

The Distribution of Ethnic Pay Gaps Among Men in England and Wales: The Role of the Firm

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Motivation

- Large ethnic wage gap literature for Britain based exclusively on household survey data
- The firm is an omitted variable in these studies
 - Usually one or two co-variates such as industry
 - One exception (Forth et al., 2021)
- Yet increasing recognition that firms are pay setters and thus play an important role in wage determination, wage inequality
 - Barth et al. (2016) and Song et al. (2019) for the USA; Card et al. (2013) for Germany
 - More important for the UK gender wage gap in ASHE than occupation (Jewell et al., 2020)
- Recognition too that hiring discrimination on grounds of ethnicity persists in Britain and has implications for firm entry and thus wages by ethnicity
 - Heath and Di Stasio (2019)

Contribution

- Examine ethnic wage gaps across the earnings distribution using payroll data linked to 2011 Census
- First use of linked ASHE-Census data
 - Census provides ethnicity previously lacking from ASHE
 - Plus other co-variates important in estimating wages, e.g., education, family
- Illustrative and experimental
 - Some work still to be done
 - But provides important insights into
 - The firm's role in the ethnic wage gap in England and Wales across the wage distribution
 - NMW bites up to around the 10th percentile
 - What can be done with the linked ASHE-Census data (not only ethnicity)

Key Findings

- Ethnic wage gaps vary greatly across the wage distribution
 - Sometimes smallest at lower end of wage distribution where NMW bites
 - But not true in the case of Chinese and Indian Men compared to White Men
- Higher up the earnings distribution, the unexplained component of wage gaps increases while the explained component often falls
 - Consistent with glass ceilings making it hard for ethnic minorities to penetrate higher up the distribution, thus requiring better Xs to do so
 - Increase in unexplained gap among higher earners is consistent with potential discrimination
- Firm-specific wage effects account for sizeable part of the gaps which would otherwise be attributed to individual worker attributes
 - Implies those with better attributes tend to work in higher paying firms, and more so for ethnic minorities
- Firm-specific wage effects account for increasing shares of ethnic wage differences moving up the wage distribution for Indians, Pakistanis, Bangladeshis and Chinese

Literature for Britain

- Ethnic wage gaps persist across time
 - Unlike gender wage gap, little sign of convergence overall among men (Clark and Nolan, 2021)
- Vary
 - Across the wage distribution (Clark and Nolan, 2021)
 - By ethnicity – some minorities earn more than whites due to education
 - By gender (Longhi and Brynin, 2017)
- Firm/workplace largely absent from the literature except Forth et al (2021)
 - Ethnic wage gap, 1998-2011, WERS linked employer-employee data, FT only
 - Workplace matters: substantially increases earnings variance accounted for in the models
 - Although ethnic segregation by workplace is strong, nearly all the ethnic wage gap at the mean is *within* workplace, not across workplace
 - Cf Carrington and Troske (1998) for the United States
 - Evidence from pay satisfaction and skill mismatch consistent with discrimination in the workplace

Methods

- Decomposition of ethnic wage gaps across the hourly earnings distribution
 - RIF unconditional quantile regression (Firpo et al., 2009) – Oaxaca applied at the 10th, 25th, 50th, 75th and 90th percentiles of ethnic group wage distributions (Rios-Avila, 2018 – “oaxaca_rif” in Stata)
- Separately for Indians, Pakistanis, Bangladeshis, Black Caribbeans, Black Africans and Chinese
 - All relative to white men, who are assumed to generate the counterfactual wage distribution
- With and without firm-specific wage effects
 - Confined to firms with 2+ male observations in ASHE
- Decomposition of raw gaps at each quantile into the contributions of
 - Xs: observed characteristics (including occupation, region, education, age, experience, family characteristics)
 - Betas: unobserved component capturing returns to those characteristics

Methods - Technical

- Yet to apply new ASHE cross-section weights based on employer non-response, nor ASHE-Census linkage weights
- Bootstrap standard errors
- Because the decompositions are based on separate regressions for white and minority workers the white and minority deciles may be in different parts of the overall wage distribution – we can change this
- Firm-specific wage effects constrained to be equal for White and Ethnic Minority men – i.e., only a “between firm” wage effect.
 - Jewell et al (2020): “a further limitation of the present study is that we have not allowed for the possibility that firm-specific wage premiums might differ between men and women within firms. If in fact they do, then this would suggest the presence of differences in bargaining power or systematic discrimination between men and women within firms.”

Data

- Annual Survey of Hours and Earnings (ASHE) linked to 2011 Census
 - ONS did the linkage on common fields, e.g. first name, middle name, surname; DoB; gender, home postcode
 - ONS seek matches for all individuals with E&W resident addresses in ASHE 2010, 2011, and 2012
 - Match rate in 2011 is at around 60%
 - Potential non-random linkage - tackling with weights in future
- Data focus: year 2011
- Men only
 - Extending to women in future
- Only 1% sample so few observations per firm
 - Can't estimate separate contributions of within and across firm components of pay gaps (e.g., for gender, see Card, Cardoso & Kline, 2016)

Data (continued)

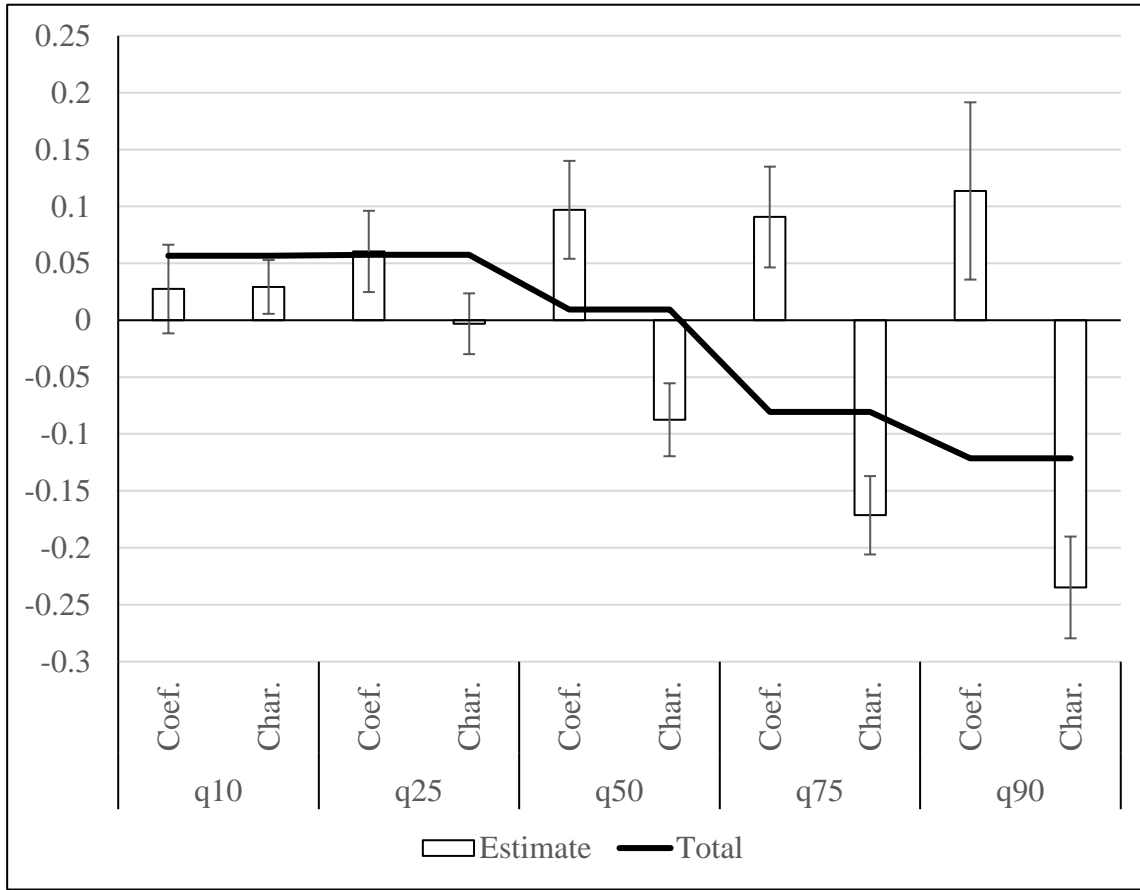
- Hourly earnings
 - Hourly pay in reference period used by LPC (hrpayx)
(Base + incentive other weekly pay)/basic weekly hours – in reference period
 - Will extend later to other measures of pay, such as annual earnings
- Covariates
 - ASHE: gender, age, occupation, industry, firm identifier, work region, tenure, part-time status
 - Census: ethnicity, marital status, number of children, and age of the youngest child
- Estimation samples on next slide

Ethnicity groups	Sample size	Estimation Sample	Median hourly wage (£) (unweighted)	Median hourly wage (£) (weighted)
White men	34605	23240	£13.73	£14.31
Indian men	1059	783	£13.58	£15.29
Pakistani men	428	309	£11.11	£11.89
Bangladeshi men	146	100	£12.47	£13.10
Black Caribbean men	363	287	£12.61	£12.74
Black African men	401	314	£10.41	£11.15
Chinese men	140	86	£18.93	£19.53

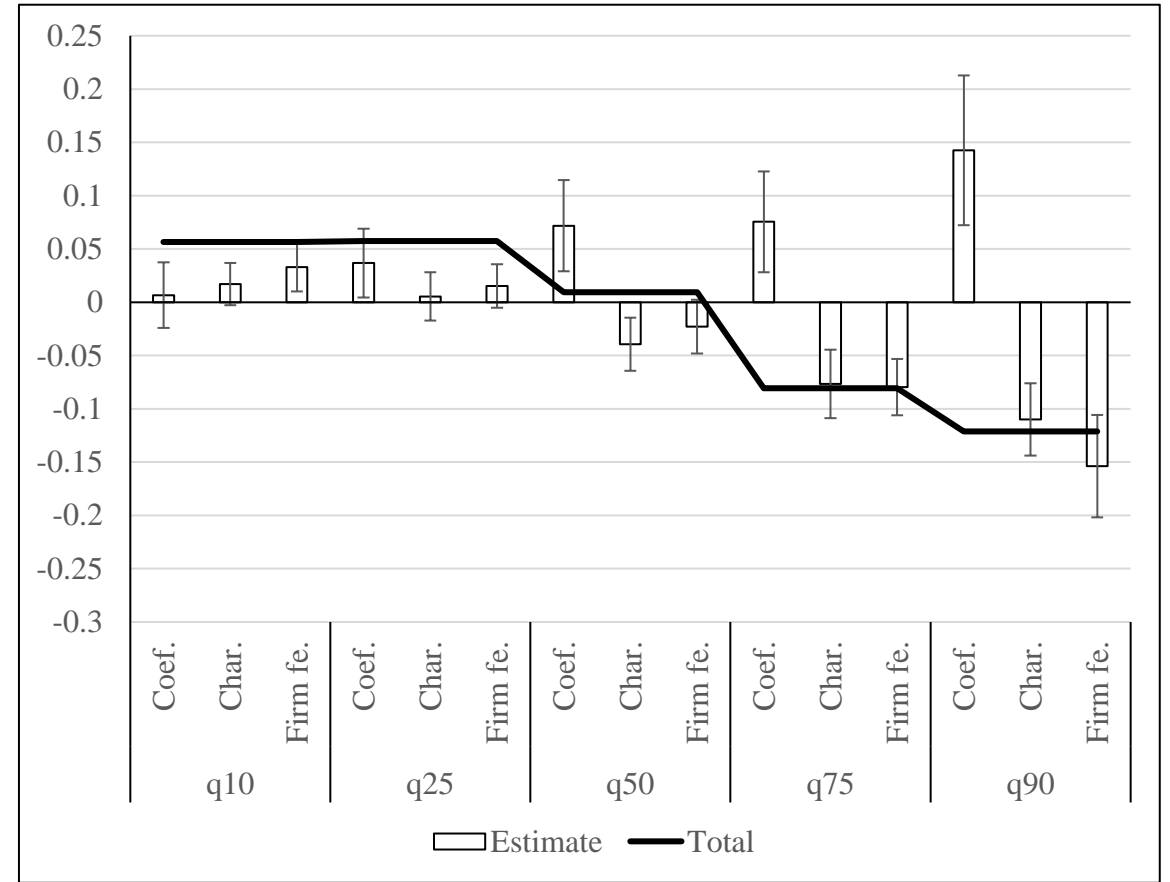
DECOMPOSING THE DISTRIBUTION OF ETHNIC WAGE GAPS

Without firm-specific wage effects vs. ***With*** firm-specific wage effects

White men vs. Indian men

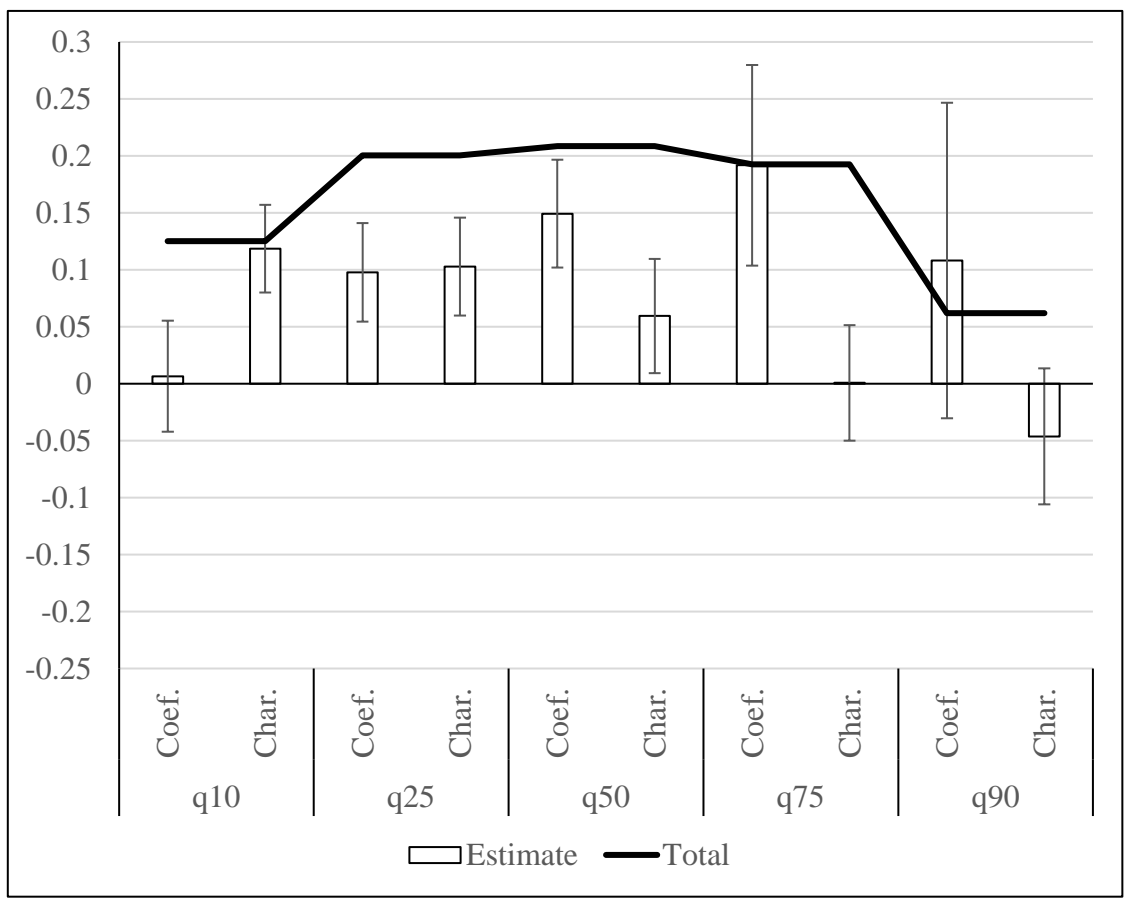


Note: without firm fixed effects

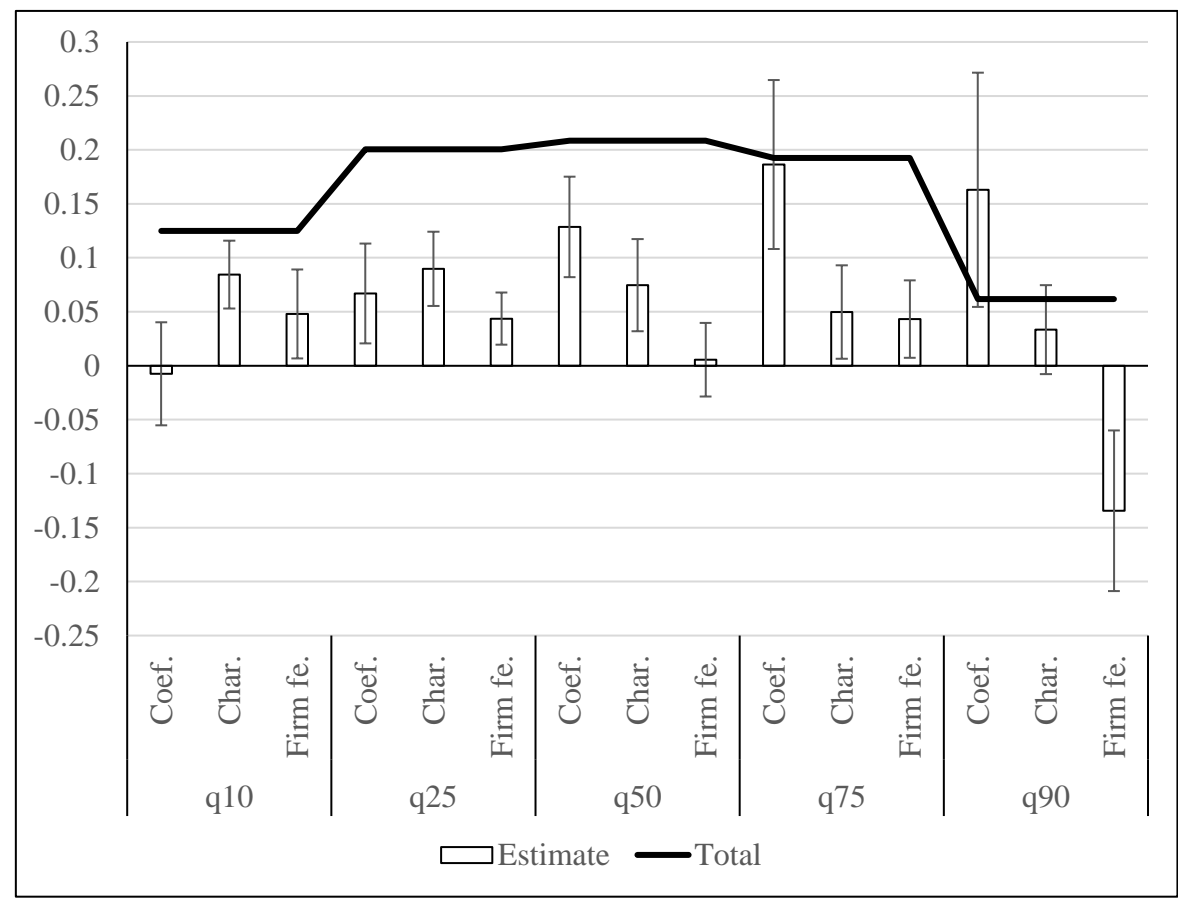


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White men vs. Pakistani men

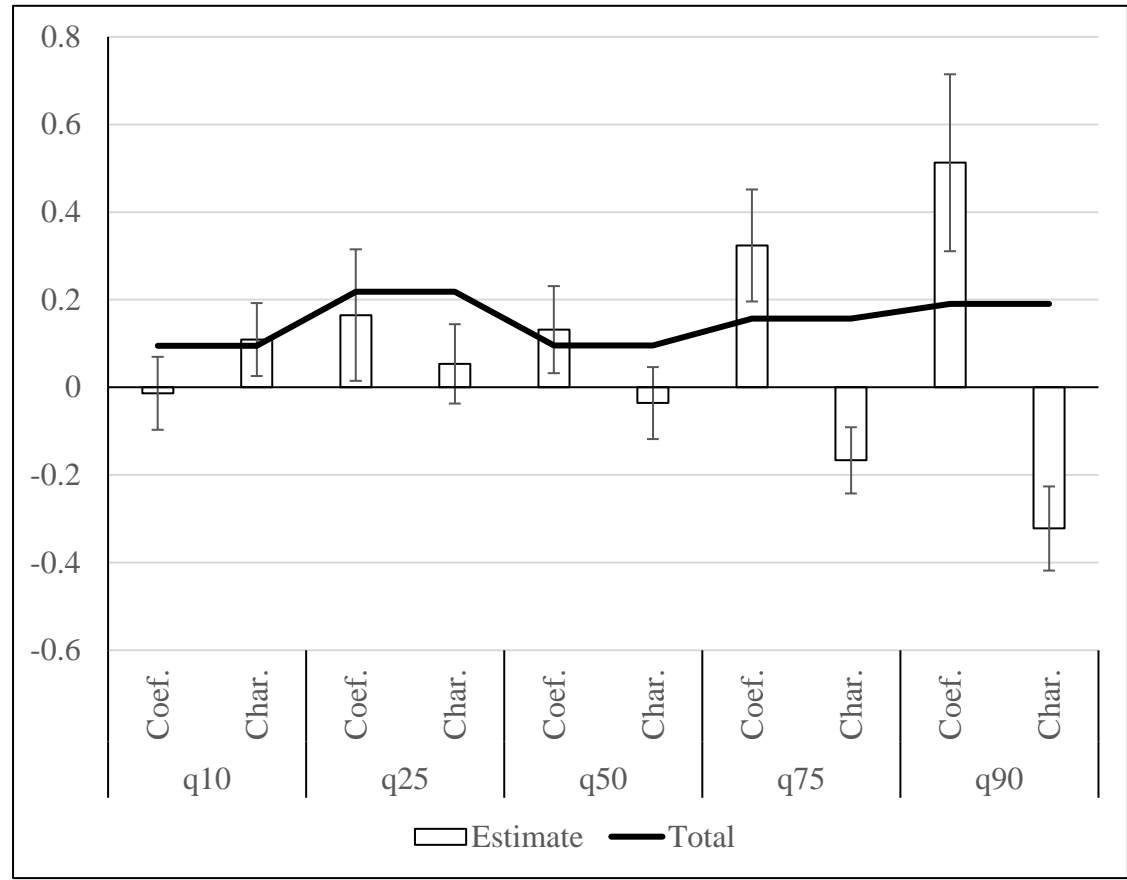


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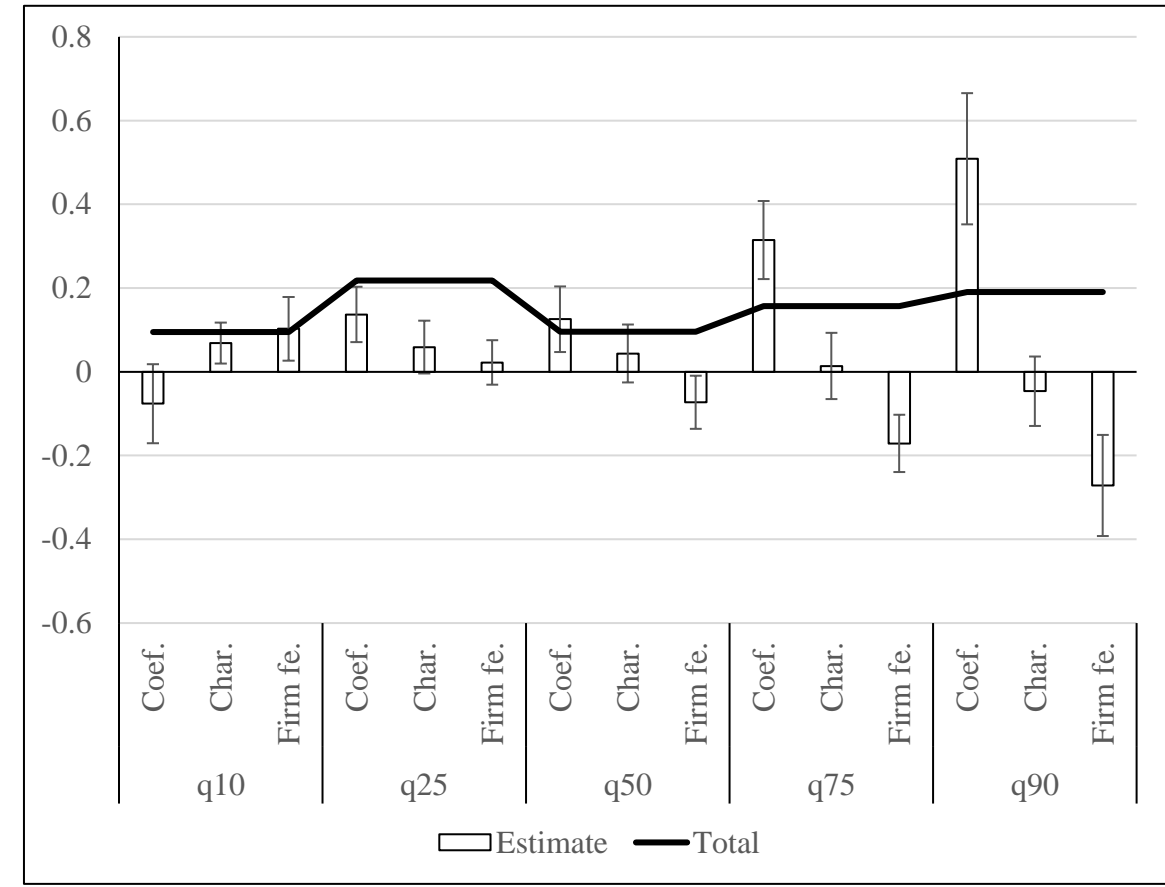


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White men vs. Bangladeshi men

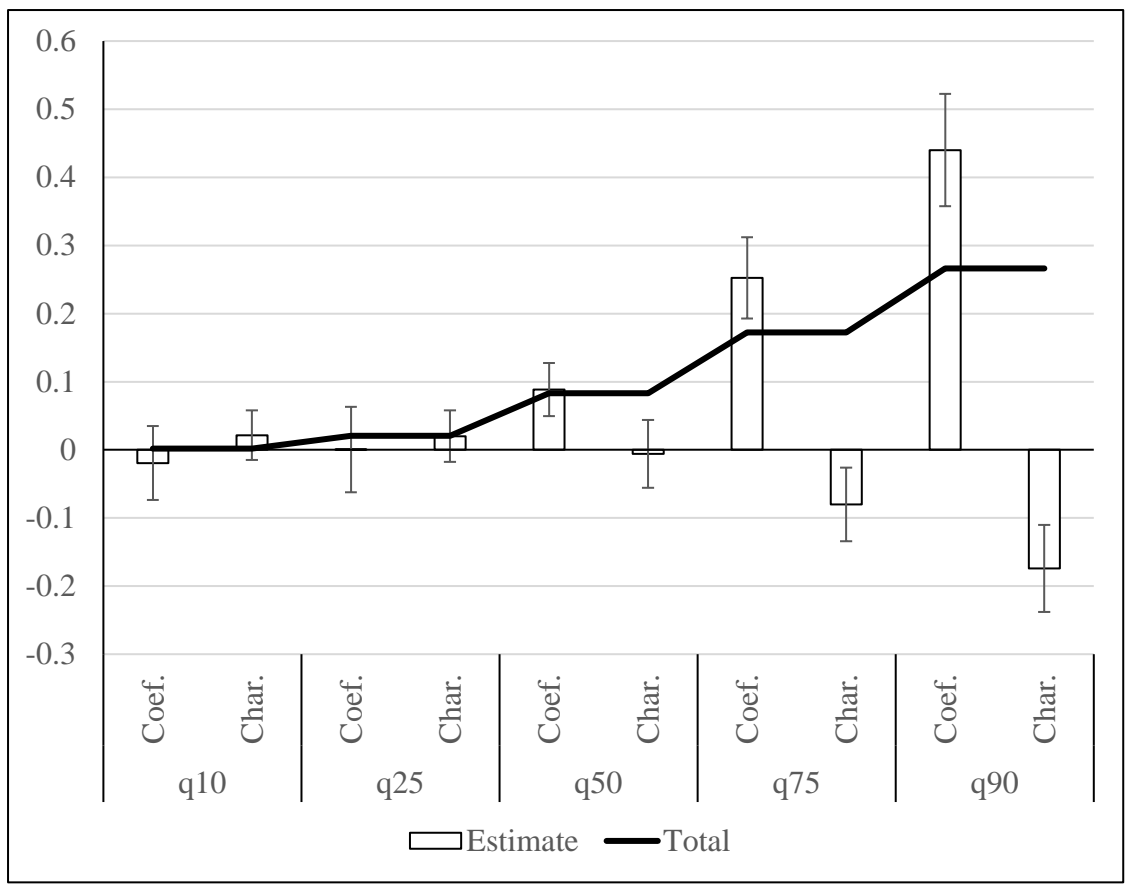


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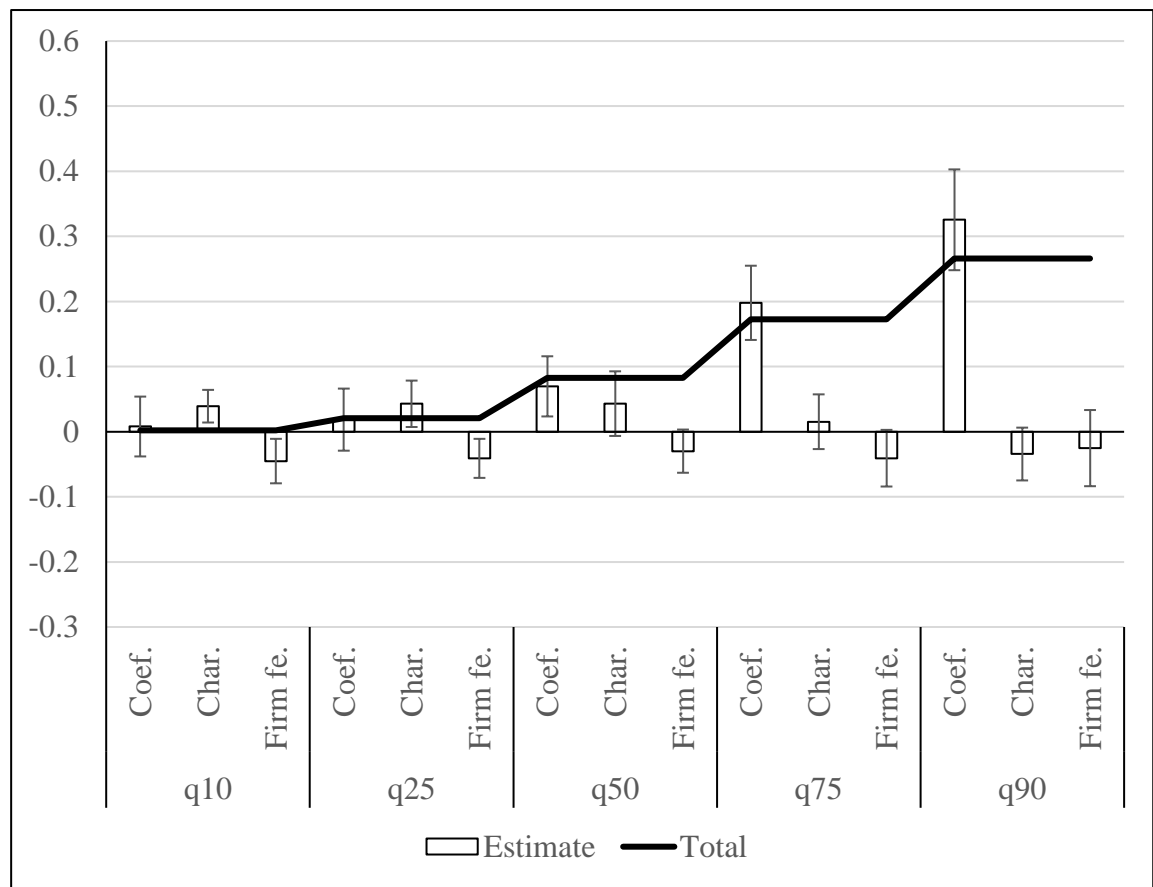


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White men vs. Black Caribbean men

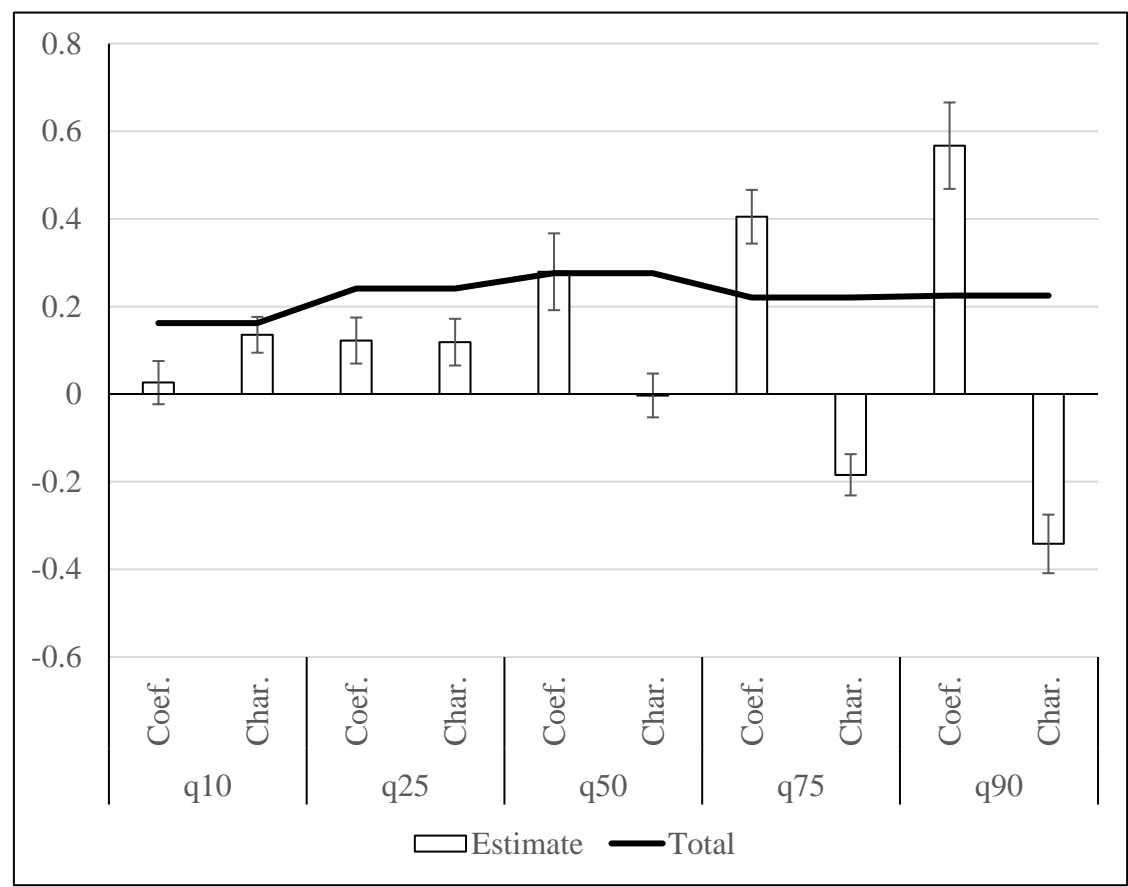


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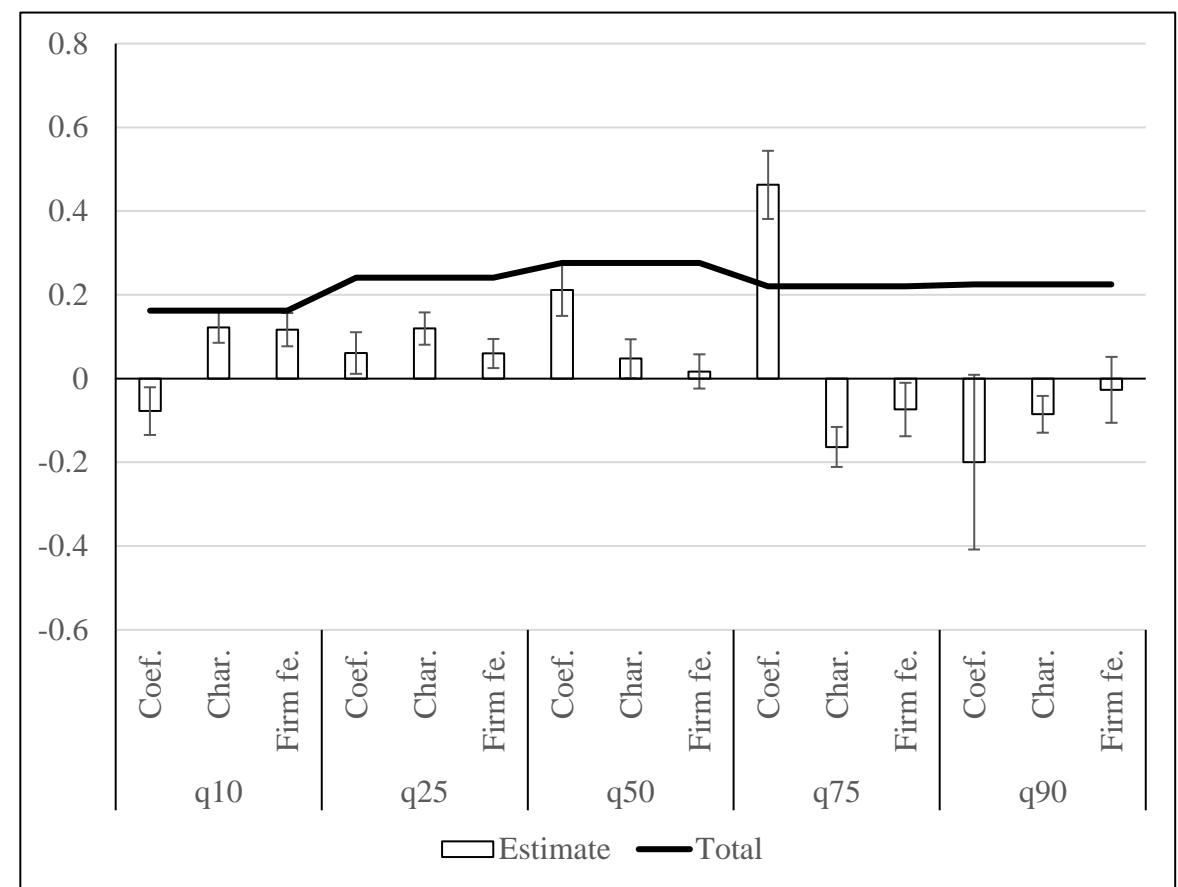


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White men vs. Black African men

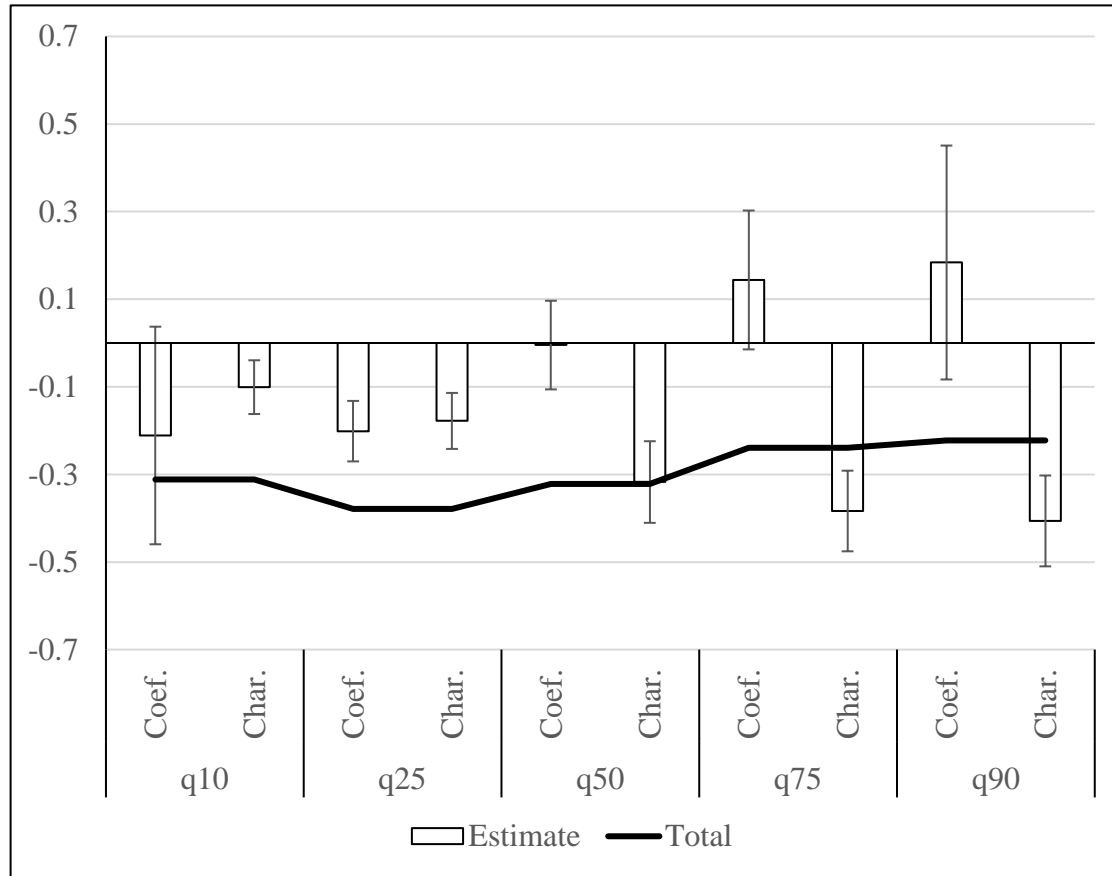


Note: without firm fixed effects
(unweighted figures)

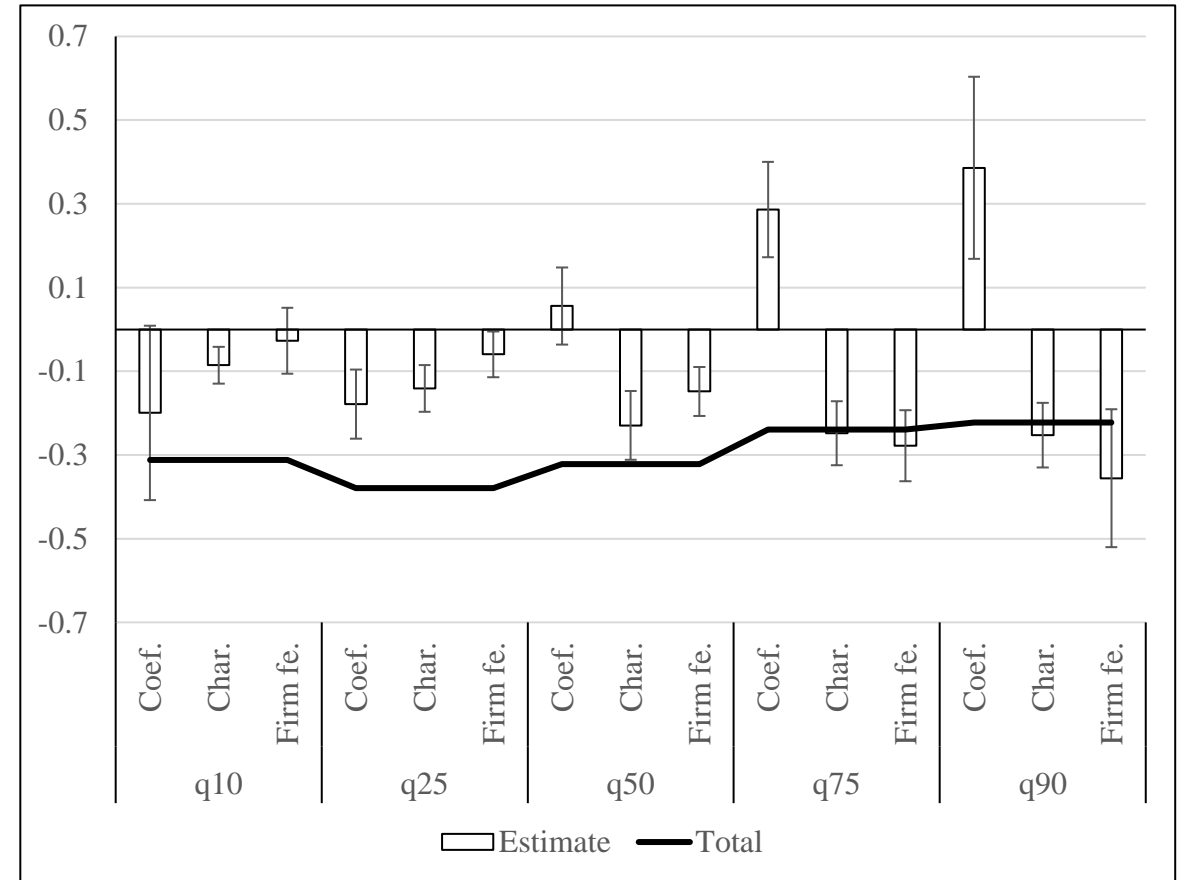


Note: with firm fixed effects
(unweighted figures)

White men vs. Chinese men



Note: without firm fixed effects
(unweighted figures)



Note: with firm fixed effects
(unweighted figures)

Reflections

- Census link allows us to extend the use of ASHE, previously confined to estimates of wage gaps by gender and age, to other demographics
 - Ethnicity, religion, disability, sexual orientation, migrants (1st or 2nd gen)intersectionality
- Ethnic wage gaps vary substantially across the wage distribution and across ethnic groups
 - Perhaps no surprise there
 - In some cases lower gaps at bottom end of distribution consistent with minimum wages limiting discriminatory behaviour
- Incorporating firm-specific wage effects provides new insights into factors driving gaps
 - They explain a substantial part of ethnic wage gaps across the wage distribution
 - They affect (reduce) the contributions made by demographic traits because those traits are linked to firm entry

Next Steps

- This paper
 - Compare white vs minority workers at the same point in the **overall** wage distribution
 - Introduce weights to account for differential probabilities of employer response to ASHE and the Census linkage and combine weights with bootstrapping
 - Extend analyses to women, fixing firm wage premia across gender and ethnicity with to increase the sample sizes
 - White British as reference instead of all white
- The future
 - Role played by religion
 - Role of local labour markets
 - Worker and firm postcodes
 - Rent-sharing
 - Additional linked firm-level data

3 take-aways for the LPC

- We need to know more about the role of the firm in understanding wage gaps at the bottom end of the wage distribution
- These ASHE-Census linked data are helpful and can be exploited more fully
- But there are constraints inherent in a 1% sample of employees
 - Preferable to have the whole population of workers and firms