Inequality

The IFS Deaton Review

Labour market inequality: a comparative political economy perspective

David R. Howell
Arne L. Kalleberg

An IFS initiative funded by the Nuffield Foundation

IFS Institute for Fiscal Studies

Nuffield Foundation

Labour market inequality: a comparative political economy perspective

David R. Howell (The New School) and Arne L. Kalleberg (University of North Carolina at Chapel Hill)

Introduction

Large and rising inequalities in wages, earnings and employment pose fundamental questions for social scientists and critical challenges for policymakers. In the canonical model of mainstream economists, these inequalities are explained by competitive market forces. In this view, workers of a particular quality can be assumed to be paid the same wage ('the law of one wage') – their marginal product – and consequently there are no rents (surplus) of importance to bargain over. This in turn requires that institutional or policy interventions that produce deviations from competitive outcomes must come at the cost of lower employment. Increasing pay inequalities in recent decades are explained by rising employer demands for cognitive skills driven by skill-biased technical changes in the workplace that are not adequately met by supplies of workers with relevant skills (Goldin and Katz, 2007; Machin and Van Reenen, 2007; Acemoglu and Autor, 2011, 2012). Evidence for this competitive market explanation has relied heavily on movements in the education–wage premium (the pay advantage to workers with at least a bachelor's degree) and job polarisation (the declining share of workers in routine-task occupations in the middle of the occupational wage distribution). The central policy recommendation follows directly: eliminate this skill mismatch with education and training programmes designed to build a more appropriately skilled workforce.

At the same time, much important empirical work on pay inequality in recent decades has recognised that most contemporary labour markets in rich countries are 'pervasively imperfectly competitive' (Manning, 2011, p. 1030). These imperfections translate into employer monopoly and monopsony power, resulting in rents that must be bargained over. This view – the 'economics of imperfect competition' – is one of a wide range of social science perspectives that put bargaining power at the centre of how labour markets work. This literature goes back at least to Adam Smith's 'The Wealth of Nations' (Chapter 8) and includes the work of Sidney and Beatrice Webb at the turn of the last century (Webb and Webb, 1897), the US industrial relations economists of the 1930s–1960s (see Kaufman, 1988), and contemporary scholars in the economic sociology, comparative politics and institutionalist traditions (e.g., Korpi, 1985; Granovetter, 2005; Streeck, 2005; Kaufman, 2010).

For simplicity and convenience, we group this broad set of bargaining power perspectives under a 'political economy' umbrella, distinguished by the view that modern labour markets are necessarily constituted by institutions, policies and market structures that determine the relative balance of power between employers and employees and that this balance is fundamental to labour market outcomes.[1] We underscore the social nature of this power by referring to it as

[1] It should be underscored that labour market institutions play fundamentally different roles for each of these perspectives on how labour markets function (Howell and Kalleberg, 2019). The canonical competitive market model

'institutional bargaining power'. Rising inequalities in this view reflect a combination of increasing employer market power and declining countervailing power of protective institutions and policies that support (directly or indirectly) the interests of workers. It follows from both the imperfect market and political economy visions that well-designed protective labour regulation can generate substantially more egalitarian outcomes with greater efficiency (e.g., employment performance).

From a comparative political economy perspective, we argue that the balance of bargaining power between employers and workers must be an essential part of a credible explanation for observed differences in the structure and change of national earnings distributions. We begin with an overview of pay inequality as measured by conventional earnings percentile ratios and wage growth trends in many developed (OECD) countries. We also present new incidence indicators for a smaller set of countries (four Anglophone countries and France), the decent- and poverty-pay shares of employment. These indicators are distinctive in that they can capture both the quality and inequality of pay in the bottom part of the earnings distribution and can be easily calculated for narrowly defined demographic groups across countries. We next consider empirical support for competitive market and political economy explanations of the growth of inequality and low-paying jobs. We critically assess the evidence on the education wage premium and employment polarisation for US wage inequality and then show that indices of institutional bargaining power can do an exceptionally good job of accounting for cross-country differences in bottom-end pay distributions, but at the same time are uncorrelated with cross-country employment performance, as measured by employment and unemployment rates. Our concluding discussion of policy implications emphasises the institutional and policy changes that could promote shared growth by raising pay quality and reducing pay inequality in the labour markets of rich countries.

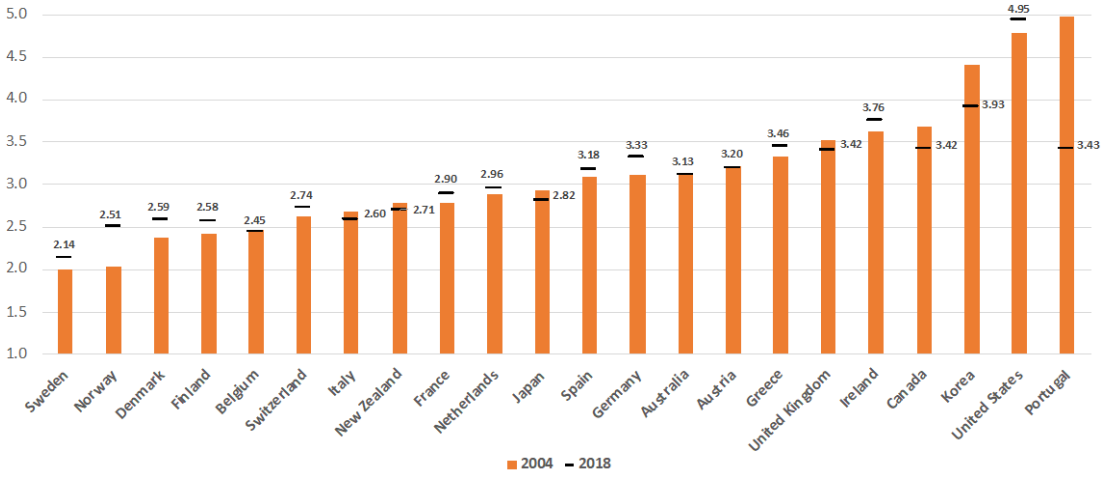
A quick tour of pay and employment inequalities in the rich world

Percentile ratios

Figure 1 shows the ratio of the 90th percentile earnings to the 10th percentile in 2004 and 2018 for 22 OECD countries, ranked by their 2004 levels. A key take-away is that country rankings have changed little: the US consistently reports the highest ratio (Portugal in 2004 appears as an exception), as it does for just about every standard inequality metric; other large Anglophone liberal market economy (LME) countries (Australia, Canada and the UK) show substantially lower levels of inequality but still tend to be located at the high end of the inequality spectrum. The four Scandinavian countries show 90:10 ratios at about half the US level.

assumes an institution-free market and that any institutional 'interventions' are necessarily inefficient. In contrast, models of imperfect competition treat them as potentially efficiency-enhancing in the face of important labour market frictions. Political economy perspectives understand protective institutions not only as potentially helpful remedies for market imperfections, but as the necessary, defining features of modern labour markets. In a recent Federal Reserve lecture, Alan Krueger (2018, p. 1) attempted to clarify this distinction: '[n]otice that I don't call these features "imperfections". They are the way the labour market works.'

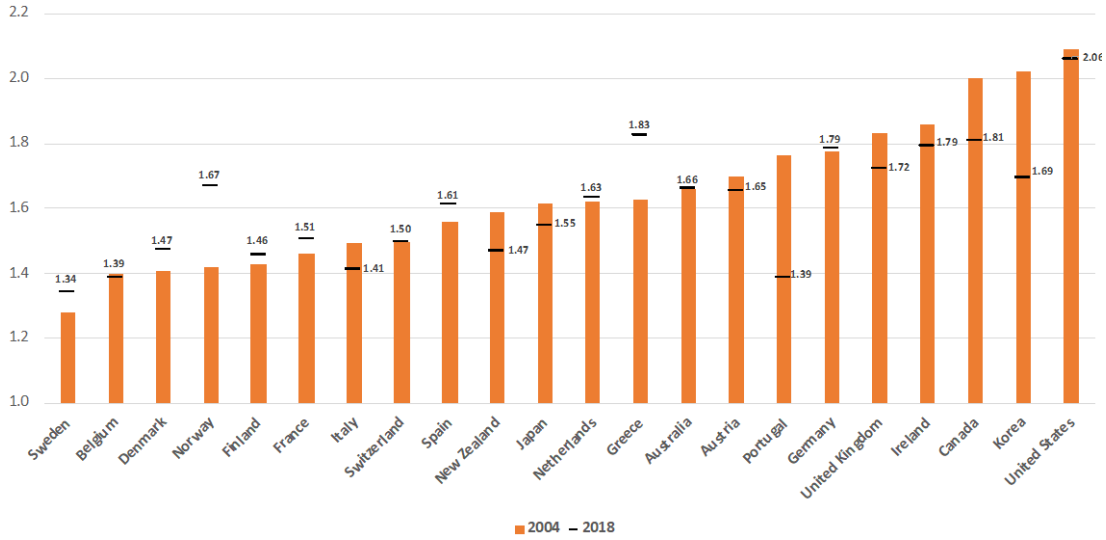
Figure 1. The 90:10 gross earnings ratio for 22 OECD countries, 2004 and 2018



Source: OECD, decile ratios (average weekly or for some countries monthly gross earnings).

Figure 2 reports that, with a 50:10 ratio of 2.06 in 2018, bottom-half earnings inequality in the US is also by far the highest, well above Canada and the UK (1.81 and 1.72) and far above France (1.51), Belgium (1.39) and Sweden (1.34). Figure 2 shows that bottom-half inequality fell in countries with the highest inequality (i.e., Canada, Ireland, South Korea, the UK and the US). In many other countries, there has been little change in the 50:10 ratio. But this stability or decline in bottom-half inequality can reflect a worsening of the entire bottom half (stability) or a larger decline in wages around the median than at lower wage levels (a kind of polarisation that appears as *declining* bottom-end inequality). For these reasons, the 50:10 wage ratio can fail to capture potentially important changes in the *quality* of pay distributions that likely matter most to working families in the post-1980 era – living standards made possible through work. This is particularly important for working families in countries with low levels of income and employment protection, and with little or no universal access to essential education, health and housing benefits (e.g., the US). Quality of pay is better measured by trends in real earnings and by the incidence of earnings quality, such as the conventional low wage share of employment. We discuss these alternative inequality metrics in the next two sections.

Figure 2. The 50:10 gross earnings ratio for 22 OECD countries, 2004 and 2018



Source: OECD, decile ratios (average weekly or for some countries monthly gross earnings).

Real earnings growth

In their 'Labour market inequality' chapter in the IFS Deaton Review, Giupponi and Machin (2022) show that real weekly wages increased across the UK distribution between 1980 and the 2008 financial crisis, as did inequality (see their Figures 1 and 2); the increase was persistently much greater at the 90th than the 50th percentile, and greater at the 50th than the 10th. As these figures indicate, UK wage performance has since collapsed, with real wages only beginning to return to their pre-crisis levels at the end of the 2010s.

Relying on data from Piketty, Saez and Zucman (2018), Howell and Kalleberg (2019, Figure 1) show that market incomes for US working-age adults followed a similarly striking growth in inequality between 1980 and 2014. As the economy (GDP per capita) grew by about 78%, top 1% incomes tripled, top 10% incomes more than doubled, the middle 40% (50th–90th) grew by just 40%, and the bottom 50% *fell* by 6%.[2]

Figure 3 offers a cross-country comparison of wage trends for young less-educated workers. Panels A and B report the 2000–14 change in the real median wage for young workers (aged 18–34) with less than a college degree, by gender, for five rich countries: France and four LME countries – Australia, Canada, the UK and the US. Two bars are shown for each country, one for all jobs and the other for the subset of poverty-pay jobs.[3] The results show that for young men and women, US performance has been exceptionally poor for both sets of jobs. Unlike the US, the other four countries all show positive wage growth at the median (the exception is for UK males).[4]

[2] These data are taken from the appendices to Piketty et al. (2018) and are annual, so they reflect working time as well as pay rates.

[3] Poverty-pay jobs are those that pay less than two-thirds of the median full-time wage ($13.33 for the US in 2017) or that offer inadequate hours, as measured by workers employed involuntarily part-time (see Howell, 2019, 2021a).

[4] These changes are measured by comparing the endpoints so they could mask different patterns over this period. It may be notable that for these young less-educated workers in the LME countries, the worst-paying (poverty-pay) jobs show better wage growth at the median than the entire set of jobs (with the slight exception of Canadian men), but this is not the case for France. These results may reflect the cross-country changes in the minimum wage, but it should be noted that the French median wage has steadily risen since 2000. Between 2010 and 2020, it rose from 9 to 10.15 euros (http://www.fredpayroll.com/minimum-wage-france/).

Figure 3. Changes in the real median wage for young workers (aged 18–34) without a college degree by gender for all jobs and for poverty-pay jobs for five countries, 2000–14

Panel A: female

Panel B: male

Source: Howell (2021a). Data are from national household surveys for 2000–14 except for Australia (2002 and 2013) and France (2000 and 2012).

Pay quality incidence indicators

Like comparisons of real wage trends at different points in the distribution, pay incidence indicators have direct implications for all three dimensions of personal well-being that Kalleberg (2018, p. 31) argues derive from work: *economic security* (sufficiency of material resources); *successful transition to adulthood and family formation*; and *subjective well-being* (life satisfaction and overall happiness).

Table 1 presents the OECD's low-pay incidence rates for five Anglophone LMC countries. These rates suggest two main conclusions. First, between 1997 (as far back as the data go for all five) and 2018, these seemingly similar varieties of capitalism report notably different low-pay outcomes: the US is persistently the highest (24%–25%), while the UK and Canada have very high rates by rich country standards but show persistently lower rates of low pay (19%–22%) than the US. Australia's rates are still 'better' (12%–16%), and New Zealand shows by far the lowest bottom-end inequality by this measure (falling from 13.3% to 8.4%). Second, since the peak before the financial crisis, all five countries have reduced their low-pay shares, but only New Zealand has

made meaningful progress, reaching a very low level by rich country standards (8.4%). The stability of this pattern of low-pay incidence strongly suggests that, even among LME countries, the quality of bottom-end pay distributions is heavily influenced by institutional designs and policy choices.

Table 1. The incidence of low pay for five Anglophone LME countries (in %)

	1980	1997	2007	2018
United States	22.0	24.9	24.5	24.1
United Kingdom	18.8	21.0	20.6	19.0
Canada		21.9	22.0	20.7
Australia	13.5	12.2	16.0	15.4
New Zealand		13.3	13.4	8.4

Source: OECD (https://stats.oecd.org/Index.aspx?QueryId=64193#).

Using alternative wage thresholds and accounting for the adequacy of work hours, the incidence of poverty-pay, low-pay and decent-pay jobs have been calculated over extended periods for a variety of demographic groups using household surveys for the US (Howell, 2019) and four other rich countries (Howell, 2021a).[5] Figure 4 shows trends in the decent-pay shares of employment in five countries for young workers (aged 18–34) with less than a college degree. The US has the lowest incidence of decent pay for these workers. The decent-pay share has declined sharply for young US female workers since the mid-1990s (Panel A) and dramatically fell for young male workers over the entire period (Panel B). The UK trends for similarly defined male and female workers show the same pattern between 1994 and 2014 but at higher levels of decent-pay incidence. Australia and Canada show still higher shares of decent-pay jobs for less-educated young male and female workers (results consistent with the pattern shown in Table 1). France performs well above the four LME countries in both decent-pay levels and growth. For example, while the French decent-pay share *rose* from just under 50% to 54.6% for young less-educated female workers between 2002 and 2012, the US decent-pay rate for these workers *fell* from about 23% to 18%.[6]

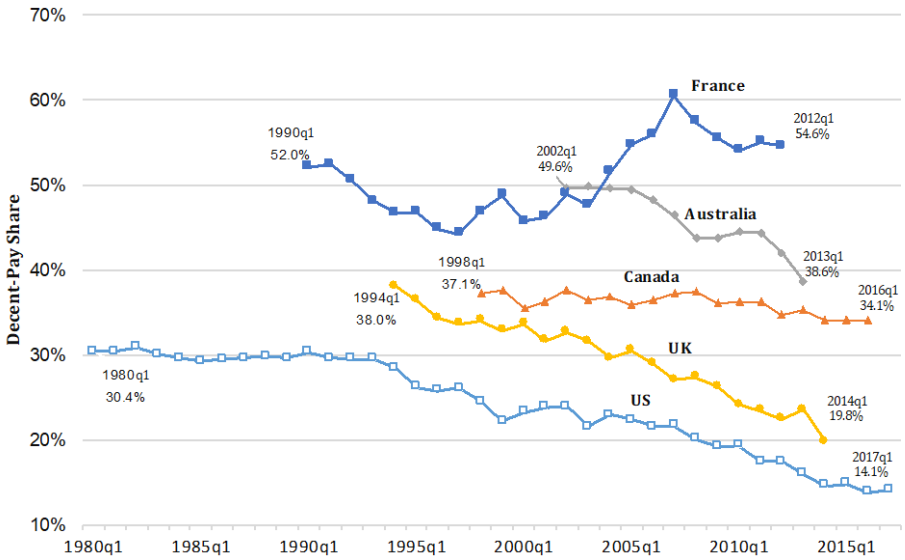
While Figure 4 focuses on the wage and earnings dimensions of job quality, Howell and Kalleberg (2019) show that for the US, non-wage benefits and working conditions (such as health, retirement and disability benefits, paid time off for vacation, sickness and other reasons, and steady work) also vary systematically with wage quality. This is consistent with the available evidence, which shows no meaningful compensating differences that could offset the decline in decent job shares documented here. Moreover, some non-wage benefits, such as employer-paid health and pension benefits, have also declined sharply in the US. The evidence for the US reported in Howell and Kalleberg (2019) strongly supports the view that non-wage benefits and working conditions vary systematically with wage quality, which thus may be treated as a good indicator of overall job quality, at least for jobs in the bottom half of the pay distribution.

[5] The wage threshold for distinguishing decent- from low-wage jobs is defined as two-thirds of the *mean* wage for prime-age (aged 25–54) full-time workers; the formula for the poverty-wage threshold is the same way as the conventional low-wage definition, two-thirds of the median full-time wage. Poverty-, low- and decent-pay jobs also consider the adequacy of hours worked, as measured by involuntary part-time employment (see Howell, 2019).

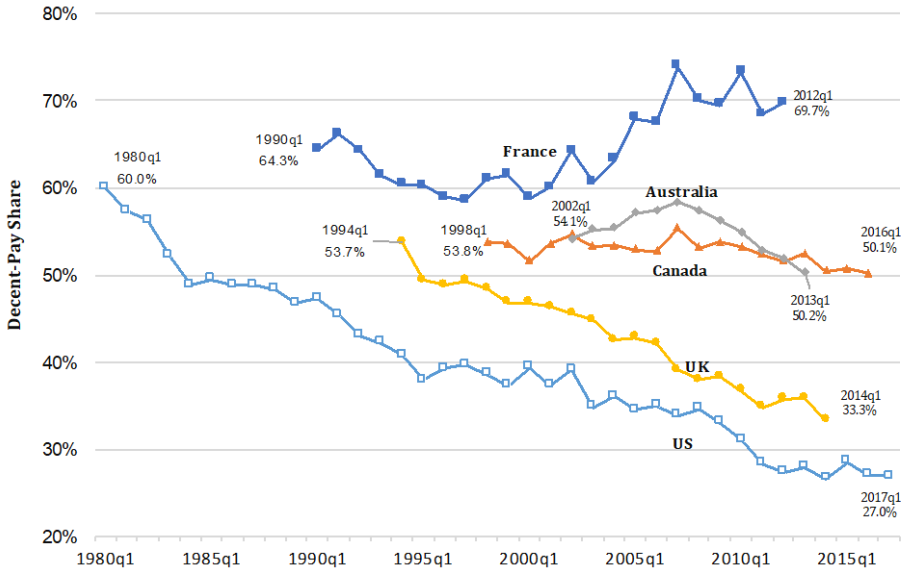
[6] For many more results for decent- and poverty-pay shares by demographic group, see Howell (2021a).

Figure 4. The incidence of decent-pay jobs for young (aged 18–34) with less than a college degree, by gender, for five countries, 1980–2014

Panel A: female < college (aged 18–34)



Panel B: male < college (aged 18–34)



Source: Howell (2021a).

What explains patterns of growth in inequality and low pay?

As Giupponi and Machin (2022) note, '[i]n the orthodox supply and demand model, wage inequality increases come about because of an increase in the relative demand for skilled workers.' At the heart of competitive model is the assumption that impersonal competitive market forces set the wage at each worker's contribution – the value of their 'marginal product' – a vision that explicitly rules out an important role for institutional effects on the balance of bargaining power between employers and workers. Consistent with this model, there is little

attention paid to labour market institutions or bargaining power in the most influential journal articles that rely on the canonical textbook model to explain contemporary wage inequality (Katz and Murphy, 1992; Goldin and Katz, 2007; Acemoglu and Autor, 2011, 2012; Autor, 2014). Consistent with this vision of the way the labour market works, policy implications are framed in terms of aligning the supply of skills with the demand for them (e.g., see Autor, 2010, 2014).

By contrast, political economy perspectives tend to interpret secular trends in inequality and real wages by reference to the balance of bargaining power between employers and workers for different parts of the earnings distribution and for different demographic groups in it. In the short run, and especially over the course of business cycles, this power may vary with imbalances in the relative demand for skills, but for both large and persistent differences in levels of inequality across countries (e.g., the US versus France) and for large within-country changes in inequality over many decades (e.g., the US since 1980), explanations need to turn to the institutions, policies and market structures that determine relative bargaining power in the wage-setting process (Kaufman, 1988, 2010). These include, first, the nature of imperfect competition in product and labour markets – the monopoly and monopsony power of firms (Manning, 2011; Benmelech, Bergman and Kim, 2020) – and second, the institutions that offer countervailing power to workers to keep wages 'out of competition' (Wallerstein, 1999; Bivens, Mishel and Schmitt, 2018; Krueger, 2018; Stansbury and Summers, 2020; Mishel and Bivens, 2021).

These alternative visions of how contemporary labour markets work are discussed in some detail in Howell and Kalleberg (2019). In our view, the competitive market and political economy explanations cannot both be right. Demand and supply forces matter along with collective bargaining power in a political economy framework, but wage-setting institutions and collective bargaining power cannot matter in a model that assumes perfect competition in the labour market and wages set by the marginal revenue product. At issue is: first, whether in modern-day rich world countries, markets ensure that wage distributions reflect worker productivities in the absence of labour market institutions; second, in the presence of protective institutions, is a wedge invariably created between wages and productivity with negative employment consequences. In our view, the answer is no to both, a view we interpret to be supported by the evidence that Giupponi and Machin (2022) offer regarding the minimum wage for the UK, as well as by recent evidence on union and minimum wage effects for the US (e.g., Farber et al., 2018; Cengiz et al., 2019).

These alternative visions of rich world wage-setting tend to lead to emphases on different kinds of evidence and, in some cases, have interpreted the same evidence quite differently. The canonical competitive model has relied heavily on evidence of a rising college wage premium and on the polarisation of occupational employment. In contrast, comparative political economy perspectives have focused on evidence of bargaining power effects, including differences in labour market outcomes across alternative institutional regimes. We consider each in turn.

The canonical model and the evidence

The college wage premium

Empirical support for the competitive market model has relied heavily on the rise in the college-wage premium. According to Autor (2014, p. 847), a 'key implication of the rising college/high school wage premium is that a central causal factor behind rising inequality in the United States has been the slowdown in the accumulation of skills by young adults almost 30 years ago.' Autor speculates that '[h]ad the supply of college graduates risen as rapidly in the decades after 1980 as

it did in the decades immediately before, it is quite plausible that there would have been no sustained rise in the skill premium in the U.S. labor market' (p. 847).

Rising wage inequality reflects increasing gaps within and between different groups of workers. Following the mainstream economics literature, Giupponi and Machin (2022) present evidence for the UK on this measure of between-group inequality (i.e., the college wage premium) in support of the orthodox supply–demand model. 'A simple way to test this notion empirically is through a time series model that relates the relative wage of college educated versus high school educated workers to shifts in relative demand and supply.'

In our view, this is not a particularly persuasive test on its own terms, much less from a political economy perspective. As has been the standard practice, no explanation is given for the exclusive attention to this single between-group indicator, or for the lack of attention to within-group inequality. Also not addressed is the arguably quite problematic use of educational credentials from educational programmes and institutions of wildly varying quality (at least in the US), whose ability to reflect workplace-relevant skills is likely to be limited and to vary substantially over time.[7]

Even apart from problems of quality across educational credentials and over time, the college wage premium is not so simple to interpret. Rather than a simple market-based reward for individual investments in productivity-related skills, the premium may be better viewed as a good proxy for who gets allocated to jobs with high bargaining power. The rise in the US college wage premium in the 1980s and 1990s was driven by large increases in pay for advanced-degree workers, arguably reflecting as much a rise in bargaining power by professional, managerial and technical workers (rent extraction) as a market-driven reward for the rise in their relative demand. Many of these high-paying jobs are protected by credential and licensing constraints and other special protections against wage competition and job loss (e.g., academic tenure) and are located disproportionately in high-rent firms, especially in the finance sector. However, for frontline workers with low educational credentials, the last four decades have been characterised by declines in protective labour institutions and changing employer practices that have undermined their bargaining power – hence a rising college premium.

Substantial recent evidence from the US supports this bargaining power explanation. Engbom and Moser (2017) find that pay premiums for higher education degrees play a large role in sorting workers towards high-wage firms in the US. This is consistent with findings of increasing firm concentration (monopoly power), the ability to mark-up product prices, and power over suppliers and workers (monopsony power) (Barth et al. 2016; Benmelech et al. 2018; De Loecker, Eeckhout and Unger 2018). For the US., Abowd et al. (2012) report that between 1990 and 2011, the skill-adjusted pay premium was +26% for people working in the US securities industry, +23% for those in legal services and –40% for eating and drinking establishments (see Rothwell, 2016). Rothwell calculates a 'gratuitous pay' premium increase in securities and investment from 41% to 60% between 1980 and 2013; from 27% to 37% for legal services, and from 21% to 39% for hospitals.

It is also notable that the 90:50 wage differential continued to increase after 2000 despite a *flattening* of the college-wage premium for both males and females, even when workers with advanced degrees are included (Autor, 2014, Figure 1). This flattening corresponds in timing to what appears to be a substantial *decline* after 2000 in the growth in demand for cognitive skills (Beaudry, Green and Sand, 2013). If computerisation drives the demand for jobs with high

[7] Quality adjustments could be made with test score results (e.g., PISA scores from the OECD). These have been used for cross-country comparisons of wage inequality but to date show little ability to account for overall wage inequality and no ability to explain bottom-half inequality (see Broecke, Quintini and Vandeweyer, 2019, and references therein).

cognitive skills, there seems no obvious reason for a break in the upward trend that takes place around 2000. Indeed, as Gould (2019) points out, the college wage premium collapsed between 2000 and 2018 (from 0.83 to 0.08), as did the wages of the bottom 60% of college graduates (see Figure B of Gould, 2019). Further complicating the story, Deming (2017) has shown that it is not jobs with the highest cognitive skill requirements that have grown fastest, but those with the highest social skills.

Our main point is that neither the college wage premium nor its change over the last four decades is simple to interpret or particularly persuasive as the key to understanding rising wage inequality in the US.

Employment polarisation

We also find that the polarisation evidence that has been widely used in support of the canonical perspective to be unpersuasive. Rising wage inequality (proxied by the college premium) is said to reflect employment polarization, as the demand for non-routine tasks at the top (cognitive-skill jobs) and bottom (personal service and caring jobs) have increased while falling for many routine manual tasks that often characterise middle-wage jobs.

In the US, the evidence suggests that workplace technologies led to an important shift from monotone growth in the 1980s across occupations (slowest at the bottom to highest at the top) to polarised employment growth in the 1990s (slowest growth in the middle). But Mishel, Schmitt and Shierholz (2013) and Bárány and Siegel (2018) argue that the US evidence points to occupation-level polarisation extending back to the 1950s, generated by shifts away from manufacturing and towards high- and low-skilled services – a hollowing out of the middle driven by deindustrialisation – decades before the use of computers in the workplace.

In addition to the difficulty of making a strong causal link between computerisation and employment polarisation trends, a fundamental problem – largely unaddressed in this literature – is the measurement of employment at the level of occupations (usually highly aggregated) and then ranking them by their average wage. This again reflects a focus on between-group (occupation) differences, eliding clear evidence of substantial within-occupation dispersion, even for narrowly defined occupations. Mishel et al. (2013, p. 5) show that while occupation-based employment polarisation can be observed in the decade of the 1990s, even for that decade 'the lines traced out fit the data very poorly' and conclude that 'changes within occupations greatly dominate changes across occupations so that the much-focused-on occupational trends, by themselves, provide few insights'. Similarly, Hunt and Nunn (2019) argue that the routine-biased technological change (RBTC) evidence is an artefact of the use of occupation wage 'bins', which masks extensive within-occupation wage dispersion. They conclude that '[w]hen using workers' wages to indicate job quality we find no employment polarisation for men or women in any period of time covered by the Current Population Survey (1973–2017), a finding that is robust to adjustment for age and education' (Hunt and Nunn, 2019, p. 10).

Institutional bargaining power and cross-country pay quality

For the purpose of exploring the links between institutions and pay distributions across countries, Howell (2021b) developed an index of institutional bargaining power (IBP) from eight conventional measures of wage-setting institutions and employment/income protection policies.[8]

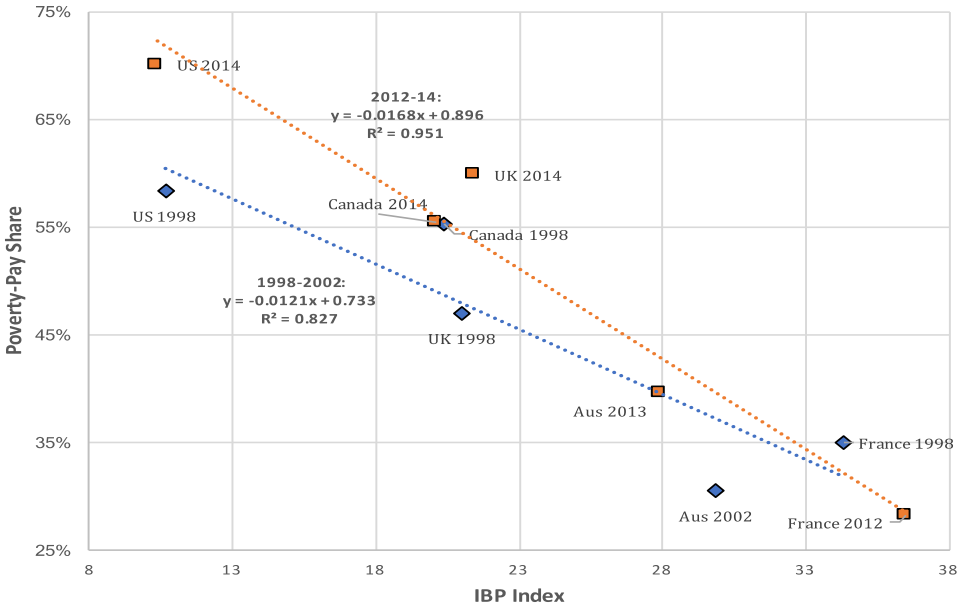
[8] See Howell (2021a, Table 1). The country scores for each of the eight institutional components were calculated by giving a '5' to the country with the highest value and then giving the other four countries scores that reflect their country's value on the variable relative to the highest country's value. For example, Australia had the highest collective

Wage-setting institutions are represented by four indicators: collective bargaining coverage (the share of workers whose pay is determined collectively), union density (the union member share of employees), the centralisation of bargaining power (the level at which bargaining takes place and the extent to which there is multi-employer bargaining), and the nationally legislated minimum wage (the Kaitz index, the ratio of the minimum wage to the median wage). The protectiveness of *employment and income* regulations and policies is captured by another four measures: the strictness of employment protection (for individual and collective dismissals under regular contracts), the generosity of income support when unemployed (unemployment net replacement rates over 12 months for a single worker without children), the generosity of public income support not conditional on employment or unemployment benefit eligibility (as a percentage of median disposable income for a single person without children, not including housing subsidies), and active labour market policy spending (e.g., on training and job search, as a percentage of GDP). The rankings of the five countries for which Howell (2021a) develops pay quality incidence indicators (Australia, Canada, France, the UK and the US) are nearly identical on seven of the eight components (union density is the exception, due to France) for both 1998 and 2014, so the index is insensitive to the mix of these eight components.

Figure 5 presents a scatter plot of the IBP index and the incidence of poverty-paying jobs for young workers without a college degree for 1998 and 2012–14 for the five countries. For young non-college degree *female* workers, Panel A shows a close fit for 1998 (R^2 = 0.733) and an almost perfect one for 2012–14 (R^2 = 0.951). For young *male* workers without a college degree, Panel B of Figure 5 reports similar results (R^2 = 0.894 for 1998; R^2 = 0.959 for 2012–14).

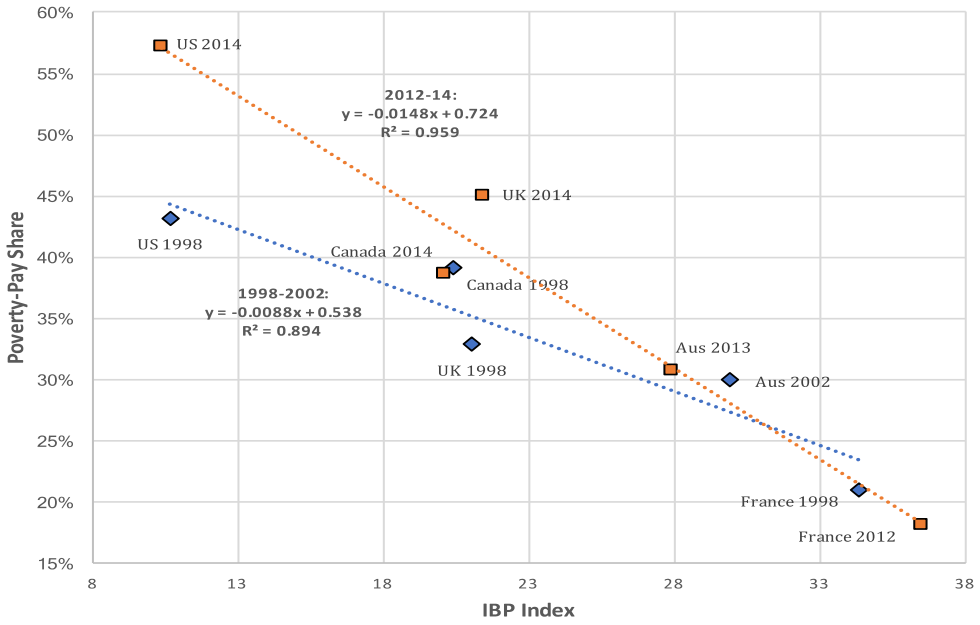
Figure 5: Institutional bargaining power and the incidence of poverty-pay for young (18–34) workers without a college degree in five rich OECD countries, 1998 and 2012–14

Panel A: female workers



bargaining coverage in 1998, 98%, and France was next, at 93.4%. As a result, Australia gets a score of 5 and France a score of 4.77 (0.934/0.98 * 5).

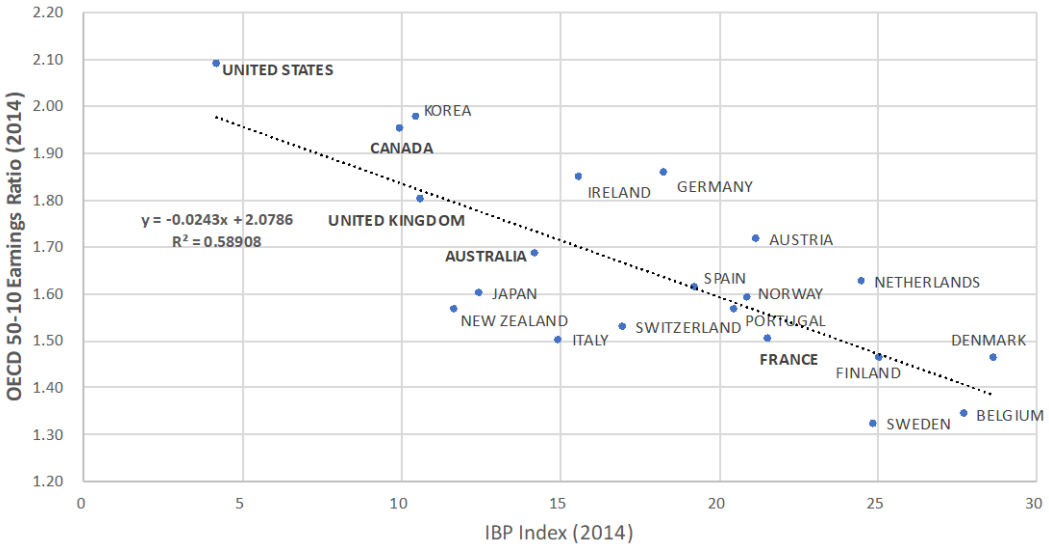
Panel B: male workers



Source: Howell (2021b).

Figure 6 also shows a close statistical fit between the OECD's 50:10 earnings ratio and the IBP index for 21 OECD countries for 2014.[9] The US is a clear outlier, with a very high bottom-end level of earnings inequality; Canada, the UK, and Australia are grouped between the US and France; and located at the high bargaining power/egalitarian end of the spectrum are Finland, Sweden, Denmark and Belgium.

Figure 6. Institutional bargaining power and the 50:10 earnings ratio for 21 OECD countries, 2014



Note: The 21-country IBP index is calculated in the same way as the five-country index (Figure 5) but does not include the minimum wage component, which was not available for several countries. Thus, the maximum score is 35 (7 × 5).

Source: Howell (2021b).

[9] The IBP index for this larger set of countries was constructed from seven indicators (the minimum wage is excluded because several countries do not have a national statutory minimum wage). We use 2014 in Figure 6 for consistency with Figure 5. The most recent IBP index, for 2018, is shown in Figure 7.

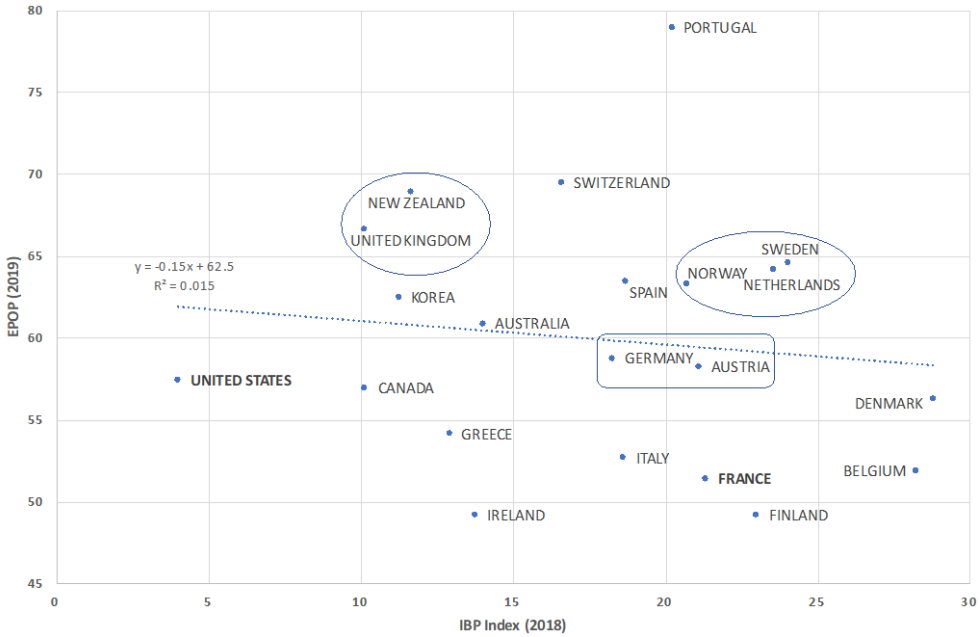
Bargaining power and employment performance

An important challenge to designing institutions and policies to promote higher wages and more egalitarian pay distributions is that employers may respond by reducing job opportunities – the prediction of the canonical competitive market model. This trade-off is widely viewed to be strongest for workers least protected by individual bargaining power – those with greater skills and more experience. Does the aggregate cross-country evidence show a pay–employment trade-off for workers who are most vulnerable to being 'priced out' of jobs, young workers with the least educational attainment? Figure 7 presents recent IBP scores (2018) and two measures of employment performance (2019) – employment-to-population rates (Panel A) and unemployment-to-labour force rates (Panel B) – for young workers (aged 25–34) with less than upper-secondary education for 21 rich OECD countries.

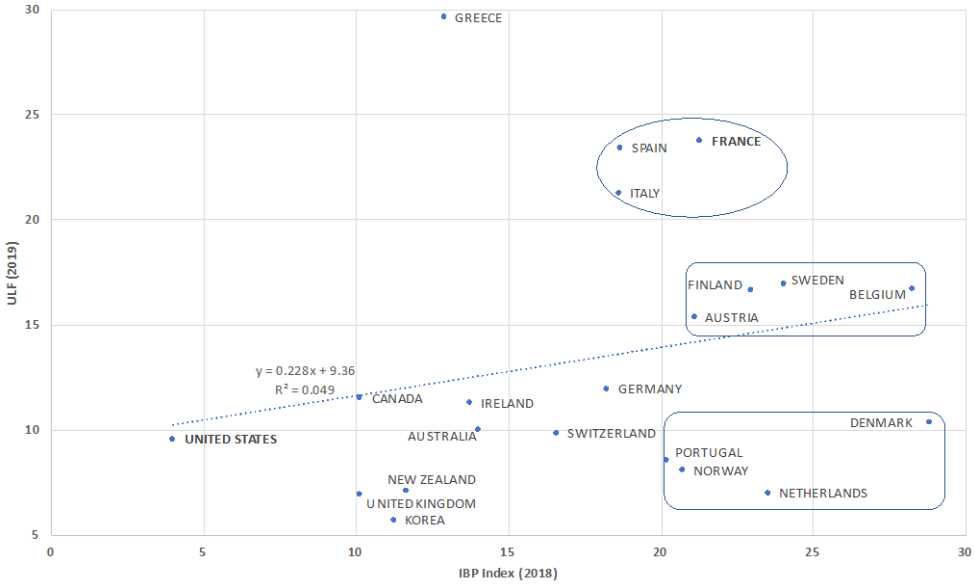
Panel A shows an exceptionally low IBP score for the US (4 out of a maximum of 35) but an employment-to-population ratio (EPOP) for young less-educated workers in the middle of the 21-country range (57.4%), below that of 12 other countries with IBP scores ranging from over twice as high (the UK, 10) to about six times higher (Sweden, 24). While the US IBP score (4) is far below that of France (21), its EPOP rate is moderately higher (57.4% compared to France's 51.4%), which could be interpreted to be supportive of the competitive market model prediction. But Canada achieves a similar employment rate as the US (56.9%) but gets twice the IBP score (10), and two LME countries (i.e., New Zealand and the UK) also have at least twice the US IBP score but have far higher EPOPs (66.6% and 68.9%). In sum, Panel A shows no overall association between the bargaining power index and employment performance, unambiguously failing to support the view that countries with greater collective bargaining power (and consequently, as shown above, more egalitarian pay outcomes) must pay a large price in the form of lower employment opportunities.

Figure 7. Institutional bargaining power and employment performance for young less-educated workers in 21 rich OECD countries, 2018–19

Panel A: employment-to-population ratios



Panel B: unemployment-to-labour force ratios



Note: For the 21-country IBP index, see the note to Figure 6.

Source: Employment and unemployment rates are taken from OECD (2020; Tables A.3.2 and A.3.4).

The same conclusion is reached with the unemployment rate as the employment performance measure (Panel B). It is true that France's employment performance for young less-educated workers is much worse than that of the US (23.7% versus 9.6%). But again, it is important to put the French–US comparison in a larger cross-country perspective. Other countries with similar or higher IBP scores to France (i.e., Austria, Belgium, Finland and Sweden) have substantially lower unemployment rates (15.4%–16.9%) and still others with far higher IBP scores have unemployment rates that are about the same as the US (Denmark) or lower (Portugal, Norway and the Netherlands). Three other Anglophone liberal market economies with double or triple the US IBP score also report similar (Australia) or much lower unemployment rates than the US (New Zealand and the UK).

This evidence indicates that the institutional bargaining power that appears to reduce the incidence of low pay and bottom-end wage inequality shows no correspondence to the cross-country pattern of employment performance in the rich world. This conclusion is lent strong support by a large recent literature on institutions, unemployment and inequality (e.g., Howell, 2005; Baccaro and Rei, 2007; Koeniger, Leonardi and Nunziata, 2007; Howell et al., 2007; Avdagic and Salardi, 2013; Jaumotte and Osorio-Buitron, 2015; Brancaccio, De Cristofaro and Giammetti, 2020).

Policies for a new era of shared growth

The two explanations for recent trends in earnings distributions we have summarised have sharply different policy implications. If rising earnings inequality is best explained by the canonical competitive market account in which rising demands for highly educated workers generated by computer-driven technological change have been unmatched by increases in the supply of college graduates, then raising worker skills must be the main policy solution. Indeed, in his overview of the RBTC–polarisation story of earnings inequality for the Hamilton Project, Autor (2010, p. 35) offers four policy recommendations, three of which are skills-related: increase the

supply of college graduates; improve K-12 education; and expand training programmes. The fourth is to increase investment in research and development and infrastructure.

By contrast, political economy perspectives explain labour market outcomes as a function of the balance of bargaining power between employers and workers, a reflection of both collective effects of institutional protections and market forces (aggregate demand as well as relative demands for skills). If bargaining power is central to job-quality outcomes, there are important roles for product market regulations designed to increase competitive market forces by reducing employer monopsony power over suppliers and workers, stronger protective labour regulations over wage-setting that provide workers with countervailing power, and greater employment and income protections that reduce the cost of job loss for workers.

While increasing relative demands for high non-routine cognitive skills do not in the political economy view offer a credible explanation for patterns of wage inequality across the rich world, this does not mean that improving the quality of K-12 education systems and increasing access to higher education should not be a critical priority. It is essential to upgrade worker skills, because high-quality jobs of the future will require workers with high levels of various kinds of skills and a good education is essential for good citizenship in democracies. Indeed, access to educational opportunities needs to be extended to institutional alternatives to colleges and universities, such as community colleges and other institutions that specialise in preparing workers for the future workplace.

But increasing the share of college degrees is not the remedy for turning around the last four decades of unshared growth in the US. As Case and Deaton (2020) argue, the answer is not that 'people should simply get more education' (p. 9); the problem is, rather, that 'American capitalism began to look more like a racket for redistribution upward than an engine of general prosperity' (p. 12). Institutions can make a big difference in enhancing the quality of jobs, as Carré and Tilly (2017) demonstrate vividly in their study of differences in job quality of retail jobs in different companies and countries. This is consistent with cross-country evidence that shows that institutional and policy arrangements can generate higher wages and lower inequality while maintaining high levels of job opportunities.

References

Abowd, J. M., Kramarz, F., Lengermann, P., McKinney, K. L., and Roux, S. (2012), 'Persistent Inter-Industry Wage Differences: Rent-Sharing and Opportunity Costs', *IZA Journal of Labor Economics*, 1, 7.

Acemoglu, D., and Autor, D. (2011), 'Skills, Tasks and Technologies: Implications for Employment and Earnings', in O. Ashenfelter and D. Card (eds), *Handbook of Labor Economics*, Volume 4B, Amsterdam: Elsevier, 1043–171.

Acemoglu, D., and Autor, D. (2012), 'What Does Human Capital Do? A Review of Goldin and Katz's The Race between Education and Technology', *Journal of Economic Literature*, 50, 426–63.

Avdagic, S., and Salardi, P. (2013), 'Tenuous Link: Labour Market Institutions and Unemployment in Advanced and New Market Economies', *Socio-Economic Review*, 11, 739–69.

Autor, D. H. (2010), 'The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings', Washington DC: Center for American Progress and The Hamilton Project.

Autor, D. H. (2014), 'Skills, Education, and the Rise of Earnings Inequality among the "Other 99 Percent"', *Science*, 344, 843–50.

Baccaro, L., and Rei, D. (2007), 'Institutional Determinants of Unemployment in OECD Countries: Does the Deregulatory View Hold Water?', *International Organization*, 61, 527–69.

Bárány, Z. L., and Siegel, C. (2018), 'Job Polarization and Structural Change', *American Economic Journal: Macroeconomics*, 10, 57–89.

Barth, E., Bryson, A., Davis, J. C., and Freeman, R. (2016), 'It's Where You Work: Increases in Earnings Dispersion across Establishments and Individuals in the United States', *Journal of Labor Economics*, 34, S2 (part 2), S67–S97.

Beaudry, P., Green, D. A., and Sand, B. M. (2013), 'The Great Reversal in the Demand for Skill and Cognitive Tasks', NBER Working Paper No. 18901.

Benmelech, E., Bergman, N., and Kim, H. (2020), 'Strong Employers and Weak Employees: How Does Employer Concentration Affect Wages?', *Journal of Human Resources*, forthcoming (https://doi.org/10.3368/jhr.monopsony.0119-10007R1).

Bivens, J., Mishel, L., and Schmitt, J. (2018), 'It's Not Just Monopoly and Monopsony: How Market Power Has Affected American Wages', Economic Policy Institute.

Brancaccio, E., De Cristofaro, F., and Giammetti, R. (2020), 'A Meta-Analysis on Labour Market Deregulations and Employment Performance: No Consensus around the IMF–OECD Consensus', *Review of Political Economy*, 32, 1–21.

Broecke, S., Quintini, G., and Vandeweyer, M. (2019), 'Wage Inequality and Cognitive Skills: Reopening the Debate', in C. R. Hulten and V. A. Ramey (eds), *Education, Skills, and Technical Change: Implications for Future US GDP Growth*, NBER Studies in Income and Wealth, Volume 77, Chicago, IL: University of Chicago Press, Chapter 7.

Carré, F., and Tilly, C. (2017), *Where Bad Jobs Are Better: Retail Jobs Across Counties and Companies*, New York: Russell Sage Foundation.

Case, A., and Deaton, A. (2020), *Deaths of Despair and the Future of Capitalism*, Princeton, NJ: Princeton University Press.

Cengiz, D., Dube, A., Lindner, A., and Zipperer, B. (2019), 'The Effect of Minimum Wages on Low-Wage Jobs', *Quarterly Journal of Economics*, 134, 1405–454.

De Loecker, J., Eeckhout, J., and Unger, G. (2018), 'The Rise of Market Power and the Macroeconomic Implications', manuscript, http://www.janeeckhout.com/wp-content/uploads/RMP.pdf.

Deming, D. J. (2017), 'The Growing Importance of Social Skills in the Labor Market', *Quarterly Journal of Economics*, 132, 1593–640.

Engbom, N., and Moser, C. (2017), 'Earnings Inequality and the Minimum Wage: Evidence from Brazil', CESifo Working Paper Series No. 6393, Munich: Center for Economic Studies.

Farber, H. S., Herbst, D., Kuziemko, I., and Naidu, S. (2018), 'Unions and Inequality over the Twentieth Century: New Evidence from Survey Data', NBER Working Paper No. 24587.

Giupponi, G. and Machin, S. (2022), 'Labour Market Inequality', IFS Deaton Review of Inequalities.

Goldin, C., and Katz, L. F. (2007), 'Long-Run Changes in the Wage Structure: Narrowing, Widening, Polarizing', *Brookings Papers on Economic Activity*, 2, 135–65.

Gould, E. (2019), 'Higher Returns on Education Can't Explain Growing Wage Inequality', Economics Policy Institute, Working Economics Blog (March 15).

Granovetter, M. (2005), 'The Impact of Social Structure on Economic Outcomes', *Journal of Economic Perspectives*, 19 (1), 33–50.

Howell, D. R. (2005), 'Wage Compression and the Unemployment Crisis: Labor Market Institutions, Skills, and Inequality–Unemployment Tradeoffs', in D. R. Howell (ed.), *Fighting Unemployment: The Limits of Free Market Orthodoxy*, Oxford: Oxford University Press.

Howell, D. R. (2019), 'From Decent to Lousy Jobs: New Evidence on the Decline in American Job Quality, 1979–2017', Working Paper, Washington Center for Equitable Growth.

Howell, D. R. (2021a), 'How Exceptional is American Job Quality? Decent- and Poverty-pay Rates in the U.S., U.K., Canada, Australia and France', Working Paper, Washington Center for Equitable Growth.

Howell, D. R. (2021b), 'Low Pay in Rich Countries: Institutions, Bargaining Power, and Earnings Inequality in the U.S., U.K., Canada, Australia and France', Working Paper, Washington Center for Equitable Growth.

Howell, D. R., Baker, D., Glyn, A., and Schmitt, J. (2007), 'Are Protective Labor Market Institutions at the Root of Unemployment? A Critical Review of the Evidence, with a Comment by James Heckman', *Capitalism and Society*, 2 (1).

Howell, D. R., and Kalleberg, A. L. (2019), 'Declining Job Quality in the United States: Explanations and Evidence', *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 5 (4), 1–53.

Hunt, J., and Nunn, R. (2019), 'Is Employment Polarization Informative about Wage Inequality and Is Employment Really Polarizing', NBER Working Paper No. 26064.

Jaumotte, F., and Osorio Buitron, C. (2015), 'Inequality and Labor Market Institutions', IMF Staff Discussion Note, Washington, DC: International Monetary Fund.

Kalleberg, A. L. (2018), *Precarious Lives: Job Insecurity and Well-Being in Rich Democracies*, Cambridge: Polity Press.

Katz, L. F., and Murphy, K. (1992), 'Changes in Relative Wages, 1963–1987: Supply and Demand Factors', *Quarterly Journal of Economics*, 107, 35–78.

Kaufman, B. E. (1988), 'The Postwar View of Labor Markets and Wage Determination', in B. Kaufman (ed.), *How Labor Markets Work: Reflections on Theory and Practice*, Lexington, MA: Lexington Books, 145–203.

Kaufman, B. E. (2010), 'The Theoretical Foundation of Industrial Relations and its Implications', *Industrial and Labor Relations Review*, 64, 74–108.

Koeniger, W., Leonardi, M., and Nunziata, L. (2007), 'Labor Market Institutions and Wage Inequality', *Industrial and Labor Relations Review*, 60, 340–56.

Korpi, W. (1985), 'Developments in the Theory of Power and Exchange', *Sociological Theory*, 3, 31–45.

Krueger, A. B. (2018), 'Reflections on Dwindling Worker Bargaining Power and Monetary Policy', Economic Policy Symposium, Jackson Hole, Wyoming, https://www.kansascityfed.org/documents/6984/Lunch_JH2018.pdf.

Machin, S., and Van Reenan, J. (2007), 'Changes in Wage Inequality', Centre for Economic Performance Special Paper No. 18.

Manning, A. (2011), 'Imperfect Competition in the Labor Market', in O. Ashenfelter and D. Card (eds), *Handbook of Labor Economics*, Volume 4B, Amsterdam: North-Holland, 973–1041.

Mishel, L., and Bivens, J. (2021), 'Identifying the Policy Levers Generating Wage Suppression and Wage Inequality', Economic Policy Institute Report.

Mishel, L., Schmitt, J., and Shierholz, H. (2013), 'Don't Blame the Robots: Assessing the Job Polarization Explanation of Growing Wage Inequality', Economic Policy Institute Working Paper.

OECD (2020), *Education at a Glance 2020: OECD Indicators*, Paris: OECD Publishing, https://doi.org/10.1787/69096873-en.

Piketty, T., Saez, E., and Zucman, G. (2018), 'Distributional National Accounts: Methods and Estimates for the United States', *Quarterly Journal of Economics*, 133, 553–609.

Rothwell, J. (2016), 'Make Elites Compete: Why the 1% Earn So Much and What To Do About It', Report, Brookings: Social Mobility Papers.

Stansbury, A., and Summers, L. (2020), 'Declining Worker Power and American Economic Performance', Brookings Papers on Economic Activity, Spring.

Streeck, W. (2005), 'The Sociology of Labor Markets and Trade Unions', in N. J. Smelser and R. Swedberg (eds), *The Handbook of Economic Sociology*, Princeton, NJ: Princeton University Press, 254–83.

Wallerstein, M. (1999), 'Wage-Setting Institutions and Pay Inequality in Advanced Industrial Societies', *American Journal of Political Science*, 43, 649–80.

Webb, S., and Webb, B. (1897), *Industrial Democracy*, London: Longmans, Green, and Co.