8.905	(2.347)	3 690 214

Industry Evidence

Return

	Quarterly Job-Level Growth in Wage for New Hires			
	(1)	(2)	(3)	(4)
$\Delta \log(\text{employment}_{it})$	-0.0175	-0.0180	-0.0153	-0.0143
	(0.00262)	(0.00314)	(0.00260)	(0.00278)
$\Delta \log(\text{employment}_{it})$	0.0453	0.0480	0.0421	0.0472
$\times I(\Delta \log(\text{employment}_{it}) > 0)$	(0.00916)	(0.00858)	(0.00727)	(0.00789)
Time Effects	Y	Y	Y	Y
Industry Trend	N	Y	N	N
Seasonally Adjusted	N	N	N	Y
Number of observations	2 577 742	2 577 742	2 577 742	2 577 742
Industry clusters	78	78	78	78

Establishment Robustness (1/2) Return

	Growth in Wage for New Hires	
	Establishment-Level	Job-Level
ΔU_{st}	0.00392	-0.0517
	(0.313)	(0.256)
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	-1.082**	-1.255***
	(0.382)	(0.265)
Time Effect	Y	Y
N	1845695	1845695
State Clusters	52	52

Establishment Robustness (1/2)

Dependent Variable:	Quarterly Establishment Growth in Wage for New Hires			
	(1)	(2)	(3)	(4)
Independent Variable:				
ΔU_{st}	0.00392	-0.268	-0.0431	-0.909***
	(0.313)	(0.353)	(0.341)	(0.0737)
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	-1.082**	-0.785^{+}	-1.021*	
	(0.382)	(0.427)	(0.414)	
Time Effect	Y	Y	Y	Y
State Trend	N	Y	N	N
QCEW Weight	N	N	Y	N
N	1845695	1845695	1845695	1845695
State Clusters	52	52	52	52

Lack of Occupation Heterogeneity

Return

Dependent Variable:	Quarterly Job-Level Growth in Wage for New Hires				
Occupation Group:	Management	Services	Sales	Construction	Production
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	-1.177**	-1.410***	-0.983*	-1.043*	-1.552***
	(0.348)	(0.310)	(0.447)	(0.433)	(0.321)
Number of Observations	568307	195274	342738	75637	329647

Job Composition and Average Wages

Return

Dependent Variable:	Quarterly Growth in Wage for New Hires			
	State, CPS		National, CPS	National, NLSY
	(3)	(4)	(5)	(6)
Independent Variable:				
ΔUnemployment	-5.748	-8.141	3.770	-1.779
	(4.359)	(5.903)	(3.468)	(3.172)
ΔUnemployment $\times$	10.59*	13.78	-5.108	2.935
$I(\Delta\text{Unemployment} < 0)$	(4.560)	(6.886)	(5.151)	(4.311)
Hagedorn/Manovskii	N	N	N	Y
Cumulative Tightness Control				
N	1377	1377	83	83
State Clusters	51	51	-	-

Job-Level Wages: Measurement (1/2) Return

- Define a job as a job title by establishment by pay category
- Restrict to jobs with multiple vacancies
- Take mean posted wage within each job-quarter
- $\sim$5 million vacancies remaining
- Covers 99% of 6 digit occupations by national employment share

Job-Level Wages: Measurement (2/2)

	Min	Max	Average	Total
Total Vacancy Posts				5 554 157
Share of 6 digit SOC occupations covered in the OES				.99
Posts Per Job	2	23	2.5	
Jobs per 6 digit SOC occupation	1	176081	1247.2	
Jobs per State	264	118 076	19 909	
Jobs per Quarter	7 519	117 566	38 343	

Annual Probability of Change Return

	Unweighted	OES Weights	QCEW Weights
Probability of Job-Level Wage Change	0.405	0.418	0.402
Probability of Job-Level Wage Decrease	0.088	0.095	0.09
Probability of Job-Level Wage Increase	0.304	0.305	0.3
Implied Duration Wages Are Unchanged (Years)	1.841	1.836	1.875

Job-Level Wages Rise More Often Than Fall

Return

	Unweighted	OES Weights	QCEW Weights	High Wage
Prob. of Job-Level Wage Increase	0.11			
Prob. Job-Level Wage Decrease	0.04			

Annual

Job-Level Wages Rise More Often Than Fall

Return

	Unweighted	OES Weights	QCEW Weights	High Wage
Prob. of Job-Level Wage Increase	0.11	0.11	0.11	0.11
Prob. Job-Level Wage Decrease	0.04	0.04	0.04	0.04

Annual

Composition Bias Return

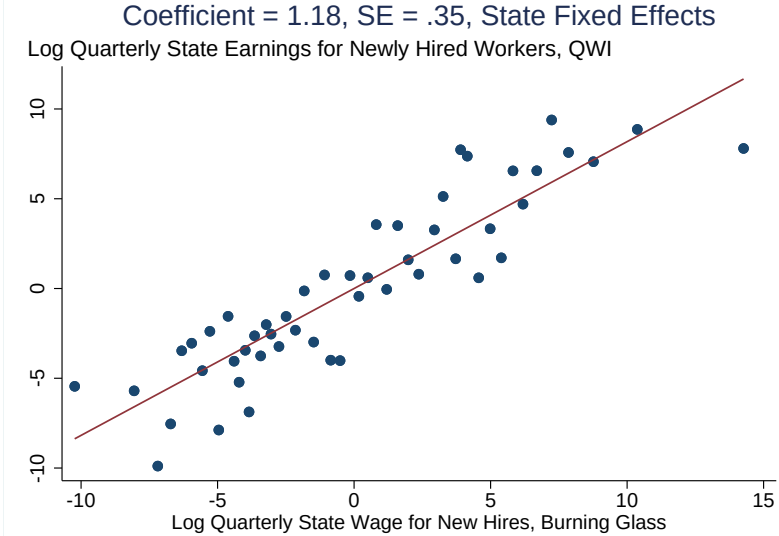
Panel A:	Quarterly Change in State Share of High Wage Vacancies			
	(1)	(2)	(3)	(4)
ΔU_{st}	-0.654	-1.040	4.815	-0.0414
	(0.831)	(1.286)	(2.677)	(0.393)
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	0.982	1.549	-3.537	
	(1.270)	(1.927)	(5.138)	
Time Effect	Y	Y	Y	Y
State Trend	N	Y	N	N
QCEW Weight	N	N	Y	N
N	1404	1404	1404	1404

Gap Between Burning Glass and CPS Wages

Return

	$\Delta[\log(\text{Burning Glass Wage}_{st}) - \log(\text{CPS New Hire Wage}_{st})]$
ΔU_{st}	-0.0917
	(1.431)
State FE	N
N	1377

Burning Glass Tracks Earnings for New Hires from QWI



Average Wages: No Rigidity Due to Job Composition

Continue

- Previous work studies **average** wage for new hires
- Our finding:
  - Average wages do not display downward rigidity
  - Even though wages downwardly rigid at job level
  - Key reason is **job composition**
- Due to job composition:
  - Average wages have higher **variance** than job-level wages

→ Regressions with average wages **too imprecise** to detect downward rigidity

Job-Level Wage Changes Before vs. After 2020 Return

State Share of Vacancies Posting Wages

Return

	Change in Share of State Vacancies with Wage			
	(1)	(2)	(3)	(4)
Quarterly State Unemployment Change	-0.654	-1.040	4.815	-0.0414
	(0.831)	(1.286)	(2.677)	(0.393)
Annual State Unemployment Change	0.982	1.549	-3.537	
	(1.270)	(1.927)	(5.138)	
Time Effect	Y	Y	Y	Y
State Trend	N	Y	N	N
QCEW Weight	N	N	Y	N
N	1404	1404	1404	1404

Job-Level Wages in Model with Heterogeneous Jobs Return

DMP model with heterogeneous jobs as in Elsby & Michaels (2013)

- Continuum of firms $i \in [0,1]$
  - Heterogeneous and idiosyncratic productivity x_{it}
  - Decreasing returns to scale
  - Pay **job-level wage** w_{it}
- All other parts of the model are standard DMP:
  - Frictional labor market with random search, u_t unemployed workers
  - Exogenous separations
  - Process for aggregate labor productivity y_t
  - Risk neutral hand-to-mouth workers

Importance of Job-Level Wages

- Object of interest is $d \log u / d \log y$
  - Elasticity of unemployment to aggregate labor productivity
  - At aggregate steady state (Ljungqvist & Sargent 2017)

Importance of Job-Level Wages

- Object of interest is $d \log u / d \log y$
  - Elasticity of unemployment to aggregate labor productivity
  - At aggregate steady state (Ljungqvist & Sargent 2017)

To a first order in a neighborhood of the deterministic steady state, we have

$$\frac{d \log u}{d \log y} = -A + B \int_0^1 \frac{dw_{it}}{dy} di$$

for constants $A, B > 0$.

Lack of Establishment Level Substitution

Return

	Quarterly Change in Share of Establishment Vacancies			
	in High Wage Occupations		with High Wages	
ΔU_{st}	0.158	0.922	-0.0296	-0.0031
	(0.370)	(0.642)	(0.0358)	(0.0577)
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	0.167	-0.158	0.0537	0.0173
	(0.441)	(0.735)	(0.0369)	(.0648)
Time Effect	Y	Y	Y	Y
Size Weighted	N	Y	N	Y
N	1770257	1770257	1883361	1883361

Lack of Market Level Substitution

Return

	Quarterly Change in State Share of High Wage Vacancies			
	(1)	(2)	(3)	(4)
ΔU_{st}	-0.654	-1.040	4.815	-0.0414
	(0.831)	(1.286)	(2.677)	(0.393)
$\Delta U_{st} \times I(\Delta U_{st} < 0)$	0.982	1.549	-3.537	
	(1.270)	(1.927)	(5.138)	
State Difference	Y	Y	Y	Y
Time Effect	Y	Y	Y	Y
State Trend	N	Y	N	N
QCEW Weight	N	N	Y	N
N	1404	1404	1404	1404

Calibrated DMP Model Return

- Standard DMP model with "reduced form wage rule" (cf. Michaillat 2012)

$$w_t = \max\left[w_{t-1}, \phi y_t^{\gamma}\right]$$

- Calibrate parameters of reduced form wage rule to match our estimates
- Calibrate other parameters to standard values (e.g. Shimer 2005)

Calibrated DMP Model

	$\Delta \log u_t / \Delta \log y_t$
Values from calibrated model	
Labor demand falling, $\Delta \log y < 0$	-3.00
Labor demand rising, $\Delta \log y > 0$	-0.83
Average value	-1.92
Value from time series data	-1.90

Source: BEA and BLS