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MINIMUM MAGES IN BRITAIN

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Bossonomics Occupational licensing Shared capitalism

Forced migration

Picking losers The work ethic

Centre Piece

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Editorial

functioning of the economy beneficial or damaging for society? This endlessly debated question is as relevant now as it has ever been with the enormous packages of 'fiscal stimulus' that have been implemented to ward off a deep recession, plus the likelihood of stronger regulation of financial markets in the hope of preventing future crises.

This CentrePiece features research findings from the Centre for Economic Performance (CEP) that provide support for both sides of the argument. For example, proponents of reduced intervention may appreciate studies of 'occupational licensing' – work that requires government permission. These find that it has few benefits and major costs for users of the services provided by the occupations, which include dentistry, accountancy and the law.

Supporting domestic industries against foreign competition is a form of government intervention more widely agreed to be damaging. At a CEP director, John Van Reenen CEP research director, Stephen Machin

Editor, Romesh Vaitilingam Design, DesignRaphael Ltd Print, Ghyllprint Ltd

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time when trade has declined dramatically, there is a real danger that countries will respond with protectionist measures, such as the 'Buy in America' provisions of the US fiscal stimulus. Frédéric Robert-Nicoud and Richard Baldwin explain why industrial policy tends to pick 'losers', a finding that is particularly topical in light of the bailout of the US car industry.

But governments can also have positive effects on people's lives. Our cover story and 'big ideas' article in this issue describe the evolution and impact of minimum wages in Britain – from the first enactment of trade boards exactly one hundred years ago through to the establishment of the National Minimum Wage in the late 1990s. The consensus view across the political spectrum is that the policy has been a success, benefiting 12 million low paid workers and reducing wage inequality.

This policy is also indicative of the potential benefits of government support for research. The Economic and Social Research Council (ESRC), which recently awarded CEP £6.08 million over a five-year period, commissioned a consultancy report aimed at measuring the impact of its funding. Focusing on the Centre's contribution to the implementation and evaluation of the National Minimum Wage, the report tried to assess the value of CEP research, concluding that:

'Of course, it is impossible to attribute with any precision the value generated, but if we start with a gross benefit of £1.2 billion attributed to the policy then even if only 2% of that gross benefit is attributable to CEP that equates to £24 million in 2008 prices.'

As ever, your comments on this magazine are welcome. Much more on CEP research can be found on our website: http://cep.lse.ac.uk/

Romesh Vaitilingam Editor romesh@vaitilingam.com



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Europe's top prize for economic research John Van Reenen has been jointly awarded the Yrjö Jahnsson Award ir

awarded the Yrjö Jahnsson Award in Economics 2009.



page 27 Government regulation of occupations The UK's National Minimum Wage arguably represents the Labour government's most significant intervention in the labour market. In the latest contribution to CEP's 'big ideas' series, **Alan Manning** describes the Centre's role in providing the intellectual context for the policy, advising on its implementation and evaluating its impact.

The UK's National Minimum Wage

cademics in general and academic economists in particular are often accused of being in an ivory tower, of doing

research of no practical relevance, perhaps claiming they are doing deep thinking but in reality writing on questions that are of interest only to a few like-minded eccentrics. When called on to offer insight into something like the current economic crisis, this line of criticism runs, they have little to say that is of value.

But most academic economists are not like that. They are interested in changing the way people think and, through that, to make the world a better place. And the 'people' are not just academics: eventually an idea must reach the mind of someone outside academia if it is to have any impact on the world.

At CEP, we have never lost sight of this goal as our series of 'big ideas' aims to demonstrate. This 'big idea' is the story of the interplay between academic research and policy that has resulted in the UK's National Minimum Wage. It is written from the perspective of someone who was involved in this process.

Some historical background and intellectual context

In 1909, Winston Churchill established 'wages councils' to protect the pay of workers in the so-called 'sweated' trades. The wages councils set minimum wage rates in a number of different industries. This system remained in place for over 80 years (covering varying numbers of industries over that period), even surviving Mrs Thatcher's onslaught on labour market regulation (though subject to some changes).

But by the early 1990s, abolition of the wages councils had become a policy of John Major's government. The argument was that, as the wages councils raised wages, they must necessarily reduce employment, though no evidence was put forward in support of this view. That was the point at which my CEP colleague Stephen Machin and I became interested in the subject.

The wider background to the debate over the future of the wages councils was the agenda of deregulating labour markets pursued by Mrs Thatcher and her successors. The basic argument used was simple but, nonetheless, powerful: that anything that raised wages must reduce employment and the most efficient labour market would be one that was completely deregulated.

The arguments typically deployed against this view struck me as particularly weak and ineffective, generally conceding the efficiency losses caused by labour market regulations but defending them on grounds of equity. But appeals to equity at that time seemed to carry less and less weight.

I wanted to provide a stronger general intellectual foundation for some form of labour market regulation. Starting in 1990, I became convinced that



'monopsony' is the appropriate way to think about labour markets. In essence, the idea is that in many circumstances, employers have considerable discretion to set wages. So the view that the labour market is close to the economist's ideal of a 'perfectly competitive' market is simply wrong. This line of research eventually led to my book *Monopsony in Motion* (Manning, 2003).

In a monopsonistic labour market, regulation is not necessarily harmful for employment. In the context of the minimum wage, the argument is that while a minimum wage might hurt the profitability of firms and reduce their demand for labour, it also increases the returns to work for workers so they might be expected to increase their supply of labour.

The argument that minimum wages must always cost jobs is based on a view that employment is determined solely by labour demand. The monopsony view suggests that the supply of labour might be as important if not more so, especially in low-wage labour markets.

But 'monopsony' is no idealistic view of the world: it suggests clear limits to what can be expected to be achieved by regulation in general and the minimum wage in particular. If the minimum wage were raised too much, there is no doubt that employment would fall. So ultimately it is evidence – not abstract theory – that should determine what are the likely effects of labour market regulation.

The fight to save the wages councils

During the 1990s, while I saw making the case for some labour market regulation as the big picture, the fight over the abolition of the wages councils was the first place these ideas got an airing in the policy arena.

Looking back, our early research on the impact of the wages councils on employment was based on some incredibly poor data but it was the best that was then available. The first published study concluded that there was no evidence that the activities of the wages councils had cost jobs (Machin and Manning, 1994).

In the run-up to the 1992 general election, at a time when opinion polls suggested that the Labour Party might win, the *Financial Times* wrote an article about this research, causing the Chief

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Executive of Grand Metropolitan (a company with large interests in low-wage sectors like pubs and fast-food restaurants) to call the Director of the LSE to complain.

But the Conservatives won the election and the 1993 Trade Union Reform and Employment Rights Bill made good on their manifesto promise and abolished the remaining 26 wages councils. As a result, there were no longer minimum wages in any sector except agriculture, leaving the UK as the only European Union country without a formal or informal system of minimum wages.

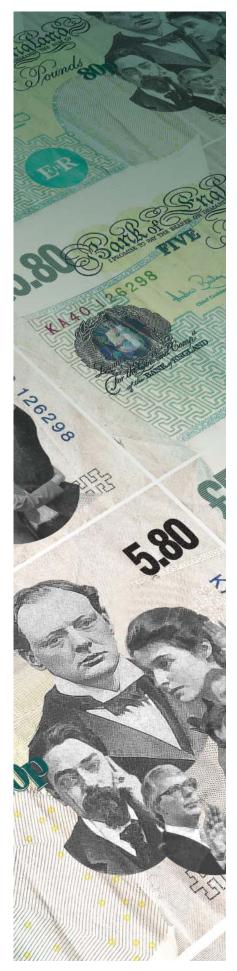
Our research continued, much of it now with our CEP colleague Richard Dickens, writing papers about the effect of abolition (Dickens et al, 1993; Dickens and Manning, 1995) and using better data to assess the effects of the wages councils (Dickens et al, 1998, 1999).

Our central message was that the abolition of the wages councils had been a mistake – but it also represented an opportunity. There was no doubt that the wages councils had been anachronistic in many ways, covering obscure industries whose names (such as 'coffin and cerement making') conjured up images of their origins in Victorian Britain. The Labour Party under the leadership of Tony Blair and Gordon Brown did not propose a return to the wages councils – instead, they suggested a new National Minimum Wage.

The introduction of a National Minimum Wage became Labour Party policy while still in opposition. The Conservative government, aided by some sympathetic academic economists, argued that it would cost millions of jobs if introduced. These estimates were not based on any study of an actual minimum wage in operation but, in large part, a product of the simple assumption that a minimum wage had to cost jobs.

The Low Pay Commission and the birth of the National Minimum Wage

Following the Labour Party's victory in the 1997 election, the introduction of the National Minimum Wage became government policy. But rather than legislate directly, the new government set up an independent Low Pay Commission in July 1997 to make recommendations on the appropriate form and level that



The 'monopsony' view of labour markets provides a rationale for regulation in general and the minimum wage in particular

the minimum wage should take (Manning, 1997).

My CEP colleague David Metcalf was one of the founding members of the Low Pay Commission, which first reported in June 1998, recommending a single minimum wage for all adults aged 22 and over and a lower rate for those aged 18-21. Most importantly, the case was strongly based on evidence (in line with wider government commitments to 'evidence-based policy-making'), a considerable part of which was research that had been done at CEP.

The initial rate was set at a modest level of £3.60 per hour, reflecting a feeling that it was best to start low and evaluate its effects rather than run the risk of setting it too high. Employers and their lobbying organisation, the Confederation of British Industry (CBI), were very concerned about job losses, and the Bank of England was worried about the potential effect on inflation.

From the beginning, the Low Pay Commission took an evidence-based approach, commissioning research on the impact on employment and other outcomes. All the initial studies failed to find any adverse effect of the minimum wage on employment. As a result, in subsequent years, the rate was raised faster than average earnings, and coverage was extended to younger workers. Metcalf (2008) and Brown (2009) provide excellent overviews of the research.

The impact on wage inequality

My interest in the minimum wage is now about its effects on wage inequality. In studies written with Richard Dickens, we find that the minimum wage raised the wages of those who would otherwise have been paid below it, but that there were no 'spillovers' onto the wages of workers who would have been paid more. And because the modest initial level of the minimum wage affected relatively small numbers of workers (perhaps about 7% of the workforce), the effect on overall wage inequality (and wage inflation) was modest (Dickens and Manning, 2004a, 2004b).

But the UK has seen a remarkable fall in wage inequality at the bottom end of the wage distribution in recent years. The gap between the median and the tenth percentile of the hourly wage distribution fell by about 8 log points in the ten years after 1997, reversing the rise in inequality seen in the decade prior to 1997 (though not undoing the increase since 1979).

It is an interesting question why this has happened, and it is tempting to believe that part of the answer must be the National Minimum Wage. But this can only be true if we think that the minimum wage has some effect on the wages of workers who are paid above the minimum. Richard Dickens and I are currently investigating whether this has been the case.

The National Minimum Wage today

The UK's National Minimum Wage is here to stay. Although the Conservative Party abolished the wages councils and fought the introduction of the minimum wage, they no longer propose to remove it. In an interview in the *Guardian* in 2005, David Cameron, then the new leader of the Conservatives, said 'I think the minimum wage has been a success' and 'it turned out much better than many people expected, including the CBI'.

In a 2008 lecture, the shadow chancellor, George Osborne, said that 'modern Conservatives acknowledge the fairness of a minimum wage'. And the Conservative Mayor of London, Boris Johnson has supported a 'living wage' for London, essentially a higher minimum wage to take account of higher living costs in London.

Ten years

National

Minimum

on, the UK's

perceived to

be a success

Wage is widely

Many people have contributed to making the National Minimum Wage the success it is generally perceived to be today. Through careful, non-ideological research, academic economists have played their part. **Alan Manning** is professor of economics at LSE and director of CEP's research programme on labour markets.

Further reading

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David Metcalf (2008) 'Why has the British National Minimum Wage had Little or No Impact on Employment?', *Journal of Industrial Relations* 50: 489-512. Trade boards – precursors of the wages councils and today's National Minimum Wage – were first enacted one hundred years ago in October 1909. **Simon Deakin** and **Francis Green** trace the legacy of a century of minimum wages in Britain.

A century of minimum wages in Britain



ny employee working in Britain who is over 21 will be entitled, from 1 October 2009, to an hourly wage of at least

£5.80. Behind this simple fact – of considerable comfort for very many of today's less well-off workers – lies not only a decade of work by the Low Pay Commission, but a hundred years of controversy, progress and regress since the first minimum wage was introduced.

For this year marks the centenary of

the passage through Parliament of the Trade Boards Act 1909. It fell to Winston Churchill, as President of the Board of Trade in the reforming Liberal government of the time, to introduce the bill on 24 March 1909, and pilot it through opposition and amendments until 20 October when it became law.

This statute was not the first enactment of minimum wage legislation in the modern era: similar laws had been passed in Australia and New Zealand in the 1890s. But among the larger nations, this was a first, and it heralded waves of twentieth century wage regulation around the world.

The original model

The Trade Boards Act of 1909 empowered the relevant government ministry of the day, the Board of Trade, to set up a board in any industry in which wage rates were 'exceptionally low compared with that in other employments'. The trade boards resembled joint negotiating bodies, with representatives of employers and workers from the trades concerned and some independents.

To begin with, only four industries were regulated: ready and bespoke tailoring, paper box making, lace finishing and chain-making. The powers of the first



boards were strictly confined: they could only set minimum hourly rates and equivalent piece rates. Nevertheless, for those covered, mainly women, it was effective in raising living standards and reducing poverty.

An expansion of the trade boards' functions and numbers followed after the First World War. By 1921, there were over 40 boards in place, covering three million workers in Britain, and a parallel system was to follow in Northern Ireland. The model was that the boards should do what, in other circumstances, was done through collective bargaining. Later the boards' powers were extended to include regulation of holiday entitlements.

The reforming Wages Councils Act 1945 was based on the premise that the state should use its powers not simply to ameliorate the effects of 'sweating' (extreme low pay and casualisation of employment) but to 'keep collective bargaining going when economic circumstances tended to destroy it'. The trade boards became 'wages councils'. At this point, approximately one in four of all workers were covered by statutory regulation.

These first minimum wages in Britain had emerged after a long period of activism in protest against the 'sweating' of labour, especially among women. And yet, the model fell a long way short of establishing a universal legal entitlement to a minimum wage.

In their 1897 book *Industrial* Democracy, Beatrice and Sidney Webb

The 1998 National Minimum

trade boards model of 1909

Wage Act owes much to the original

had argued for 'a systematic and comprehensive Labour Code, prescribing the minimum conditions under which the community can afford to allow industry to be carried on; and including not merely definite precautions of sanitation and safety, and maximum hours of toil, but also a minimum of weekly earnings'.

But the solution arrived at by 1945 was a compromise that involved the expansion of wages councils alongside government encouragement for industrylevel, multi-employer bargaining.

After the Second World War

The wages councils system struggled to maintain its legitimacy in the post-war years. The prevailing view was that the retention of statutory controls was holding back the development of voluntary collective bargaining. Several wages councils, covering around half a million workers, were abolished in the 1960s and 1970s.

In the 1980s, the policy pendulum moved decisively in the direction of labour market deregulation. The Wages Act 1986 removed the powers of the wages councils to set more than basic time and piece rates, in the process eliminating all statutory paid holiday entitlements. Complete abolition of the remaining 26 councils followed in 1993.

This time of retreat on regulation coincided with a renewal of economic analysis of the effects of minimum wages. Against the then-prevailing economists' view that raising wages induced employers The Webbs, early proponents of a national minimum wage, argued that it could help realign Britain's industrial structure with the wider interests of society

to reduce employment (the extent of loss depending only on the elasticity of labour demand), new models of the labour market claimed to represent the reality of many low-skilled labour markets better than the textbook model of perfect competition. The idea of 'monopsony' (see previous article) introduced a substantial element of ambiguity, even suggesting that moderate rises in minimum wages would increase employment, because of their positive effects on labour supply.

Simultaneously, advances in empirical research techniques and the availability of new sources of data revealed instances of minimum wage increases in the United States that induced only very modest changes in employment, either positive or negative. In Britain, research on the wages councils was finding no beneficial employment increases from



the reductions in wages that had taken place throughout the 1980s.

The legacy

With the new Labour government of 1997, the National Minimum Wage Act 1998 was enacted. There was now a statutory National Minimum Wage binding on all employers regardless of their sector. It was to be complemented by the European Directive on Working Time, which, among other things, required re-regulation of the provision of paid holidays.

But the 1998 Act owes much to the wages council system, even more to the original trade boards model of 1909 and rather less to the Webbs. The tripartite structure of the Low Pay Commission is in a direct line of descent from the arrangements put in place for the trade boards. As in 1909, the 1998 Act and the related National Minimum Wage Regulations 1999 contain no power to set the minimum wage at a level that reflects living costs. There is no statutory mechanism for automatically uprating the minimum wage with price increases.

These arrangements contrast with statutory minimum wage regulation in some other European countries, most notably the French model of the 'minimum growth wage' (the salaire minimum interprofessionel de croissance, SMIC). The law governing the SMIC, which has been in force since 1970, links the minimum rate to price inflation, and also makes provision for it to be raised each year by at least half the increase in the value of the purchasing power of the average wage.

In contrast to the earlier models, however, the principal constraint on

raising the statutory minimum is no longer the policy goal of preserving the voluntary collective bargaining system, but the perceived need to minimise what are seen as potentially negative economic effects.

One positive outcome of the intense interest in the effects of minimum wage regulation over the past decade has been the growing sophistication of social science research on this subject. Theoretical arguments are more rigorous and realistic than they used to be, while new data sources have been used in an imaginative way.

The research generated by the Low Pay Commission, and the use made of it, has been one of the better examples of evidence-based policy-making: it has supported the attempt to rationalise the process of setting the rate of the minimum wage. The consensus view from a wide range of empirical studies is that its introduction has not had the negative employment effects that orthodox economic theory predicts.

Aside from this, some dissident economists put forward a 'social cost' argument in favour of a national minimum as originally advanced by the Webbs. The minimum wage removes the artificial subsidy that low pay provides to inefficient firms, and which in an 'unregulated' system is borne by other firms and the community at large. In this way, it removes an externality and realigns the industrial structure with the wider interests of society.

This argument has featured more in debates in continental Europe than in Britain. A century on from the first Trade Boards Act, perhaps the time has come to look again at the Fabian argument for the 'public organisation of the labour market'. This article summarises the introduction to a special issue of the *British Journal of Industrial Relations* (47: 2, June 2009), which celebrates the centenary of the Trade Boards Act 1909 with a selection of papers from several countries (http://www3.interscience.wiley.com/ journal/122382753/issue).

Simon Deakin is professor of law at the University of Cambridge. Francis Green is professor of economics at the University of Kent and a visitor at CEP.

As in 1909, the 1998 Act contains no power to set the minimum wage at a level that reflects living costs or price inflation



in brief... Heterogeneous firms in international trade

Research in international trade increasingly focuses on firms and products as well as countries and industries. **Stephen Redding** reports on a recent conference to discuss the latest findings.

International trade is dominated by firms selling multiple products to multiple destinations. Research by Peter Schott (Yale School of Management) and colleagues examines the production and export decisions of these firms and how they are affected by globalisation. In his keynote presentation to the conference, he showed that much of the variation in aggregate trade between countries is accounted for by the 'extensive margins' of trade – the number of exporting firms, the number of exported products and the number of export destinations.

Trade liberalisation raises firms' productivity by inducing them to focus on their 'core competencies' in their leading products. Therefore, the reallocation of resources in response to events such as trade liberalisation may be even more important than hitherto thought insofar as it occurs within as well as across firms.

Further theory and evidence on the role of multi-product firms in understanding the volume and pattern of trade was presented by Peter Neary (University of Oxford) and colleagues and by Costas Arkolakis (Yale University) and Marc Muendler (University of California, San Diego).

Other papers presented at the conference explored the dynamics of firm exporting. Recent empirical research has found that between one third and one half of all exporters are new entrants in a typical year. These new entrants are, on average, much smaller than incumbent exporters and the majority of them exit within a year. Nonetheless, those new exporters that do survive grow rapidly and as a result account for a substantial proportion of aggregate export growth over longer time intervals.

Emanuel Ornelas (CEP) and colleagues presented theory and evidence on 'sequential exporting,' in which firms enter one export market in part to obtain information about their profitability in other export markets. Costas Arkolakis (Yale University) presented a unified model of firm selection and growth that can account for both the cross-section dispersion of firm size and the dynamics of firm growth and survival over time.

Another theme of the conference was the impact of trade liberalisation on wage inequality and unemployment. In research with Elhanan Helpman and Oleg Itskhoki, I presented a new framework for examining the distributional consequences of globalisation, which emphasises heterogeneity across workers and firms, labour market frictions and firm selection into export markets.

Within this framework, the opening of trade increases wage inequality and unemployment in both developed and developing countries, because only the most productive firms export and these exporters pay higher wages and are more selective in their recruitment policies than non-exporters. Once the economy is open to trade, further trade liberalisation can either increase or decrease wage inequality and unemployment, depending on the initial level of trade openness.

Another dimension through which globalisation can affect wages and employment is offshoring. Guru Sethupathy (Columbia University) presented a paper in which lower offshoring costs raise profitability and wages at offshoring firms relative to those at non-offshoring firms. Perhaps surprisingly, domestic employment can rise at offshoring firms because the increase in efficiency from offshoring expands their employment and offsets the direct loss of offshored jobs. In contrast, domestic employment necessarily falls at non-offshoring firms, which lose market share and contract.

Using the Mexican Foreign Investment Law of 1993 and the peso crisis in 1994 as natural experiments that changed the marginal cost of offshoring to Mexico, the study provides empirical evidence in support of these predictions.

This article summarises the issues and papers discussed at a conference on 'Heterogeneous Firms in International Trade', jointly organised by CEP, CESifo and the Norface partnership between 14 European research councils, held in Venice in July 2009 (http://www.cesifo-group.de/portal/page/portal/ifoHome/ c-event/c2conf/30confvsi).

Stephen Redding is director of CEP's research programme on globalisation (http://cep.lse.ac.uk/_new/research/ globalisation/default.asp). How important are management practices in driving the performance of firms and the productivity of nations across Asia, Europe and North America? Survey data collected and analysed by **Nick Bloom** and **John Van Reenen** is providing many new insights into the economics of management and productivity.

Bossonomics: the economics of management and productivity

conomists have long speculated on why there are such astounding differences in the productivity performance between firms and plants within countries, even within the same narrow sector. While business schools have long stressed the importance of different management practices, empirical economists have had relatively little to say about management. A major problem has been the absence of high quality management data that is measured in a consistent way across countries and firms.

To address this lack of management data, we have been refining and implementing a methodology that measures management practices (Bloom and Van Reenen, 2007; Bloom, Sadun and Van Reenen, 2008). We use an interviewbased evaluation tool that defines and scores 18 basic management practices from one ('worst practice') to five ('best practice'). This evaluation tool was developed by an international consulting firm, and scores these practices within three broadly defined areas:

Monitoring: how well do companies track what goes on inside their firms and use this for continuous improvement?

- Target setting: do companies set the right targets, track the right outcomes and take appropriate action if the two don't align?
- Incentives: are companies promoting and rewarding employees based on performance and systematically trying to hire and keep their best people?

To obtain accurate responses from firms, we interview production plant managers using a 'double-blind' technique. Managers are not told they are being scored or shown the scoring grid; they are only told they are being 'interviewed about management practices for a research project'. To run this blind scoring, we use open questions.

For example, the first monitoring question is 'tell me how you monitor your production process', rather than 'do you monitor your production daily [yes/no]'. We continue with open questions targeting actual practices and examples until the interviewer can make an accurate assessment of the firm's practices. For example, the second question on performance tracking is 'what kinds of



achievements

measures would you use to track performance?' Figure 1 shows the scoring grid for this performance tracking dimension.

The other side of the double-blind technique is that interviewers are not told in advance anything about the firm's performance. They are only provided with the company name, telephone number and industry. Since we randomly sample medium-sized manufacturers (employing between 100 and 10,000 workers) who are not usually reported in the business press, the interviewers generally have not heard of these firms before, so have no preconceptions.

To ensure high sample response rates and skilled interviewers, we hired MBA students to run interviews. We also obtained government endorsements for the surveys in each country covered, and positioned it as a 'lean manufacturing' interview with no requests for financial data. These steps helped to yield a 45% response rate.

Management practices across firms and countries

Figure 2 plots the average management practice score across countries from the 6,000 interviews we carried out in survey waves between 2004 and 2008. It shows that the United States has the highest management practice scores on average,

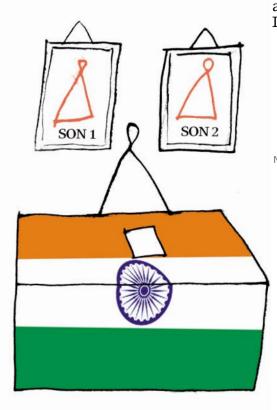
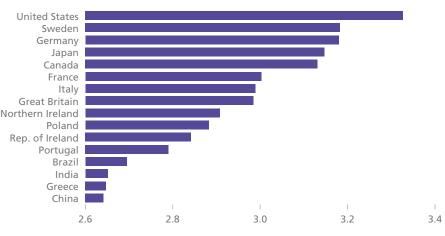


Figure 1: Management practice question number 4 ('Performance tracking')

	Score 1	Score 3	Score 5
Scoring grid	Measures tracked do not indicate directly if overall business objectives are being met. Tracking is an ad hoc process (certain processes aren't tracked at all).	Most key performance indicators are tracked formally. Tracking is overseen by senior management.	Performance is continuously tracked and communicated, both formally and informally, to all staff using a range of visual management tools.
Example firm	A manager tracks a range of measures when he does not think that output is sufficient. He last requested these reports about eight months ago and had them printed for a week until output increased again. Then he stopped and has not requested anything since.	At a firm every product is bar-coded and performance indicators are tracked throughout the production process. But this information is not communicated to workers.	A firm has screens in view of every line, to display progress to daily target and other performance indicators. The manager meets daily with the shop floor to discuss performance metrics, and monthly to present a larger view of the company goals and direction. He even stamps canteen napkins with performance

Figure 2:

US firms have the best management practices on average, and those in developing countries like Brazil, China and India the worst



The bars indicate for each country the average score on the 18 management questions (1=worst practice, 5=best practice).

Management practices seem to play an important role in determining country-level productivity with the Germans, Japanese, Swedes and Canadians grouped together below this, followed by a block of mid-European countries (France, Italy, the UK and Poland), with Southern Europe and developing countries – Brazil, China, Greece and India – at the bottom.

In one sense, this is not surprising since it approximates the cross-country spread of productivity. But in another sense, it suggests that management practices could play an important role in determining country-level productivity. At the firm level, better management practices are strongly associated with higher firm-level productivity, profitability and survival, suggesting they could play an equally important role in country-level productivity.

Better management is also linked with improved employee work-life balance and lower energy use, suggesting better management does not come at the expense of worker welfare or more pollution (Bloom, Kretschmer and Van Reenen, 2006; Bloom, Genakos, Martin and Sadun, 2008).

Three factors play a key role in shaping management practices – competition, family ownership and multinational status

Of course the key question is why do management practices differ across countries? Figure 3 plots firm-level management practices by country, and shows that management practices display tremendous within-country variation. So, much like productivity figures, withincountry variation is far greater than crosscountry variation.

Figure 3 also highlights that US firms have the highest average management score because they have almost no density of firms with management practices below two. In comparison, India, which has the lowest cross-country management score, has a large mass of firms with extremely poor management practices (scores of two or less).

This raises two key questions on which we are currently working: why are there

these variations in management practices; and to what extent do variations in management practices cause variations in productivity?

Why do management practices vary so much across firms and countries?

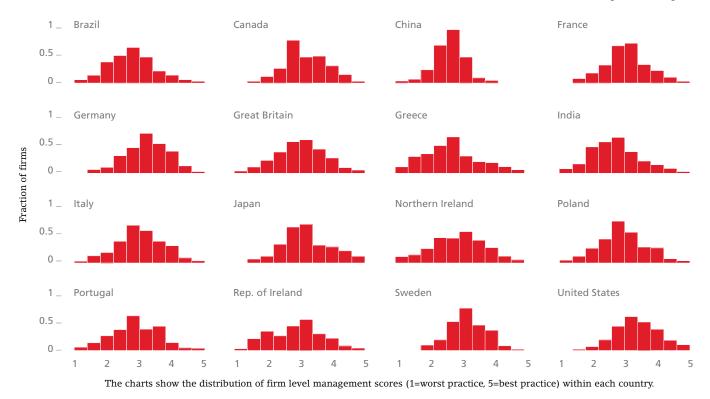
We have identified three key factors that appear to play an important role in shaping management practices – competition, family ownership and multinational status.

Product market competition is associated with significantly better management practices. In particular, the tail of badly managed firms shrinks in highly competitive markets. Thus, the competitive product markets of the United States explain much of its lack of badly managed firms. In contrast, many product markets in India have limited competition because of entry barriers, trade regulations and high transport costs, enabling badly managed firms to persist.

We are currently investigating the mechanisms through which competition works to improve management. One possibility is Darwinian selection – high levels of competition should drive badly managed firms out of business more quickly. Another is by inducing higher levels of effort – tough product market competition may lead managers to work harder as the stakes are higher (slacking is



Distribution of firm-level management practices by country, showing few badly managed firms in the United States (a small left tail) and many badly managed firms in developing countries like India (a large left tail)



more likely to lead to losses of market share and bankruptcy). As we follow up the initial cross-sectional firm surveys to convert this into panel data, we can investigate these different mechanisms.

Firms that are both family owned and family managed tend to be badly run on average. This is true even after including controls for country, industry, firm size, skills and capital. Looking at these family firms in more detail, it appears that the worse managed firms are those that hand down the position of CEO using the ancient practice of primogeniture (succession of the eldest son).

To elicit this information, we asked the plant managers the question 'How was the CEO chosen, was he selected as the eldest son or by some other mechanism?'. In many countries, including Brazil, India and the UK, the answer was often selection by eldest son, while in other countries, such as the United States and Sweden, this was very rare. A number of factors, including traditions over leadership succession, inheritance tax breaks and the external market for CEOs, appear to drive these differences.

Private equity-owned firms are significantly better managed than family firms. They have strong people management practices (hiring, firing, pay and promotions) but even stronger operations management practices (lean manufacturing, continuous improvement and monitoring), which suggests that private equity ownership is associated with broad-based operational improvements in management rather than just stronger performance incentives (Bloom, Sadun and Van Reenen, 2009).

Multinational and export status also appear to play an important role in determining a firm's management practices. One stylised fact is that multinationals have good management practices wherever they are located – so multinationals in Brazil, India and the United States all appear to be well run.

A second stylised fact is that some countries have relative managerial strengths and weaknesses – for example, the Japanese are better at monitoring and the Americans at incentives and people management – and their multinationals take this with them abroad. We show that US multinational affiliates located in Europe are able to use their managerial advantage to make better use of information technology to raise productivity (Bloom, Sadun and Van Reenen, 2008).

We argue that these managerial differences could account for about half of the superior productivity growth performance in the United States relative to Europe in the decade after 1995. A third stylised fact is that among domestic firms, those that export are better managed than non-exporters.

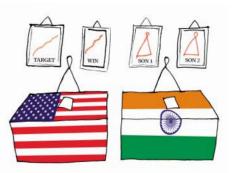
Future directions for research

We have also been collecting and analysing information on firm organisation such as decentralisation and delayering. Working with Raffaella Sadun and Luis Garicano, we have been analysing how organisational structures are shaped by culture and information and communications technology. In other work with Christos Genakos, we have been using longitudinal data to look at how changes in labour market regulation, skills and competition drive changes in management practices.

Finally, we have been collaborating with international organisations to develop randomised control trials to evaluate the causal impact of management practices on firm performance. Governments spend billions of dollars on business support programmes to improve management with little evidence on whether this has any effect.

Working with Benn Eifert, David McKenzie, Aprajit Mahajan and John Roberts, we have started the first wave of field experiments employing an international consulting firm to provide management assistance to a random set of Indian firms and evaluate their performance against a control group. Identifying the causal impact of management practices on firm performance will start to allow us to estimate the impact of the differences in management practices on firm and national productivity.

Managerial differences could account for half of the superior productivity growth in the United States relative to Europe after 1995 Nick Bloom is an associate professor of economics at Stanford University and a research associate in CEP's productivity and innovation programme. John Van Reenen is director of CEP.



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Nick Bloom and John Van Reenen (2007) 'Measuring and Explaining Management Practices across Firms and Countries', *Quarterly Journal of Economics* 122(4): 1351-1408 (earlier version available as CEP Discussion Paper No. 716: http://cep.lse.ac.uk/ pubs/download/dp0716.pdf).

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Nick Bloom, Raffaella Sadun and John Van Reenen (2008) 'Americans do I.T. Better: US Multinationals and the Productivity Miracle', EDS Innovation Research Programme Discussion Paper No. 15 (http://www.lse.ac.uk/collections/ EDSInnovationResearchProgramme/ pdf/EDSdp015/edsDP015.pdf).

Nick Bloom, Raffaella Sadun and John Van Reenen (2009) 'Do Private Equity Owned Firms Have Better Management Practices?', CEP Occasional Paper No. 24 (http://cep.lse.ac.uk/pubs/download/ occasional/op024.pdf). From the 1970s, unemployment across Europe increased substantially. Research by Jean-Baptiste Michau argues that a declining work ethic is key to understanding this rise.

European unemployment: how significant was a declining work ethic?

nemployment increased substantially across the world after the sharp oil price rises of the 1970s and the collapse of the Bretton Woods system of fixed exchange rates. But unlike many other parts of the world, unemployment in many European countries never returned to the low levels seen during the Golden Age after the Second World War.

Why did European unemployment remain stubbornly high? The standard explanation is that industrialised economies became more unstable and more frequently subject to shocks – such as oil price rises or exchange rate fluctuations – from the 1970s onwards. Those countries with flexible labour market institutions – such as modest unemployment benefits, light employment protection legislation and a low degree of union power – managed to absorb the effects of these shocks much better than those with rigid institutions (Blanchard and Wolfers, 2000).

The rise in the number of jobless in most European countries is therefore attributed to the interaction between shocks and institutions. But it remains difficult to identify the precise nature of these shocks. In recent research, I argue instead that a decline in the work ethic, induced by the expansion of the welfare state, is key to understanding European unemployment.

It has long been recognised that generous unemployment benefits create 'moral hazard' – workers are partly protected against the consequences of being unemployed, so they are less likely to search for jobs with the same intensity. But the size of the moral hazard problem depends on the values that individuals hold.

People with a strong work ethic would find it unacceptable to rely on benefits without actively looking for jobs, while others with weaker values try to remain on benefits for as long as possible. So the average values in a country have an impact on the size of the moral hazard problem and hence on the cost of providing generous unemployment benefits. We would expect countries where workers have a weaker work ethic to have a lower 'replacement ratio' – the level of benefits relative to wages.

To measure the work ethic in different countries, I use the World Values Survey,



A decline in the work ethic, induced by the expansion of the welfare state, is key to understanding European unemployment



which consists of harmonised questions asked in every decade since 1980 to a representative sample of individuals in many countries. One question is particularly useful for evaluating a country's work ethic: 'Please tell me whether you think it is always justified, never justified or something in between to claim government benefits to which you are not entitled'.

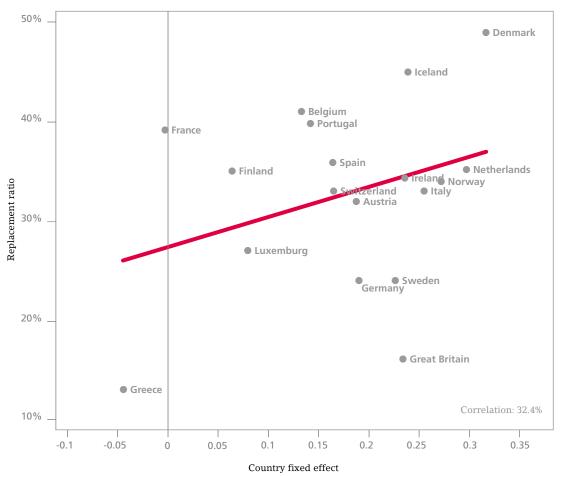
The analysis shows that there are large differences in answers across countries, even within Western Europe. These persist after filtering out the effects of age, gender, political orientation and religion on individual answers. Using France as a baseline, for a person with average characteristics, being Danish rather than French increases the probability of answering 'never justifiable' to the question by 32%. Being British increases it by 24%; while being Greek decreases it by 5%. Figure 1 indicates that there is a positive correlation between the number of people who think it is 'never justifiable' to cheat on benefits and the replacement ratio of unemployment benefits. This suggests that the strength of values affects policy and that when the moral hazard problem is too strong, the provision of benefits is reduced.

But values change over time and could be affected by government policies – for example, a work-shy culture could result from high levels of unemployment benefit. To understand the true nature of the mechanism at work, we need to understand why people hold a particular set of values.

Parents play an important role in instilling values in their children. This is exemplified by the fact that a US citizen tends to provide the same answer to the question about claiming benefits as

Figure 1:

Correlation between unemployment insurance generosity and the values held in a country (as measured by the probability of finding it 'never justifiable' to cheat on benefits)



Note: France taken as reference, for example, being British rather than French increases the probability of answering 'never justifiable' by 24%. Data source: OECD and World Values Survey someone from his ancestors' country of origin (Algan and Cahuc, 2009). More generally, the transmission of values from one generation to the next can either be vertical – from parents to their children – or oblique – from other individuals of the parental generation to children.

Recent research suggests that cultural transmission is not something spontaneous; rather, it results from the optimising behaviour of parents who weigh the benefits and costs of transmitting desirable values to their children (Bisin and Verdier, 2001). The expansion of the scope and size of the unemployment benefits system that occurred after the Second World War decreased the returns from having a strong work ethic, and this meant that parents put less effort into raising their children to work hard.

In addition, it is possible that some rebellious young individuals, reluctant to learn from their parents, might have been attracted by the lifestyle of those living off benefits for extended periods of time.

The drop in values from one generation to the next was probably magnified by the fact that those of the parental generation survived the Second World War. Many of these people would have been willing to risk their life for their nation, and were particularly reluctant to cheat on government-provided benefits.

Using the World Values Survey, I look at whether the work ethic has deteriorated over time. The challenge is The later people are born, the less likely they are to say that it is 'never justified' to cheat the benefit system

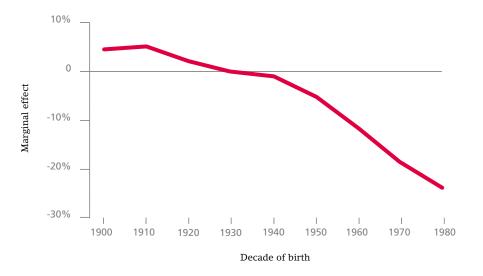


that the data were only collected since the 1980s. The solution is to work with 'birth cohorts' – generations of individuals born in the same year. We would expect individuals born before the Second World War to have a stronger work ethic than those born after.

As Figure 2 shows, the later people are born, the less likely they are to say that it is 'never justified' to cheat the benefit system. This is true after filtering out the effects of age, gender, political orientation, education, religion and nationality. Using the 1930s as a benchmark, for a person with average characteristics, being born in the 1960s rather than in the 1930s decreases the probability of answering 'never justifiable' by 12%. There has recently been an acceleration in the decline with the corresponding probability reaching 19% and 24% for those born in the 1970s and 1980s, respectively.

The trend over time is of comparable magnitude to the effect of nationality and much more important than other factors such as gender or education. Men are slightly less likely to answer 'never

Figure 2: Impact of decade of birth on the probability of thinking that it is 'never justifiable' to cheat on government-provided benefits



Note: Individuals born in the 1930s taken as reference group, that is, their marginal effect is set equal to zero (for example, being born in the 1960s, rather than the 1930s, decreases the probability of answering 'never justifiable' by 12%). Data source: World Values Survey.

justifiable' than women but the difference is small, only 3%. The more educated you are, the more you believe that it is 'never justifiable' to cheat on benefits, but again the effect is minor: university educated people are only 1% more likely to answer that it is 'never justifiable' to cheat on benefits than people who left school as soon as they could.

This decline in the work ethic could be one of the major factors explaining the evolution of European unemployment since 1945. When workers from the baby boom generation entered the labour market in the 1970s, they had a weaker work ethic than their parents and the moral hazard problem of unemployment benefits became much more severe.

This led to an increase in the number of people living off unemployment benefits for extended periods of time. In other words, the rise in European unemployment can be explained by a generation-long lag between the introduction (or expansion) of unemployment benefits and the behavioural response of workers.

Changes in values may also explain the decline in European unemployment prior to the recession. As the share of people willing to cheat on benefits increased, providing generous unemployment benefits became ever more expensive. So governments were forced to curtail the level of benefits relative to wages. This created an incentive for the new generation of workers to look for work.

Recently, European countries have

tried to monitor the unemployed to ensure that they are looking for work, alongside an expansion of active labour market policies designed to help workers find jobs. Both of these developments certainly contributed to the reduction in the number of jobless in Europe.

A decline in the work ethic is arguably one of the key factors behind the evolution of European unemployment since the Second World War. It explains why policies that have not changed much over time (such as unemployment benefits) have had distinctly different effects over time. This study suggests that policy-makers should not neglect the potential impact that their policies could have on the transmission of values from one generation to the next. This article summarises 'Unemployment Insurance and Cultural Transmission: Theory and Application to European Unemployment' by Jean-Baptiste Michau, CEP Discussion Paper No. 936 (http://cep.lse.ac.uk/pubs/download/ dp0936.pdf).

Jean-Baptiste Michau is a researcher in CEP's macroeconomics programme.

More generous benefits may have meant that parents did not bring up their children to be hard workers



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in brief... Shared capitalism: does it work?

Employee share ownership and other forms of 'shared capitalism' are large and growing. **Alex Bryson** and **Richard Freeman** ask whether it leads to better performance.

Shared capitalism – in which firms reward employees on the basis of the performance of their enterprise or workplace – has traditionally been viewed as a niche part of the economy. Famous names – John Lewis in the UK, Mondragon in Spain and, at one point, the US company United Airlines – might operate in this way, but they are thought to be unusual organisations.

Our analysis shows that in the UK, the United States and elsewhere in the advanced countries, shared capitalist arrangements have increased way beyond niche status. Today, more employees have a bigger financial stake in their firms than ever before.

In the United States, 44% of employees have part of their pay linked to company performance, either through ownership, stock options, profit-sharing or gain-sharing. In the UK, one fifth of private sector workplaces have share ownership schemes covering one third of employees.

Some of the growth in share ownership in the UK over the past quarter century is attributable to tax privileges for firms that pay staff with ownership stakes. But some of the growth is also part of a movement towards giving employees more effective incentives through collective forms of pay.

Despite the United Airlines bankruptcy, overall employee ownership in the United States has not fallen. And in the UK, an increasing number of firms, some with very different ownership models, have joined the Employee Ownership Association, which represents the growing coowned sector.

Is this any good for the economy? The narrowest view of worker behaviour says it can't be. Workers will 'free-ride' on the backs of others instead of trying harder because of the financial incentive. And under UK tax law, employees have to hold onto shares for three years before they benefit from the tax breaks: shares can go down as well as up.

What's more, worker effort and activity is only one factor influencing a company's performance. And aside from top executives, few employees have sizeable holdings that give them both a large financial stake and an influence on decision-making. But share ownership and other forms of shared capitalism are large and growing. So do they really lead to better performance?

Isolating the effects of share ownership on performance through economic analysis is tricky. Firms do not choose the schemes randomly. Share capitalist companies may be those that have identified benefits in sharing the rewards of good performance with their employees, while other firms may have chosen to be 'lean and mean' because that pays off for them. In addition, many believe that firms with share schemes have more sophisticated managements and it is the leadership that really matters, not the scheme.

But two recent studies find that shared capitalism works for UK firms beyond the fabled John Lewis. The first, commissioned by HM Treasury, is the largest study of share ownership ever undertaken in the UK.

Linking administrative data from HM Revenue and Customs records to company performance data, the Treasury study finds that 'on average, across the whole sample, the effect of tax-advantaged share schemes is significant and increases productivity by 2.5% in the long run'. The analysis also finds that 'there are further benefits to be gained from operating several types of schemes'. And schemes chosen by firms without tax advantages tend to pay off more than those with tax breaks (Oxera, 2007).

Our research, which analyses data from the 2004 Workplace Employment Relations Survey, finds positive effects of share ownership on workplace productivity, with the effects being much more pronounced when shared capitalist schemes are deployed in combination. Share ownership has the clearest positive association with productivity, but its impact is largest when combined with other forms of shared capitalist pay.

Today, more employees have a bigger financial stake in their firms than ever before



Shared capitalism works in the UK outside John Lewis – and it works in the United States and many other economies too

Our findings mirror results from the United States in the 2000s. Researchers at the National Bureau of Economic Research (NBER) have surveyed tens of thousands of workers about what makes shared capitalism work more or less effectively. They find that shared capitalism improves outcomes both for companies and their staff. For example, owning company stock strongly predicts both a culture of innovation and a willingness to engage in innovative activity (Kruse et al, forthcoming).

We have learned a lot about shared capitalist schemes as a result of this research but much remains to be understood. Firms often change the specific schemes they use. The schemes also appear to have larger positive effects in some sectors and firms than in others (though there is almost no evidence of any negative effects).

Neither we nor the authors of the Treasury-sponsored study feel sufficiently confident in the magnitudes of the estimated effects to assess whether the tax privileges given to shared capitalist arrangements are socially optimal. And neither we nor the NBER researchers feel sufficiently confident that we have identified the right mix of schemes and other policies that guarantees success with shared capitalism.

But taken together, the growth of shared capitalist forms of pay and the research evidence that it pays off for both firms and employees give a picture that diverges greatly from the old view that this is just a small niche within capitalism. Shared capitalism works in the UK outside John Lewis. And it works in the United States and many other economies too. Given the fundamental problem of 'free-riding' that shared capitalism must surmount to succeed, how do firms and workers manage to produce positive economic outcomes? There are two ways firms overcome this incentive problem: through workers monitoring other workers (see Kruse et al); and through the creation of corporate culture that inculcates workers with a team orientation.

This article summarises 'How Does Shared Capitalism Affect Economic Performance in the UK?' by Alex Bryson and Richard Freeman, CEP Discussion Paper No. 885 (http://cep.lse.ac.uk/pubs/download/dp0885.pdf).

Alex Bryson of the National Institute for Economic and Social Research is a visiting research fellow in CEP's labour markets programme. **Richard Freeman** of Harvard University is a senior research fellow in CEP's wellbeing and labour markets programmes.

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Firms in declining industries have stronger incentives to lobby for protection than firms in expanding industries

Governments frequently intervene to support domestic industries, but a surprising amount of this support goes to ailing sectors. **Frédéric Robert-Nicoud** and **Richard Baldwin** explain why.

Industrial policy: why governments pick losers

overnments that try to pick winners and losers usually choose the latter. Some of the clearest examples of this come from trade policy. In the United States and Europe, the most protected sectors – agriculture, textiles, clothing, footwear, steel and shipbuilding – have all been in decline for decades. Likewise, one of the few policies of the Bush administration that President Obama is not breaking with is in keeping the US car industry alive 'a high priority'.

Counter-examples are rare. Even when a growing sector gets protection, as the US semiconductor industry did, the protection tends to be focused on market segments – like memory chips – in which the domestic industry is losing ground.

There are a few reasons for protecting 'losers', two of which may make some economic sense. The first is that the losers of today might be the winners of tomorrow: these 'infant industries' need protection while they mature before they can successfully compete with the world leaders. These are industries like biotechnology or semiconductors, where accumulated learning and experience are important drivers of productivity. But picking potential winners is difficult in practice. And governments seem much better at protecting 'national champions' – sunset sectors like Detroit's car industry or Italy's flagship airline, Alitalia – than dynamic industries. In contrast, 'the market does a great job of rewarding the very best and cutting the rest down to size' (Harford, 2008).

A second justification for protecting losers is one of 'insurance' – a desire to protect the least well-off. But in developed nations, governments have many policies for redistributing income and protecting the worst-off (such as income taxes, unemployment benefits and retraining schemes). So we should separate industry support from considerations of income distribution. After all, we care about people not corporations.

A third intuitive explanation for protecting losers is the fact that people care more about 'known' individuals than unidentified 'faceless' individuals. Anne Krueger (1990) contrasts the impact of a subsidy to a declining sector with one to an expanding industry: both will alter the allocation of employment, but in the ailing industry the jobs 'saved' can be identified with specific people whereas the jobs

created in the expanding sector cannot.

Unlike the first two explanations, this 'identity bias' argument has implications that are much more consistent with observed government behaviour. Witness, for example, the asymmetry in press coverage and government response (especially in continental Western Europe) between a factory that shuts down and

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lays off a few hundred workers and the thousands of jobs being created daily in dynamic industries that go unnoticed.

But an important criticism of the identity bias argument is that it does not explain why certain sectors are more successful in attracting government support than others. In the 1980s, the real wages of US unskilled workers fell substantially but only a small subset of these, including apparel workers, managed to win government support.

Understanding these facts becomes easier if we take a more cynical view of the way policies are shaped. In our research, we use the proliferation of pressure groups to account for the surprising amount of support that goes to declining industries.

Pressure groups are ubiquitous. There are an estimated fifteen to twenty thousand lobbyists in Brussels. In the United States in 1999, 3,835 political action committees were registered and over eleven thousand general interest groups, companies and associations engaged representatives in Washington, DC (www.opensecrets.org; Grossman and Helpman, 2001).

Some of the activities of these groups may be beneficial: they can relay complex information from experts to legislators and senior civil servants. But it is also clear that such groups are equally successful at bringing home what Americans call 'pork'.

Our basic story is simple. Government policy is influenced by pressure groups who engage in expensive lobbying. Special interest groups spend money in return for favours that benefit their bottom line (Grossman and Helpman, 1994). But contracting industries have much more to gain from retaining lobbyists than expanding industries.

In an expanding industry, a given firm cannot successfully retain the benefits from lobbying as new firms will enter the



Protectionist packages that place controls on domestic entry or production are likely to attract greater lobbying efforts

market and compete away any profitable opportunities. This is not true in declining industries. Since there are costs that are 'sunk' when a firm enters the market (such as unrecoverable investments in product development, training and brand name advertising), new entrants will not be able to compete away profitable opportunities as easily.

The result is that losers lobby harder. So it is not government policy that picks losers but rather that losers pick government policies. This may also explain why special interest groups fight harder to avoid losses than they do to win gains.

One key ingredient in our story is that lobbying is costly. Some sectors might overcome these costs and organise more easily than others. In particular, sectors with only few firms should find it easier to prevent one firm from 'free-riding' on the lobbying efforts of others than sectors with a plethora of small firms. Recent US evidence suggests that all things being equal, sectors that have few large firms get more protection than others (Bombardini, 2008). The other key ingredient in our story is that there are entry costs that are 'sunk' and not recoverable on exit. When these sunk costs are investments in human capital, this also explains why workers with skills specific to ailing industries lobby harder (for example, farmers and car workers).

Our analysis sheds light on the undesirability of packaging protectionist policies with policies discouraging entry from competitors (such as a government monopoly or production quotas). Such packaging is likely to lead to greater levels of protection because it increases the incentives of all industries to lobby for protection.

In addition, when some of the entry costs are created by regulation and red tape, special interest groups that manage to keep such regulations in place need not be losers. Taxi drivers in the big cities of the world are an example. How else to explain how a New York taxi licence hit the record price of US\$600,000 in May 2007? If entry were free, the licence would be worthless.



Government policy doesn't pick losers: losers pick government policies While most OECD countries have laws prohibiting cartels that prevent new production and entry, in certain industries, such as medicine and law, the special interest group itself regulates the flow of new entrants. In many countries, the airline industry regulator and the flagship airline seem to be indistinguishable in practice.

Unions can play a similar role: those that are able to control the wages of new workers benefit from higher tariffs in both contracting and expanding industries. In fact, many countries have sanctioned 'closed shop' rules that have had exactly this effect. France protects its energy market from foreign competitors (in violation of European Union rules). In this case, the unions of its national giant, EDF, managed to secure wages at a much higher level than the national average – that is, to capture a share of the profits being created by limited entry that usually accrue to shareholders.

The recent US 'cash-for-clunkers' policy and the government loans to Chrysler and GM can also be understood as ultimately helping a key constituency of the Democrats: the members of the United Auto Workers union.

So protectionist packages that place controls on domestic entry or production are likely to attract greater lobbying efforts – which is worse for society as a whole. If governments refrain from packaging trade policy with policy that (in effect) regulates entry, protectionism should be reduced.



This article summarises 'Entry and Asymmetric Lobbying: Why Governments Pick Losers' by Frédéric Robert-Nicoud and Richard Baldwin, CEP Discussion Paper No. 791 (http://cep.lse.ac.uk/pubs/ download/dp0791.pdf) and subsequently published in the *Journal of the European Economic Association* 5(5): 1064-93, September 2007.

Frédéric Robert-Nicoud, who is at the University of Geneva and a Peter Kenen Fellow at Princeton, is a research affiliate in CEP's globalisation programme. Richard Baldwin, who is at the Graduate Institute, Geneva, is policy director of the Centre for Economic Policy Research.

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Image: Anastasia Whittle

More than 400,000 Finns were forced to leave their homes as a result of the Soviet invasion in 1939. Research by **Matti Sarvimäki** and colleagues finds evidence of a surprisingly positive impact on the economic outcomes of the displaced people more than three decades later.

The unexpected consequences of forced migration





few hours after the Soviet aircraft had attacked the Finnish village of Kiviniemi on 30 November 1939, a messenger arrived at the Uosukainen family farm. He commanded the women and children to make their way to the train station and said that everyone was allowed to bring just one suitcase, nothing more. Mrs Uosukainen packed in haste, climbed onto a sleigh with her children and sister, and rode to the station.¹

They were not alone. More than a tenth of the Finnish population was permanently displaced during the Second World War as the eastern parts of the country were ceded to the Soviet Union.

At the time, Finland was a middleincome developing country by today's standards. It had won independence just two decades earlier, gone through a short but brutal civil war and then evolved into a reasonably well functioning democracy. Half of the population was working in agriculture, typically owning small farms and working as hired labour in forestry during the winter.

When the war ended, the country of four million had suffered relatively minor civilian casualties. But 92,000 men had died in battle and more than 200,000 were injured. Much of the production capacity was destroyed and large war reparations were due. On top of this, 430,000 people were displaced.

To cope with the situation, the Finnish parliament decided that the displaced people would be compensated for their lost property, financing the compensation by levying a massive tax on capital. Displaced people in urban areas received compensation in government bonds, while displaced farmers were given agricultural land. Since the amount of publicly owned land available was insufficient, half of the distributed fields were expropriated from private farmers living in their farms.

In 1950, the Uosukainen family had another visitor. This time the matter was far less dramatic: Finland was conducting its first full census and the man was there to help fill in the questionnaire.

The census form included a large set of questions about the family's current situation as well as retrospective questions on the pre-war municipality of residence, socio-economic status and industry. The answers were then coded to punch cards and transformed to reports published during the next eight years. The original forms were sorted by municipality, archived into boxes and largely forgotten.

Fifty years later, Statistics Finland drew

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Finnish men displaced by the war earned substantially more in later life than otherwise similar men who were not forced to migrate

a sample of every tenth box of the original census forms. Most of the information was keyed into a database. These data were then merged with later censuses, creating a large dataset that follows a random sample of the Finnish population and their children for more than six decades.

Our research uses a subset of these data to study the long-term effects of displacement on those forced to migrate. We focus on the cohorts born between 1907 and 1925 – those who were at least 14 years old at the beginning of the war and still of working age in 1971, when we first observe their tax records.

Analysis of these data shows that the pre-war economic status of those who later became displaced was similar to the rest of the population. But more than three decades later, the displaced men were earning substantially more than otherwise similar men who had not been forced to migrate. This result survives a battery of checks for robustness, so we interpret it as indicating a causal relationship.

What happened? According to our research, the most likely answer is that forced migration increased people's mobility both in terms of geography and occupation. Of course, the displaced were geographically mobile during the war. Less obviously, they were more likely to move from traditional to modern occupations. They also remained geographically more mobile even after resettlement.

Most of these migrations were from the countryside to the cities. This capacity to adapt to the changing circumstances turned out to be valuable in the rapidly urbanising and industrialising post-war Finland – at least for men. While the

¹ The recollection of Mrs Uosukainen's daughter is available in Finnish at: http://www.sakkola.fi/tarinat/uosukainen-1.htm estimates for urbanisation among women are comparable to those of men, we find no impact on income. This suggests that later migrations were likely to be driven by the labour market considerations of husbands.

Our findings illustrate that while forced migrations can be tragic, good policies can prevent the displaced becoming an impoverished underclass. The Finnish policy consisted of providing land and monetary compensation for lost property. Those given land were free to sell it. Everyone remained free to choose where to live. So the policy provided the means to start over but did not lock the displaced into traditional work.

It may be tempting to think that such policies were possible only in a country with a homogenous population and well functioning institutions. But it is not evident that Finland was such a country in the 1940s.

For example, one of the reasons for the civil war in 1918 was a dispute about land, notably between landowners and crofters (tenants of very small farms), who wanted the right to buy the land they were renting. And the resettlement of the displaced was fiercely debated in the Finnish parliament, with representatives of the Swedish-speaking parts of the country managing to exempt their constituencies from giving up virtually any land.

In short, the resettlement policies were not implemented as a consequence of Finland being an exceptionally harmonious society. Rather, pragmatism and fear of further unrest are the most likely explanation for these policies.

Our results also point towards a broader lesson about the importance of mobility. While economists have long argued that the returns to migration are positive and potentially large, hard evidence has been scarce.

The reason is that migrants are typically a highly self-selected group. Hence correlations between migrant status and economic outcomes are not likely to be informative about the causal effect of migration. Since we are able to study the impact of migration in a 'quasiexperimental' setting, this selection problem does not occur.

Of course, one should not extrapolate too freely from these results to current policy debates. Yet, the results are consistent with the argument that policies promoting mobility – both in terms of occupation and geography – are likely to promote growth.

Policies to promote occupational and geographical mobility are likely to be good for economic growth



While forced migrations can be tragic, good policies can prevent the displaced becoming an impoverished underclass

This article summarises 'Long-term Effects of Forced Migration' by Matti Sarvimäki, Roope Uusitalo and Markus Jäntti, Discussion Paper No. 15 of the Spatial Economics Research Centre (SERC) at LSE (http://www.spatialeconomics.ac.uk/textonly/ SERC/publications/download/sercdp0015.pdf).

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in brief... Government regulation of occupations

Occupational licensing – where working for pay in an occupation (such as teaching, dentistry, accountancy and the law) requires government permission – is a growing phenomenon. **Alex Bryson** and **Morris Kleiner** organised a symposium at CEP to explore the impact on earnings, employment and access to services.

The regulation of occupations has a long and varied history. Among the oldest evidence of rules governing occupations is the Babylonian Code of Hammurabi, which stipulates both the fees that patients were obliged to pay for medical services and the punishments that practitioners faced for negligent treatment. And in *The Wealth of Nations*, Adam Smith commented on the ability of the crafts to lengthen apprenticeship programmes and limit the number of apprentices per master, thus ensuring higher earnings for people in those professions.

In modern times, occupational regulation has become pervasive in western industrialised nations. In the United States, for example, the proportion of workers whose occupation requires them to have a licence from the government to perform their work has grown nearly sixfold during the last 50 years to reach about 29% of the workforce. Adding in people whose occupation involves some kind of government certification means that about 38% of the workforce has some permission requirements from the government to work for pay.

Earlier this year, a symposium at CEP explored the role that governments and non-profit organisations play in precluding individuals from working in an occupation for pay. It also examined whether occupational regulations provide higher quality services and greater health and safety benefits, as well as eliminating consumer uncertainty about the services.

Building on the strong industrial relations tradition of multidisciplinary interactions between academics and practitioners, the symposium included scholars from industrial relations, economics, public policy and sociology as well as practitioners and officials from the Council on Licensure, Enforcement and Regulation (CLEAR), an international organisation of occupational regulation professionals.

The papers ranged from analyses of national-level occupational licensing institutions to specific issues within specific occupations – and from an analysis of the avenues for enforcing occupational regulation of the offshoring of radiology in different countries to access to care within a country's dental profession. This diversity underscores the complexity of the globalisation of occupational regulation and the need for fresh analytical approaches to a topic that is at the core of labour market regulation.

Occupational licensing in the United States

In the 1950s, one in 20 US workers were required to have a licence from an agency of the US government to be able to do their job. A paper by Morris Kleiner and Alan Krueger finds that in 2006, the proportion was nearing one in three workers. Occupational regulation in the United States now affects many times more workers than unionisation, which encompasses roughly 12% of the workforce. Moreover, the effect of licensing on wages – raising them by around 15% – is similar to the impact of unions on wages.

A paper by Joseph Hotz and Mo Xiao examines childcare provision in the United States and finds that the effects of state-level quality standards that specify the labour intensiveness of childcare services are strikingly different from those that specify staff qualifications. Requirements for higher staff-child ratios deter entry of new providers and reduce the number of operating childcare establishments. Requirements for higher staff educational qualifications do not deter new entry, but they do have the unintended effects of discouraging accreditation, reducing owners' profits and driving firms out of business.

Comparison of cross-national approaches to occupational regulation is a key issue in the internationalisation of work. A paper by Kyoung-Hee Yu and Frank Levy examines variations in a specific case – the offshoring of diagnostic radiology in Singapore, the UK and the United States – to show how differences in national institutions continue to affect market transactions of professional services in a globalised world.

All three countries are offshoring diagnostic radiological readings, but primarily for reasons other than cost. The United States offshores radiology to US board-certified radiologists who are located abroad. The UK offshores radiology largely to radiologists trained in other European Union (EU) countries. But only Singapore of the three countries offshores any significant amount of work to India.

Occupational regulation in the European Union

In contrast with the long history of research on occupational licensing in North America and the detailed data that are available there, there has been relatively little examination of occupational licensing in the EU. A paper by Francis Kramarz and colleagues examines the influence of the abolition of compulsory conscription (the draft) in France on the acquisition of driving licences by young men (something that had been effectively subsidised through their acquisition while in the army) and the effects on both labour supply and the demand for driving instructors. The results show that abolition of the draft resulted in increased rents for driving instructors because heavy entry regulations ensured that demand for driving instructors outstripped supply.

A paper by David Metcalf discusses how in the UK, policies are being adopted on immigration that take into account the relative supply and demand aspects of the occupation. Moreover, occupations regularly lobby to limit the numbers within the occupation in government agencies.

Case studies

Occupational regulation influences wages, employment and consumers differently depending on the stage and level of regulation. For example, funeral directors in the United States are required to learn practices such as embalming that are used infrequently, but are expensive in terms of both money and time to master. The result, according to a paper by Alison Cathles and colleagues, is a reduction in the supply of female practitioners and an increase in the earnings of funeral directors. Similarly, a paper by Tanya Wanchek shows that the number of hygienists is limited by state laws that reduce consumers' access to dental care, but raise the earnings of this female-dominated occupation.

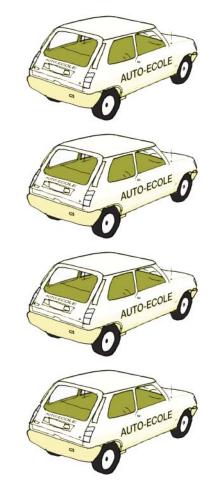
A key overarching aspect for the labour market is the influence of occupational licensing on wage determination. A paper by Mario Pagliero finds that for US attorneys, more difficult state-by-state exams directly translate into higher salaries for lawyers. Similarly, a paper by Robert Thornton and Edward Timmons shows that for barbers in the United States, tougher statutory restrictions for barbers are associated with higher salaries.

Policy implications

The papers presented at the symposium support the interpretation that occupational licensing serves as a means to enforce entry barriers to a profession that raise wages and reduce employment without any demonstrable benefits to consumers. For occupations to continue to be licensed or for licensing of occupations that are currently unlicensed, it must be shown that they are enhancing consumer well-being.

The estimates of the relationship between occupational licensing and wages is consistent with the idea that members of an occupation raise wages by using the powers of government to drive up requirements and capture work for the regulated workers. These estimates suggest a strong role for the monopoly face of licensing in the labour market. Indeed, the wage premium associated with licensing is strikingly similar to that found in studies of the effect of unions on wages.

Occupational licensing introduces entry barriers to a profession that raise wages and reduce employment



This article summarises the issues and papers discussed at 'The International Symposium on the Government Regulation of Occupations', jointly organised by CEP and the *British Journal of Industrial Relations* and held at CEP in March 2009 (http://cep.lse.ac.uk/_new/events/event.asp?id=66).

Alex Bryson of the National Institute of Economic and Social Research is a visiting research fellow in CEP's labour markets programme. Morris Kleiner of the University of Minnesota is the author of *Licensing Occupations: Ensuring Quality or Restricting Competition?*, Upjohn Institute for Employment Research (2006).

in brief... Europe's top prize for economic research

John Van Reenen, CEP director and LSE professor, has been jointly awarded the Yrjö Jahnsson Award in Economics 2009, Europe's most prestigious prize for economic researchers.

In 1993, the Finnish Yrjö Jahnsson Foundation established the Yrjö Jahnsson Award in Economics, for a young (under 45) European economist who has made a contribution in theoretical and applied research that is significant to economics in Europe.

The Award is given every two years in cooperation with the European Economic Association (EEA) and previous winners include Tim Besley, Richard Blundell and Jean Tirole (see: http://www.yjs.fi/index_eng.cfm?rID= 2&lgID=2&tID=33). This year the recipients were announced at a ceremony at the annual congress of the EEA in Barcelona in late August.

The citation from the Board of the Yrjö Jahnsson Foundation, which nominated John Van Reenen and former CEP researcher Fabrizio Zilibotti (now at the University of Zurich) as recipients of the 2009 award, said:

'John Van Reenen and Fabrizio Zilibotti, both on their own and in joint work, have made several important contributions to the analysis of technological innovation and its link with economic growth and labour market phenomena'.

'The work of Van Reenen and Zilibotti addresses very relevant questions, with rich policy implications, using a diversity of research styles and methods, but always with the highest standards of rigour and excellence.' The Award recognises the broad scope and impact of Professor Van Reenen's research on the world of work and business (detailed on his home page here: http://cep.lse.ac.uk/_new/staff/person.asp?id=1358):

'John Van Reenen has made several contributions to the empirical analysis of labour markets, competition policy and industrial economics, especially in areas relating to productivity growth, management practices, R&D, intellectual property, and investment decisions.'

'He has also done pioneering work on the organizational structure of the firm and its relation to innovation, contributing both with empirical evidence and measurement tools.'

Professor Van Reenen's research on management practices is discussed in the 'Bossonomics' article starting on page 10 of this issue of *CentrePiece* and in Bloom and Van Reenen (2007). Some of his research on productivity in both the private and public sectors is written up in Faggio et al (2007) and Hall et al (2008). And work on technology and the organisational structure of the firm is described in Acemoglu et al (2007) and Bloom et al (2009).

Professor Van Reenen said: 'I am deeply honoured to receive this award. It belongs more to the wonderful colleagues and students I have been so lucky to have worked with over the years.'

Further reading

Daron Acemoglu, Philippe Aghion, Claire Lelarge, John Van Reenen and Fabrizio Zilibotti (2007) 'Technology, Information and the Decentralization of the Firm', *Quarterly Journal of Economics* 122(4): 1759-99.

Nick Bloom, Luis Garicano, Raffaella Sadun and John Van Reenen (2009) 'The Distinct Effects of Information Technology and Communication Technology on Firm Organization', CEP Discussion Paper No. 927. Nick Bloom and John Van Reenen (2007) 'Measuring and Explaining Management Practices Across Firms and Nations', *Quarterly Journal of Economics* 122(4): 1351-1408.

Giulia Faggio, Kjell Salvanes and John Van Reenen (2007) 'The Evolution of Inequality in Productivity and Wages: Panel Data Evidence', CEP Discussion Paper No. 821.

Emma Hall, Carol Propper and John Van Reenen (2008) 'Can Pay Regulation Kill? The Impact of Labour Markets and Skills on Hospital Productivity', CEP Discussion Paper No. 843

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