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CentrePiece

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Inequality and attitudes to redistribution
Swing states and US trade policy
Central bank communications

Life chances
Rising prices
University fees

SUPERMARKETS AND THE BRITISH HIGH STREET: THE UNINTENDED CONSEQUENCES OF PLANNING REGULATIONS

Spend it like Beckham

CentrePiece

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E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

Editorial

All three of the main political parties in Britain are now putting the idea of fairness at the heart of their policy agenda. The Conservatives propose 'a blueprint for fairness'; the Liberal Democrats want 'to restore fairness to British families'; and the prime minister aspires to create 'a fair Britain for the new age'.

What these words mean concretely remains unclear, but there appears to be a common concern with equality – of outcome and/or opportunity – an area in which research by the Centre for Economic Performance (CEP) has made many pioneering contributions.

Over the past two decades, work by researchers at the Centre has documented rising labour market inequalities in Britain – and uncovered their causes in large-scale technological and institutional change. And a series of CEP studies has revealed that social mobility has fallen between the cohort of British children who grew up in the 1960s and early 1970s and those who grew up in the 1970s and 1980s – a social science 'fact' that is now embedded in public debate.

In this *CentrePiece*, CEP's research director Stephen Machin, who was recently appointed to the government's new National Equality Panel, describes the 'big ideas' that have emerged from the Centre's longstanding programme on wage inequality. Future issues will review CEP research on and evaluation of key policy responses such as education and the minimum wage.

In a separate article with Jo Blanden, Machin outlines the latest evidence on what has happened to the life chances of children born into poor families since 1970. This shows that contrary to the oft-repeated claims of many politicians and commentators, the downward trend has not continued but appears to have flattened out.

Two further articles touch on the theme of inequality: one on how inflation hurts the poor more than the rich; the other charting British people's diminishing enthusiasm for redistribution.

We also feature two more stories that illustrate the complex interactions between politics and economics. As the US presidential race nears the finish, one article shows that industries in the so-called 'swing states' are more likely to enjoy trade protection.

And our cover story examines the impact of planning regulations designed to restrict the development of 'big-box' supermarkets. This is an issue on which politicians clearly do take different positions – and it turns out that those most strongly opposed to big boxes have set in motion the opposite effect from what they intended, actually accelerating the decline of smaller independent stores on the British High Street.

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In 1996, new regulations made it much harder for UK supermarkets and other retailers to develop new out-of-town outlets – so-called 'big boxes'. In part, these regulations were supposed to 'save the traditional British High Street' by protecting small retailers. Research by **Raffaella Sadun** shows that they might have actually accelerated the decline of independent stores.

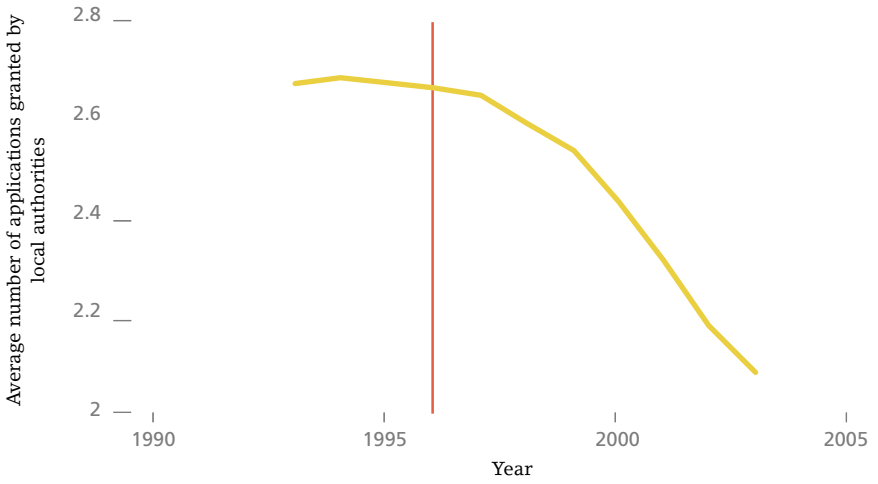
Does planning regulation protect independent retailers?

Given that we claim to be so attached to the traditional British High Street, it seems odd that until the mid-1990s, fewer and fewer of us spent much of our time shopping there. Instead we were migrating to the out-of-town behemoths: gigantic mega-stores run by, among others, Tesco, Sainsbury's and Asda (now owned by Wal-Mart, the world leader in such superstores).

But over the course of the 1990s – in part as a result of pressure from groups concerned about the plight of small independent retailers – the planning regulations changed, with the effect that large retail chains significantly slowed the expansion of 'big boxes'. My research shows that this actually may have harmed small independent retailers in the British high street, the opposite effect of the one intended.

The new planning regulations – introduced in 1996 and reinforced in 1999 – stipulated that retailers wanting to open a store of more than 2,500 square metres had to pass a 'sequential test' and a 'test of need'. These tests demanded proof that large out-of-town developments could not be created in alternative in-town or edge-of-town

Figure 1:
Planning grants for large retail stores declined sharply after regulations introduced in 1996



Big boxes may be good news for 'mom-and-pop' stores

Note: The figure reports the number of major retail applications granted across 304 English local authorities between 1993 and 2003.

locations, and that these new retail developments were 'needed' in the area.

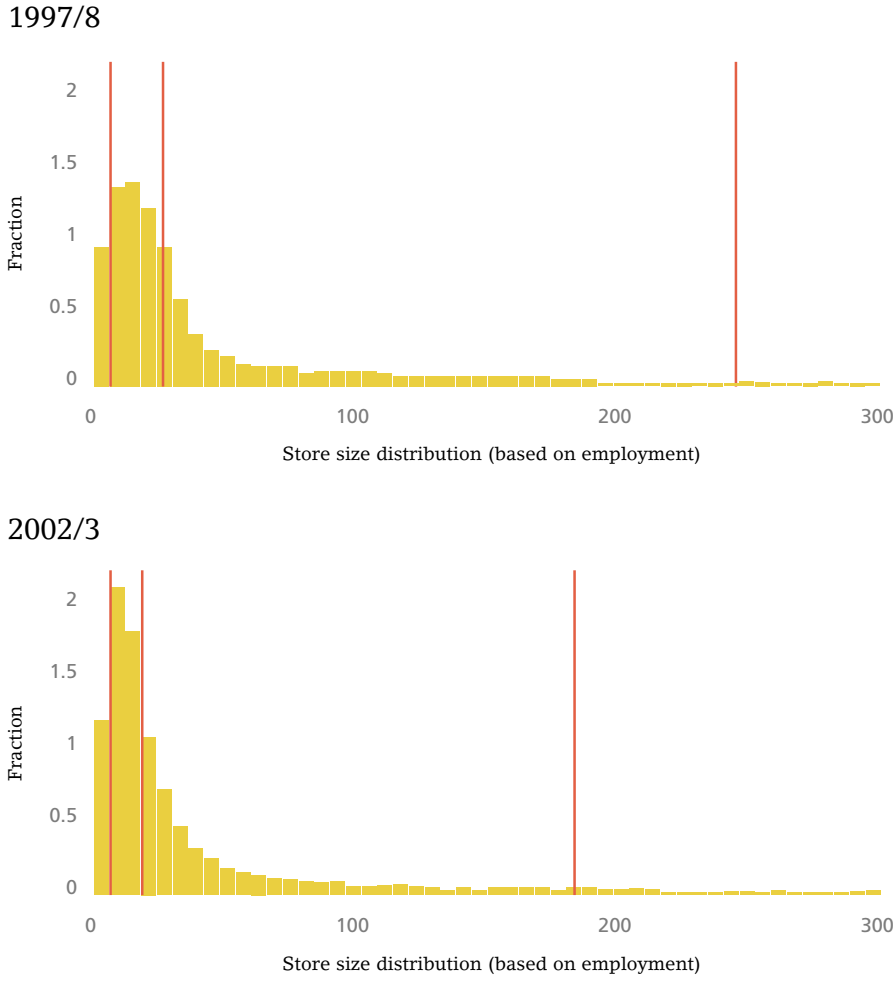
The reforms also increased the role of local authorities in the implementation and interpretation of these planning guidelines. Significantly, this meant that local politicians could select which large stores could open in their area.

Under the new planning system, the number of successful planning applications in an area depended both on local demand conditions (whether firms would want to open a new store there) and on local politics (whether politicians would let them). Overall, these changes added significant monetary and time costs to the application process. Unsurprisingly, the development of new big boxes declined sharply, as Figure 1 shows.

But the fall in the opening of big boxes did not coincide with a reduction in the total number of new stores, rather with a change in their size and location. In the years following the introduction of the reforms, the major UK retail chains started to open more small stores on high streets and in city centres. Griffith and Harmgart (2005) show that since the late 1990s, the top four UK retail chains substantially increased the number of small convenience stores opened in town centres relative to investments in large stores in out-of-town locations.

Figure 2 shows how the median size of stores operated by the big supermarket chains fell between 1997/8 and 2002/3. Over the relatively short period of four

Figure 2:
After 1996, supermarket chains began opening smaller stores



Note: The figures show the changing average size of 'non-specialised stores' (mostly supermarkets) operating nationally (that is, in all 11 UK regions) in 1997/8 and 2002/3, as measured by employment in each store. The vertical lines mark the 10th, 50th and 90th percentiles of the distribution.

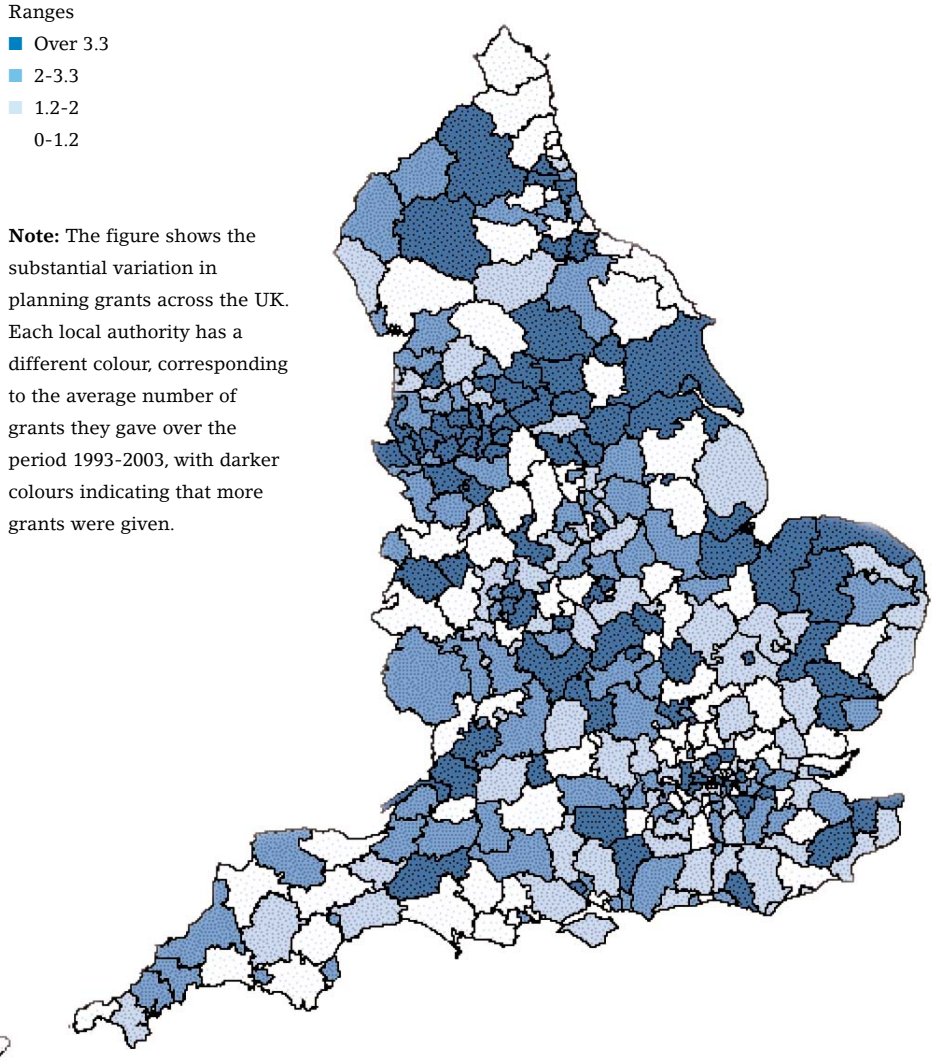
years, the median size of a store belonging to a large supermarket chain fell from 75 to 56 employees. This trend contrasts with the retail chains' development in other countries. For example, over a comparable time period, the average store size of national retail chains in the United States increased from 142 to 152 employees (Haskel et al, 2008).

In my research, I investigate what are the direct and indirect effects of the new planning regulations on employment among independent retailers. In particular, I estimate the effect of the number of planning grants won by big boxes on the employment growth of independent retailers in a local authority.

This is far from straightforward, as the same factors can influence both the number of grants and the growth of independent retailers. For example, if an area experiences rising incomes, this will lead to increasing demand for retail products, which will be spread across

Conservative councils are much less likely to grant planning permission for new big boxes than other councils

Figure 3:
Average number of planning grants for large retail stores across English local authorities, 1993-2003



Note: The figure shows the substantial variation in planning grants across the UK. Each local authority has a different colour, corresponding to the average number of grants they gave over the period 1993-2003, with darker colours indicating that more grants were given.

both big boxes (thus generating more planning applications) and small independent retailers.

To identify whether the number of big box grants affects the employment growth of independent retailers, I exploit the fact that there is a political, as well as an economic, dimension to the planning process. The two key assumptions at the basis of my methodology are that politicians' preferences about planning regulations depend on their party affiliation, and that the electoral success of the different parties is independent of factors that might affect employment among independent retailers. Under these circumstances, it becomes possible to use the political composition of the local authorities to identify the effect of grants of big boxes on the employment growth of independent retailers.

More than any other party in the UK, the Conservatives have traditionally been associated with *Nimby-ism* ('not in my backyard') – a strong opposition towards new retail developments. Typically justified on environmental grounds, this also probably reflects the political weight of middle-class homeowners, who worry about the effect on the value of their properties, and small retailers, who often fear competition from big boxes.

The influence of Conservative politicians on local planning activities affects the number of applications granted across the UK, leading to considerable variation in the number of grants across local authorities (Figure 3). This is the variation I use to identify the effect of big boxes on the employment growth of independent retailers.

I find that the number of successful planning grants for out-of-town supermarkets is *positively* related to the employment growth of small independent retailers. This implies that regulation that prevents the development of more big boxes may actually harm independent retailers and the people that they employ.

A possible interpretation of this result is that when planning regulations prevent the entry of large supermarkets, retail chains move to a business model based more on smaller in-town stores. These smaller format stores compete more directly with independent stores, and accelerate their decline.

To provide more evidence of this, I proceed in two steps. First, I show that

The fewer big boxes allowed by councils, the more small chain stores were introduced – and the more independent retailers suffered

the growth of smaller in-town stores belonging to retail chains is negatively associated with the number of big boxes winning a planning grant. This suggests that the increasing movement of the major UK chains towards small convenience stores can be directly linked to the increasing planning hurdles faced by big boxes.

Second, I look separately at the effect of big boxes on the entry and exit rates of retailers into and out of the market, and on the growth or contraction of retailers already in the market. Interestingly, there appears to be almost no effect from more grants for big boxes on changes in the size of existing retailers, nor on the number of new independent retailers that enter the market.

The entire effect from more big boxes winning planning permission appears to come from fewer independent retailers leaving the market. This suggests that having more big boxes has the effect of *reducing* the total amount of competition that independent retailers face.

My estimates suggest that the sharp decline in new big boxes can account for about 15% of the decline in employment among independent retailers between 1998 and 2004. It should be stressed that it is not clear whether all independent retailers benefit equally from more big boxes, and it is too early to draw conclusions about any long-run effects. But so far, at least, it seems that big boxes may actually be good news for 'mom-and-pop' stores – at least compared to the likely alternative of more Tesco Metro stores.

This article summarises 'Does Planning Regulation Protect Independent Retailers?' by Raffaella Sadun, CEP Discussion Paper No. 888 (http://cep.lse.ac.uk/pubs/download/dp0888.pdf).

Raffaella Sadun is a research officer in CEP's productivity and innovation programme.

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More big boxes being given planning permission is associated with fewer independent retailers being forced out of business

in brief...

Are the top universities worth paying for?

With the introduction of tuition fees for undergraduates, the UK government accepted the principle that since graduates receive much of the benefit of their degrees, they should be asked to bear some of the cost. But are degrees from 'better' universities worth more than others? **Iftikhar Hussain**, **Sandra McNally** and **Shqiponja Telhaj** investigate.

From 2006, new UK undergraduates – 'freshers' – were asked to pay up to £3,000 in fees for each year of their degree. The tripling of tuition fees was politically contentious at the time. But for many backbench members of parliament, the key sticking point was not that universities were allowed to charge much more than before, but that the £3,000 a year limit represented a cap not a fixed rate. This established the principle that different universities could charge different fees.

In the event, only a handful of universities charged fees below the £3,000 cap. But if the limit were to be raised, there could be more variation in the fees charged, with more universities charging a lower fee than the maximum permitted. Indeed, this might make sense. After all, universities' costs vary: the more prestigious ones typically (but not always) pay higher salaries to their staff and may want to recoup more of their costs through raising the fees to the higher levels permitted.

But would this variation in fees be paralleled by a variation in the benefits that students get from different universities? For example, does going to a more prestigious and costly institution pay off in terms of its graduates receiving a higher salary on entering the labour market?

We know that the average starting salary of students from the Russell Group of 20 elite UK universities is higher than that for students from all other UK universities. But this could be because the Russell Group universities take higher calibre, more highly motivated students in the first place.

Can evidence from the United States help us here? Many US studies show that the relationship between university quality and graduate wages is positive, even after controlling for the high school grades (and therefore possibly the ability and drive) of each student on entry. Black and Smith (2006) show that the positive impact might even be understated, as the studies only use a single measure of university quality – students' average high school test scores.

But we should be careful about assuming that this applies in the UK. For one thing, similar studies find no effect from the quality of US high schools on wages (as noted in Hanushek, 2003). This might be because US high schools operate in a less competitive market than US universities. Since UK universities operate in a more centralised, less competitive system than US universities, there might be little or no difference to a graduate's earnings from attending a prestigious university.

The principal difficulty with establishing whether university quality affects graduate salaries is that high-quality universities select (and are selected by) the best students. But if universities select students entirely on the basis of things that we can observe – such as their grades at GCSE and A-level – then we might be able to remove any bias in the results of our research by controlling for them appropriately.

To make sure that we fully capture those traits that we don't observe – such as ambition and effort – we also control for background family factors such as parents' education.

Our study is based on four cohorts of students: those that graduated in 1985, 1990, 1995 and 1999. The 1995 and 1999 cohorts were surveyed three and four years after graduation, respectively. These two cohorts are the most comparable since the surveys were deliberately designed to be similar.

The 1985 and 1990 cohorts were surveyed 11 and six years after leaving university, respectively. For both of these cohorts, we study their wages six years after graduation (the earlier cohort were asked to recall their wages six years after they graduated). The differences between the cohorts mean that we have to be careful about saying that the 'returns' to studying at different universities have changed over time.

One difficulty for the research is measuring the quality of an institution. A single measure is likely to be inaccurate, as quality can be demonstrated in different ways.

Going to an 'elite university' (in the top quartile of quality) rather than a university in the bottom quartile increases graduate pay by 10-16%.

Consequently, we use a single composite measure that combines research quality, the faculty-student ratio, expenditure per student, the A-level scores of incoming students and the dropout rate.

The results of our analysis suggest that there is a significant premium to attending a high-quality university over an average university in terms of the wages that graduates can command in the labour market. This implies that even if two graduates have the same A-level grades and family background and studied the same degree subject, they will earn different wages if they went to different universities. The graduate from the more prestigious university will, on average, earn more.

Specifically, an increase of one standard deviation in university quality leads to a roughly 6% increase in graduate wages. To put this another way, a student who goes to a university that is in the second highest quartile (in terms of quality) can expect to earn 5-7% more than a student with the same parental background and A-levels who goes to a university in the bottom quartile of quality.

There is also evidence that students who go to the very best universities can benefit even more: our results suggest that there may be increasing returns to quality. A student who attends a university in the top quartile of quality may earn 10-16% more than a student who attends a university in the bottom quartile, depending on the measure of quality used.

Our results indicate that students who go to a top university do benefit more from their degrees than students who go to universities of lesser quality. As it turns out, our estimates for the 'returns to quality' are similar to those found by Black and Smith (2006) for the United States, as well as those found by Conlon and Chevalier (2003) for the premium for attending a Russell Group university in the UK.

As far as we can tell, the returns to going to a better quality university have increased over time. This may reflect the large increase in the number of universities in 1992. But because our samples differ so much between the first two cohorts and the second two, we cannot be certain about this.

Over a lifetime in the labour market, going to a university of higher quality can make a big difference to total income. The average annual earnings of graduates from the 1999 cohort were £22,828 in 2003 (four years after graduation). If we assume that the returns to quality are 6% of this amount and that this stays constant in absolute terms over the total time in the labour market, this is worth in total £35,207 (assuming 25 years in the labour market and using a discount rate of 3.5%). Since it is likely that the premium to going to a higher quality institution increases over time, this may be an underestimate.

A degree from a top university is worth more, but a degree from any university still pays off in terms of higher earnings

Such evidence suggests that there is some justice in requiring graduates to contribute to the cost of their university education, and in allowing different universities to charge different fees. That said, we should be clear that although there are increased average returns to graduates of higher quality institutions, these are still small in comparison with the overall value of higher education.

Blundell et al (2005) find that the average returns to higher education are 48% (of earnings) in comparison with leaving school at age 16 with no qualifications. If we translate this into lifetime earnings in the same (very rough) way, this amounts to a £281,594 difference between a graduate and a school-leaver. So we can see that encouraging more people to go into higher education should still be the major policy priority.

This article summarises 'University Quality and Graduate Wages in the UK' by Iftikhar Hussain, Sandra McNally and Shqiponja Telhaj, Centre for the Economics of Education Discussion Paper No. 99 (forthcoming). The study was funded by the Economic and Social Research Council through its Teaching and Learning research programme.

Iftikhar Hussain is a research economist in CEP's education and skills programme. **Sandra McNally** is director of CEP's education and skills programme. **Shqiponja Telhaj** is a lecturer in economics at the University of Sussex and a research economist in CEP's education and skills programme.

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In the second of CEP's 'big ideas' series, **Stephen Machin** surveys significant research findings on wage inequality that have emerged from the Centre over the past three decades.

Big ideas

Rising wage inequality

Accurately documenting – and understanding the causes of – rising labour market inequalities have been a major preoccupation of CEP researchers over many years. While the study of wage and employment structures dates back a long way in economics (at least as far as Adam Smith), the large body of more recent academic literature on rising inequality began in the early to mid-1990s. It sprang from a recognition that wage gaps between higher and lower paid workers were rapidly widening in a number of countries, notably the UK and the United States.

There are at least two main aspects of this research to which CEP economists have made significant contributions and shaped the debate. The first is careful use of large-scale microeconomic data on individuals' wages and employment to document what happened and to measure accurately the extent to which the wage distribution widened.

For many years, economists had pointed to the stability of the wage structure. But there was a sense in the late 1980s and early 1990s that things were changing. In the early to mid-1990s, CEP researchers Stephen Machin and John Schmitt (then a doctoral student at CEP and now a senior economist at the Center for Economic and Policy Research in Washington, DC), using data sources such as the General Household Survey and the New Earnings Survey, were the first to document the substantial increase in wage inequality that had occurred since the late 1970s (Schmitt, 1995; Machin, 1996).

Simultaneously, CEP research fellow Richard Freeman of Harvard University was documenting a similar increase in wage inequality in the United States – which was worse than in the UK as those at the bottom were experiencing large real falls in their earnings.

The second significant contribution was to develop a better understanding of the proximate causes of rising wage inequality. Influential cross-country work from the late 1980s by Stephen Machin, John Van Reenen and various co-authors pinpointed 'skill-biased technological change' as a force operating in the labour markets of a number of industrialised countries as generating greater labour market inequality than in the past (Berman et al, 1998; Machin and Van Reenen, 1998; Nickell and Van Reenen, 2001).

This change consists of technological advances (such as computers) that have been observed to benefit more skilled or educated workers and, at the same time, to be detrimental to the wages and employment prospects of less skilled or educated workers. As these technologies diffused into modern workplaces, the relative wages of skilled versus unskilled workers rose or the employment rates of the skilled versus the less skilled rose – or in some countries, notably the UK and the United States, both happened.

CEP researchers have continued to make significant contributions to this debate and we now know a lot more than we did when the initial research was undertaken. It has become evident that the sharpest burst of rising wage inequality in the UK occurred in the 1980s. In that decade, the whole wage distribution widened as successively higher percentiles of the wage distribution experienced higher relative wage growth (Machin, 1999).

This can be illustrated by thinking of 'upper tail wage inequality' as the wage at the ninetieth percentile (the wage received by someone 10% below the top of the wage distribution) relative to the fiftieth percentile (the person right in the middle), and 'lower tail wage inequality' analogously as the tenth percentile wage relative to the fiftieth.

Figure 1 shows decade-by-decade

The rises in UK and US wage inequality are due to a combination of technological change and institutional changes, such as union decline, affecting the labour market

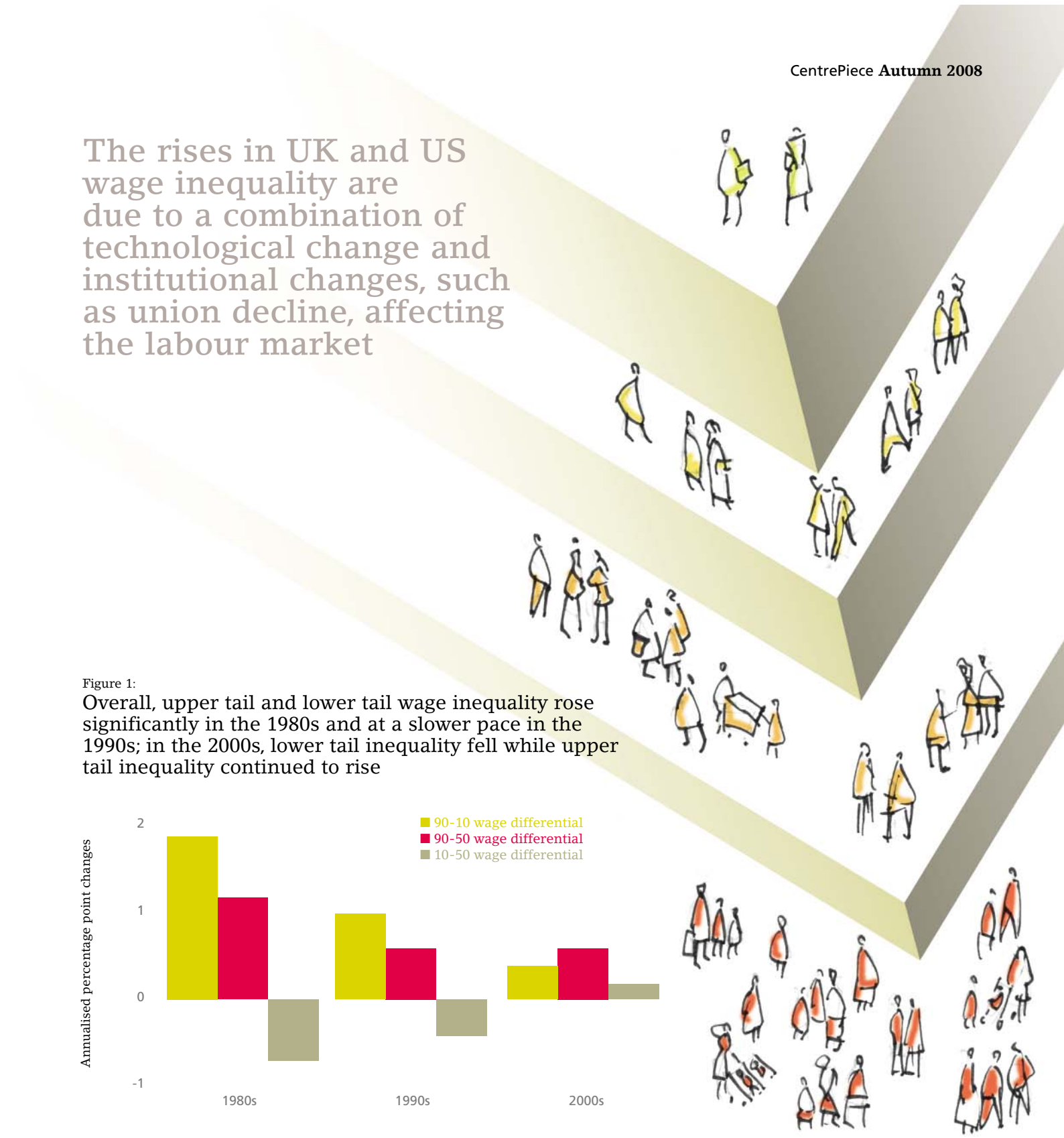

Figure 1:
Overall, upper tail and lower tail wage inequality rose significantly in the 1980s and at a slower pace in the 1990s; in the 2000s, lower tail inequality fell while upper tail inequality continued to rise

changes in overall, upper tail and lower tail wage inequality (in annualised percentage points). In the 1980s, both lower and upper tail inequality rose significantly as the 90-50 wage differential increased and the 10-50 wage differential fell. A key aspect to this was rising wage gaps between more and less educated workers – in other words, the wage 'returns' to education rose.

The next two decades proved somewhat different, however. In the 1990s, wage inequality continued to rise but at a more muted pace. In the 2000s, lower tail inequality narrowed as the 10-50 differential increased but upper tail inequality continued to expand.

How does recent research reconcile these patterns of change? First of all, the 'naïve' story of skill-biased technological change has evolved into a more nuanced one. It may be more plausible to think of technological advances as damaging the wage and employment prospects for workers in jobs that can be replaced by machines and computers – those jobs that require workers to perform routine tasks. At the same time, jobs requiring workers to do more complex, non-routine tasks cannot be replaced or downgraded in terms of the wages they pay in the same way.

So it was not only unskilled workers on the production line who saw their jobs disappear and wages fall, but also those relatively skilled workers like bank clerks who performed routine clerical tasks. Their jobs were increasingly replaced by new information technology such as ATM machines.

CEP work by Maarten Goos and Alan Manning showed that this process effectively caused a polarisation of the labour market (Goos and Manning, 2007). At the top end of the occupational structure, job growth since the late 1970s has been rapid – and wages have risen significantly. But the middle has hollowed out, as the jobs that could be replaced by automation have been lost. At the bottom end, there remain jobs that cannot be replaced by machines or computers – like cleaning or caring jobs – and the demand for some very low wage jobs has risen.

While we can say that the significant growth in upper tail inequality in the UK since the late 1970s was down in large part to skill-biased technological change, we had to find other mechanisms to explain the big rise in lower tail inequality in the 1980s and the subsequent bounce back of the 2000s. Here CEP research pointed to changes in the role of labour market institutions, in which there have been two important episodes.

First, the rapid decline of trade unions, which had traditionally propped up the wages and employment of low-skilled workers, played a role in rising lower tail inequality. Second, as documented in research by Richard Dickens and Alan Manning, the introduction of the National Minimum Wage in April 1999 has been important in securing sizeable relative wage gains for low paid workers in the 2000s and thus contributed to the more recent narrowing of lower tail inequality (Dickens and Manning, 2004).

Where does this leave us today? CEP research on this important question has been vital in documenting and explaining why labour market inequalities have risen over time in the UK, and in placing this rise into its appropriate international context. But many important issues are still outstanding.

For example, our work found that the role of developing countries and foreign competition in fostering lower wages for the less skilled in the UK was, perhaps surprisingly, minimal. Although in theory, trading with poorer countries could lead to the wages of unskilled British workers 'being set in Beijing', this did not seem to be happening.

But this literature mainly pre-dated the rise of China and India in the mid-1990s, and ignored some of the ways in which trade itself could stimulate greater technical change. Both these issues are being pursued in our future work using new sources of data.

In conclusion, our work has shown that the recent rises in UK wage inequality have mainly been due to a combination of skill-biased technological change and institutional changes affecting the labour market. But what kind of policies could be implemented to reverse the trend in inequality?

The long-term policy has to be the building up of human capital. But what is the best way to do this? In the shorter term, reform of labour market institutions such as the minimum wage and trade unions could also be important. We will turn to policies with the potential to tackle distributional problems in future issues of *CentrePiece*.

Stephen Machin is research director of CEP and professor of economics at University College London.

The long-term policy response to rising inequality has to be the building up of human capital

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The emergence of China and India in the global economy

July 2008 conference

This three-day conference debated all aspects of the impact of the emerging economic powers on Europe and the United States and the changes within India and China themselves. A highlight of the conference was a policy panel featuring Athar Hussain of LSE's Asia Observatory, Alan Winters, recently appointed chief economist at the UK's Department for International Development, Martin Wolf of the *Financial Times* and Yale professor Peter Schott.

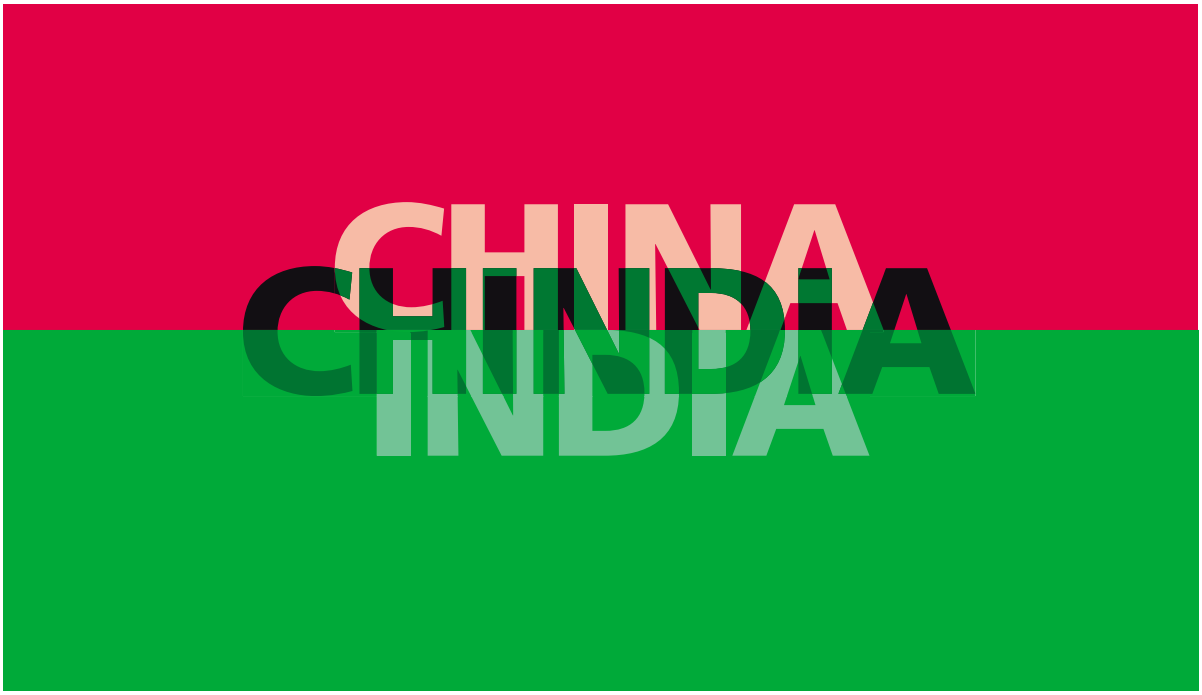
CEP's director John Van Reenen, chaired a lively discussion, which he kicked off by asking three questions about lessons for growth, the effect of globalisation on inequality and threats to the political coalition for globalisation.

The panellists focused on the fact that the lessons from China and India's development may be limited for other countries. A key factor has certainly been an emphasis on exports, a degree of opening up of markets to imports and some liberalisation of the economy. But China has embarked on a more classical development path through manufacturing exports, whereas India's growth has been startlingly service-driven, a very new mode of development.

There was some dispute over the role of trade in driving inequality in the rich countries. Martin Wolf argued for technology having the major role whereas the other panellists saw a greater role for trade. John Van Reenen's research shows that the two are inter-related: trade with China appears to have stimulated faster technological progress in the West.

Although the panel agreed that the prospects for the Doha round were grim, Martin Wolf pointed to the fact that globalisation had created footloose multinationals with much less vested interest in protectionism in any one country. This by itself undermined one of the key lobbies against trade – vested domestic business interests.

The conference on the emergence of China and India in the global economy was co-organised by Stephen Redding and John Van Reenen of CEP. Full details on the conference are available here: http://cep.lse.ac.uk/_new/events/event.asp?id=50



in brief...
Spend it like Beckham

The gap in income between rich people and the average Briton has widened very markedly over the last three decades. **Andreas Georgiadis** and **Alan Manning** wonder why voters have not forced successive governments to increase taxes on the rich.

'I warn you that there are going to be howls of anguish from those rich enough to pay over 75% on their last slice of earnings.'
Denis Healey, Labour Party Shadow Chancellor, 1973.

'The justice for me is concentrated on lifting incomes of those that don't have a decent income. It's not my burning ambition to make sure that David Beckham earns less money.'
Tony Blair, Labour Party Leader, 2001 election campaign.

The gap in income between rich people and the average Briton has widened very markedly over the last three decades. In the early 1970s, the top 10% received about one quarter of total income but their proportion of total income now is more like one third. We might expect that the political response to this – at least from a Labour government – would take the form of more redistribution, including higher marginal tax rates for the rich. But this has not happened.

The simplest way to see it is that the top rate of income tax fell from 83% in the late 1970s to 40% in 1988 – since when it has not changed. There is now no major political party proposing substantial rises in the top marginal rate of income tax. Looking across the tax and benefit system, we can see that redistribution has not increased even as inequality has risen.

In a democracy, it is the voters in the middle (the median voter) who have the most influence since they are the 'swing' voters who determine the outcomes of elections. And as the median voter has a below average income (due to a handful of super-rich people), we might expect them to put pressure on the government to redistribute resources from the rich to themselves. According to this view, a rise in income inequality will lead to more redistribution as the median voter tries to get a slice of the extra pie going to the rich.

Of course, there is substantial redistribution: the share of the top 10% in final income is about one quarter, which is considerably lower than their one third share in original income. But the prediction that more inequality will lead to more redistribution is not supported by the evidence. Not only has redistribution in the UK failed to keep pace with rising inequality, but there is also little evidence that it applies across other countries. Perhaps the starkest comparison is between the United States and Europe: the former has higher levels of inequality than the latter and less redistribution.

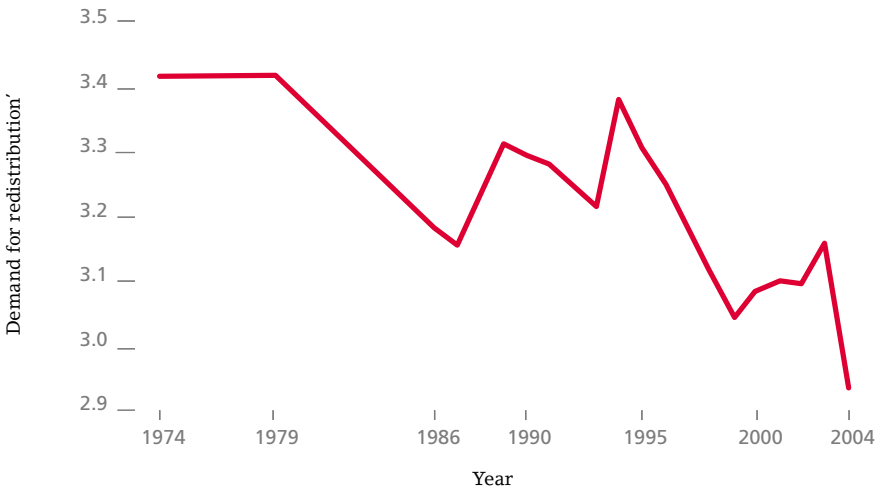
So why has the rise in inequality in the UK been met with so little demand for higher taxes on the rich? One view might be that our democracy is closer to 'one pound, one vote' instead of 'one person, one vote'. If this were so, then a rise in the share of income going to the rich would also lead to a rise in their share of political power, hence potentially explaining the lack of a redistributive response.

Our research has been considering other possible explanations. We analyse the British Social Attitudes Survey (BSAS) to see whether attitudes towards redistributive taxation have been changing.

The answer is that they have. Figure 1 shows the average response of individuals to the statement 'government should redistribute income from the better-off to those that are less well-off' from 1 ('strongly disagree') through to 5 ('strongly agree') – so that higher average values represent a greater demand for redistribution.

Figure 1 indicates that the demand for redistribution fell in the early 1980s but then rose from the mid-1980s to

Figure 1:
Agreement with the statement that 'government should redistribute income from the better off to those that are less well-off' (1=strongly disagree; 5=strongly agree)



This article summarises 'Spend It Like Beckham? Inequality and Redistribution in the UK, 1983-2004' by Andreas Georgiadis and Alan Manning, CEP Discussion Paper No. 816 (http://cep.lse.ac.uk/pubs/download/dp0816.pdf).

Andreas Georgiadis is a research economist in CEP's labour markets programme. **Alan Manning** is director of CEP's labour markets programme.

Voters seem to value redistribution less – and this is the main reason why it hasn't increased

the mid-1990s. This was the period in which inequality grew fastest and it seems likely that the lack of redistribution by the Thatcher and Major governments was not particularly popular.

Tony Blair inherited a large demand from voters for more redistribution in 1997. Since the election of New Labour, support for redistribution plummeted to a new low. One explanation might be that the Labour government succeeded in redistributing income so that voters' demand were met. But the data suggest that little has actually happened to inequality or redistribution since 1997.

There has been some redistribution towards children in poverty and poor pensioners. But these are relatively small deals in the big scheme – the underlying trends in inequality in the economy as a whole. We are left with the job of explaining the puzzle that inequality now is much higher than in the 1970s but the demand for redistribution is much lower.

What determines attitudes towards redistribution? Our analysis of the BSAS indicates a number of important factors, all in line with the theory of the median voter:

- First, your personal circumstances – the rich are markedly less in favour of redistribution than the poor.
- Second, if you care a lot about the poor or are very envious of the rich, it is quite likely that you support a lot of redistribution.
- Third, if you believe that high taxes discourage work, then you are less likely to support redistribution.
- Finally, if you think the government cannot be trusted, then you are not likely to support as much redistribution.

The views of the British population have changed over time and our analysis attempts to link the fall in the demand for redistribution to changing attitudes. We find that we can do a pretty good job: changes in attitudes towards redistribution can explain almost two thirds of the decline in the demand for redistribution in the UK.

The single most important change is that many fewer people now seem to believe in the 'class war' – that there is one law for the poor and one for the rich, or that big business benefits owners at the expense of workers.

So people's beliefs are as important as their economic circumstances in explaining attitudes to political issues like redistribution. And these beliefs can change fast. That politics is a battle for 'hearts and minds' is not surprising, but why have the beliefs of British voters changed in this way?

It seems that British views are becoming more like the views of Americans: those in the middle are no longer envious of the rich – instead they aspire to be the rich. But as we enter a recession in which the average Briton is quite likely to feel the pinch, it may once again become an attractive political policy to seek to increase the share of taxes paid by the rich.

It was CEP research that first established that the life chances of children born into poor households in 1970 were worse than those for children born twelve years earlier. Now **Jo Blanden** and **Stephen Machin** look at more recent evidence to find out what happened to the life chances of children born into poor families since then.

Recent trends in intergenerational mobility:

Will the downward trend continue?

Since 1997, the government has launched a variety of initiatives designed to improve the life chances of poor children. The logic was clear: every child should have an equal chance to succeed in life regardless of how well-off their parents are. Whether parental background is becoming more or less important in determining child outcomes is of interest in itself, and it may help us to evaluate the policy initiatives designed to increase social mobility from one generation to the next.

We have shown in work with Paul Gregg (Blanden et al, 2005, 2007) that, on average, the life chances of a child born into a poor household in 1970 were worse than those of a child born into a similar household in 1958. In particular, we showed that the earnings of individuals born in 1970 were more strongly related to the income of their parents than those of the earlier cohort. But until now, we have not been able to assess whether intergenerational mobility has declined further since then.

To do so is especially important since children even from the second cohort would have been in their late twenties by the time New Labour came to power in 1997 and would not have been affected by policies such as Sure Start (which provided services for pre-school age children) and the Excellence in Cities programme (which directed more resources to inner city schools).

Our new study, funded by the Sutton Trust, uses more recent data to attempt to determine what has happened to social mobility since 1970. It uses information on the children of both the 1958 and 1970 cohorts: on average, the children of those born in 1958 were born in 1985, and the children of the 1970 cohort were born in 1999.

In addition, we use information on young adults from the British Household Panel Survey (BHPS), a nationally representative sample of 5,500 households, as well as children born in 2000 and 2001 from the Millennium Cohort Study.

One problem with looking at the mobility of these later cohorts is that children born recently have not entered the labour market yet. So instead, we investigate the link between parents' income and the intermediate outcomes of their offspring. These outcomes include acquiring a degree by the age of 23, cognitive test scores during the early years, and parents' reports of behaviour during childhood.

We then analyse whether the link between parental income and these outcomes has been strengthening over time based on the principle that if the relationship has strengthened, then this is likely to lead to a decrease in intergenerational mobility later in life. We can check if this principle is true by using the 1958 and 1970 cohorts, for which we

Illustration: Jenny Mumford

have information on intermediate outcomes and for whom we know that intergenerational income mobility fell.

Figures 1 and 2 show how the intermediate outcomes that we use are related to parental income. Figure 1 shows that although children born in 1970 were more likely to have a degree by the age of 23 than children born in 1958, the growth in degree-level education was strongest among those from the richest backgrounds.

Although 7% of children born in 1970 from the poorest fifth of households had a degree (up from 5% of the children born 12 years earlier), degree attainment from those from rich backgrounds grew much more quickly: from 20% to 37%. So inequality in degree attainment widened from 15 percentage points to 30 percentage points between the two cohorts.

Figure 2 repeats this exercise for reading test scores (at age 11 in the 1958 cohort and age 10 in the 1970 cohort) and shows the average test score percentile achieved by those from different backgrounds. Inequality also grows across the cohorts by this measure.

We then compare the changing relationship between these outcomes and family income between 1958 and 1970 with recent trends. If intermediate outcomes are ever more strongly related to parental income, this suggests that the trend of declining social mobility has continued.

A key assumption is that educational outcomes for children are a good (and reasonably constant) predictor of what they will earn as adults. This has been borne out by other studies: the more educated you are, the more you earn.

Figure 3 compares the degree achievement of the 1970 cohort with that of more recent 'pseudo-cohorts' drawn from the BHPS. Unlike the earlier period, there is little to suggest that the gap between the rich and the poor (in terms of degree attainment) widened. Indeed, the gap in degree attainment between children from the poorest households and the richest remains static between the 1970 cohort and the first BHPS sample (who are on average six years younger).

The gap appears to widen slightly between the first and second BHPS groups, but the change is too small for us to rule out the possibility that it is an artefact of the data. So the recent evidence should be interpreted as 'no change': it appears (from this measure at least) as though the decline in intergenerational mobility has been arrested.

Degree attainment is only one of the

Figure 1:
Inequality in degree attainment – 1958 and 1970 cohorts

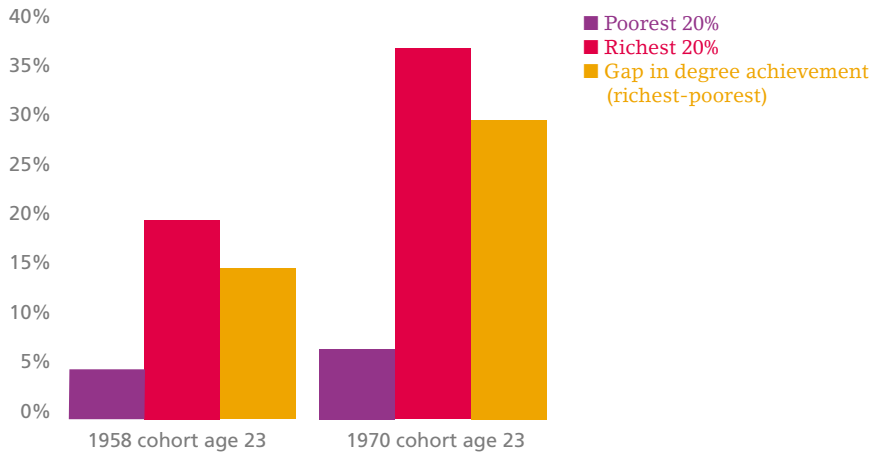
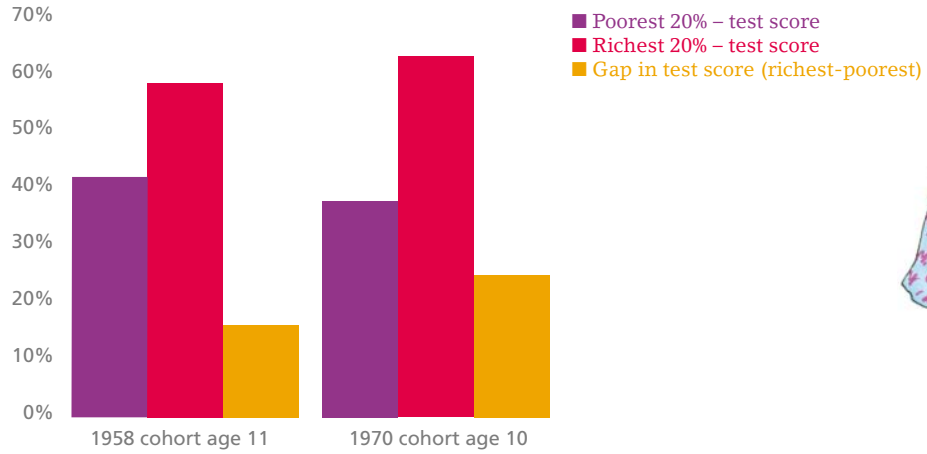


Figure 2:
Inequality in test score percentiles – 1958 and 1970 cohorts



Inequality in degree attainment and test scores widened between the 1958 and 1970 cohorts

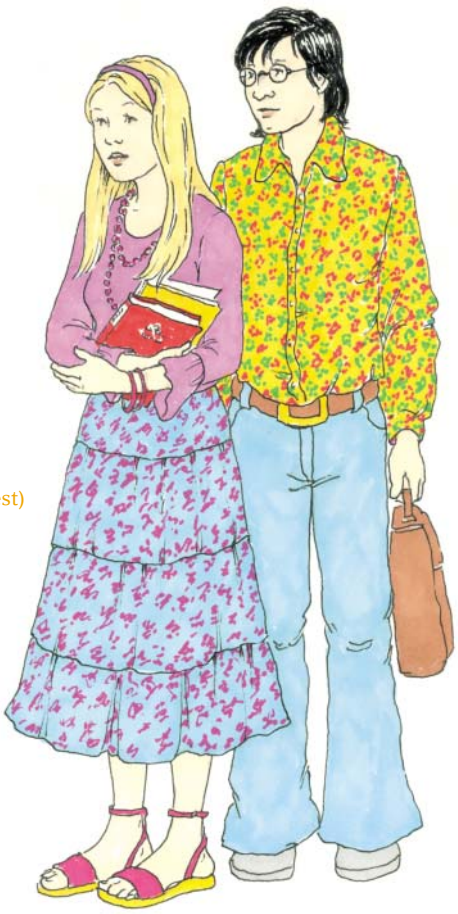


Figure 3:
Inequality in degree achievement - 1970 onwards

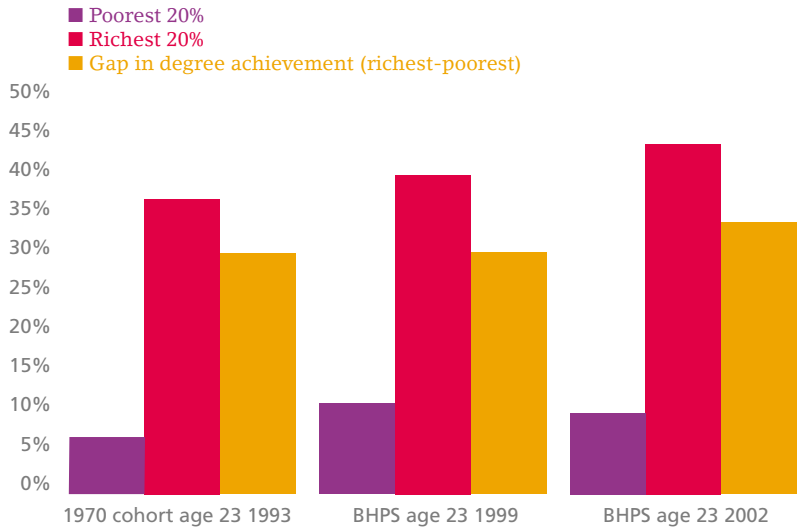
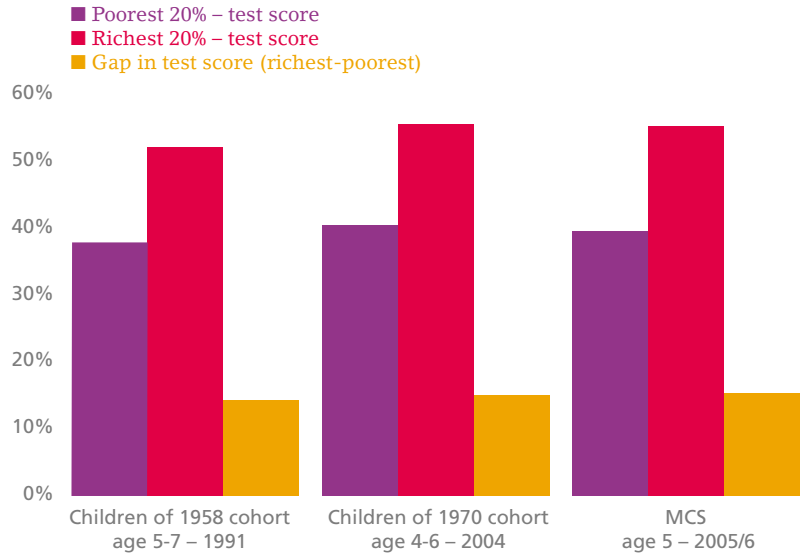


Figure 4:
Inequality in test score percentiles - more recent cohorts



intermediate outcomes in which we are interested. But as it turns out, the story from the other measures is similar: the gap between rich and poor children has not widened in recent years.

Figure 4 shows this for test score performance at around the age of 5. The bars look almost identical across the three datasets, indicating that there has been no change in the relationship between test scores and family income in the cohorts born from the mid-1980s to the turn of the millennium.

Evidence from behavioural tests confirms and consolidates our findings. The relationship between family income and externalising or 'acting out' behaviour increases in the earlier cohorts but shows no change for those born since the mid-1980s.

As far as we can tell, therefore, it seems that our previous finding of a fall in intergenerational mobility between the 1958 and 1970 cohorts will not continue for children born more recently. Looking at the connection between intervening factors - educational attainment, test scores and behavioural measures - and family income for more recent cohorts we find little evidence of change.

It appears that the decline in social mobility may well have flattened out. This may be either good or bad news for policy: while it may have stopped the previous decline, it has failed to lead to an overall improvement in mobility.

The fall in intergenerational mobility between the 1958 and 1970 cohorts has not continued for children born more recently

This article summarises 'Up and Down the Generational Income Ladder in Britain: Past Changes and Future Prospects' by Jo Blanden and Stephen Machin, *National Institute Economic Review* 205: 101-17. This work originally appeared in December 2007 as the Sutton Trust report 'Recent Evidence on Intergenerational Mobility'. The authors gratefully acknowledge the financial support of the Trust.

Jo Blanden is a lecturer in economics at the University of Surrey and a research associate in CEP's education and skills programme. **Stephen Machin** is research director of CEP and professor of economics at University College London.

Further reading

Jo Blanden, Paul Gregg and Stephen Machin (2005) 'Educational Inequality and Intergenerational Mobility', in *What's the Good of Education? The Economics of Education in the UK* edited by Stephen Machin and Anna Vignoles, Princeton University Press.

Jo Blanden, Paul Gregg and Lindsey Macmillan (2007) 'Accounting for Intergenerational Persistence: Non-cognitive Skills, Ability and Education', *Economic Journal* conference volume: C43-60.

Intergenerational mobility

June 2008 conference

On 23 June 2008, the Prime Minister gave a flagship speech to school leaders in which he said that 'raising social mobility in our country is a national crusade in which everyone can join and play their part' and pledged that a White Paper on social mobility would be produced by the end of the year.

On the same day, CEP – which has been at the forefront of recent research into intergenerational mobility – hosted a one-day conference on the subject, co-organised with the Centre for Longitudinal Studies at the Institute for Education. The day brought together many of the leading academics in the field – what Polly Toynbee described in *The Guardian* as 'a roll call of top sociologists and economists'.

The first session contrasted the approaches and results from the sociological and economic approaches to measuring intergenerational mobility. Colin Mills presented joint work with John Goldthorpe from the sociological side while Jo Blanden provided the economists' perspective, presenting a paper she has written with Paul Gregg and Lindsey Macmillan. Discussion from Robin Naylor and John Hills brought out the similarities and differences in findings and approach.

Paul Gregg and Lindsey Macmillan then brought the evidence on intergenerational mobility right up to date, looking at how the relationship between family background and educational achievements has changed under New Labour and the implications of this for future mobility. Miles Corak gave the last paper of the morning, showcasing Canadian data which indicates that 40% of men follow their father into the same firm.

In the afternoon, Marco Francesconi presented joint work with John Ermisch, using data from the Millennium Cohort Study to examine the impact of family background on birth weight, one of the very earliest ways in which family investments can influence children's outcomes. Maia Güell followed with a paper (joint with Sevi Mora and Chris Telmer) showing how the ability of surnames to explain income in the population is related to, and can estimate, intergenerational mobility from one generation to the next.

Steve Nickell responded by questioning the worth of estimating intergenerational mobility, arguing that one number is insufficient to capture all the complex social and economic processes involved. In the discussion that followed, intergenerational elasticity was compared with the growth rate and the Gini coefficient measure of inequality as one of the essential statistics that describe an economy.

The final academic paper of the day was by Anders Björklund (joint with Lena Lindahl and Matthew Lindquist), using data from Sweden to explore the value of sibling correlations in income as an alternative measure of mobility.

The audience for the day came from a broad background: representatives of charities, thinktanks and government departments were present, alongside academics from across the UK. In recognition of this, the conference aimed to combine academic papers with a broader discussion of the policy implications of social mobility research.

To this end, the day closed with a roundtable discussion chaired by Stephen Aldridge of the Cabinet Office. Academics Stephen Machin and John Goldthorpe set the scene by building a bridge between the academic and policy viewpoints. Contributions then followed from Liberal Democrat MP Lynne Featherstone, Conservative MP David Willetts, Lee Elliot Major of the Sutton Trust and Polly Toynbee.

Social mobility remains at the top of the policy agenda and the discussions at CEP have contributed to bringing the academic and policy communities a little closer together in their thoughts.

The conference on intergenerational mobility was co-organised by **Jo Blanden** of CEP and **Kirstine Hansen** of the Centre for Longitudinal Studies at the Institute for Education. Further information is available here: http://cep.lse.ac.uk/_new/events/event.asp?id=48

The British public is increasingly sceptical that official inflation numbers reflect the true rise in the cost of living. **Nicholas Oulton** explains the problems in creating an accurate measure of inflation, and outlines a new method of measuring rising prices.

How to measure the rising cost of living

When I tell my friends that I have been studying the problem of path-dependence bias in chain index numbers of the cost of living, their eyes tend to glaze over. But aside from its purely intellectual interest, the study of cost-of-living (and other) index numbers has many important practical implications. After all, whenever you read that the consumer prices index (CPI) rose at an annual rate of 2.5% last month or that GDP in the first quarter rose by 1.5%, you are being told something about index numbers.

To what extent do price indices like the retail prices index (RPI), used to update pensions and social security benefits in Britain, or the CPI, used by the Bank of England as its inflation target, measure the true cost of living? An index is a group (or 'basket') of goods, and by measuring the price change of each good you can estimate the price change of all. But because some goods take up a larger proportion of our disposable income than others, we need to adjust (or 'weight') the index to reflect this.

In the past, such price indices quickly became out-of-date as they were based on a fixed basket of goods: the weight of different goods in the baskets didn't change over time. And as people tend to substitute goods that have quickly rising prices for ones that have slowly rising prices, the share of our spending that each good takes up varies, and becomes less and less similar to that of the original index.

So in Britain the basket of goods is not fixed but is changed every year in line with the latest spending patterns – in the jargon, the CPI or the RPI is a chain index. But conventional price indices like the CPI and the RPI, considered as measures of the true cost of living, do suffer from what I call 'path-dependence bias'. This second type of bias arises because the poor spend their money in different ways from the rich, even when both face the same prices.

> From 1974 to today, inflation in the UK has hurt the poor more than the rich

One of the earliest and most robust empirical findings in economics is Engel's Law, named for an 1857 study by Ernst Engel of household budgets in Saxony. Engel found that richer households spent more on food but that the richer the household, the lower the share of food in total expenditure.

Engel's study is not just of historical interest. The share of the household budget devoted to food in Britain has fallen by around half in the last 30 years and it's likely that this is mostly due to the rising average level of prosperity over this period.

Engel's Law illustrates a general problem with measuring the cost of living. Consider a household with a very low standard of living, spending say 60% of its budget on food, just like the majority of the households Engel studied in 1857 or indeed hundreds of millions of people in poor countries today. Suppose the price of food rises by 20%, with other prices remaining unchanged. Then money income will probably have to rise by close to 12% (0.60 x 20%), to leave the standard of living unchanged.

Notice that we can't say it must rise by exactly 12% since it might be possible for the household to substitute some other goods for food. For example, the need for food could be reduced a little by burning more fuel (this is the substitution bias point). But at such a low standard of living, the substitution possibilities are clearly limited.

Compare this household with a modern day British one, spending only 15% of its budget on food. Now the maximum rise in income required to maintain the standard of living intact is only 3% (0.15 x 20%). In fact, it may be a good bit less as substitution opportunities are greater: if the price of food rises, households can buy cheap food instead of expensive food (more bread and less meat) or substitute other products for food, though poorer households will obviously find this harder than richer ones.

The general point is that though prices tend to rise over time, they don't all rise at the same rate. The increase in the cost of living depends on the pattern of expenditure; this pattern differs between richer and poorer households and also changes as the average standard of living rises over time. So a single number that tries to measure the change in the cost of living will be necessarily inaccurate, as poor families spend their money on different things than rich families do.

So when we find that a conventional price index like the RPI has risen at an average rate of about 6% per year over the period 1974-2004, the key question is: whose standard of living is being taken as the base for measuring the cost of living? The answer is, roughly, that of someone with the average standard of living in the middle of this period – around 1989.

But what's so special about 1989? Why not take the viewpoint of people today, who are of course considerably richer on average than their counterparts in 1989? Or the viewpoint of people in 1974, who were considerably poorer?

Because people's incomes change over time, so do their spending habits. But if

Accurate measurement of the rising cost of living in the developing world is needed to inform development policy

we want a true picture of how the cost of living is changing, this change in incomes confuses things. We can't simply use the original shares of each item in the household budget (in the base year, here 1974) as substitution bias means that the price index will overstate the cost of living: people would naturally buy fewer of the goods that have seen quickly rising prices. But we shouldn't really use the actual budget shares in 2004 either, as this will lead to path-dependence bias – since people now are richer than they were in 1974, they want to buy different things.

What we would ideally like to know are the *hypothetical* budget shares: what the shares *would have been* if prices were at their *actual* level in 2004 but the standard of living had been at its 1974 level (or any other year taken as the point of comparison). Of course these hypothetical shares cannot be directly observed.

Fortunately, there is a way of estimating the hypothetical shares indirectly. This can be done using only available data, namely prices and (actual) budget shares. When the hypothetical shares have been estimated, we can construct an RPI for any level of the standard of living we like.

For example, taking 1974 as the base year for the standard of living, we could ask: by how much would the income of a household with the typical 1974 standard of living have to rise in order for it to enjoy the same standard of living at the prices of 2004? The same could apply to any other year.

Figure 1 shows the results of estimating an RPI appropriate to the standard of living of each year between 1974 to 2004. It reveals a very interesting pattern. The growth rate of the cost of living tends to be higher the further back in time the base year is. As incomes have grown steadily over time, this implies that the rise in the cost of living was greatest if we take the viewpoint of the poorest (the British in 1974) than if we take the viewpoint of the richest (the British in 2004).

In other words, over this period, inflation hurt the poor more than the rich. The difference between the highest and the lowest inflation rate is around 0.5% per year: this is the maximum size of the path-dependence bias.

This method can also be applied between countries. Policy towards poverty and development should be informed by the size of the gap between the rich and the poor – and so how the cost of living is changing for different groups is important, not least due to the rapidly rising food prices that we are seeing at the moment.

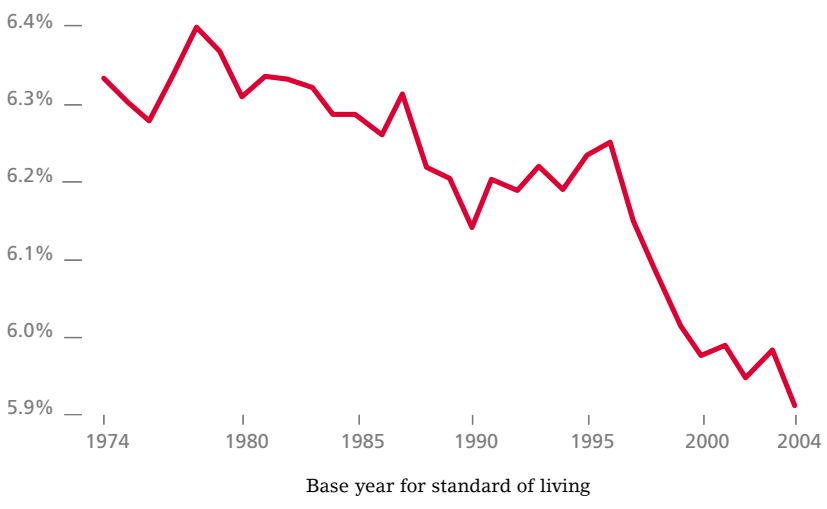
But exactly the same problem of path-dependence bias arises here too. And the bias is potentially much larger: across the globe, living standards vary by much more than they did over the period 1974-2004 in Britain, during which they approximately doubled.

The World Bank has just completed the latest and fullest round of the International Comparison Program, which has delivered detailed price and spending comparisons for virtually every country of any size in the world, including (for the first time) China. Applying the new method to these data will allow us to develop better measures of living standards across the globe.

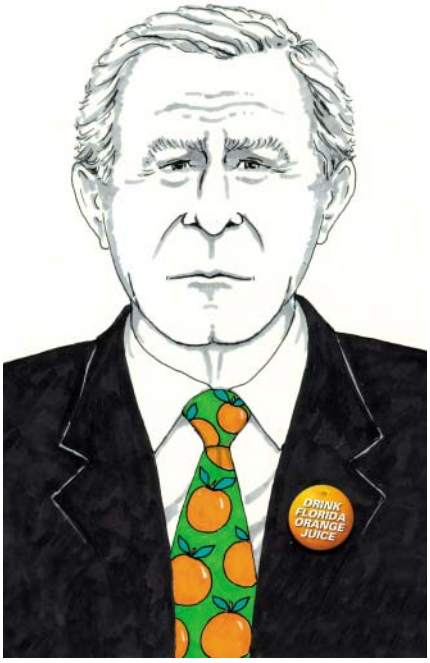
This article summarises 'Chain Indices of the Cost of Living and the Path-dependence Problem: An Empirical Solution' by Nicholas Oulton, CEP Discussion Paper No. 797 (http://cep.lse.ac.uk/pubs/download/dp0797.pdf) and *Journal of Econometrics* 144(1): 306-24 (May 2008).

Nicholas Oulton is a senior visiting research fellow at CEP.

Figure 1:
Average growth rate of true cost-of-living index, 1974-2004 by base year for standard of living (per cent per year)



As the US election campaign approaches its climax, the presidential candidates jet from one battleground state to the next trying to drum up support. Research by **Mirabelle Muûls** and **Dimitra Petropoulou** finds that the US government is more likely to try to protect industries concentrated in these states.



Do swing states influence trade policy?

John McCain and Barack Obama are spending the lion's share of their time on the campaign trail in just a few states – because it is only these so-called 'swing states' that could conceivably vote for either candidate. Neither candidate is likely to devote many resources to New York (safely Democrat) or South Carolina (solid Republican).

But do swing states just receive more visits from presidential hopefuls come election time, or does their electoral importance translate into something more tangible? In particular, is it possible that swing states with concentrations of certain industries, notably those that are fast becoming uncompetitive in the face of cheaper imports from China and elsewhere, are able to push for protectionist trade policies?

In 2002, President Bush introduced tariffs of up to 30% on imported steel. It seemed to many that the president was less worried about supposed dumping (the ostensible reason for the tariffs) than the potential loss of jobs in 'rust belt' swing states like Michigan, Ohio, Pennsylvania and West Virginia.

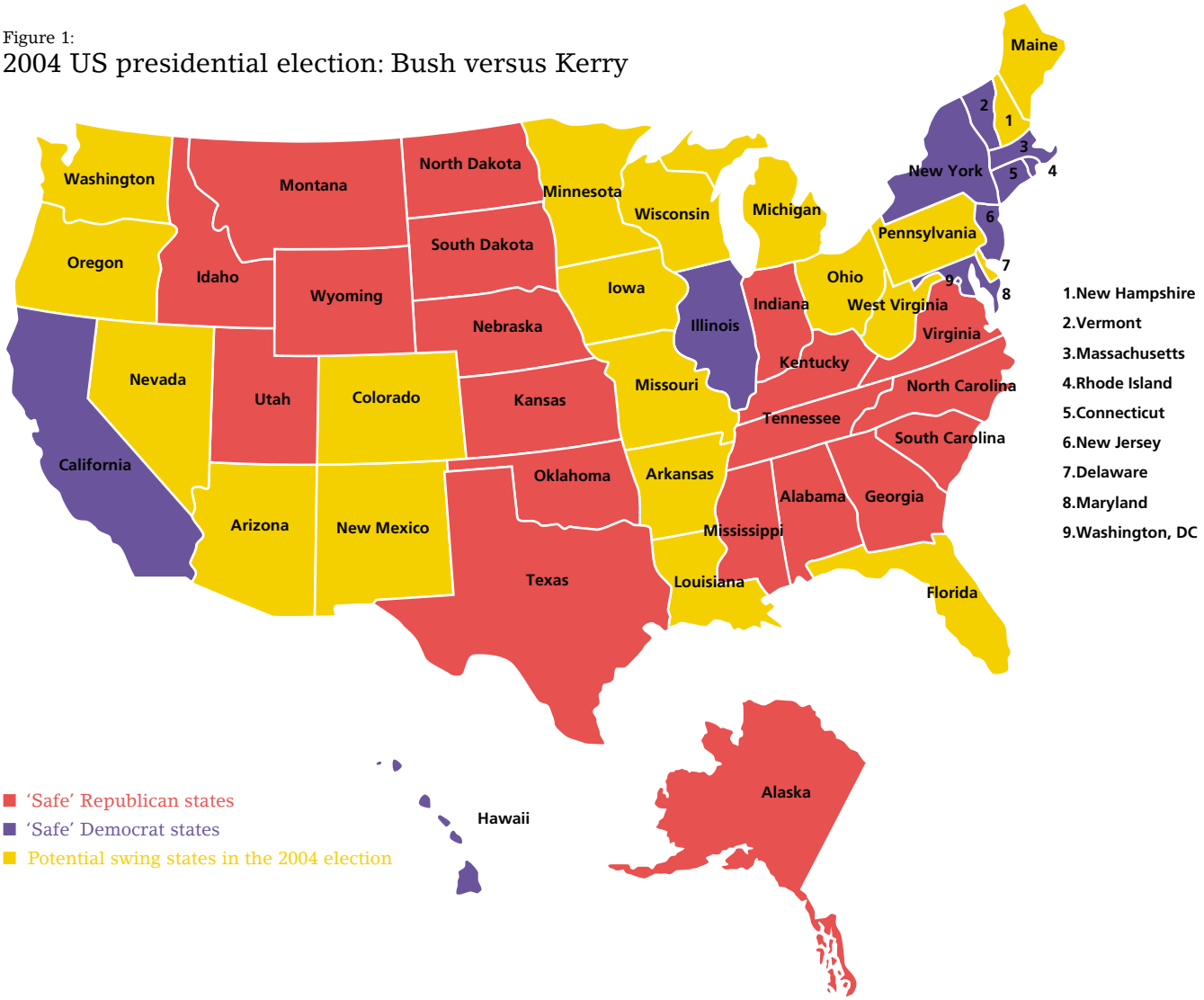
The World Trade Organisation (WTO) ruled that the tariffs were not justified, and allowed the European Union (EU) to retaliate. The EU leaders were certainly under the impression that President Bush was following political incentives, as their proposed retaliatory tariffs were targeted at goods exported from other key swing states, such as oranges (Florida) and cars (Michigan). The president duly repealed the steel tariffs.

The attention paid to swing states, especially large swing states (which have more votes in the 'electoral college' that ultimately chooses the president), should not be understated. Florida was the most intensively contested state in the 2004 election, receiving a fifth of all candidate visits and more than a quarter (27%) of all money spent on television advertising. According to data from 'Who Picks the President?', a report by FairVote

Industries that employ many people in politically decisive states are more likely to be protected

Illustration: Jenny Mumford

Figure 1:
2004 US presidential election: Bush versus Kerry



(www.fairvote.org/presidential), this was more money than was spent on advertising in 45 other states and the District of Columbia combined.

The map shows the swing states, such as Florida with 27 electoral votes, in yellow, while blue and red states denote the Democratic and Republican 'safe states', respectively, such as California (55 electoral votes) and Texas (34 electoral votes).

Previous research has tried to explain US trade policy by looking at the role of political lobbying. The thesis is simple: industries that are represented by stronger lobbies on Capitol Hill are more likely to be protected. Our work investigates another potential channel: the strong incentives for presidential candidates to try to win over certain states.

Our hypothesis is that industries which employ many people in the key swing states are more likely to receive protection by incumbent governments so as to attract votes. If we are right, then industries that receive protection are those which employ many people.

Subtle non-tariff barriers allow presidents to get around World Trade Organisation rules on protection

We first show, using a model of the electoral college, that an incumbent president has a strong incentive to manipulate trade policy so as to build a reputation of protectionism with the electorate, especially in the large swing states. By signalling his preferences on trade policy, an incumbent president (or party) can influence swing voters and the chances of re-election. This theoretical work lends support to the hypothesis that the 2002 US steel tariffs were introduced for reasons of political expediency.

We test our theory by looking at the 1984 presidential election. This election, between Ronald Reagan (the Republican incumbent) and Walter Mondale (Democrat), provides as good a set of data as any to test the hypothesis that industries concentrated in states expected

to be both swing and decisive are more likely to be protected.

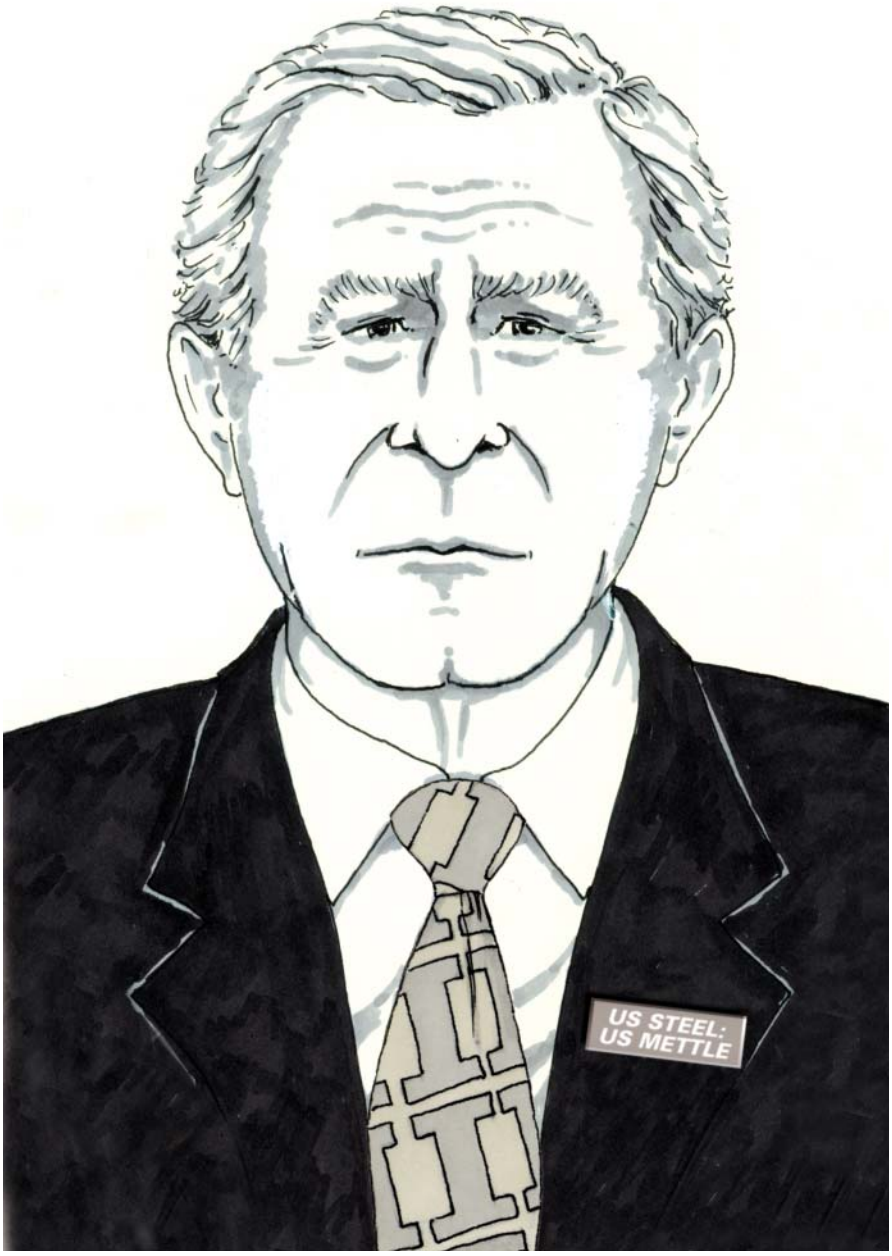
Using data for 1983 (the year preceding the poll), we construct a measure of which industries were concentrated in which states. Our measure is based on employment, as workers are voters. In particular, the higher the proportion of employment in any given industry in a swing state, the higher we expect its electoral influence to be.

We combine these employment data with a measure of each state's joint probability of being both swing and decisive in the 1984 election. At that time, Texas, with 29 electoral votes, was the most contentious state, with the highest joint probability of being both swing and decisive, followed closely by Pennsylvania and California, while Florida emerges as the seventh most swing and decisive state.

The White House could not easily introduce tariffs to protect the relevant industries, as such barriers would be illegal under WTO rules. But there are other, more subtle non-tariff barriers to protect industries. These can take many forms, such as anti-dumping measures or countervailing duties, as well as requirements on how a good is produced, or its quality, preventing the import of goods that do not meet such specifications.

Our results show that while lobbies are important in determining the 'industry non-tariff barrier coverage ratio' (our measure of protection), industries that employ many workers in swing states (especially those that carry a larger weight in the electoral college) enjoy higher levels of protection than others.

So it appears that the electoral college system that determines the outcome of the US presidential election creates incentives for presidents to intervene in favour of industries in swing and decisive states. As the campaign season reaches its climax, it appears that politics could trump economics in the setting of trade policy. John McCain, a supporter of free trade, acknowledges that 'globalisation will not automatically benefit every American (worker)', while Barack Obama has stated that if elected president, he 'will not sign another trade agreement unless it has… protections for American workers'.



The electoral college system creates incentives for presidents to intervene in favour of industries in swing states

This article summarises 'A Swing-state Theory of Trade Protection in the Electoral College' by Mirabelle Muûls and Dimitra Petropoulou, CEP Discussion Paper No. 849 (http://cep.lse.ac.uk/pubs/download/dp0849.pdf)

Mirabelle Muûls is an associate of CEP's globalisation programme and a research associate at the Grantham Institute for Climate Change, Imperial College London. **Dimitra Petropoulou** is a stipendiary lecturer in economics at Hertford College, University of Oxford.

By influencing market expectations of future interest rates, central bank communications have become a key tool of monetary policy-making. Research by **Carlo Rosa** finds that announcements by the US Federal Reserve move market interest rates significantly more than comparable announcements from the European Central Bank.

Words that work:
comparing the effectiveness of central bank communications

Over the past few years, financial market participants – especially those active in the bond markets – have benefited from increased transparency from central banks about how they set monetary policy. Alongside their interest rate decisions, central banks increasingly publish detailed explanatory documents, such as the Bank of England's quarterly *Inflation Report*.

Central banks have tried to become more transparent about their future monetary policy intentions in part because expectations of future interest rate decisions are priced into today's money markets – and so, in theory at least, communication can be a tool to tighten or loosen policy, as much as actually altering the key policy rate.

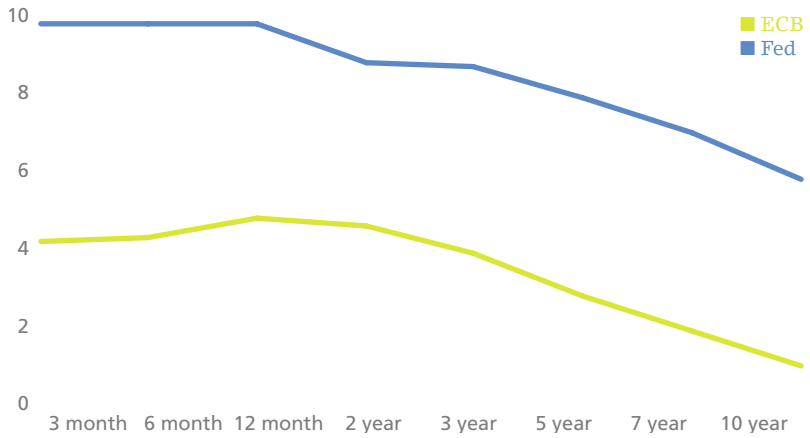
Of particular note are central banks' 'balance-of-risk' statements – announcements about the likelihood of a future increase or decrease in the target rate. These are used by market participants to predict the future direction of interest rates.

The fundamental question for central bankers is whether (and to what extent) financial markets react to their announcements over and above any change in the interest rate itself. For example, the statement following the Federal Open Market Committee (FOMC) meeting on 28 January 2004 led to one of the largest reactions in the bond market in the past 15 years: no less than a 25 basis point increase (one quarter of one percentage point) in the five-year Treasury bond rate in the half-hour surrounding the announcement.

Contrary to conventional wisdom, this reaction was spurred by the Fed's words rather than its deeds. As market participants expected, the FOMC did not change its target interest rate. Instead, it was the decision to replace the phrase 'policy accommodation can be maintained for a considerable period' in its accompanying statement with 'the Committee believes it can be patient in removing its policy accommodation' that led market participants to revise upwards their expectations of future interest rates.

Are the words of central bankers always heeded in this way? And are the words of some central banks more effective than others? To answer these questions, my research looks at the communication strategies of the European Central Bank (ECB) and the Fed. I also directly compare the ability of the ECB and the Fed to affect market rates using deeds (changes in the present target rate) or words (balance-of-risk statements).

Figure 1:
The effects of central banks' decisions and announcements on interest rates, 1999-2006



Note: This figure plots the average total effect of the surprise components of central banks' words and deeds on interest rates for the period 1999-2006. The horizontal axis is maturity of interest rates – from three months to 10 years. The vertical axis is interest rates in basis points.

The Fed's words have a much greater effect on market interest rates than those of the ECB

I find that the Fed is much more effective than the ECB at steering market interest rates on bonds of all maturities. Figure 1 provides a graphical comparison of the *average* total effects of central bank words and deeds on interest rates both in Europe and the United States. It is striking to note that overall the Fed is able to move market rates twice as much as the ECB.

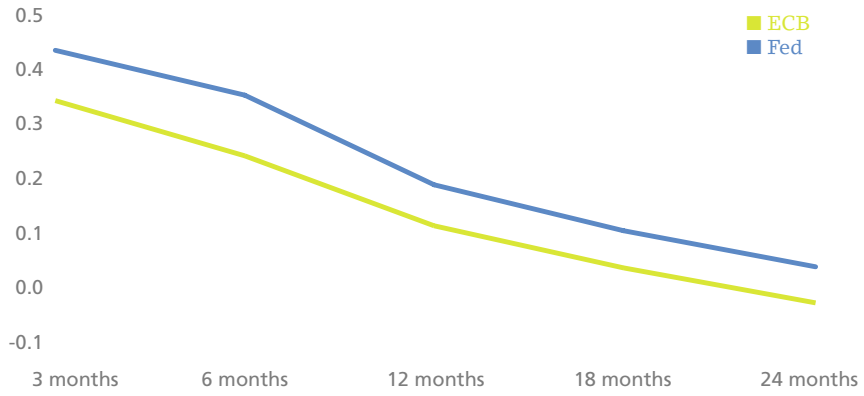
I also find that long-term US interest rates react much more strongly to new information from the Fed than the equivalent reaction of European long-term yields to new information in ECB announcements. This discrepancy can be explained in two ways.

One possibility is that the Fed's long-term inflation objective is less explicit than the ECB's objective: the Fed's mandate is to pursue stability of both prices and economic activity while the ECB's mandate assigns overriding importance to price stability. Hence, long-term inflation expectations (and hence interest rates) in the United States may be more sensitive to Fed statements than are those in the euro area. In other words, Fed statements may contain information not only about its future policy intentions but also about its opaque inflation target, which may vary over time.

An alternative explanation might be that Fed statements are more informative than ECB statements, and as a result the former move interest rates in the money markets more than the latter.

My analysis suggests that the greater sensitivity of US long-term yields to central bank communication is intimately related

Figure 2:
Testing central bank transparency: the predictive ability of central bank actions using statements



Note: This figure plots the predictive ability of future policy rates using central bank statements about its future intentions. The horizontal axis is maturity of interest rates – from three months to two years. The vertical axis is the adjusted R2 of the regression.

to the higher informational content of Fed statements compared with those of the ECB rather than to any difference in their institutional mandate. Figure 2 shows that the Fed's announcements predict its future actions more precisely than the corresponding announcements from the ECB.

Both the ECB and the Fed are consistent (they match words with deeds) but there remain some differences in their communication policies. The ECB is fully transparent in the very short run – what it will do in the next month. For example, when the keyword 'strong vigilance' is used, the market understands that the ECB will increase rates at its following Governing Council meeting. The Fed is more transparent in the short and medium run – beyond the next meeting – and this is clear in Figure 2.

There are also notable differences in the word length of communications: the Fed's balance-of-risk statement contains about 220 words on average while the ECB's statement contains 1,163 words (or 4,533 if the 'Questions and Answers' section is also considered). But transparency is not a matter of the number of words. Indeed, the ECB needs to explain the content of its statement during the Questions and Answers. For example, at the press conference on 5 June 2008, the ECB's president Jean-Claude Trichet explained the meaning of the expression 'heightened alertness' (http://www.ecb.int/press/pressconf/2008/html/is080605.en.html).

If central bank words can move domestic market interest rates, then it is likely that these words may affect interest rates in bonds denominated in other currencies as well. I find that since 1999, the Fed has been more able to move European interest rates of all maturities than the ECB to move US rates.

What drives this asymmetric relationship? During the early years of the euro, the ECB's likely conduct of monetary policy was not well known, and financial market participants seemed to use information from the Fed to forecast future ECB behaviour on the assumption that ECB monetary policy would be influenced by Fed policy. Moreover, euro-denominated money and bond markets were much smaller than dollar-denominated fixed income assets. It is not surprising, therefore, that the causal effect comes from the United States to Europe, and not vice versa.

But it is not clear whether the effect of the Fed's behaviour on European interest rates is a simple consequence of global financial integration, or whether financial intermediaries think that the ECB really is going to mimic the Fed's behaviour. My results indicate that the ability of the Fed to move euro- as well as dollar-denominated debt seems to be tied to the predominance of dollar-denominated fixed income assets rather than to an attempt by the ECB to follow the Fed's monetary policy.

It is clear that central banks' words are powerful tools – but some are more powerful than others. My research suggests that the Fed's words are treated as a more accurate guide to future monetary policy than those of the ECB – and so a change in tone by the Fed is more likely to move markets. What's more, the prevalence of dollar-denominated debt means that Fed words even have the capacity to move European interest rates.

The size of the dollar-denominated debt market means that Fed words can even affect European interest rates

So why does the Fed move the market more than the ECB? The Fed differs from the ECB in at least two respects. The Fed has not only been much more active than the ECB, which could mean that the market understands better what it says and does – a transparency effect. But the Fed also has a different institutional mandate compared to the ECB – the Fed is not 'inflation targeting'.

Theoretical research has shown that under the Fed's mandate, it is optimal to communicate more information to the public than under an inflation targeting regime. But I find empirically that the reason why the market responds more to the Fed's announcements compared with ECB statements is not due to its mandate; rather, it is a pure transparency effect.

This article summarises 'Talking Less and Moving the Market More: Is this the Recipe for Monetary Policy Effectiveness? Evidence from the ECB and the Fed' by Carlo Rosa, CEP Discussion Paper No. 855 (http://cep.lse.ac.uk/pubs/download/dp0855.pdf).

Carlo Rosa is a research associate at the Center for Operations Research and Econometrics (CORE), Université Catholique de Louvain, and an associate in CEP's macroeconomics programme.

in brief...

The end of trade unionism as we know it?

The number of workers belonging to trade unions has declined markedly since the Conservative government's reforms of the mid-1980s. **Alex Bryson** and **David Blanchflower** explore the changing nature of British unions and whether their decline really matters for employees and firms.

Trade unions have seen falling membership across most advanced economies over the last 25 years. In Britain, workers are far less likely to be members of a union than they were two decades ago, and fewer and fewer employers recognise unions for pay bargaining. While unions remain important in the public sector, private sector union membership has declined rapidly. Our research tries to establish why this has happened and whether it really matters for workers and for firms.

It is often assumed that the decline of large-scale manufacturing plants has been the principal reason for the decline in union membership. While this may be partly true, employer recognition of unions does not depend only on what industries produce. If workers continue to want union representation, there is no reason why unions should not be able to colonise new workplaces and new occupations. While union recognition is usually up to the employer, employers may be forced into recognition if workers want it and possess sufficient bargaining power.

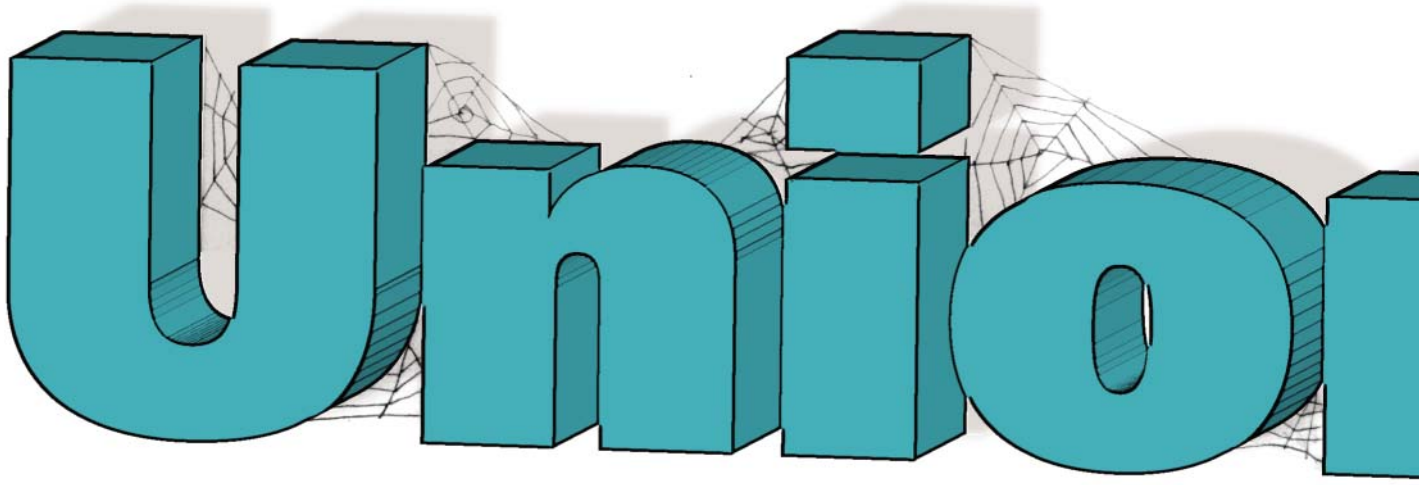
We analyse nationally representative data for British private sector workplaces with 25 or more employees to assess the differences in unionisation rates between sectors and over time. We find that since 1980, there have been substantial and persistent differences in unionisation rates between sectors and regions.

'Distribution, Hotels and Catering' is the industry with the lowest probability of unionisation, while this probability is highest in 'Energy and Water'. There are also sizeable regional effects, with the probability of unionisation being the lowest in the South East of England. And throughout the period, larger workplaces have higher unionisation rates than smaller ones.

But structural changes in the economy do not account for much of the decline in unionisation. Only a third of the 28 percentage point decline in private sector union recognition between 1980 and 2004 is attributable to changes in workplace characteristics, such as the decline of heavy industry.

So most of the decline in union recognition – the remaining two thirds – is not due to structural change. Rather, it is due to the fact that after 1980, firms are much less likely to recognise unions than firms that employed the same number of people in the same region and in the same industry in 1980. This is consistent with studies suggesting that the decline in unionisation is

Unions are less prevalent in some industries, such as catering, and some regions, such as the South East



Unions may help protect their members from the worst of the current economic downturn

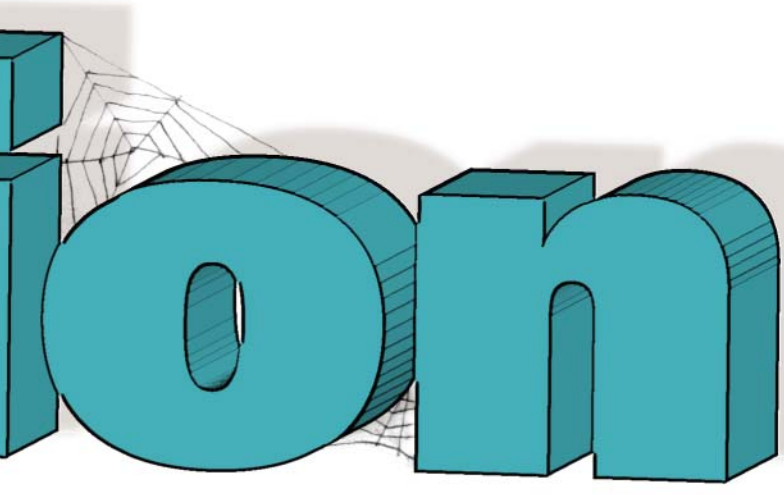
largely due to employers turning their back on unions – preferring to 'go' or 'remain' non-union (see, for example, Bryson et al, 2004).

It is often assumed that union decline is accompanied by a similar decline in the effect that remaining unions have on workers and firms. Nationally, this must be the case: a decline in the presence of unions means that they affect fewer workplaces. But it is unclear what effect unions can have on those workplaces that remain unionised.

Unions' effects depend on their ability to bargain on behalf of their members and to act as the representative voice of workers to management (as first noted by Freeman and Medoff, 1984). Whether unions are able to do so depends on which unions survived the decline in unionisation – the strong ones, the weak ones or perhaps a mixture of the two. Their effects also depend on firms' preparedness and ability to resist union demands or accommodate them.

Conventional wisdom among employers suggests that unions are undesirable. But we find limited evidence that unions have a negative effect on firms in recent years. In particular, there is little evidence that unions have a negative impact on employment growth, financial performance and industrial relations.

Although this may be because strong unions with the power to disrupt business operations have disappeared, there is no evidence for this. If anything, it seems that the association between workplace closure and unionisation in the 1990s was most evident where unions were weaker.



Alternatively, it is possible that unions have increasingly chosen to co-operate with employers. Our results suggest that unionised workplaces have seen a faster improvement in financial performance than non-unionised workplaces, all else being equal. In part, this might be because unions appear to have less impact on the wages of their members than in the early 1980s.

Overall, unions have a smaller effect today than they did in 1980. But we are unable to establish whether this is permanent or temporary. We would expect smaller union effects when economic conditions are good, as employers are often more profitable and in a better position to resist union demands at such times.

Historically, unions have made their presence felt in recessions, as unionised labour has proved more able to hold onto the gains made in the boom years. Whether unions will help protect their members from the current economic slowdown remains to be seen.

This article summarises 'Union Decline in Britain' by David Blanchflower and Alex Bryson, CEP Discussion Paper No. 864 (http://cep.lse.ac.uk/pubs/download/dp0864.pdf) and forthcoming as a chapter in *The Evolution of the Modern Workplace* edited by William Brown, Alex Bryson, John Forth and Keith Whitfield, Cambridge University Press. The research was conducted as part of an ESRC grant (RES-000-23-1603).

David Blanchflower is Bruce V. Rauner Professor of Economics at Dartmouth College and a member of the Bank of England's Monetary Policy Committee. **Alex Bryson** is a senior research fellow at the National Institute of Economic and Social Research and a visiting research fellow at CEP.

Further reading

David Blanchflower and Alex Bryson (2008) 'The Wage Impact of Trade Unions in the UK Public and Private Sectors', *Economica* 75: 1-18.

Alex Bryson, Rafael Gomez and Paul Willman (2004) 'The End of the Affair? The Decline in Employers' Propensity to Unionize', in *Union Organization and Activity* edited by John Kelly and Paul Willman, Routledge.

Richard Freeman and James Medoff (1984) *What Do Unions Do?*, Basic Books.

Paul Willman, Alex Bryson and Rafael Gomez (2007) 'The Long Goodbye: New Establishments and the Fall of Union Voice in Britain', *The International Journal of Human Resource Management* 18(7): 1318-34.

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Improvements in transportation and communication technologies have led some to predict the death of distance, and with that, the death of the city. What then, does the future hold for our cities? This event marks the launch of SERC: **www.spatialeconomics.ac.uk**

Speaker: Edward Glaeser, Fred and Eleanor Glimp Professor of Economics at Harvard University, Director of the A. Alfred Taubman Center for State and Local Government and Director of the Rappaport Institute of Greater Boston
Chair: Howard Davies

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