

# British wage inequality: what occupation you have has never mattered so much

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**Mark Williams** looks at how occupations relate to the massive rise in British wage inequality between the mid-1970s and mid-1990s, finding that growing inequality is largely between groups and is driven by a small handful of occupations.



That Britain has become hugely unequal over the last few decades is a well-known fact. *How* inequality has grown is less well known. My research examines how occupations relate to trends in wage inequality. I found that the single-most important factor accounting for growing inequality was that the wages of already high-paying occupations increased the most, ahead of the changing relative sizes of occupations, and inequality within occupations.

Looking at what occupations people do could provide a promising avenue for policy makers, the general public, and academic research in understanding how the massive rise in wage inequality unfolded – and continues to unfold.

The LSE economist, Henry Phelps Brown, once remarked that

*“the pay of any two persons may differ for many reasons [...] but the most conspicuous reason lies in differences of occupation. It is these that come first to mind as the source of systematic differences in pay” (1977:28).*

Occupations as a unit of analysis since fell away in wage inequality research – so little is known about how occupations relate to the massive rise in British wage inequality between the mid-70s and mid-90s. This is what I investigated using a classification system of 366 occupational groups.

How can occupations shape trends in wage inequality? Occupations can affect inequality in three ways:

- Changes in the relative sizes of occupations – there could be a growth in high-paying occupations and low-paying occupations, with a simultaneous fall in middle-paying occupations, polarising the wage structure;
- Changes in average wages of occupations – the distance between occupational wages

could grow – the wages of some occupations may grow very steeply – some may even fall;

- Changes in inequality within occupations – a final way is the distance in wages between individuals could increase within occupations increasing overall inequality.

Examining the relative weight of each of these mechanisms in accounting for trends in British wage inequality using a statistical technique, I found that changes in occupational mean wages to be the most important factor, accounting for 48.3 per cent of the growth in male wage inequality 1975-1996, and 45.7 per cent of the growth in female wage inequality 1975-1996. Changes in the relative sizes of occupations is next important, accounting for 42.9 per cent for men, and a quarter for women. Least important is growing inequality within occupations, accounting for less than 10 per cent for men, and about a quarter for women.

The methodological approach I take allows for an estimation of the contribution by each and every single of the 366 occupations in the data. This is done by estimating a 'counterfactual' level of wage inequality – in effect calculating what the level of inequality 'would be' had occupation X's size, mean wage, and internal inequality not changed – whilst all other occupations' had changed. Subtracting this counterfactual level of inequality from the actual level of inequality reveals the contribution to the change in overall inequality of occupation X.

Some surprising results emerge. Just 10 occupations account for over half the growth in overall male wage inequality 1975-1996. The top 20 combined account for over two-thirds of the growth in overall inequality and cover just one-quarter of the 1996 labour force (16 per cent of the 1975 labour force).

For women, a similar finding emerges. Just 12 occupations account for over half the growth in overall inequality, and cover less than one-third of the 1996 labour force. The top 20 combined account for nearly two-thirds of the growth in overall inequality and cover just over 40 per cent of the 1996 labour force (and 33 per cent of the 1975 labour force).

Top twenty inequality-producing occupations 1975-1996 (men)

Occupation	Overall contribution to change in male inequality (%)	Number employed (estimated)		Mean annual wage (2008 £s)*	
		1975	1996	1975	1996
Marketing and sales managers	9.83	177,853	449,748	23,442	42,515
Other managers and administrators <i>D.E.C.</i>	6.50	114,616	377,338	21,819	34,528
Underwriters, claims assessors, brokers, investment analysts	5.67	39,436	151,430	25,875	50,856
Treasurers and company financial managers	5.57	33,057	113,188	25,064	61,880
Sales assistants	4.74	211,793	352,220	12,667	12,854
General managers; large companies and organizations	4.21	2,638	37,731	25,106	102,336
Drivers of road goods vehicles	4.04	566,460	586,995	13,499	15,330
Production, works and maintenance managers	3.61	245,242	345,549	20,779	36,005
Kitchen porters, hands	2.96	23,520	45,231	11,232	10,608
Computer systems and data processing managers	2.35	35,341	96,776	23,400	46,363
Security guards and related occupations	2.33	96,825	180,990	13,562	14,061
Bank, building society and post office managers	2.31	49,338	102,079	24,814	48,256
Other financial institutions and office managers <i>D.E.C.</i>	2.27	123,739	191,990	23,358	39,354
Medical practitioners	2.10	35,990	76,623	32,656	56,181
Computer analyst/programmers	1.84	63,494	209,697	22,672	32,802
Bar staff	1.83	41,628	83,448	11,669	22,693
Storekeepers, warehousemen	1.79	457,457	481,759	13,291	16,120
Software engineers	1.32	27,877	82,647	23,421	35,360
Management consultants, business analysts	1.26	12,031	34,445	24,049	46,197
University and polytechnic teaching professionals	1.22	21,128	65,590	30,098	46,717

Source: NES. \*Annual wage calculated from hourly rates, assuming 40-hour week.

Top twenty inequality-producing occupations 1975-1996 (women)

Occupation	Overall contribution to change in female inequality (%)	Number employed (estimated)		Mean annual wage (2008 £s)*	
		1975	1996	1975	1996
Cleaners, domestics	10.03	610,218	701,487	9,963	10,920
Sales assistants	7.00	572,079	930,360	8,299	11,544
Care assistants and attendants	5.74	130,716	405,822	11,461	12,501
Clerks (n.o.s.)	5.09	418,660	957,139	11,315	15,746
Marketing and sales managers	4.23	26,900	126,525	12,355	35,693
Other financial institutions and office managers n.e.c.	3.38	44,420	163,311	13,042	27,872
Other managers and administrators n.e.c.	2.74	26,342	128,649	13,333	26,707
Nurses	2.69	347,861	597,302	14,726	24,773
Other childcare and related occupations	2.54	67,583	152,742	10,754	11,190
Counterhands, catering assistants	2.43	177,281	209,068	9,630	11,045
Medical practitioners	2.10	9,669	32,764	19,490	48,381
Kitchen porters, hands	1.88	132,245	121,830	9,776	10,317
Bar staff	1.84	53,594	121,041	8,424	9,901
Underwriters, claims assessors, brokers, investment analysts	1.79	11,636	50,939	13,312	32,011
Treasurers and company financial managers	1.75	6,160	29,930	13,998	40,206
Waitresses	1.56	44,277	91,017	8,778	10,046
Other secretaries, personal assistants, typists, word processor operators n.e.c.	1.53	517,627	617,326	12,147	19,344
Higher and further education teaching professionals	1.50	34,287	99,108	23,338	33,176
Solicitors	1.42	4,509	34,588	15,059	36,941
Chartered and certified accountants	1.40	18,061	50,406	12,501	31,741

Source: NES. \*Annual wage calculated from hourly rates, assuming 40-hour week.

For men, most are managerial, including the top four – with marketing and sales managers being the most important – accounting for almost 10 per cent of the growth in wage inequality alone. Not all the inequality-producing occupations are highly-paid, however, such as goods vehicle drivers, kitchen porters and cleaners. This is especially true for women where cleaners are the most important occupation. So when we think about growing inequality we should also think about what is happening amongst low-paying service occupations as well as high-paying managerial occupations.

## Implications

As Phelps Brown noted, occupation is the first reason to come to mind when considering pay inequalities. This is because occupations relate to skills and aspect of employment relations such as span of control or position within the organisational hierarchy.

For policy-makers, the fact that growing inequality is largely between groups should be good news – as it gives them something more tractable to work with than if inequality is largely within groups. Most importantly, my research finds that growing inequality is driven by only a handful of occupations. For researchers, these results point to the need to pin down exactly what explains the ‘occupation effect’ and reasons why these particular occupations were as influential as they were.

## Conclusion

My research adds to the wage inequality story by examining the role of detailed occupational categories – which have been oddly overlooked. My research has established that a between-group story is the more accurate one when groups are defined in terms of detailed occupations. My research points to the highly concentrated nature of growing wage inequality and to particular sections of the labour market that warrant further investigation. Moreover, the between-occupation story gives policy-makers something tangible to work with if tempering growing inequality is to be a policy goal.

*Note: This article gives the views of the author, and not the position of the British Politics and Policy blog, nor of the London School of Economics. Please read our [comments policy](#) before posting.*

## About the author

**Dr Mark Williams** is a Fellow in the Employment Relations and Organisational Behaviour Group at the LSE. He recently completed his DPhil at Nuffield College, Oxford, where he also obtained an MSc in Sociology (Distinction). In addition to doctoral work he has conducted several other pieces of research including a government report on the role of workplace practices on mediating the quality of employment and an article on how country-level employment regimes shape the vulnerability of the low-skilled across Europe.

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