

## Discussion: Monopsony in Labour Markets

A study of power, productivity and wages in the United Kingdom

Will Abel, Silvana Tenreyro and Gregory Thwaites

Discussion by Silvia Albrizio (BdE)

29<sup>th</sup> May 2020

ARC 2020 NBU and NBP on labour Market and Monetary Policy

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## SUMMARY I:

Monopsony power in the UK private sector labour market (1998-2017):

1. Evolution
2. Effect on wages

### Data

- Employee-employer data from NES-ASHE (1% weighted sample) & BSD datasets
- labour market power: Herfindahl-Hirschman Index by industry (occupation), region and time

Dispersion in concentration between and within industry - not explained by between regions

### Methodology

Search and matching (Pissarides 2000), panel regression with fixed effect & interactions

Baseline:

$$\omega_{i,t} = \alpha + \beta_1 HHI_{j,r,t} + \beta_2 X_{i,t} + \epsilon_{i,t}$$

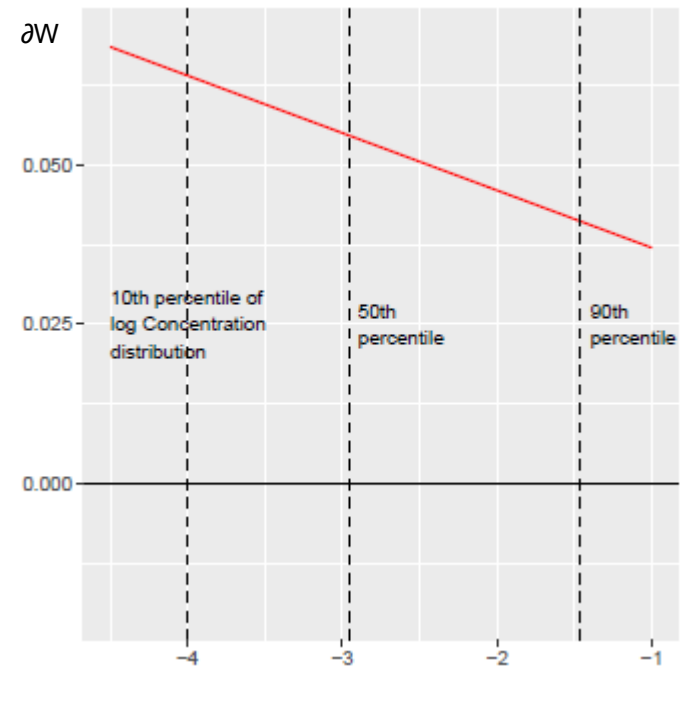
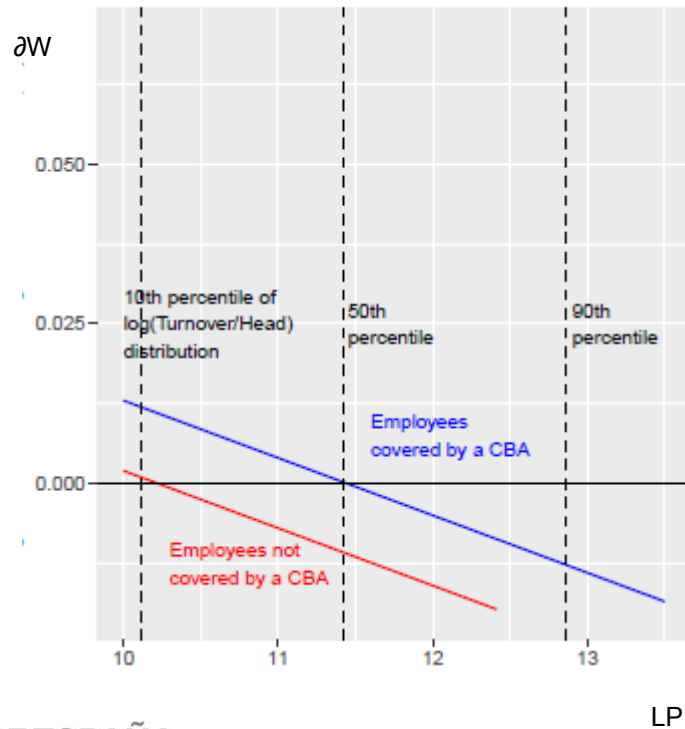
## SUMMARY II:

$$\omega_{i,t} = \alpha + \beta_1 HHI_{j,t,r} + \beta_2 HHI_{j,t,r} * CBA_{f,t} + \beta_3 * CBA_{f,t} + \beta_4 HHI_{j,t,r} * LP_{f,t} + \beta_5 * LP_{f,t} + \beta_6 X_{i,t} + \epsilon_{i,t}$$

## Results:

$$\frac{\partial \omega_{i,t}}{\partial HHI} = \beta_1 + \beta_2 * CBA + \beta_4 * LP$$

$$\frac{\partial \omega_{i,t}}{\partial LP} = \beta_4 * HHI + \beta_5$$





Understanding trend and effect of monopsony:


- wage stagnation (Benmelech et al. 2018, Wilmers, 2018)
- decreasing labour shares (Struyven 2018, Stansbury and Summers 2020)
- minimum wage effects (such as workers reallocation: Manning, 2003 and Bhaskar, Manning, To 2002, Bergen, Herkenhoff, Mongey, 2019, Card et al. 2019, Dustmann et al. *forthcoming*)
- antitrust law (mergers, non-compete and no-poaching agreements), employment regulation, collective bargaining agreement (Azar et al. 2019, OECD Employment Outlook - the Future of work 2019)

## COMMENTS I: CONCENTRATION



NES-ASHE: weighted sample by age, sex, occupation and region (not firm size).

Paper: Potential bias discussion and Monte Carlo simulation exercise.

- Bias=f(true concentration, sample size), not clear how “good” is your sample size  
[Dropping firms < 10 employees (2.5%obs), ES:64% firms have less than 5]
- Weights which take into account the probability of observing each company given its size to correct for overrepresentation of large firms
- Occupation HHI: Marinescu and Rathelot 2018, Martins 2018 - show it;)
- Schubert et al. 2020: workers’ true labour markets rarely coincide with occupational boundaries => adjusted HHI to consider outside options 

## COMMENTS II:

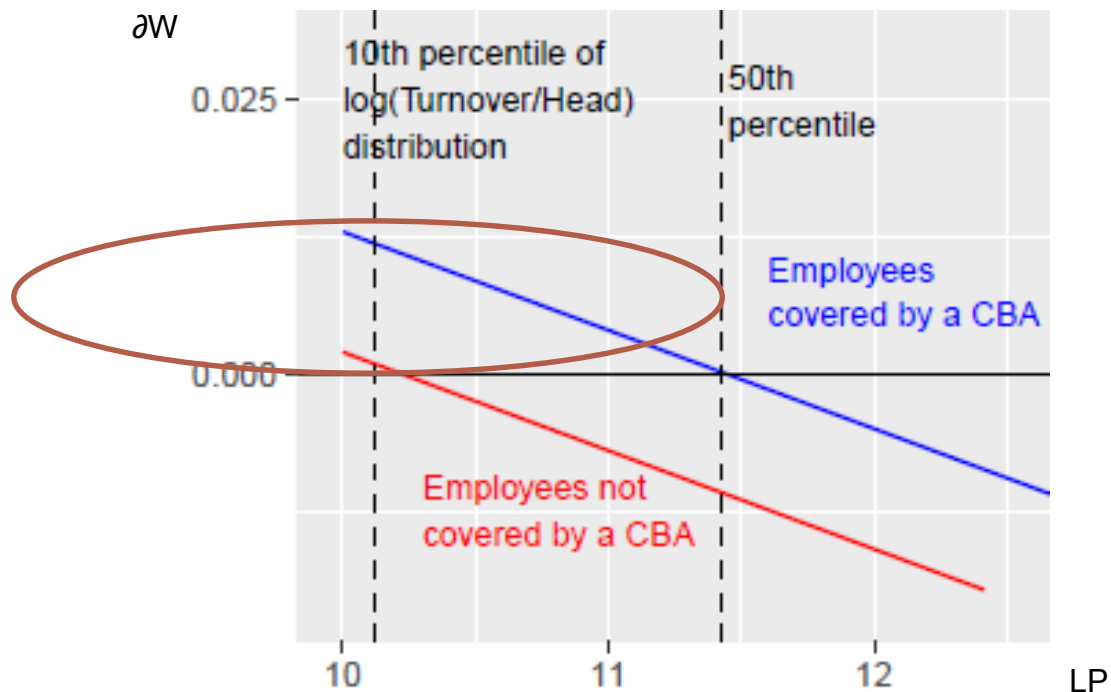
### ❖ What is the relevant metric for labour mkt power?

- *HHI: Stock vs. flow (bargaining relationship) - posted vacancies and applications (Azar et al. 2019), separation rate*
- *Other frictions/factors (info, transport, trade): markdown/elasticity of labour supply (Hershbein et al 2019, Dube et al. 2020, Naidu et al. 2018, Webber 2013, Sokolova and Sorensen 2018)*

# COMMENTS III:



$$\frac{\partial \omega_{i,t}}{\partial HHI} = \beta_1 + \beta_2 * CBA + \beta_4 * LP$$



CBA coverage	0.016*** (0.005)	0.054*** (0.010)	0.039*** (0.010)	0.045*** (0.001)
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Log concentration	-0.004 (0.005)	-0.013** (0.006)	-0.0139** (0.00594)	0.092*** (0.014)
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# PRODUCT AND LABOUR MARKET POWER: ALWAYS BAD?



Product market increasing concentration in US (Autor 2017: 1995-2015).

1. **market power** => *reduces investment and welfare*
2. **concentration** (“superstar firms”) => *increase productivity (from intangible investment)*

Crouzet and Eberly 2018: heterogeneous industry effects

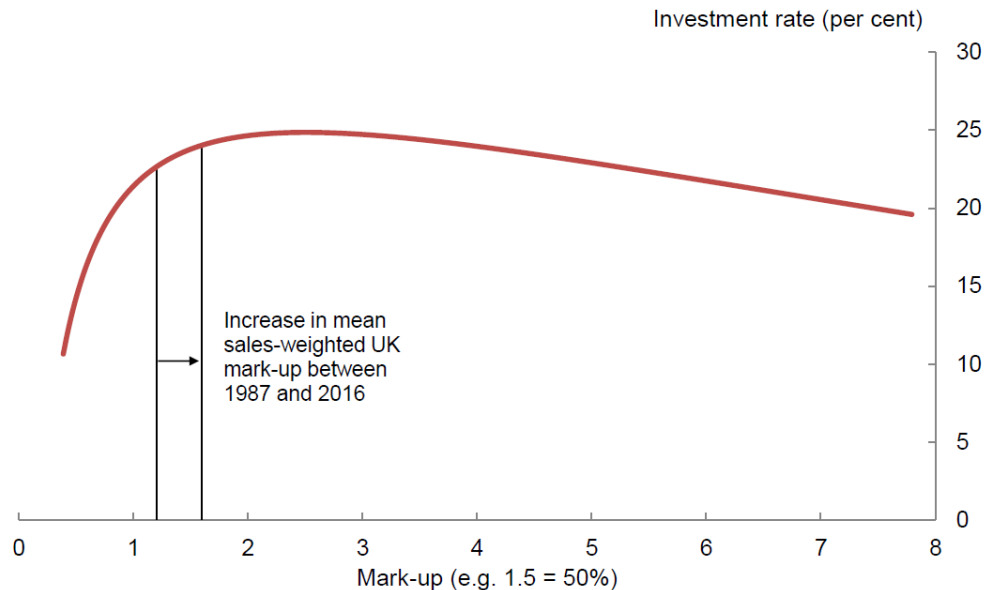
- Retails (Amazon): labour productivity
- Healthcare (Novartis): mark-ups
- High-Tech: both forces are at work
- Manufacturing: mark-ups but the effect is economically small

**Heterogeneous effect also in labour mkt concentration across industry/occupation (wider or less defined)?**

# UK: MARK-UPS AND INVESTMENT



Chart 12: UK-listed firms' mark-ups and investment rates




Sources: Thomson Reuters Worldscope and Bank calculations. Investment function based around the firm-level regression in Table 2. 'Investment rate' defined as capital expenditure as a proportion of the previous year's net property, plant and equipment level (PPE).

Haldane 2018, Diez et al. 2018

Assuming there is a correlation between product and labour market, low productive firm could use the additional profit margin to invest in human capital and attract higher productive workers offering a higher salary.

## ADDITIONAL COMMENTS

- Is the observed decline in CBA more relevant for some industry/occupation than others?
- Hershbein and Macaluso (2018) find that highly concentrated labour markets tend to have greater demand for skilled rather than unskilled labour. Additional insights on concentration distribution by occupation?
- Wage measure (Bassier et al 2019): wage variation generated by movers
- Use lagged productivity not contemporaneous (simultaneity)
- IV approach on concentration (Azar et al. 2019, Benmelech et al. 2019) 

THANKS FOR YOUR ATTENTION

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