

Power plays

The shifting balance of employer and worker power in the UK labour market

Ufuk Altunbuken, Paweł Bukowski, Stephen Machin & Hannah Slaughter

July 2022



Acknowledgements

We thank Torsten Bell, Greg Thwaites, Alex Beer, Alex Bryson, Nikhil Datta, Alan Manning, Anna Stansbury, and seminar participants at the Resolution Foundation and LSE Centre for Economic Performance for comments, discussion and data advice. Any errors, however, remain the authors' own.

ONS crown copyright info

This work contains statistical data from ONS which is Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates.

Citation

If you are using this document in your own writing, our preferred citation is:

U Altunbuken, P Bukowski, S Machin & H Slaughter, *Power plays*:

The shifting balance of employer and worker power in the UK labour market, The Resolution Foundation, July 2022

Permission to share

This document is published under the [Creative Commons Attribution Non-Commercial No Derivatives 3.0 England and Wales Licence](#). This allows anyone to download, reuse, reprint, distribute, and/or copy Economy 2030 Inquiry publications without written permission subject to the conditions set out in the Creative Commons Licence.

For commercial use, please contact: info@resolutionfoundation.org

The Economy 2030 Inquiry

The Economy 2030 Inquiry is a collaboration between the Resolution Foundation and the Centre for Economic Performance at the London School of Economics, funded by the Nuffield Foundation. The Inquiry's subject matter is the nature, scale, and context for the economic change facing the UK during the 2020s. Its goal is not just to describe the change that Covid-19, Brexit, the Net Zero transition and technology will bring, but to help the country and its policy makers better understand and navigate it against a backdrop of low productivity and high inequality. To achieve these aims the Inquiry is leading a two-year national conversation on the future of the UK economy, bridging rigorous research, public involvement and concrete proposals. The work of the Inquiry will be brought together in a final report in 2023 that will set out a renewed economic strategy for the UK to enable the country to successfully navigate the decade ahead, with proposals to drive strong, sustainable and equitable growth, and significant improvements to people's living standards and well-being.

The Nuffield Foundation

The Nuffield Foundation is an independent charitable trust with a mission to advance social well-being. It funds research that informs social policy, primarily in Education, Welfare, and Justice. It also funds student programmes that provide opportunities for young people to develop skills in quantitative and scientific methods. The Nuffield Foundation is the founder and co-funder of the Nuffield Council on Bioethics and the Ada Lovelace Institute. The Foundation has funded this project, but the views expressed are those of the authors and not necessarily the Foundation. Visit www.nuffieldfoundation.org.

Summary

Worker power is an issue of topical debate in 2022: the cost of living crisis and the return of strikes over pay and conditions have brought the issue to the nation's attention. Some have pointed to a tight labour market as enabling workers to demand higher pay. But a very tight labour market is rare, and it is far from clear whether it can be relied on to drive sustainably-better outcomes for workers. Despite the labour market currently reaching record tightness on several measures, wages are growing more slowly than inflation, and pay growth is concentrated among the highest earners. Rather than cyclical drivers, then, in this briefing note we focus on structural shifts of worker and employer power through time.

It is well-known that since the 1980s, unions have declined and the labour market has moved away from collective bargaining. The decline of unions at the workplace level has not been driven either by unionised workplaces closing more frequently or by active derecognition of unions, but instead by an absence of unions at new establishments. Union recognition rates among younger establishments (less than 10 years old) were two-thirds the rate of older establishments in 2011 (26 per cent versus 39 per cent). And where collective bargaining does still occur, it has become more decentralised, most often involving union and management negotiations at individual workplaces rather than at a national, industry, regional, or multi-employer level. These shifts show that labour market institutions can change drastically over time – and more so than other features of the economy, such as its long-term industrial structure.

As the labour market has become more decentralised, other metrics of worker power come to the fore – such as an individual's outside options, i.e. the extent to which workers can switch to another job if they are not satisfied with their pay or conditions. But we show that in many respects these, too, have got weaker. Workers are getting less transferrable training than they were a decade ago (5.5 per cent of workers in 2019-2020, down from 9.1 per cent in 2010-2011), making it more difficult for them to switch employers. And in the face of rising insecure work and lower unemployment benefits relative to average earnings, both moving jobs and leaving work altogether are getting less attractive.

This lack of worker power is to some extent reflected in the big success of the National Minimum Wage (NMW), as state power has stepped in to support the lowest earners. But the NMW is not a perfect substitute for worker power. First, the NMW and collective bargaining cover different groups of workers, as low-wage workers are less likely to be union members. And second, NMW legislation does not cover wider, non-monetary working conditions that have traditionally been part of union bargaining.

But a focus on formal worker power only covers half the story. In contrast to the decline of power among workers, employer power has either slightly risen or remained constant, depending on the measure we use. As unions have declined, managers have increasingly taken over the wage-setting process (rather than wages being set through individual negotiations, for example). The incidence of management-led wage-setting has been rising in workplaces over time as union decline occurred. For example, it rose from 70 per cent to 78 per cent for 10-plus employee workplaces between 1998 and 2011, and it was increasing prior to that in the wake of falls in collective bargaining. In addition, real wage growth of public sector workers determined by the pay review bodies has lagged other workers through the 2010s.” Some human resource management (HRM) practices that seek the input of workers have become more prevalent – for instance, the share of 25-plus employee establishments with suggestion schemes rose from 25 per cent to 37 per cent between 1984 and 2011. But these are not a substitute for unions: their presence is rising in both union and non-union sectors and unionised establishments are, in fact, more likely to use HRM practices.

When consumers have limited choice among products, producers can earn higher profits by charging higher prices. Similarly, when workers’ job options are limited, their employers can increase profits by paying lower wages. In the case of the labour market, this market power is known as ‘monopsony power’. Empirical evidence suggests that some firms have substantial power to set workers’ wages – and that they have more power over low-wage workers. On some measures, monopsony power has been rising over time; on others, it rose as the financial crisis hit, though has since fallen back to similar levels to the late 1990s. And low-paid workers tend to face more concentrated labour markets (one proxy for employer power), being around two-thirds more likely than the highest paid to work in one of the top 20 largest firms by employee size. With weaker unions and stable or increasing employer market power, the balance will have shifted in relative terms from workers to firms

This matters more than is usually recognised. Declining levels of worker power – in the form of fewer unions and worsening outside options – drives down wages. The latest evidence suggests that wages could be between 15 and 25 per cent lower than they would be otherwise because of employer power over workers. These estimates are extremely imprecise – but a wage markdown of 15 per cent, at the conservative end of these estimates, would mean the average worker today is losing out on almost £100 a week.

What’s more, the changing nature of worker power, as bargaining becomes more individualised, drives up wage inequality. A raft of evidence shows that, at a given point in time, unions reduce wage inequalities. As a consequence, their sharp decline has

resulted in higher wage inequality for some groups: the decline of unions has accounted for one-sixth of increased wage inequality among men between 1983 and 2019.

Monopsony power also affects lower earners more than higher earners: those in lower-skilled occupations face around double the impact on wages from a rise in concentration than mid-skilled workers. The minimum wage has, however, pulled the other way in the bottom half of the wage distribution: the big rise in lower tail wage inequality (the gap between the 50th and 10th percentiles) that occurred between 1980 and 1999 was fully reversed by faster wage growth for minimum wage workers in the next 20 years.

The changing balance of worker power, then, is both pushing down the level of wages and making their distribution more unequal. And the scale of the impact means that the nature of firm and worker power is a crucial issue for policy makers to grapple with – and should be an important part of the UK's economic strategy.

We cannot rely on a tight labour market to deliver real wage growth

Worker power is a topical debate in 2022. In the face of the cost of living crisis, industrial action has returned with nationwide strikes among rail workers, and further strike action planned across a range of sectors. This has brought collective action into prominent focus.¹ Some have pointed to the fact that the labour market is tight on several measures as enabling workers to exert power and demand higher wages.² But a very tight labour market is rare, and it is far from clear that it can be relied on to drive sustainably-improved outcomes for workers: despite the labour market currently reaching record tightness on several measures, wages are growing more slowly than inflation,³ and pay growth is concentrated among the highest earners, especially through bonuses.⁴

Rather than cyclical drivers, then, this briefing note focuses on structural shifts in the balance of worker and firm power through time. (Box 1 summarises the determinants of this balance.) From the worker side, we explore how the decline of unions and the decentralisation of the bargaining process have led to the 'decollectivisation' of workers, and worsening outside options have given workers less power, but at the same time the minimum wage has protected those on the very lowest wages. From the firm side, we show the rise of managerial power and present evidence on how a lack of labour market competition benefits employers. Finally, we provide evidence on the consequences of these trends.

¹ See, for example: BBC News, [Rail strikes: Travel disruptions continue after talks to stop third walkout fail](#), June 2022; BBC News, [Yorkshire Arriva bus drivers strike enters fourth week](#), June 2022; BBC News, [Thousands of BT workers vote to strike over pay](#), June 2022; BBC News, [Post Office workers to strike over pay](#), June 2022.

² See, for example: R Duval, M Oikonomou & M Tavares, [Tight Jobs Market Is a Boon for Workers But Could Add To Inflation Risks](#), IMF Blog, March 2022.

³ N Cominetti, [A tight labour market, but early signs of cooling](#), Resolution Foundation, June 2022.

⁴ G Thwaites, [Unemployment hits a record low but pay is still falling in real terms](#), Resolution Foundation, May 2022.

BOX 1: What determines the balance of power between firms and workers?

When firms and workers come together in a productive employment relationship, they can create a surplus: both parties are better off than they would be without it. But how this surplus is shared varies widely and is determined by the relative power of the worker and their employer.

There are several factors that determine the balance of power. First, it depends on labour market institutions. For example, a collective bargaining agreement is one way for workers and firms to negotiate over how to share the surpluses from employment. And the minimum wage, which puts a floor on how low wages can go, puts a limit on how much power firms can exert over their workers.

It also depends on the ready availability of alternative jobs and workers. The more alternative jobs a worker can easily take (often referred to as 'outside options'), the higher their power; similarly, the more workers that are readily available for a firm to hire, the higher the firm's power. Relatedly, the balance of power depends on how 'special' the worker and the firm are to each other: if a worker cannot easily be substituted for another (for example, because they have specialist skills), they have more power; similarly, if a firm is different from other employers (for example, through the non-financial rewards they offer, such as location or flexibility) they will have more power.

Unions have been in decline since the 1980s

Traditionally, the main way that workers have exerted collective power is through trade unions. Union bargaining can boost wages, job security and other work conditions of union relative to non-union workers.⁵ Since the 1980s in the UK, however, legislation restricting the actions of unions⁶, a changing economic landscape⁷, changing economic impacts of trade unions and behaviour of employers have led to sharp and rapid union decline.

⁵ J Dunlop, *Wage determination under trade unions*, MacMillan, 1944; H G Lewis, *Unionism and relative wages in the United States: an empirical inquiry*, University of Chicago Press, 1963; R Freeman & J Medoff, *What do unions do?*, Basic Books, 1984; A Booth, *The economics of the trade union*, Cambridge University Press, 1994.

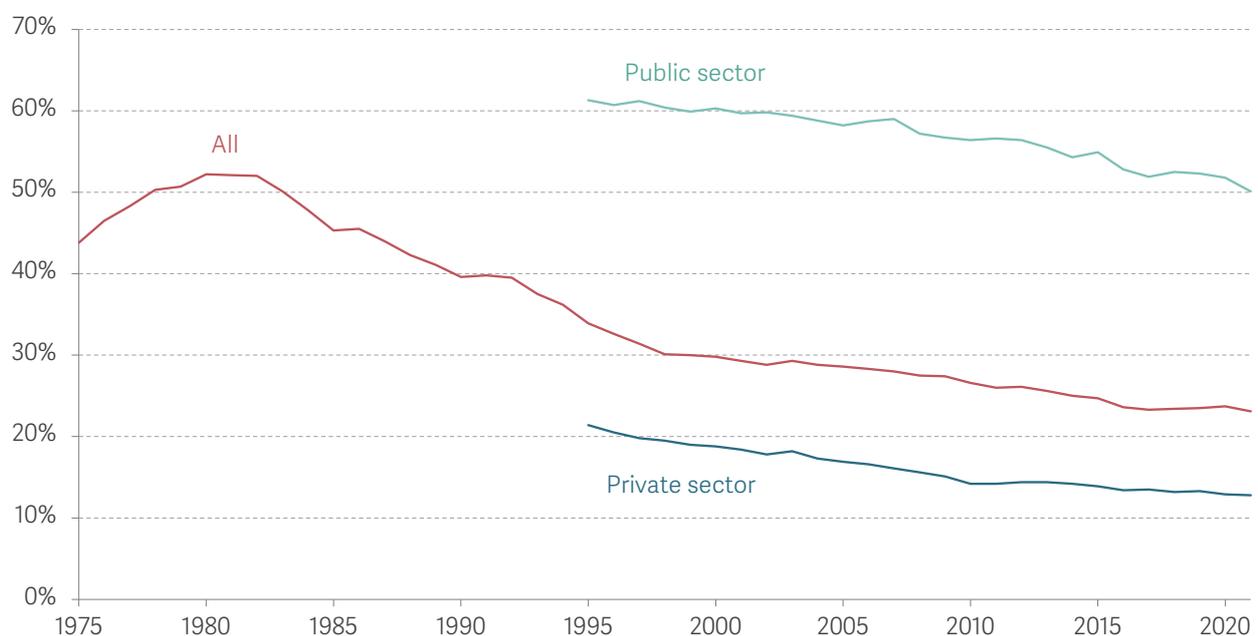
⁶ W Brown & S Wadhvani, *The economic effects of industrial relations legislation since 1979*, National Institute Economic Review 131(1), February 1990; D Metcalf, *British unions: resurgence or perdition?*, in D. Metcalf & S. Fernie (eds.), *Trade Unions: Resurgence or Demise?*, Routledge, 2005; D Pyper, *Trade union legislation 1979-2010*, House of Commons Library Briefing Paper CBP 7882, January 2017.

⁷ For example, the decline of the manufacturing sector has been linked to a reduction in union membership in the private sector. See: S Machin, *Union Decline in Britain*, British Journal of Industrial Relations 38(4), December 2000; S Machin, *Factors of Convergence and Divergence in Union Membership*, British Journal of Industrial Relations 42(3), September 2004; L Mishel, L Rhinehart & L Windham, *Explaining the erosion of private-sector unions*, Economic Policy Institute, November 2020.

Figure 1 shows the scale of the union decline. It reports that union density – the share of workers who are union members – has more than halved since the end of 1970s, going from 52 per cent in 1980 to 23 per cent in 2021.⁸ Similar speeds of decline (in percentage point terms) are observed in both public and private sectors, albeit from dramatically different initial levels. In 1995, when we can present the series in a breakdown by sector, the density in public sector (61 per cent) was nearly three times larger than in the private sector (21 per cent); today, it is nearly four times larger (50 per cent vs 13 per cent). In Box 2, we explore the changing composition of union members.

FIGURE 1: Union density has been trending downwards

Proportion of workers who are union members: UK, 1975-2021



NOTES: Density for all sectors is from OECD/AIAS/ICTWSS and is based on official administrative data (1975-1994) and LFS (1995-2019). The data for 2020-2021 is from LFS as published by the Department for Business, Energy & Industrial Strategy (BEIS) in the Trade Union Membership, UK: Statistical Bulletin. The data for private and public sector is from LFS as published by the Department for Business, Energy & Industrial Strategy (BEIS) in the Trade Union Membership, UK: Statistical Bulletin.

SOURCE: Analysis of OECD/AIAS ICTWSS Database; BEIS, Trade Union Membership, UK: Statistical Bulletin.

⁸ Unfortunately, we are not able to show a long-run consistent definition series of union coverage (the share of workers whose pay is affected by collective pay agreements) going back to the 1970s. In the UK private sector, union density and coverage are now closely related, because collective pay agreements are mostly negotiated between firms and unions, which usually act on behalf of union members only. In industry agreements of the past they could be extended to some non-union workers and this still arises in some public sector cases, where non-members may be covered as well.

BOX 2: Who are union members?

Using General Household Survey for 1983 and Labour Force Survey data for 2021 (from Trade Union Membership, UK: Statistical Bulletin) we provide two portraits of an archetypical union member today and nearly 40 years ago:

- In 1983, an archetypical union member was a white male between 35-49 years old, with a low level of education, working full-time in the private sector.
- In 2021, an archetypical union member was a white male or female who was older than 50 years old, with a higher level of education, working full-time in the public sector.

These portraits document a substantial change in the composition of union members. In the past, union membership was higher for males, negatively associated with education and mostly a domain of private manufacturing and the public sector. Today there is no gender gap in union membership status, education is positively associated with membership and unions are most likely to be found in the public sector. While the average age of a union member has gone up, the effect of age on the probability of union membership, after taking into account other characteristics, has not changed.⁹

Fewer new workplaces are recognising unions

The dominant reason for union decline is the failure of unions to organise workers in newly set-up establishments. We have compiled six waves of the Workplace Industry Relation Survey (WIRS) and its successor, the Workplace Employment Relation Survey (WERS), to shed light on whether establishments have recognised trade unions and how this has changed through time. The top row of Table 1 shows a decline in recognition from around two-thirds (66 per cent) at the start of the 1980s to just over a third (36 per cent) by 2011.¹⁰

⁹ Source: Analysis of ONS, Labour Force Survey.

¹⁰ The analysis throughout this section also forms part of: U Altunbuken, P Bukowski & S Machin, The Labour Market Consequences of Lower Worker Power, 2022 (manuscript).

TABLE 1: Fewer new workplaces recognise unions

Proportion of establishments with 25 or more employees that recognise unions: UK

	1980	1984	1990	1998	2004	2011
All	64%	66%	53%	42%	38%	36%
< 10 years old	59%	58%	34%	27%	23%	26%
≥ 10 years old	65%	68%	59%	50%	42%	39%
<i>Percentage point gap</i>	-5 ppts	-10 ppts	-25 ppts	-23 ppts	-19 ppts	-13 ppts
<i>Per cent gap</i>	-8%	-14%	-42%	-46%	-44%	-34%
Workplaces established post-1980	n.a.	*	34%	30%	25%	25%
Workplaces established in 1980 or before	64%	66%	59%	55%	50%	55%
<i>Percentage point gap</i>	n.a.	*	-25 ppts	-25 ppts	-24 ppts	-30 ppts
<i>Per cent gap</i>	n.a.	*	-42%	-46%	-49%	-54%

NOTES: The figure for post-1980 establishments in 1984 is excluded due to a very low sample size.

SOURCE: Analysis of BEIS, Workplace Industrial Relations Survey and Workplace Employment Relation Survey.

At establishment level, an aggregate fall in union recognition can come about for three reasons, namely the failure of new establishments to recognise unions, heightened closure rates among unionised establishments, or an imbalance between derecognition and new recognition rates at existing establishments.¹¹ Table 1 suggests that the key explanation lies in the former: the rate of recognition in establishments that were opened within ten years of the survey date plummets by a huge 33 percentage points, from 59 per cent in the 1980 survey to 26 per cent in the 2011 survey. It falls, but by much less, in establishments that were over ten years old.

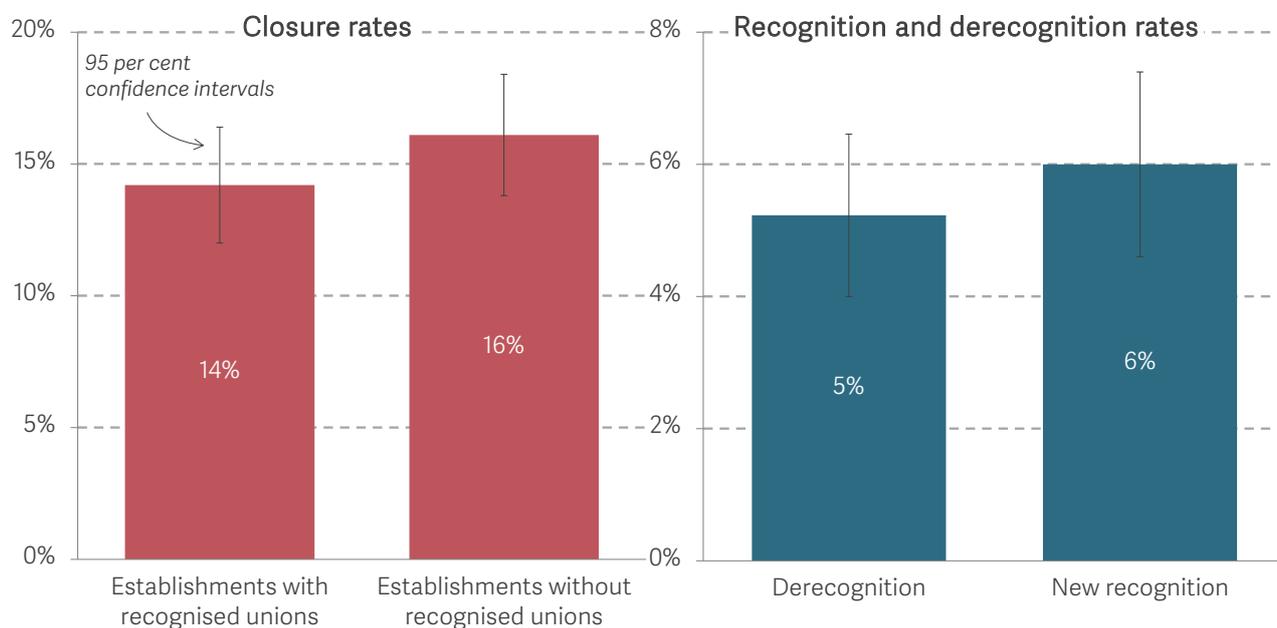
That the evolution in newly set up workplaces is key is backed up by the numbers shown in Figure 2. The left panel shows that there is no statistically distinguishable relationship between establishment closure and union recognition and the right panel shows that derecognition (and new recognition) of unions in existing workplaces was relatively rare and too small to explain the scale of change.¹²

¹¹ S Machin, [Union Decline in Britain](#), British Journal of Industrial Relations 38(4), December 2000; U Altunbuken, P Bukowski & S Machin, [The Labour Market Consequences of Lower Worker Power](#), 2022 (manuscript).

¹² The left-hand panel updates the results reported in: S Machin, [Plant closures and unionization in British establishments](#), British Journal of Industrial Relations 33(1), March 1995.

FIGURE 2: The decline in recognition was neither driven by differential closure rates nor by workplaces derecognising unions

Proportion of establishments with 25 or more employees which closed, derecognised, or newly recognised unions between survey waves: UK, 1984-2011



NOTES: The sample consists of establishments with 25 or more employees observed in two consecutive waves of WIRS/WERS, pooled across the survey waves.

SOURCE: Analysis of BEIS, Workplace Industrial Relations Survey and Workplace Employment Relation Survey.

Thus, the decline in workplace union recognition results from unions not getting recognition in new establishments set up since 1980. Statistical regression analysis conducted in Altunbuken, Bukowski and Machin shows that after controlling for employment size, ownership, industry, proportion of part-time workers and year effects, workplaces established after 1980 are 13 per cent less likely to recognise unions compared to those established before.¹³

Collective bargaining has become less centralised

As unionisation has fallen, in contexts where unions do still exist the nature of bargaining has altered dramatically. We now turn to the analysis of collective bargaining agreements (CBAs), focusing in particular on the degree of bargaining (de)centralisation. In the UK, this has moved from typically being centralised industry or multi-employer bargaining to a much more decentralised level. Bargaining now most typically takes place between unions and management at the workplace.

In the UK, unions engaged in collective bargaining principally bargain on behalf of their members. However, in some sectors and where bargaining takes place at a centralised

¹³ U Altunbuken, P Bukowski & S Machin, The Labour Market Consequences of Lower Worker Power, manuscript.

level, and usually in the public sector, non-union wages can also be covered by the agreements. For instance, in 2021, 14 per cent of UK private sector workers were covered by collective bargaining and 13 per cent were union members; the figures were 58 per cent and 50 per cent respectively for public sector workers.¹⁴ A similar practice can be found in other countries (such as Germany), but this is not the rule everywhere. In France, for instance, there is a very different structure as collective agreements are negotiated by unions, but apply to most workers (coverage is 98 per cent, membership is 11 per cent).

The scale of decentralisation has further weakened the ability of unions to negotiate higher wages – direct evidence for this will be provided below where we show that the union wage differential has fallen over time. Figure 3 presents data on union coverage – the share of workers whose pay is affected by a CBA – and the level at which bargaining takes place, among OECD countries. At the end of the 1970s and start of the 1980s, the UK was a country with a high level of union coverage and relatively centralised bargaining. Around 60 per cent of full-time workers and 87 per cent of those covered by the unions had their pay set at national or industry level,¹⁵ and 66 per cent of establishments with recognised unions for manual employees used national bargaining for manual workers.¹⁶ As such, the UK bargaining structure was more centralised and covered more workers than in other Western European countries, but less than in Scandinavia (see the left-hand panel of Figure 3). Nowadays, union coverage is low and the bargaining that does take place in the private sector is done almost entirely at workplace level: for instance, by 2011, only 9 per cent of workplaces used national bargaining,¹⁷ and in 2021, 21 per cent of all workers (3 per cent in the private sector and 67 per cent in the public sector) and 51 per cent of those covered by unions had their pay set at the national or industry level¹⁸ – similar to the US, Canada, Japan and South Korea.

¹⁴ These numbers are based on Labour Force Survey data as published in: Department for Business, Energy & Industrial Strategy, [Trade union membership 2021: statistical bulletin](#), May 2022. Union CBA coverage is self-reported by workers and might underestimate union coverage. Indeed, the data on CBA coverage provided by employers in ASHE (also reported in the Statistical Bulletin) show that in 2021, 21 per cent of private sector and 91 per cent of public sector workers were covered by a CBA. This could be, however, an overestimation as employers might count non-CBA forms of wage setting, such as National Minimum Wage or Pay Review Bodies.

¹⁵ These numbers are for 1978 and come from: Department of Employment, *New Earning Survey 1978 (Part F: Hours, Earnings of part-time workers. Types of collective agreements)*, 1979.

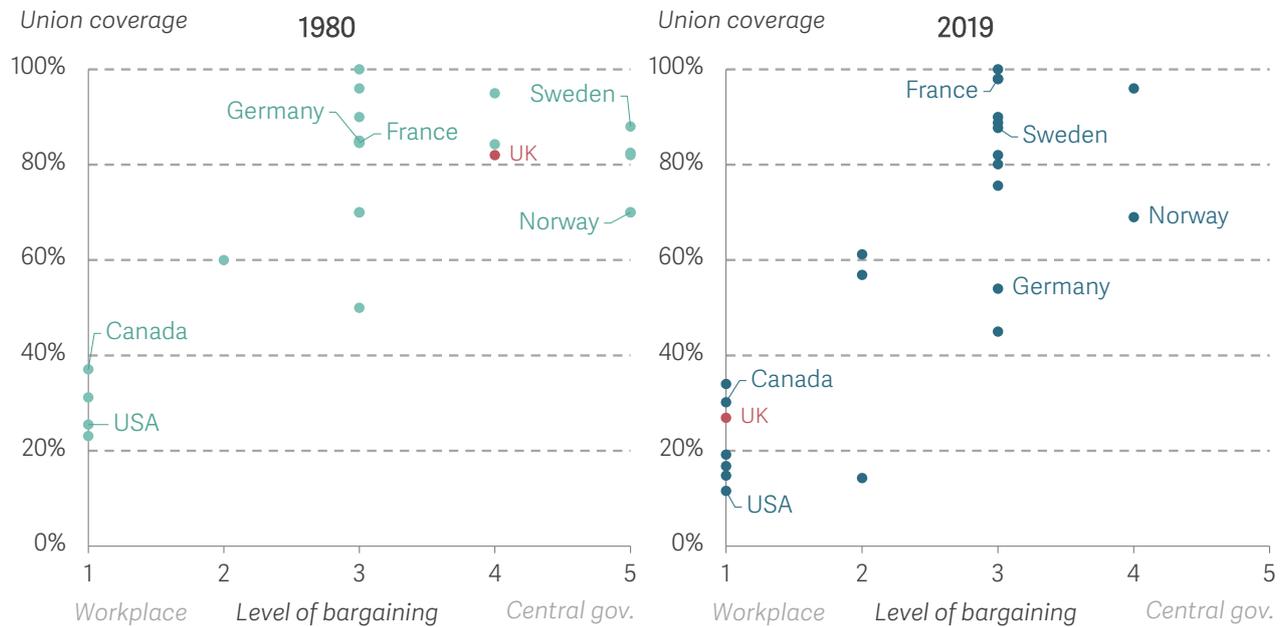
¹⁶ This number is for 1984 and comes from our own analysis of WIRS 1984. Only establishments with at least 25 employees are considered.

¹⁷ This number is for 2011 and comes from our own analysis of WIRS 2011. Only establishments with at least 25 employees are considered.

¹⁸ Department for Business, Energy & Industrial Strategy, [Trade union membership 2021: statistical bulletin](#), May 2022.

FIGURE 3: The UK’s collective bargaining system has become decentralised and union coverage has fallen sharply

Proportion of workers who are covered by collective bargaining agreements and the level at which bargaining takes place, by year and country



SOURCE: Analysis of OECD/AIAS ICTWSS Database.

Even within the (shrinking) union sector then, UK workers have experienced a big change in the level at which they can bargain. Within one generation, the UK has gone from a country with high union density and centralised bargaining, to one of weak unions and decentralised bargaining. Only Ireland, New Zealand and post-communist countries have experienced similar changes.

Despite low unemployment increasing worker power, wider labour market trends may be narrowing workers’ outside options

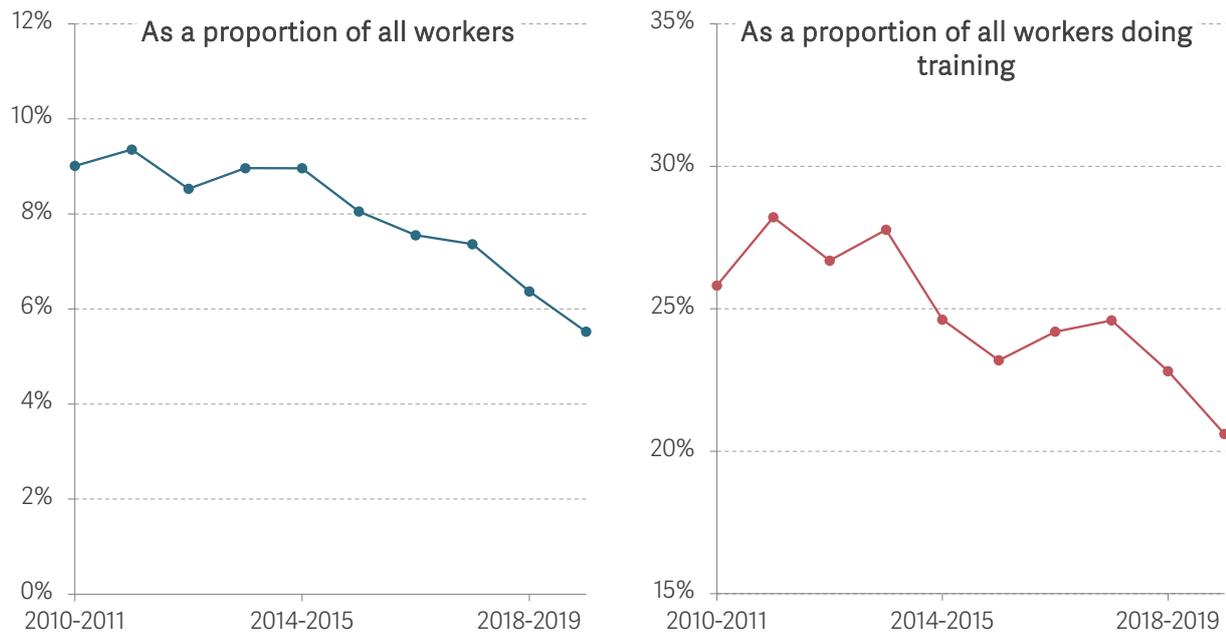
As bargaining has become more individualised, other forms of worker power – such as outside options, or the extent to which workers can easily switch to another job if they are not happy with their pay or conditions – have become more important. On the one hand, relatively low levels of unemployment and a tight labour market in the run-up to the Covid-19 crisis put workers in a strong position.¹⁹ As unemployment fell from a post-financial crisis peak of 8.1 per cent in 2011 (still well below the peaks of the 1980s and 1990s recessions) to near-record lows of less than 4 per cent on the eve of the pandemic, the ratio of vacancies to unemployment also fell to the lowest levels since at least the

¹⁹ The 16-plus unemployment rate averaged 9.9 per cent in the 1980s and 8.2 per cent in the 1990s, compared to 5.4 per cent in the 2000s and 6.0 per cent in the 2010s, falling below 5 per cent in every year since 2015. See: Office for National Statistics, Unemployment rate (aged 16 and over, seasonally adjusted): %, June 2022.

early 2000s (when comparable data began).²⁰ This means workers had more outside options, giving them more power relative to firms, who faced greater competition for workers. But other changes in the labour market may be reducing worker power by giving workers fewer alternatives to staying in their current job.²¹

FIGURE 4: Workers are getting less training to prepare for a future job

Proportion of workers doing training 'to prepare you for a job you might do in the future': UK



NOTES: Includes both employees and self-employed workers aged 16-64, but excludes full-time students. The survey questions ask workers about the training completed since the previous interview (usually one year earlier); the sample therefore contains only workers who have been interviewed previously, and we reweight the data to take account of differential attrition rates. Each data point covers two calendar years, and the latest data point covers 2019-2020.

SOURCE: Analysis of ISER, Understanding Society.

First, a decline in job-related training may be limiting workers' abilities to find a new job with better pay. Over the first two decades of the 21st century, the share of workers receiving 'off the job' training fell by more than one-third (35 per cent), and has recovered only marginally since.²² This trend is mirrored in the share of workers doing training that they say is preparing them for a future job, which has fallen by two-fifths (39 per cent)

²⁰ See: N Cominetti, [A record-breaking labour market – but not all records are welcome](#), Resolution Foundation, February 2020, which shows that the labour market reached record tightness on several measures in the run-up to the Covid-19 pandemic.

²¹ It is worth noting that it is not just workers' actual outside options that are important for wage bargaining and worker power: workers' *beliefs* about their outside options are also important. Recent research in Germany has found that workers – particularly the low paid – typically underestimate their outside options, which (all else equal) reduces their power in the labour market. See: S Jäger et al., [Worker Beliefs About Outside Options](#), CESifo Working Paper No. 9508, January 2022.

²² The proportion of workers receiving 'off the job' training in the past four weeks – which we focus on in preference to 'on the job' training, which is defined in the Labour Force Survey as 'learning by example and practice while actually doing the job' – declined from 10.2 per cent in the year to Q1 2002 to 6.6 per cent in the year to Q1 2019, and stood at 7.2 per cent in the year to Q4 2021. See the Scorecard in: N Cominetti et al., [Labour Market Outlook Q1 2022: How should we interpret strong nominal earnings growth?](#), Resolution Foundation, April 2022.

over the past decade (see the left-hand panel of Figure 4).²³ And as the right-hand panel of Figure 4 shows, the fall in training to prepare for a new job is not just a consequence of the decline in training overall. The proportion of all training that is to prepare for a new job has also dropped, from a high of 28 per cent in 2011-2012 to 21 per cent in 2019-2020.

This lack of training is a particular problem for low-paid workers: as well as receiving less training overall, people in low-paid jobs are less likely than higher earners to receive training that would be useful elsewhere.²⁴ In 2017, just one-in-five (18 per cent) of those in the bottom quartile of weekly pay had received training in the past year that would be useful at another firm in the same industry, compared to two-fifths (43 per cent) of workers in the top pay quartile (making the highest earners 2.4 times more likely to receive transferrable training). And the highest-paid quartile were three times more likely than the lowest-paid to receive training that would be useful if they were to switch sector (36 per cent vs 12 per cent).²⁵ This lack of training is likely to compound the difficulties that low earners face in moving to a better-paid job,²⁶ as well as limiting their ability to bargain for higher pay with their current employer.²⁷

Second, the non-wage aspects of other jobs may be becoming less attractive to workers relative to their current role. At the lower-paying end of the labour market, insecure work is becoming ever more prevalent,²⁸ and workers may be reluctant to take the risk of leaving a secure, permanent job.²⁹ And across all pay levels, workers starting a new job often lack basic employment rights that those with longer job tenures take for granted: workers are now only protected against unfair dismissal after two years in continuous employment, up from one year prior to 2012.³⁰

Finally, the ultimate outside option for a worker is to leave work altogether and become unemployed. But this outside option has become less attractive over time, as basic

²³ See also Figure 3 in: K Henehan, [Can training help workers change their stripes? Retraining and career change in the UK](#), Resolution Foundation, August 2020, which shows that training received by adults with lower-level qualifications is more likely to centre on health and safety and maintaining occupational standards rather than improving skills.

²⁴ For an overview of the pay gradient in who gets work-related training, see, for example: N Cominetti, L Marston & L Try, [Workertech and low pay: An overview of research on low-paid workers in the UK](#), Resolution Foundation, July 2021.

²⁵ Source: Analysis of Skills and Employment Survey.

²⁶ See: C D'Arcy & D Finch, [The Great Escape? Low pay and progression in the UK's labour market](#), Resolution Foundation, October 2017, which shows that only a minority of low-paid workers manage a sustained 'escape' from low pay over a ten-year period.

²⁷ See also: K Handscomb, L Judge & H Slaughter, [Listen up: Individual experiences of work, consumption and society](#), Resolution Foundation, February 2019; J Antonio Llosa et al., [Job insecurity and mental health: A meta-analytical review of the consequences of precarious work in clinical disorders](#), *Anales de Psicología* 34(2), April 2018. And while in theory greater labour market flexibility could also give workers a higher number of outside options by increasing employment, UK evidence has found no link between the level of unstable jobs in a worker's local labour market and their probability of moving from unemployment into work. See: S Avram, [Labour market flexibility and unemployment duration: evidence from the UK](#), ISER Working Paper No. 2020-11, October 2020.

²⁸ N Cominetti et al., [Low Pay Britain 2022: Low pay and insecurity in the UK labour market](#), Resolution Foundation, May 2022.

²⁹ Some people may benefit from the flexibility offered by atypical forms of work (such as zero-hours contracts or agency work). Overall, however, insecure work has been linked to lower subjective well-being and an increased prevalence of mental health conditions. See, for example: G Bangham, [Happy now? Lessons for economic policy makers from a focus on subjective well-being](#), Resolution Foundation, February 2019; J Antonio Llosa et al., [Job insecurity and mental health: A meta-analytical review of the consequences of precarious work in clinical disorders](#), *Anales de Psicología* 34(2), April 2018. And while in theory greater labour market flexibility could also give workers a higher number of outside options by increasing employment, UK evidence has found no link between the level of unstable jobs in a worker's local labour market and their probability of moving from unemployment into work. See: S Avram, [Labour market flexibility and unemployment duration: evidence from the UK](#), ISER Working Paper No. 2020-11, October 2020.

³⁰ HM Government, [The Unfair Dismissal and Statement of Reasons for Dismissal \(Variation of Qualifying Period\) Order 2012](#), March 2012.

unemployment benefits have fallen as a share of average earnings.³¹ As a result of unemployment benefits not being linked to previous earnings, high earners have the greatest amount to lose from moving from work onto Universal Credit: a worker in the top income decile will typically get just 47 per cent of their previous income in the event of unemployment. But low earners have seen the biggest falls in their income replacement rates over the past decade, from 82 per cent to 71 per cent among the lowest income decile.³² As well as reducing workers' bargaining power, the evidence suggests that less-generous unemployment benefits also reduce the quality of matches as workers are pushed into taking sub-optimal job offers.³³

The National Minimum Wage has helped to protect the lowest-paid workers

Against this backdrop of decollectivisation and diminishing outside options, another shift in labour market institutions took place in 1999, with the introduction of the National Minimum Wage (NMW). While the main rationale of minimum wages is to protect the wages of the low paid, they at the same time can be thought of as offsetting workers' lost power. By determining a legally binding floor for hourly wages, the NMW ensures that firms cannot push wages below a certain level. In a textbook world of perfect competition, the main cost of minimum wage would be reduced employment – but there is little evidence for this happening in practice in the UK, even as the minimum wage rose rapidly.³⁴

The introduction of the minimum wage represented a substantial change to the UK's labour market institutions. Figure 5 shows that, within one generation, the UK has moved from being a country of high union coverage, but no minimum wage (upper-left quadrant), to a country with low unionisation, but a generous minimum wage (bottom-right quadrant).³⁵

³¹ The level of unemployment benefits as a share of average earnings is set to fall below 14 per cent by 2024-25, half the value in the early 1970s (28 per cent). See Figure 4 of: M Brewer et al., [Social Insecurity: Assessing trends in social security to prepare for the decade of change ahead](#), Resolution Foundation, January 2022.

³² See Figure 15 of: M Brewer et al., [Social Insecurity: Assessing trends in social security to prepare for the decade of change ahead](#), Resolution Foundation, January 2022. These figures exclude temporary support this year in response to the cost of living crisis.

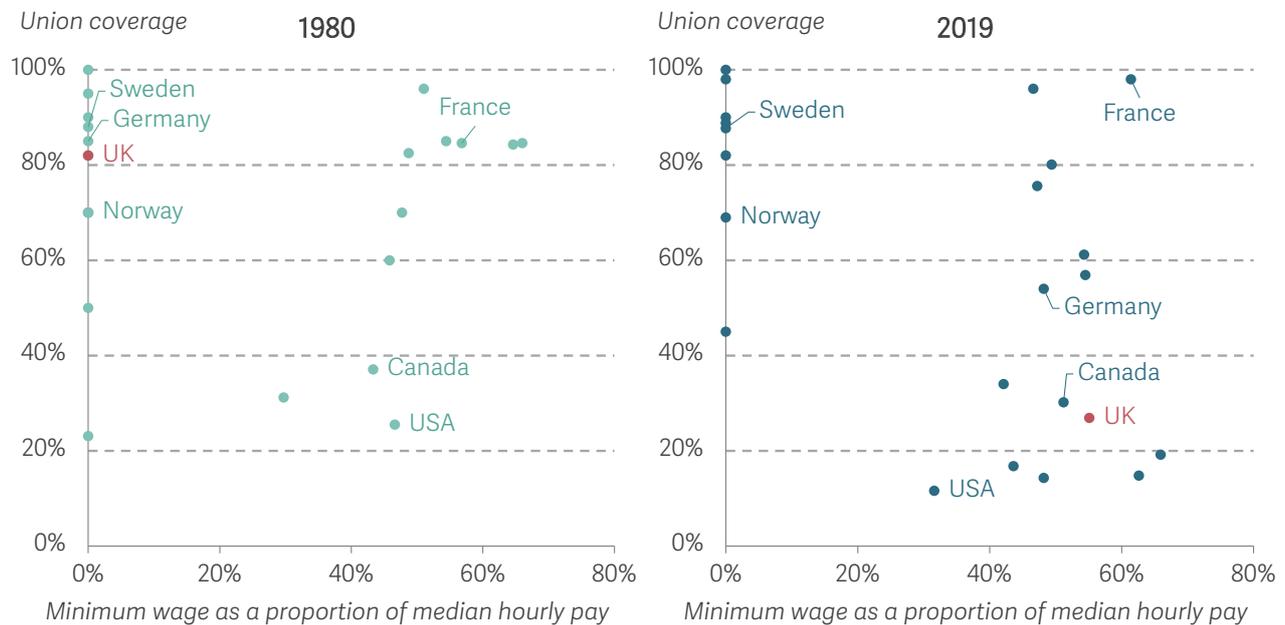
³³ See, for example: G Dahl & M Knepper, [Unemployment Insurance, Starting Salaries, and Jobs](#), NBER Working Paper 30152, June 2022.

³⁴ A Dube, [Impacts of minimum wages: review of the international evidence](#), HM Treasury & Department for Business, Energy & Industrial Strategy, November 2019. This has been traditionally interpreted as a sign that labour markets are not perfectly competitive and minimum wages have been able to set wages for low-paid workers at the competitive level. See, for example: D Card & A Krueger, [Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania](#), *American Economic Review* 84(4), September 1994; S Machin & A Manning, [Employment and the introduction of a minimum wage in Britain](#), *Economic Journal* 106(436), May 1996.

³⁵ Figure 5 first appeared in: G Giupponi & S Machin, [Labour market inequality](#), IFS Deaton Review of Inequalities, March 2022.

FIGURE 5: The minimum wage has increased substantially, while UK has bargaining coverage has declined

Proportion of workers who are covered by collective bargaining agreements and the ratio of minimum wage to median earnings of full-time employees, by country



SOURCE: G Giupponi & S Machin, Labour market inequality, IFS Deaton Review of Inequalities, March 2022.

It would be wrong, however, to interpret unions and the minimum wage as substitutes. In some sense, through the introduction of the NMW, state power filled in for lack of worker power. However, the NMW is not able to replace unions. Low-wage workers are less likely to be covered by union agreements and thus benefit from minimum wage legislation. Instead, unions mainly cater to mid- or high- skill workers. From this perspective, the two institutions jointly protect the power of workers across the wage distribution. The minimum wage is not a result of bargaining between workers, firms, and the government. As such, the minimum wage does not equip low-skilled workers with collective voice and political power. Finally, non-monetary work conditions, that would fall under union bargaining, are not addressed by minimum wage legislation.

As the power of workers has declined, employers and managers have taken a more active role in wage-setting

Worker power, then, has diminished substantially over the last four decades, with a decline in collective bargaining and the attractiveness of outside options, albeit with the introduction of protections for low earners in the form of the NMW. But when considering the balance of power in the labour market, it is also important to consider the power of firms. In this section, we turn to how employers have been responding to the decollectivisation of the workforce.

As unions declined, wage setting increasingly became a domain of company and workplace managers. We use questions about the way pay is set for various occupational groups available in WIRS/WERS surveys to illustrate the rise of managerial power. Table 2 shows the fraction of establishments larger than 10 employees which set wages of some occupation group by management, as opposed to collective bargaining, individual negotiations (not shown) or pay review bodies (not shown). In 2011, in 78 per cent of workplaces, managers set wages for some occupational groups – an 8-percentage-point increase compared to 1998. And the rise was entirely driven by the private sector, where management wage setting is present in 87 per cent of establishments. In contrast, wage setting in public sector workplaces is dominated by collective bargaining and its importance is growing.

TABLE 2: **Managerial power in wage setting**

Proportion of establishments with 10 or more employees, by type of wage setting: UK

	1998			2011		
	Public	Private	All	Public	Private	All
Any collective bargaining	61%	16%	27%	77%	8%	17%
Any set by management	29%	83%	70%	18%	87%	78%

NOTES: Specifies whether establishment uses the specified method as primary method of pay determination for any of its seven occupational groups.

SOURCE: Analysis of BEIS, Workplace Industrial Relations Survey and Workplace Employment Relation Survey.

The nature of worker voice at British establishments has shifted from unions to management-led practices. Directly involving workers in decision making and improving communication between them and employers might be beneficial for both employees (through higher job satisfaction, wages) and businesses (through higher productivity and innovation). Traditionally, some of those aims used to be achieved by unions³⁶ and other more formal bodies with union representatives, such as Joint Consultative Committees (JCCs).³⁷ However, as shown in Table 3 (looking at establishments with 25 or more employees), recent decades have witnessed a substantial rise in HR management (HRM) practices, which is an umbrella term for a variety of management-led initiatives, such as team briefings, regular meetings with senior management, management chains

³⁶ R Freeman & J Medoff, *What do unions do?*, Basic Books, 1984; S Machin & S Wood, *Human Resource Management as a Substitute for Trade Unions in British Workplaces*, Industrial and Labor Relations Review, 2005.

³⁷ P Willman, R Gomez & A Bryson, *Voice at the workplace: where do we find it, why is it there and where is it going?*, in W Brown et al. (eds), *The Evolution of the Modern Workplace*, Cambridge University Press, 2009.

or suggestion schemes. Particularly important is a surge in HRM practices between the 1980s and 2011: in 1984, around 35 per cent of establishments had regular meetings between workers and junior or senior managements; by 2011, this had risen to 85 per cent. This contrasts with the use of representative voice (that is, one or more workers representing others), such as JCCs, which declined from 34 per cent during the 1980s to 23 per cent in 2011.

TABLE 3: **Managerial-led practices have risen as unions have declined**

Proportion of establishments with 25 or more employees who use HRM practice and JCCs: UK

	1980	1984	1990	1998	2004	2011
Team briefings	-	36%	48%	53%	72%	85%
Meetings with senior management	-	34%	41%	57%	80%	85%
Management chain	-	62%	60%	60%	74%	71%
Suggestion schemes	-	25%	28%	33%	35%	37%
Joint Consultative Committee	34%	34%	29%	29%	24%	23%

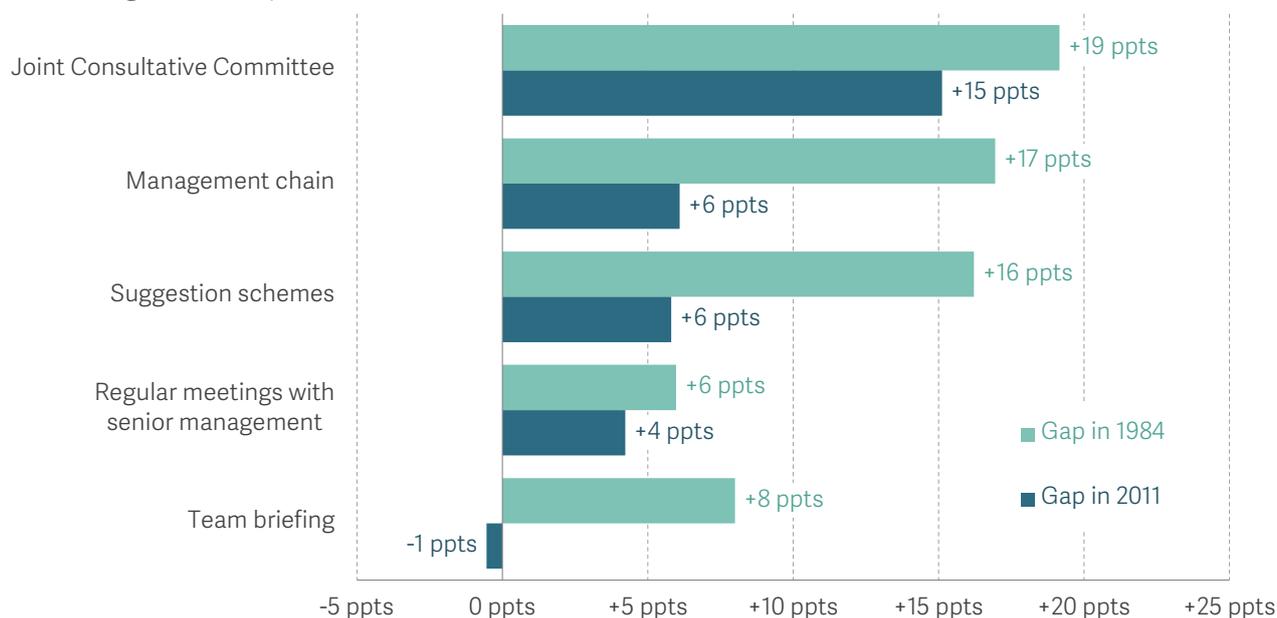
SOURCE: Analysis of Workplace Industry Relation Survey and Workplace Employment Relation Survey.

The increasing use of HRM practices, however, does not seem to be a substitute for union activities. Stronger unions in the past could have resisted HRM practices on the ground that they would give the management control over the voice of workers. The decline of unions weakened this resistance, but HRM practices did not replace the role of unions. Following and updating Machin and Wood, Figure 6 shows that unionised establishments are more likely to use HRM practices and have JCCs, but in 2011 to a lesser extent than in 1984.³⁸ For instance, in 1984, the usage of meetings between workers and senior managements in unionised workplaces was 6 percentage points higher than non-unionised workplaces; in 2011, the gap fell to 4 percentage points. On the other hand, the large and positive gap in the existence of JCCs between unionised and non-unionised workplaces is not surprising, given that unions might prefer this method of consultation, rather than management-led practices.

³⁸ S Machin & S Wood, *Human Resource Management as a Substitute for Trade Unions in British Workplaces*, Industrial and Labor Relations Review, 2005.

FIGURE 6: HRM practices are unlikely to be substitutes for unions

Percentage point gap between establishments with and without unions in terms of the usage of HRM practice and JCCs: UK



SOURCE: Analysis of BEIS, Workplace Industry Relation Survey and Workplace Employment Relation Survey.

Evidence is mixed on how monopsony power has changed

Finally, a key measure of the power that employers have to set wages is the extent of monopsony power: the extent to which a lack of competition allows firms push down wages below their competitive level.³⁹ This is a topic that has seen renewed interest globally in recent years, and in Box 3 we briefly review the international evidence.

BOX 3: International evidence on monopsony power

The international literature on the extent of monopsony power, and the impact on wages, has grown substantially in recent years – and while this paper focuses on the UK, evidence from other countries can provide a useful contribution to the evidence base.

Much of the recent literature focuses on the US. Using US census data, Benmelech, Bergman and Kim find a negative relationship between employer concentration and wages in local labour markets; they also find that the relationship is stronger at higher levels of labour market concentration and has

³⁹ A Manning, *Why we need to do something about the monopsony power of employers*, LSE Phelan US Centre, September 2020.

been increasing over time.⁴⁰ Similarly, Azar, Marinescu and Steinbaum find a negative relationship between employer concentration – this time measured using job vacancy postings – and posted wages.⁴¹ And Schubert, Stansbury and Taska find that moving from the median to the 95th percentile of employer concentration reduces wages by an average of 2.6 per cent – but that this is almost three times higher (7.3 per cent) for workers in the lowest quartile of occupational mobility (that is, those workers who are least likely to switch occupations when they move jobs).⁴²

The international literature is also beginning to consider monopsony power in tandem with some of the forms of worker power discussed earlier in this briefing note, particularly unions.⁴³ For example, a recent Norwegian paper by Dodini, Salvanes and Willén shows that the union wage premium is far larger in highly concentrated labour markets, suggesting that a key role of unions is to counterbalance monopsony power. In fact, the authors estimate that a high enough level of union density (63 per cent, in the context of Norway) can eliminate the negative impact of employer concentration on wages.⁴⁴

One way of measuring monopsony power is to use the separation elasticity – that is, the extent to which workers switch readily between employers in response to small wage differences between them. Recent evidence from the UK suggests that the separation elasticity has been falling since the late 1990s, as workers stay with firms even when they could get a higher wage elsewhere, implying a rise in monopsony power over the past two decades.⁴⁵ This is consistent with evidence suggesting that firms' market power more generally has been rising: price mark-ups have risen substantially since the mid-1990s.⁴⁶

By contrast, other evidence suggests that the extent of employer concentration in local labour markets may have changed very little. Labour market concentration is a commonly used proxy for the power that firms have to set workers' wages, and several

⁴⁰ E Benmelech, N Bergman & H Kim, [Strong Employers and Weak Employees: How Does Employer Concentration Affect Wages?](#), NBER Working Paper 24307, February 2018.

⁴¹ J Azar, I Marinescu & M Steinbaum, [Labor Market Concentration](#), *Journal of Human Resources* 57(4), May 2020.

⁴² G Schubert, A Stansbury & B Taska, [Employer Concentration and Outside Options](#), Washington Center for Equitable Growth Working Paper, March 2022.

⁴³ For UK research that combines monopsony with collective bargaining coverage (discussed later in this section), see: W Abel, S Tenreyro & G Thwaites, [The balance of power: monopsony unions and wages in the United Kingdom](#), August 2020.

⁴⁴ S Dodini, K Salvanes & A Willén, [The Dynamics of Power in Labor Markets: Monopolistic Unions versus Monopsonistic Employers](#), CESifo Working Paper No. 9495, December 2021.

⁴⁵ See Figure 3(a) of: M Langella & A Manning, [Marshall Lecture 2020: The Measure of Monopsony](#), *Journal of the European Economic Association* 19(6), December 2021.

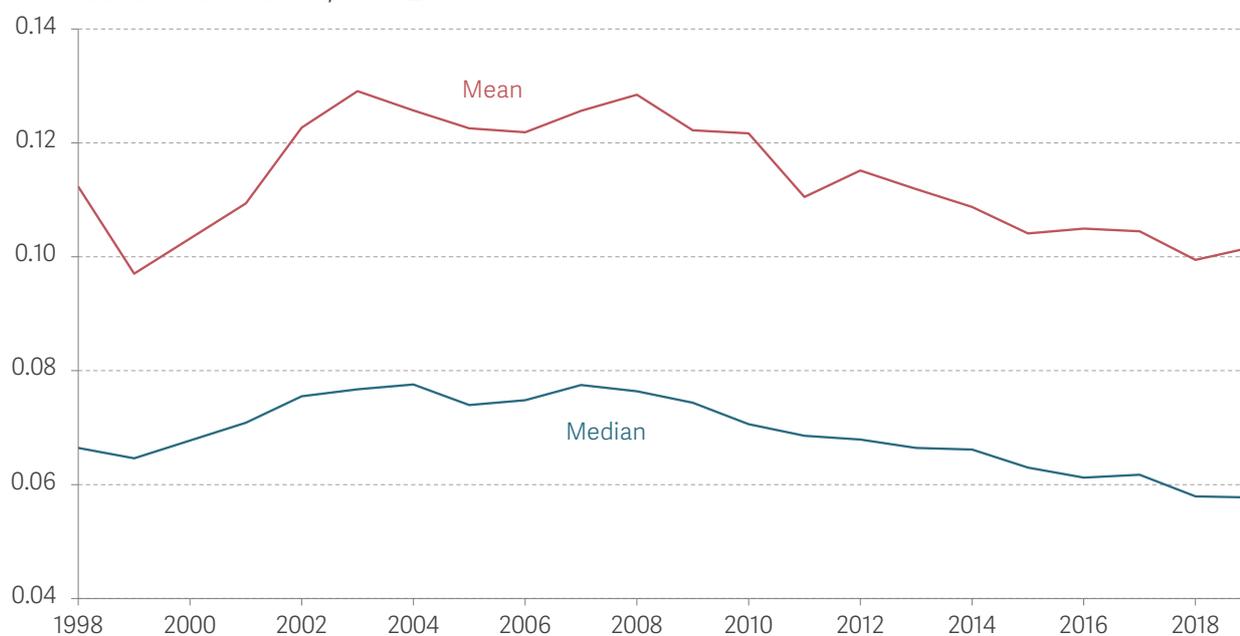
⁴⁶ J De Loecker, T Obermeier & J Van Reenen, [Firms and inequalities](#), IFS Deaton Review of Inequalities, March 2022. The authors do, however, assume that there is no market power over inputs when calculating this mark-up. Given that in practice, firms may have market power over the price of labour, this is a caveat in the context of our paper.

studies have found that higher employer concentration is associated with lower wages – see, for example, those cited in Box 3. But some observers think it is a poor one.⁴⁷

Recent research from the UK has found that the average concentration of employers in UK local labour markets is at roughly the same level as 1998: labour markets became somewhat more concentrated in the run-up to the financial crisis, but this trend subsequently went into reverse, and by 2017 had returned to similar levels to two decades earlier.⁴⁸ In Figure 7, we extend this analysis and show that that firm concentration remained lower than 1998 levels through to 2019.

FIGURE 7: Labour market concentration rose prior to the financial crisis, but has since fallen

Mean and median concentration (Herfindahl-Hirschman) index across region-industry labour markets: UK, 1998-2019



NOTES: This chart replicates and extends Figure 1 of: W Abel, S Tenreyro & G Thwaites, *The balance of power: monopsony, unions and wages in the United Kingdom*, August 2020. Labour markets are defined at the NUTS2 region x industry (at the two-digit SIC level) level.

SOURCE: Analysis of ONS, Annual Survey of Hours and Earnings.

⁴⁷ For example: other factors, such as labour market tightness, are also important for wages; concentration is correlated with other factors affecting the supply of labour, and so it is difficult to separate out its independent effect; and measuring concentration without taking into account movements across geographical boundaries tends to overstate the concentration of the local labour markets that workers face in practice. See: A Manning & B Petrongolo, *Monopsony in local labour markets*, IFS Deaton Review of Inequalities, March 2022.

⁴⁸ W Abel, S Tenreyro & G Thwaites, *The balance of power: monopsony, unions and wages in the United Kingdom*, August 2020.

While Figure 7 suggests that firm power, at least as proxied for by market concentration, is not rising over time, it did rise before the financial crisis. In addition, the impact of concentration on wages is greater for some groups of workers, notably those already on lower pay. First, lower earners tend to face more concentrated labour markets in the first place: previous Resolution Foundation research found that the lowest-paid workers are around two-thirds more likely to work in one of the top 20 largest firms, by employee size, than the highest-paid.⁴⁹ And second, lower-skilled workers (who tend to be lower-paid) face a greater hit to their wages when they work in more-concentrated labour markets than those in higher-skilled occupations.⁵⁰

Crucially, however, evidence from the UK and elsewhere has shown that a greater level of firm concentration only pushes down wages for workers whose pay is not set by a collective bargaining agreement (CBA) – or, put differently, collective bargaining appears to protect workers from the wage impacts of monopsony power – reiterating the importance of considering labour market institutions, and the balance of power, from both the firm and worker perspectives together.⁵¹

Lower worker power relative to employers reduces wages

The evidence suggests that the balance of power has tipped in favour of firms, as worker power has declined while the trend in firm power is less clear. And this matters both for the level of wages and for their distribution.

As worker power declines relative to that of employers, firms are able to use their market power to pay workers less than their marginal product. It is difficult to measure the size of the shortfall (known as the ‘wage markdown’). But some indirect estimates based upon how quickly workers leave firms with low wages in the US – a labour market with a lower (and falling) labour share, a lower minimum wage, and less collective bargaining than the UK – suggest that wages could be between 15 and 20 per cent lower than they would be otherwise because of employer power over workers.⁵² (Recent evidence from the UK suggests an even higher wage markdown at one low-wage national firm, of between 20 and 25 per cent.⁵³)

⁴⁹ In 2017, 15 per cent of the low paid (those earning below two-thirds of typical hourly earnings) worked in a top 20 firm by number of employees, compared to 9 per cent of the highest-paid (those in deciles 9 and 10 of hourly pay). See Figure 16 of: C D’Arcy, *Low Pay Britain 2018*, Resolution Foundation, May 2018. Trends in this measure may be less informative because it will be distorted by changes to employment practices such as outsourcing.

⁵⁰ W Abel, S Tenreyro & G Thwaites, *The balance of power: monopsony, unions and wages in the United Kingdom*, August 2020.

⁵¹ W Abel, S Tenreyro & G Thwaites, *The balance of power: monopsony, unions and wages in the United Kingdom*, August 2020; S Dodini, K Salvanes & A Willén, *The Dynamics of Power in Labor Markets: Monoplistic Unions versus Monopsonistic Employers*, CESifo Working Paper No. 9495, December 2021.

⁵² M Langella & A Manning, *Marshall Lecture 2020: The Measure of Monopsony*, *Journal of the European Economic Association* 19(6), September 2021.

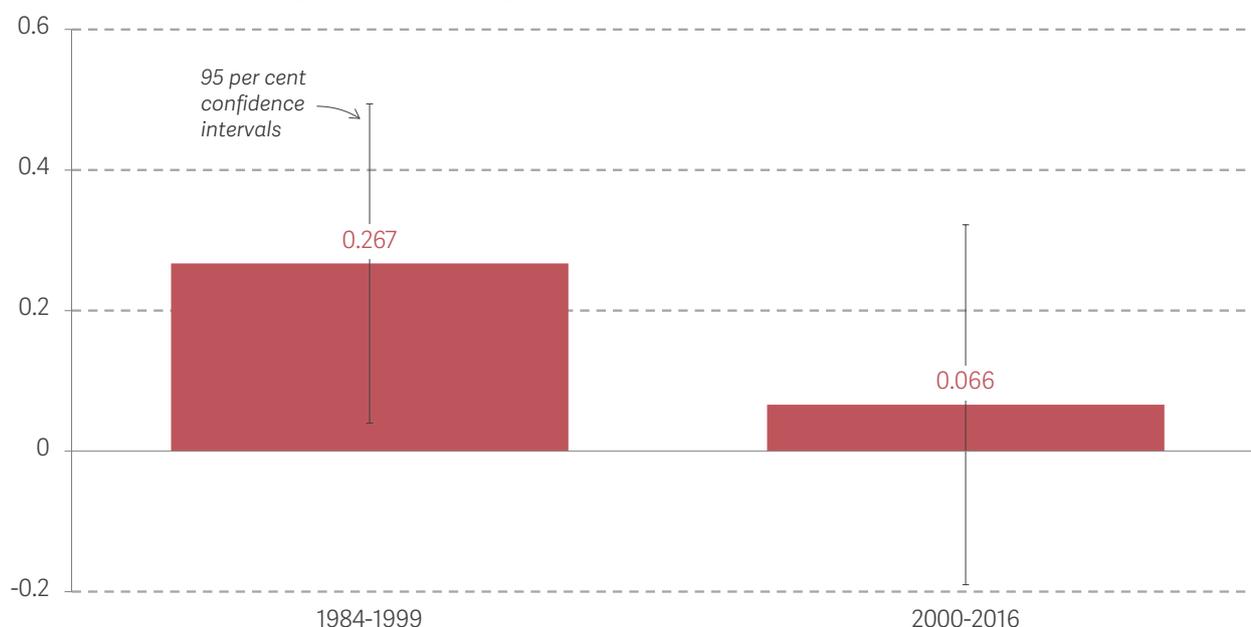
⁵³ N Datta, *Local Monopsony Power*, manuscript, 2022.

These estimates of the size of the surplus are extremely imprecise. But they suggest that employer market power could be having a large effect on wages: a wage markdown of 15 per cent, at the conservative end of the estimates above, would mean the average worker today is losing out on almost £100 a week.⁵⁴ What's more, UK estimates suggest that some indirect measures of the wage markdown have got bigger over time.⁵⁵

Even relatively small changes in the drivers of worker and firm power can have tangible impacts on wages. For example, research has found that moving from the 25th to the 75th percentile of employer concentration is associated with a 1.6 per cent decrease in workers' wages,⁵⁶ equivalent to £9 a week, or £470 a year, for the average worker.⁵⁷

FIGURE 8: Workers are participating less in companies' success

Pass-through coefficient between firm-level value added per worker and average wage, measured among the top 300 largest UK publicly listed companies: UK



NOTES: The IV second-stage results from first-differenced firm-level regression of log wages, log value added per, log average industry wage and year fixed effects. The instrument for log value added per worker is the Excess Stock Market Return value of patents.

SOURCE: B Bell, P Bukowski & S Machin, Decline in Rent Sharing, manuscript.

⁵⁴ Average weekly pay (excluding bonuses and arrears) was £562 in April 2022. If employers are marking down pay by 15 per cent, average weekly earnings would be £661 in the absence of employer power over workers – that is, average wages would be £99 a week higher. Source: Office for National Statistics, [AWE: Whole Economy Level \(£\): Seasonally Adjusted Regular Pay Excluding Arrears](#), June 2022.

⁵⁵ M Langella & A Manning, [Marshall Lecture 2020: The Measure of Monopsony](#), Journal of the European Economic Association 19(6), December 2021.

⁵⁶ W Abel, S Tenreyro & G Thwaites, [The balance of power: monopsony, unions and wages in the United Kingdom](#), August 2020.

⁵⁷ Average weekly pay (excluding bonuses and arrears) was £562 in April 2022. Source: Office for National Statistics, [AWE: Whole Economy Level \(£\): Seasonally Adjusted Regular Pay Excluding Arrears](#), June 2022.

Lower worker power and high firm power also mean that workers are participating less and less in their company's success. If workers have high bargaining power, they can appropriate a portion of economic rents accrued to the firm (e.g., on the product market). The decollectivisation of labour and the decline in the bargaining power of workers, might thus imply that a smaller piece of the economic rents is shared with workers.

This is consistent with Figure 8,⁵⁸ which presents evidence on the evolution of rent sharing in a sample of the top 300 largest UK publicly-listed companies.⁵⁹ Until 2000, the rent sharing coefficient was 0.27, implying that a 10 per cent increase in value added per worker increased wages by 2.7 per cent. Today, the rent sharing is almost four times lower and not statistically different from zero.⁶⁰

The decline of unions has increased wage inequality, but the NMW has protected the real wages of the lowest earners

Figure 9 shows that inequality between workers in terms of hourly pay has risen on some measures, particularly when we compare high earners to those further down the wage distribution.

We observe a rise of the 90th/10th percentile wage ratio between 1980 and the mid-1990s, followed by a period of stagnation and decline. Inequalities at the top (90th/50th percentile ratio) are more pronounced than those at the bottom half (50th/10th percentile ratio) of the distribution. The 90th/50th percentile ratio is stagnating over the period from the 2008-09 financial crisis onwards, whereas the 50th/10th percentile ratio shows a gradual, secular decline in inequality after 1999 – the year when the NMW was introduced.

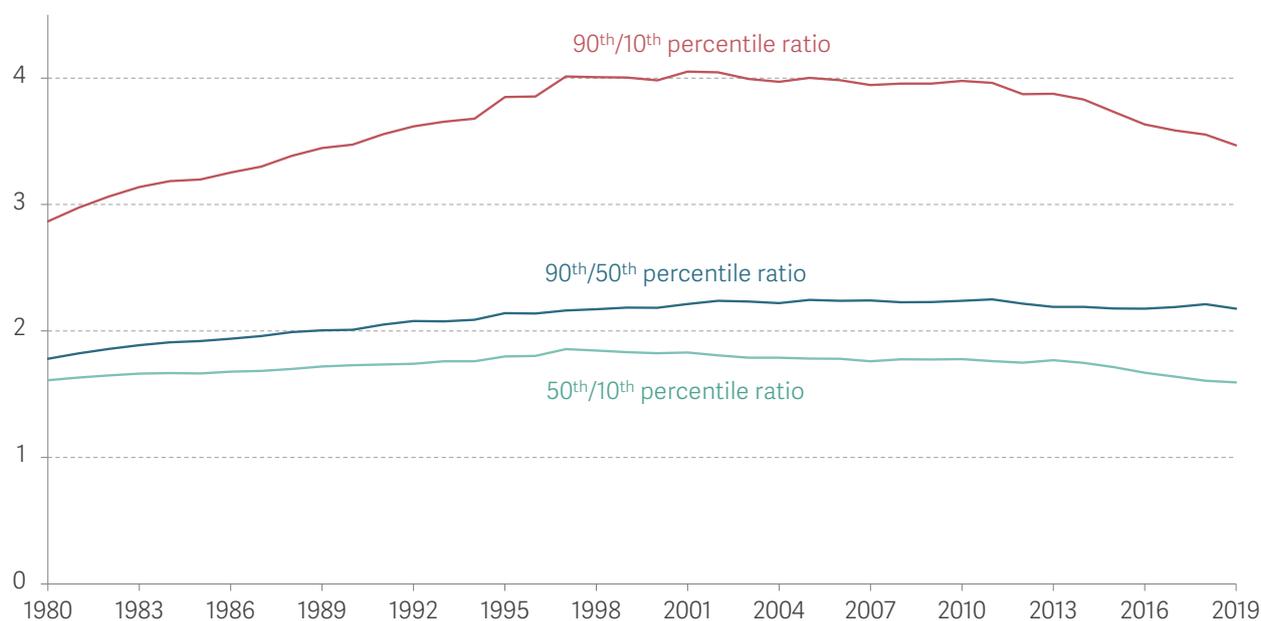
⁵⁸ B Bell, P Bukowski & S Machin, Decline in Rent Sharing, manuscript, 2022.

⁵⁹ Rent sharing is estimated as a firm-level relationship between value added per worker (a proxy for economic rents) and average wage.

⁶⁰ The decline in pass-through coefficient could be alternatively explained by a falling monopsonistic power of firms. Bell, Bukowski and Machin argue, however, that this is an unlikely explanation of their results.

FIGURE 9: Inequalities at the bottom reversed to the 1980 level, while at the top continued to grow

Percentile ratios of gross hourly wages of workers: GB



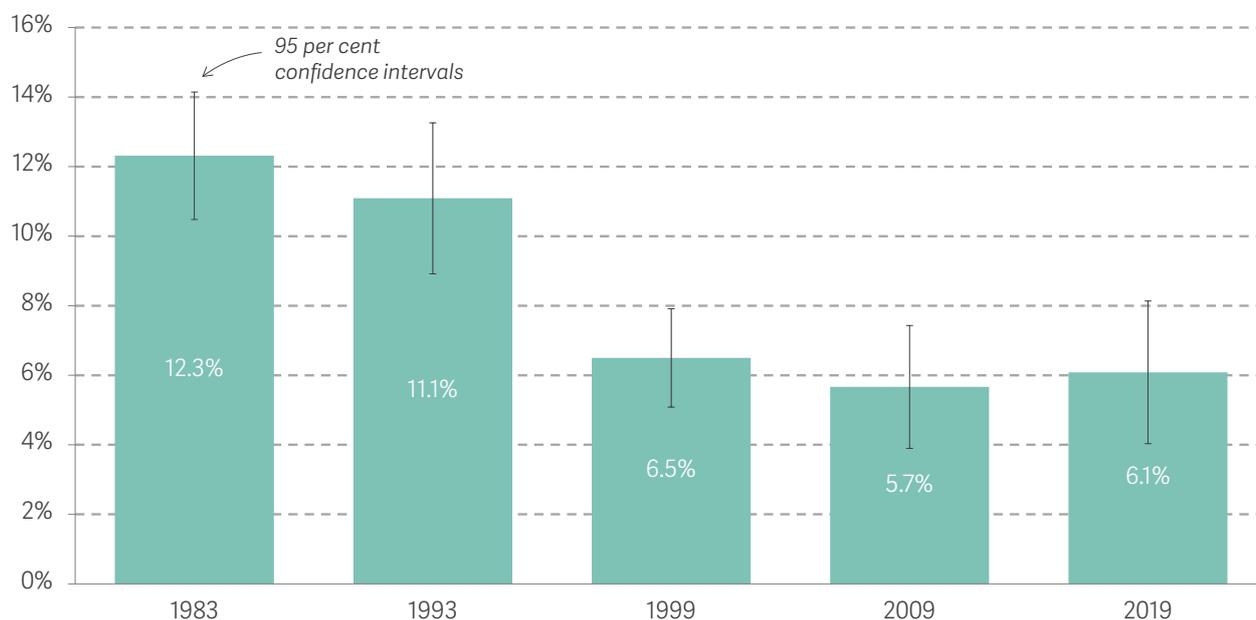
SOURCE: G Giupponi & S Machin, Labour market inequality, IFS Deaton Review of Inequalities, March 2022.

How do these trends relate to the shifts in worker/employer balance of power? In theory, the presence of unions has an ambiguous effect on wage inequality. On the one hand, unions increase the bargaining power of their members, which has a positive effect on wages of union members relative to non-members.⁶¹ This is illustrated by Figure 10, which reports the union hourly wage premium calculated after controlling for gender, type of work, age, ethnicity, education, industry and region. In 1983, on average, union members earned 12 per cent more than non-members – but this premium fell between 1993 and 1999 to 6 per cent and remains at more or less the same level since. Because union members are mostly recruited among those with medium and high skills, the existence of a positive (albeit declining) union wage premium implies that the decline in union density is overall an equalising force, all else equal. On the other hand, unions tend to equalise wages among their members by reducing wage gaps across skill groups, firms, and regions. This effect implies that the decline in union density might make wages less equal, as fewer workers are part of this compressed wage structure.

⁶¹ M Friedman, *Capitalism and Freedom*, University of Chicago Press, 1962; H G Lewis, *Unionism and relative wages in the United States: an empirical inquiry*, University of Chicago Press, 1963.

FIGURE 10: **The union wage premium has declined**

Difference between the hourly wages of union members and non-union members, after controlling for other characteristics: UK



NOTES: The union wage premium is calculated from regressions of log hourly wages on a union dummy and a set of control variables.

SOURCE: Analysis of ONS, Labour Force Survey; ONS, General Household Survey.

In practice, at a point in time unions tend to reduce wage inequality: the literature has shown that the effect of the within-union wage compression is stronger than that of the effect of union wage premium.⁶² In Figure 11, we reproduce the results from Giupponi and Machin, showing the proportion of the change in variance of hourly wages between 1983 and 2019 explained by the decline in union density.⁶³ If we assume that workers do not sort into union and non-union sectors based on other characteristics, the decline of unions explains one-third of the increase in wage inequality between 1983 and 2019 for males; and this effect for men declines to 17 per cent after taking into account the sorting of workers into unions. In contrast, for women the decline in unionisation explains only 4 per cent of the change in wage inequality before accounting for sorting of workers, and 1 per cent when we do account for sorting. The smaller effect is driven by a smaller decline in union membership for women than for men,⁶⁴ contrasted with a larger increase in wage inequality for women, both within-union and non-union sectors.

⁶² R Freeman, *Unionism and the Dispersion of Wages*, *Industrial and Labor Relations Review*, 1980; D Metcalf, K Hansen & A Charlwood, *Unions and the Sword of Justice: Unions and Pay Systems, Pay Inequality, Pay Discrimination and Low Pay*, *National Institute Economic Review* 176, April 2001; B Bell, P Bukowski & S Machin, *Decline in Rent Sharing*, manuscript; D Card, T Lemieux & W C Riddell, *Unions and wage inequality*, *Journal of Labor Research* 25, December 2004.

⁶³ G Giupponi & S Machin, *Labour market inequality*, IFS Deaton Review of Inequalities, March 2022.

⁶⁴ In 1983, the unionisation rate for women (34 per cent) was lower than for men (43 per cent), and a lot lower in the private sector.

FIGURE 11: The decline of unions explains a significant part of the growth of wage variance for men, but not for women

Proportion of the change in variance of hourly wages between 1983 and 2019 explained by the decline in union membership, by sex and measure: UK



NOTES: The basic decomposition assumes that workers do not sort into union and non-union sectors based on other characteristics; the adjusted version allows for selection into union jobs based on predicted quintiles of non-union earnings, age, education and ethnicity.

SOURCE: G Giupponi & S Machin, Labour market inequality, IFS Deaton Review of Inequalities, March 2022.

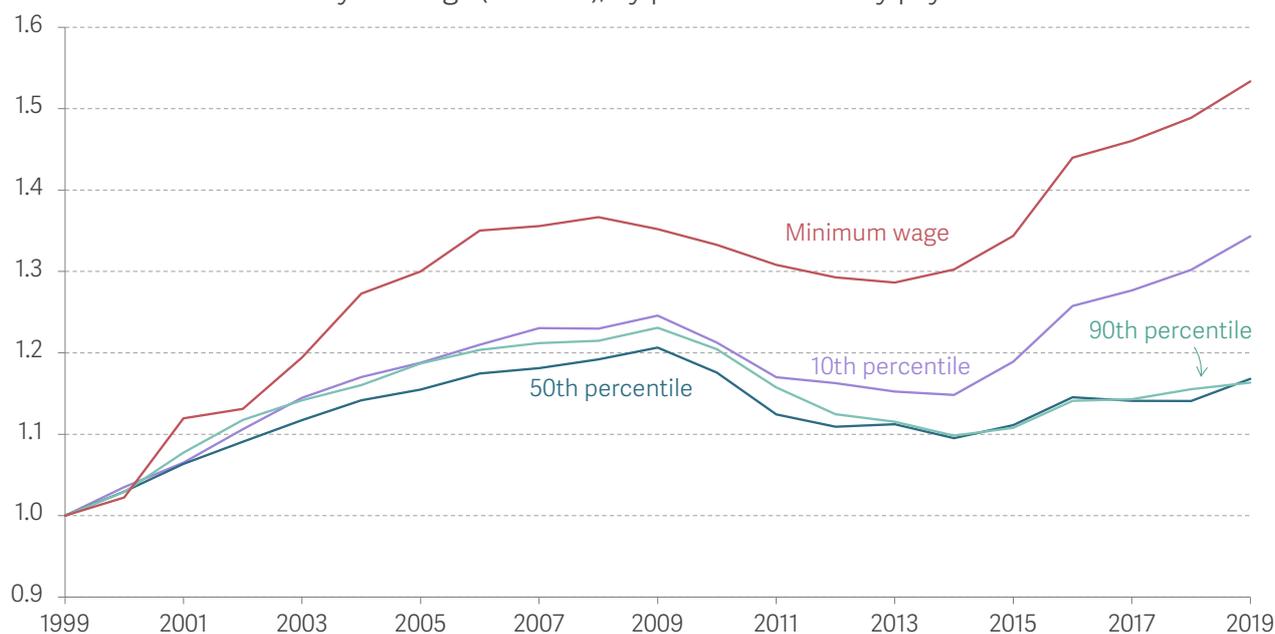
The NMW has prevented a rise in inequality at the bottom of the distribution

Even as the decline of unions has contributed to growing wage inequality overall, however, the introduction of the NMW has ensured a strong growth of real wages for low-paid workers and reduced inequalities at the bottom of the distribution. Figure 12 shows that the NMW has grown by more than 50 per cent since its introduction (from £3.60 per hour in 1999 to £8.21 in 2019).⁶⁵ The fact that real pay growth at the 10th percentile (of 35 per cent) was much faster than growth at 90th percentile and the median (around 18 per cent) over this period provides suggestive evidence that the NMW has boosted the wage growth of the lowest earners even in an era of weak real wage growth overall.

⁶⁵ Figure 12 first appeared in: G Giupponi & S Machin, *Labour market inequality*, IFS Deaton Review of Inequalities, March 2022.

FIGURE 12: **The minimum wage has driven up real wages at the bottom**

Growth of real hourly earnings (1990 = 1), by point in the hourly pay distribution: GB



SOURCE: G Giupponi & S Machin, Labour market inequality, IFS Deaton Review of Inequalities, March 2022.

It is clear that labour market institutions have played an important role in shaping the long-run evolution of UK economic inequalities. While the decline of unions has contributed to growing wage and income inequality, the introduction of the NMW has helped to fully reverse prior trends in inequality at the bottom of the distribution by boosting the real wage growth of the lowest earners. This shows that growing inequality is not an inevitable consequence of economic development, but can be counteracted by policy choices.

Conclusion

This briefing note has shown the scale of the changing balance of power, as the drivers of worker power have declined while those of employer power have at best remained constant, and perhaps increased. But it has also made clear that power shifts are both pushing down the level of wages and making their distribution more unequal. Given the scale of the impact, the nature of the balance between worker and firm power should be a core part of the UK's economic strategy.

THE ECONOMY 2030 INQUIRY

SHAPING A DECADE OF CHANGE

The UK is on the brink of a decade of huge economic change – from the Covid-19 recovery, to exiting the EU and transitioning towards a Net Zero future. The Economy 2030 Inquiry will examine this decisive decade for Britain, and set out a plan for how we can successfully navigate it.

The Inquiry is a collaboration between the Resolution Foundation and the Centre for Economic Performance at the London School of Economics. It is funded by the Nuffield Foundation.

For more information on The Economy 2030 Inquiry, visit
economy2030.resolutionfoundation.org.

For more information on this report, contact:

Hannah Slaughter

Senior Economist

hannah.slaughter@resolutionfoundation.org