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CentrePiece

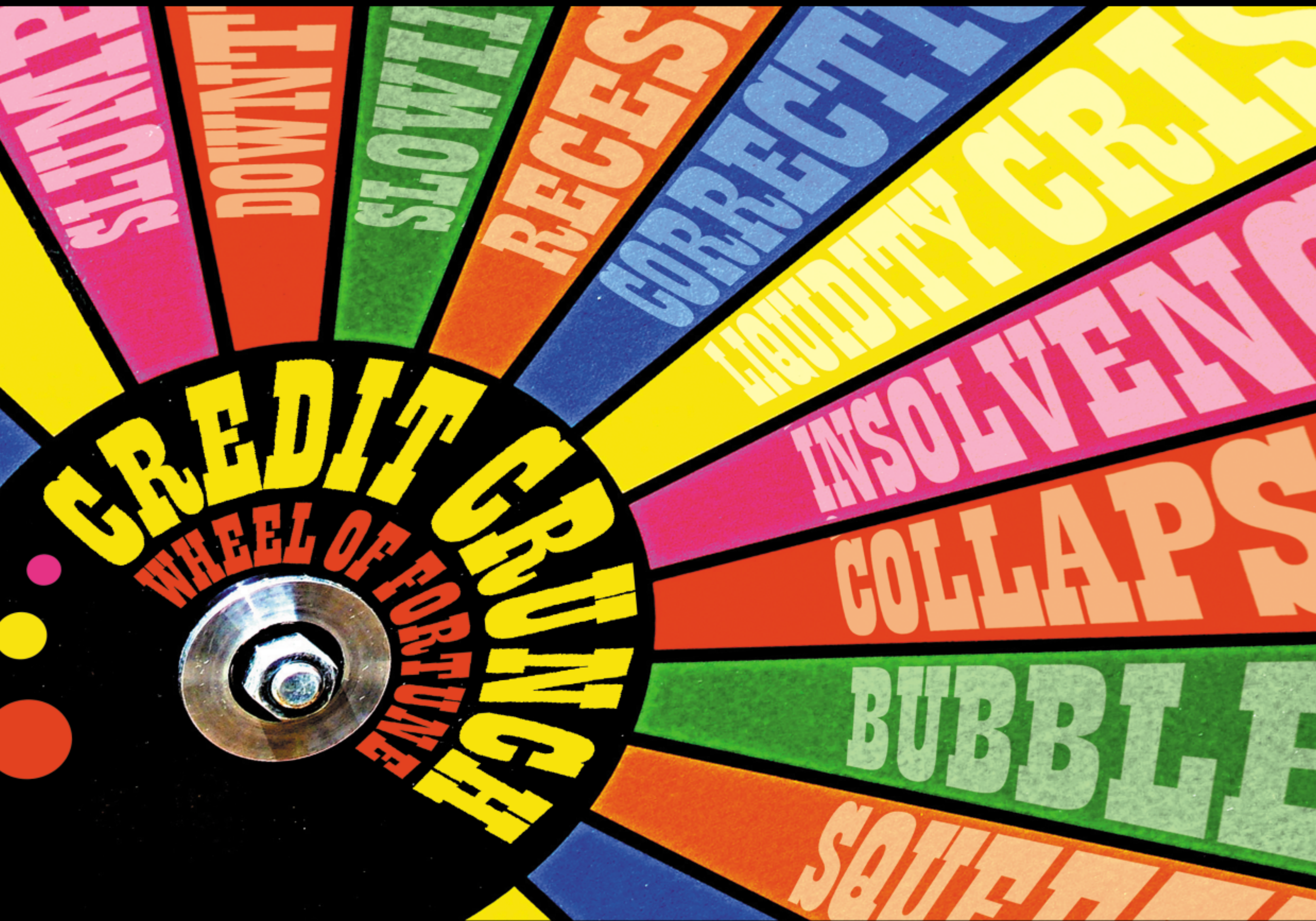
The Magazine of The Centre for Economic Performance

Volume 13 Issue 1 Spring 2008

Unemployment and welfare to work
Voting on interest rates

Nurses' pay
Britain's new homes

WILL THE CREDIT CRUNCH LEAD TO RECESSION?



China's entrepreneurs
India's foreign investment policy
Management practices in China and India

CHINA INDIA

CentrePiece

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ECONOMIC
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Editorial

Management gurus and the publishing industry that sustains them often congratulate themselves on their 'thought leadership', compiling endless lists of 'ultimate business thinkers' and 'most enduring ideas'. All very amusing – indeed, frequently lampooned by columnists like Lucy Kellaway in the *Financial Times* – but disturbing too. Despite the lack of intellectual rigour in most business bestsellers and an absence of any evidence beyond the anecdotal, they clearly have a ready market.

Economists and other serious social scientists tend to be more modest in the claims they make for their ideas – and they are typically more reluctant to package their findings in a way that will attract an audience beyond academia. The Centre for Economic Performance (CEP) has always sought to buck this trend: one of its central aims is for top-quality economic research to have an impact on society through the long-term percolation of new ideas into policy, practice and public understanding.

In this issue of *CentrePiece*, we take a leaf out of the management crowd's book with the launch of a series of reviews of CEP's achievements, looking back at some of the 'big ideas' that have emerged from the research and their influence on both scholarship and public policy. In the first article, John Van Reenen describes how the Centre's work on unemployment and welfare have not only changed the way economists think about these problems, but also led to policies like the New Deals.

CEP research of a more recent vintage is making significant advances in the study of management itself, and here we report findings from our surveys of management practices in China and India. Two other articles address key issues for these emerging giants of the world economy – and much more will be discussed at a three-day conference on the topic that CEP is hosting in early July.

Elsewhere, we examine the often perverse effects of regulation in Britain – the lethal impact of pay regulation in healthcare; and how planning regulations stop us building houses where they're most needed – and the role of incentives – for the unemployed to get a job; and for novice monetary policy-makers to conceal their true views on interest rates.

Finally, our cover story asks whether the credit crunch will lead to recession and reaches a worrying conclusion. This too draws on enduring ideas from economic research: the doctoral thesis of Federal Reserve chairman Ben Bernanke. When it comes to management of the world economy, economists and their ideas are, fortunately, more prominent than the business gurus.

Romesh Vaitilingam
Editor
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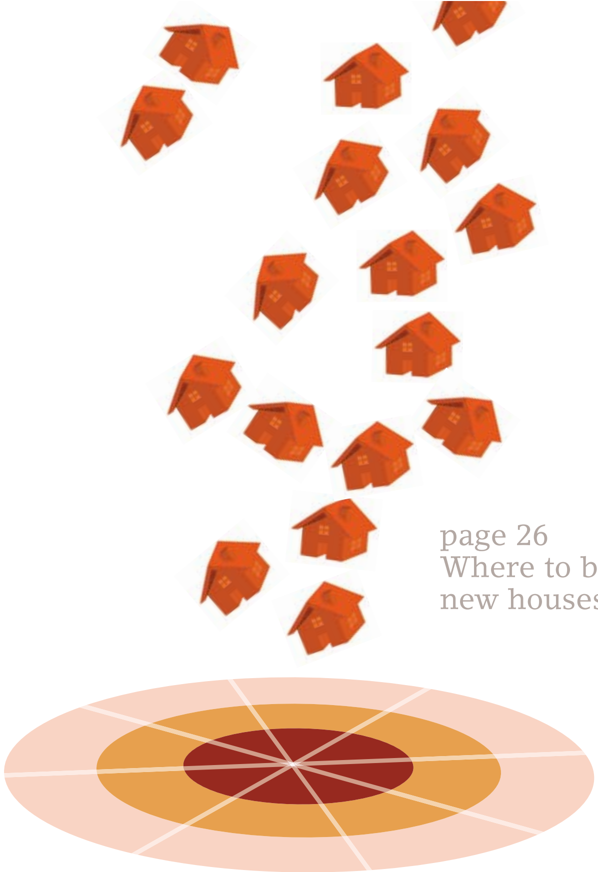

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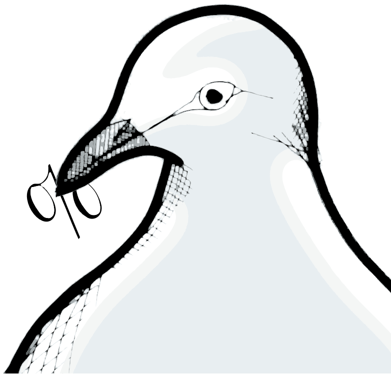

Contents

in brief...

To illustrate CEP's impact on public policy and debate, **John Van Reenen** introduces and presents the first in a series of 'big ideas', surveying the significant research findings that have emerged from the Centre over the past three decades.

What has economics done for me lately? I am often asked about the purpose of the Centre for Economic Performance (CEP). What impact have we had? How can we justify our funding?

The CEP makes a difference in a variety of ways. We evaluate public policies to see if they have any benefits and, if so, to whom those benefits accrue and whether they outweigh any costs. The literacy hour in primary schools, the Job Seeker's Allowance for the unemployed, R&D tax credits and many other policies have been subjected to our rigorous and objective assessment. Our findings can be used by governments and others to assess what worked in the past and what needs to be changed in the future.

Of course, many of these findings go unattributed once they enter the national bloodstream. Ideas, once accepted, are often bastards. How many people know that the decline in social mobility between the generations born in 1958 and 1970, mentioned repeatedly by politicians and commentators, was first discovered by CEP researchers?

CEP researchers do not hide away from public debate. In 2007 alone, CEP research appeared in the print, online or broadcast media on more than 380 occasions. It is by taking public communication seriously that our research can be disseminated to a wider audience.

Our researchers are also formally involved in policy-making in a number of different areas, serving on bodies such as the Low Pay Commission, the Monetary Policy Committee, the Migration Advisory Service and pay review bodies, and advising business and non-governmental organisations such as trade unions.

But this perhaps misses out what is most important: the long-term impact of the CEP. Starting in this issue of *CentrePiece*, we have decided to give a flavour of how our ideas have influenced the world. As Keynes said in *The General Theory*, 'Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back.' Whatever your opinion of their mental state, there is no question that policy-makers have been significantly influenced by CEP research.

Obviously our ideas are not developed in a vacuum: we have many interactions with the wider research and policy community, above all with others in the economics faculty at the London School of Economics (LSE). We are fortunate to be part of the department that is the highest-ranked in the world outside the United States.

We have learned that it takes time for academic ideas to percolate into public consciousness. Our findings and their policy implications are not accepted immediately – or sometimes at all. Many are disproved by events or further investigation, but even the ones that prove to be right take time to be supported and put into practice. This means, of course, that many of the new ideas that we have been generating in recent years may not have an effect for many years to come.

Our first 'big ideas' overview looks at unemployment and welfare to work. Future commentaries will include the causes of rising wage inequality and policies to combat this inequality such as education, the minimum wage and unions; declining social mobility; productivity and competition; innovation policies; economic geography; and happiness and mental health.

Unemployment and welfare to work

Unemployment and welfare to work have been one of the most high profile areas in which the combination of theory and careful empirical analysis at CEP led to policy developments. In turn, the recommendations that were adopted were evaluated and this allowed us to enhance our theoretical understanding of these issues.

In the aftermath of the Great Depression and World War II, the Keynesian consensus was that unemployment was essentially a problem

Big id

of demand. Governments needed to get the level of aggregate demand right to maintain full employment through a mixture of monetary and, above all, fiscal policies. LSE economists like John Hicks and Bill Phillips (of the famous Phillips curve) were at the heart of this consensus.

The appearance of 'stagflation' – growing inflation and unemployment – in the 1970s shattered this happy state of affairs. Out of the crisis, Thatcherism drew on Milton Friedman's work to emphasise the failure of demand management and the need for governments to allow the market to let unemployment find its 'natural' level (the NAIRU or 'non-accelerating inflation rate of unemployment'). Printing money to boost demand led only to accelerating inflation.

In 1990, as the Thatcher era was drawing to a close, CEP was born. A major strand of our work (building on the former Centre for Labour Economics) agreed that there was a NAIRU as Friedman argued. But rather than being something immutable and fixed in stone, microeconomic supply-side policies could be used to lower the NAIRU and thereby reduce unemployment. Simply cutting unemployment benefits was not the only way of achieving lower unemployment.

The framework for this view was published in the classic textbook *Unemployment: Macroeconomic Performance and the Labour Market* by Richard Layard (CEP's founder director), Stephen Nickell and Richard Jackman (first edition 1992). Reviewing the 2005 edition in the *Journal of Economic Literature*, MIT's Olivier Blanchard wrote:

> *'The book was and remains an impressive achievement. The way to read it however is not so much as a treatise than as a manual of battlefield surgery. Its purpose is clear: How to understand, and then how to reduce, unemployment in Europe, by taking inventory of the knowledge at hand.'*

First, there had to be intellectual foundations. This meant moving away from the textbook model of perfect competition in the labour market and considering a more subtle and realistic picture of how people worked. Together with Dale Mortensen, Chris Pissarides (director of CEP's macroeconomics programme from 1999 to 2007) developed job search theory, now regarded as the foundation for modern unemployment theory.

The basic idea is that it takes time for an employee to find a job and for an employer to find an employee – so this means that there will be an equilibrium level of vacancies and unemployed as individuals get 'matched' with jobs. Layard et al showed how many other models of imperfect competition (bargaining, efficiency wages, etc.) had some similar implications.

Second, these theories had to be confronted with data both to test the models and to put numbers on the strength of the relationships. Huge effort was invested in building up cross-national macro and micro datasets that could be used to perform statistically rigorous analysis.

The next step was the implications for policy. The basic message was that supply-side policies to improve the matching process between jobless workers and vacancies were crucial. This implied an agenda of 'welfare to work', something that has been taken up by governments around the world, particularly in the UK since 1997.

An example of this is the New Deal for Young People, first suggested by Richard Layard and introduced by Gordon Brown in 1998 (and later extended to other groups on welfare, including single mothers and disabled people). The philosophy of the reform was that long-term unemployment was a huge waste of resources as the jobless lost skills and motivation and were no longer effectively competing in the labour market and dampening wage inflation.

To combat this problem, a combination of 'carrot' and 'stick' was needed. The carrot was to give the unemployed help with job search through intensive information and mentoring at job centres. Those who still struggled to find work would be supported in subsidised work and training programmes. The stick was that those who refused work or other options would lose their benefits. Elements of a sanctions approach had been tried before the Labour government but without the support package, they had only limited success.

The story does not end there. A vital part of policy is rigorous evaluation of whether it works or not. I was deeply involved in the first evaluation of the New Deal, which required us to develop new techniques and combine new datasets. We found that the programme did appear to have major benefits, raising the job finding rate by about 20%, and I argued that on the whole these benefits outweighed the costs. Subsequent work has tended to support this conclusion.

The evaluations raised many questions: what should be the balance between the carrot and the stick? How effective is the training option? Why does the New Deal effect seem stronger when it was first introduced than later? Why is the aggregate effect not larger, and is the youth labour market now running into trouble? These questions feed back into further developments of the theory and other policies.

The overall lesson is that careful economic research has real effects on policy and the world.

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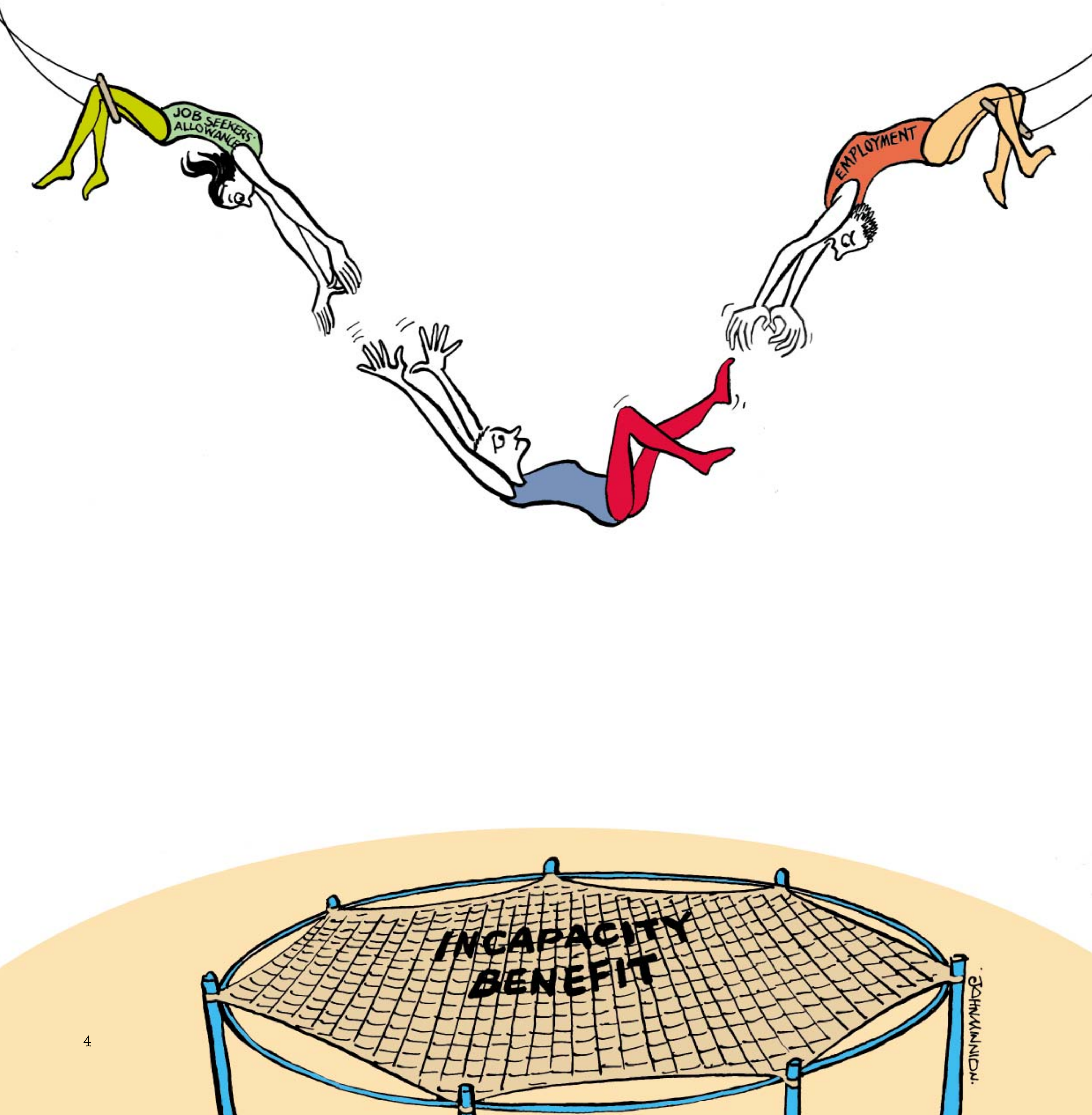
John Van Reenen is director of CEP.

The Job Seeker's Allowance was introduced in late 1996 to encourage benefit claimants to look for work. New research by **Barbara Petrongolo** investigates whether it has succeeded in breaking the 'unemployment trap'.

The unemployment trap



The Job Seeker's Allowance (JSA) was introduced in the UK on 7 October 1996. It replaced the existing system of unemployment benefits and income support, and is currently the main welfare support to the unemployed. It was intended to break the 'unemployment trap' in which workers were discouraged from finding work because of the availability of benefits.

The new system placed stringent conditions on claimants – possibly forcing some to stop claiming without finding a new job first. Individuals who drop out of the welfare system may become more detached from the labour market and put less effort into searching for a new job. This may lower the employment rate in the future – exactly the opposite effect of the one intended.

The JSA has two distinct components:

- The contributory component, which has limited duration, is not means-tested and is based on previous national insurance contributions. This component replaced unemployment benefit.
- The means-tested component. In principle, this is an open-ended measure that replaced income support.

The contributory component of the JSA is more stringent than the unemployment benefit that it replaced. It is only payable for half a year (rather than a full year), young people aged 16-25 receive less and there is no allowance for a dependent spouse. In contrast, the means-tested component of the JSA is payable at the same level as the former measure of income support. And as most support is provided through this component, the total effect of the changes was not large.

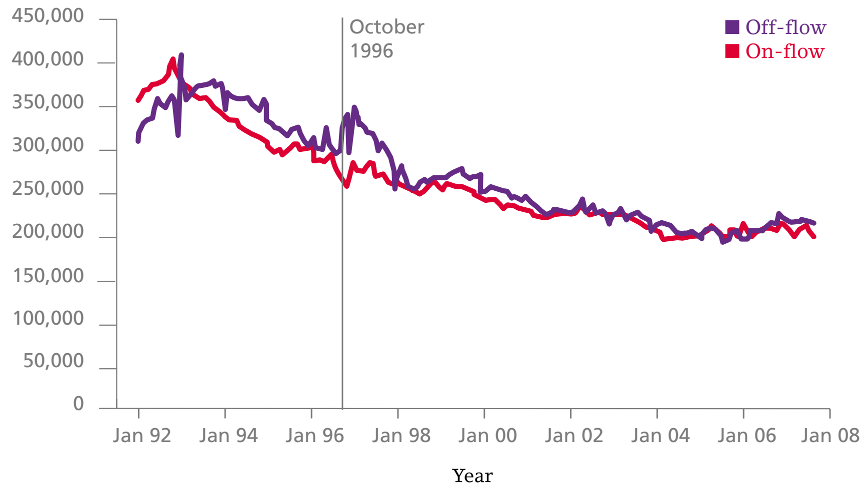
The most significant break with the previous system was the substantial increase in evidence that claimants had to provide to demonstrate that they were looking for work. Claimants now have to sign a Jobseeker's Agreement in which they agree to look for work actively and commit to a number of specific 'search steps'. Such steps might include how many employers they are going to contact every week or how many times they are going to contact a job centre.

Claimants are required to keep a detailed diary of each search step undertaken, such as each phone call made to a potential employer. The search diary is then checked against the initial agreement at fortnightly interviews with the Employment Service – or more frequently if a claimant is suspected of fraud. Claimants may be 'directed' by the Employment Service staff to take specific steps.

If claimants are still unemployed after 13 weeks, they are required to broaden their search and may not turn down job

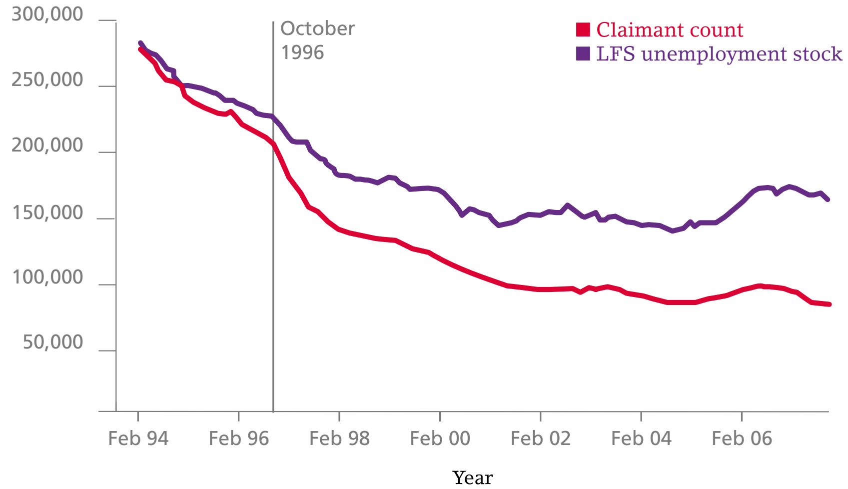
The Job Seeker's Allowance introduced conditions to ensure claimants were looking for work

Figure 1:
Flows into and out of the claimant count (seasonally adjusted)

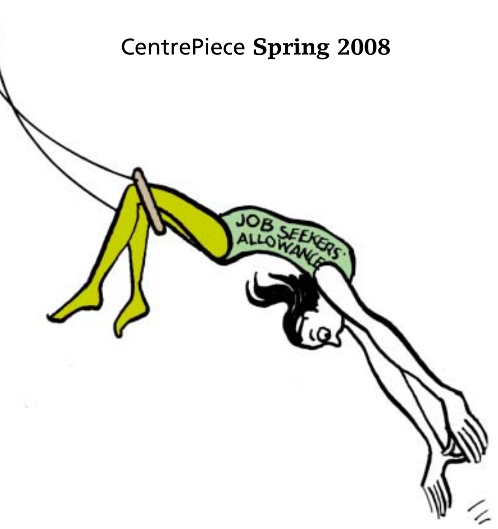


Source: NOMIS.

Figure 2:
The claimant count and the Labour Force Survey stock of unemployed (seasonally adjusted)



Source: NOMIS and ONS.



The Job Seeker's Allowance reduced the number of claimants – but it also reduced the number of claimants finding work

offers outside their main occupation (although this is difficult to enforce). A claimant who fails to meet these requirements is threatened with temporary sanctions or disqualification from the JSA entirely.

Some of the effects of the JSA can be seen by looking at flows of people into and out of registered unemployment, as Figure 1 shows. Soon after the introduction of the JSA, there was a large increase in the number of people stopping claiming the JSA, with no increase in the number of new claimants. This translated into a rapid decline in the unemployment rate, which was already falling in the months before the reform came into effect.

Official evaluations of the JSA carried out by the then Department of Social Security (now the Department for Work and Pensions) show that the JSA increased the number of people stopping claiming benefits. This was largely due to a 'weeding out' effect: those who were not serious about searching for a new job were forced off the register.

Their findings also show that the average claimant increased his or her efforts to find a new job. Of course, it is possible that as less serious claimants were weeded out, only claimants who were trying to find a job remained. So it could be that the remaining claimants were the ones who were always more motivated, rather than being motivated by the JSA directly.

Indeed, research by Alan Manning (2005) finds that taking account of the behaviour of both claimants and non-claimants, their average search effort did not increase at all after the introduction of the JSA.

Further effects of the JSA can be evaluated by comparing two groups of job seekers: those who became unemployed shortly after the introduction of the JSA; and those who became unemployed six months earlier (and then adjusting for seasonal factors using information on later cohorts of claimants).

Although claimants affected by the JSA system came off benefits more quickly than claimants did under the old system, they were 4% less likely to be in work a year after they lost their job. This meant that they were earning an average of £600 less a year.

What's more, these effects were stronger for young people (those aged up to the age of 24), who experienced more severe earnings losses than older workers after the introduction of the JSA.

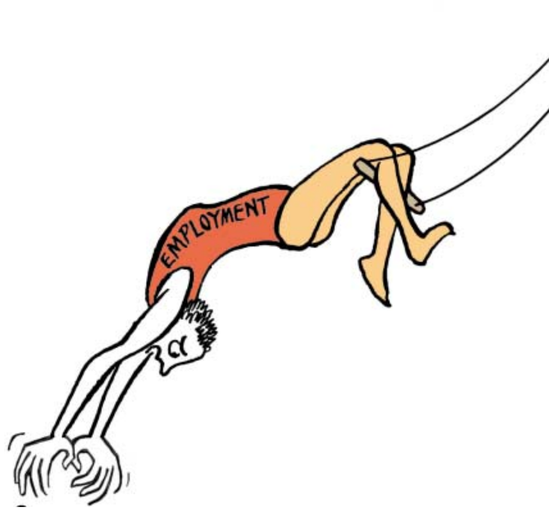
As the JSA seems to have moved claimants off benefits but not into new jobs, it increased the number of non-employed people who were not claiming benefits. Figure 2 shows that the claimant count – while being very close to the Labour Force Survey (LFS) measure of unemployment until 1996 – fell more sharply than LFS unemployment after the introduction of the JSA in late 1996.

So what happened to these workers who were neither working nor claiming benefits? Many may have become part of the 'hidden unemployed' – but there are other possibilities.

A study by Stephen Machin and Olivier Marie (2008) shows that crime in the UK rose more in areas that were most affected by the tougher JSA benefit regime. Could this mean that people pushed out of the benefit system by the new, more stringent standards were turning to illicit methods of earning? Possibly – but other factors could be at work as well, so we must be careful in claiming this.

Another possibility is that people simply moved onto other benefits, notably incapacity benefits. Indeed, individuals covered by the JSA are 3% more likely to take up incapacity benefits – and thus be induced into longer-term dependency – than individuals not covered by the JSA.

This has important consequences for government spending on welfare. While expenditure on unemployment benefits has been lower under the JSA, if we take account of the increase in incapacity benefits, it is not clear whether the total benefit expenditure was reduced. So it remains unclear whether the move from the unemployment benefit and income support system to the JSA was beneficial either in terms of reducing benefits or of helping more people into work.



Some workers appear to have moved off the Job Seeker's Allowance and onto incapacity benefit

This article summarises 'What are the Long-term Effects of UI? Evidence from the UK JSA Reform' by Barbara Petrongolo, CEP Discussion Paper No. 841 (http://cep.lse.ac.uk/pubs/download/dp0841.pdf).

Barbara Petrongolo is a lecturer in economics at LSE and an associate in CEP's labour markets programme.

Further reading

Stephen Machin and Olivier Marie (2008), 'Crime and Benefit Sanctions', *Portuguese Economic Journal* (special issue on labour economics), earlier version available as CEP Discussion Paper No. 645 (http://cep.lse.ac.uk/pubs/download/dp0645.pdf).

Alan Manning (2005), 'You Can't Always Get What You Want: The Impact of the UK Job Seeker's Allowance', CEP Discussion Paper No. 697 (http://cep.lse.ac.uk/pubs/download/dp0697.pdf).

in brief...

Understanding trade unions and the labour market

Richard Freeman, professor of economics at Harvard University, visiting professor at LSE and senior research fellow in CEP's research programmes on labour markets and wellbeing, has been awarded the IZA Prize in Labor Economics 2007.

The prize, awarded by the Institute for the Study of Labor (IZA) in Bonn, honours the pioneering work of exceptionally creative scholars who have revolutionised theoretical and empirical research on labour markets. The prize committee includes Nobel Laureates George Akerlof and Joseph Stiglitz, and the previous winners are Jacob Mincer, Orley Ashenfelter, Ed Lazear, Dale Mortensen, David Card, Alan Krueger and CEP's Chris Pissarides.

The award team said: 'By drawing attention to important social problems and trends, Richard Freeman has greatly extended the range of issues addressed in modern labour economics. His analyses of inequality and discrimination, the role of unions and the welfare state are extremely valuable for the understanding of effective labour market policy.'

'In various studies, Freeman has proven that unions perform multiple economically valuable functions which reach far beyond their role in wage bargaining. These contributions, which are among Freeman's most influential research, have revolutionised the perception of trade unionism in modern labour economics.'

'In light of globalised markets and international competition, the trade unions' strategies should not be confined to achieving higher wages. According to Freeman, modern unions must also provide a direct channel of communication between workers and management and act as an intermediary to protect employment and foster the creation of new jobs.'

'By serving as an institution of collective voice, unions contribute to a higher level of job satisfaction and improve workers' loyalty to the firm. Freeman has demonstrated that union influence not only reduces absenteeism but also promotes long-term employment relationships by lowering the number of quits. This reduction in labour turnover lowers hiring and training costs. More importantly, it increases productivity by creating incentives to invest in workers' education and skill enhancement.'

'In this respect, trade unions who act constructively are of vital importance to overall economic performance. Freeman's research shows that non-dogmatic unions can play a significant role in today's labour markets. It should encourage union leaders to be more aware of their key responsibility for the economy as a whole.'

'For more than three decades, Richard Freeman has been among the internationally most active and influential labour economists. His research, which has greatly enriched the scientific debate, has also had a strong impact on policy debates around the globe. Among the institutions he has advised on economic policy issues are the World Bank, the International Labour Organization and the European Union. In addition, Freeman directs the Program on Labor Studies at the National Bureau of Economic Research.'

One of the results of the IZA prize will be a book based on Richard Freeman's articles published by Oxford University Press. This will be about his research on labour markets in the UK and continental Europe, work done primarily at CEP.

Further reading

Alex Bryson and Richard Freeman (2006), 'What Voice Do British Workers Want?', CEP Discussion Paper No. 731 (http://cep.lse.ac.uk/pubs/download/dp0731.pdf).

Richard Freeman (2005), 'From the Webbs to the Web: The Contribution of the Internet to Reviving Union Fortunes', in Susan Fernie and David Metcalf (eds), *Trade Unions: Resurgence or Demise?*, Routledge (summarised in *CentrePiece*: http://cep.lse.ac.uk/pubs/download/CP182.pdf).

Richard Freeman, 'Are European Labor Markets as Awful as All That?', CEP Discussion Paper No. 644 (http://cep.lse.ac.uk/pubs/download/dp0644.pdf).

Richard Freeman and Joel Rogers (1999), *What Workers Want*, Cornell University Press.

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

in brief...
Can pay regulation kill?

John Van Reenen and colleagues present evidence on the impact of regulating the labour market for nurses on the performance of hospitals in England.

Nurses' pay in England is set centrally with little local variation. This means that hospitals in high cost areas like London and the South East struggle to recruit and retain staff. As a consequence, our research finds that they treat fewer patients and have lower quality outcomes – for example, much higher fatality rates among patients admitted with emergency heart attacks.

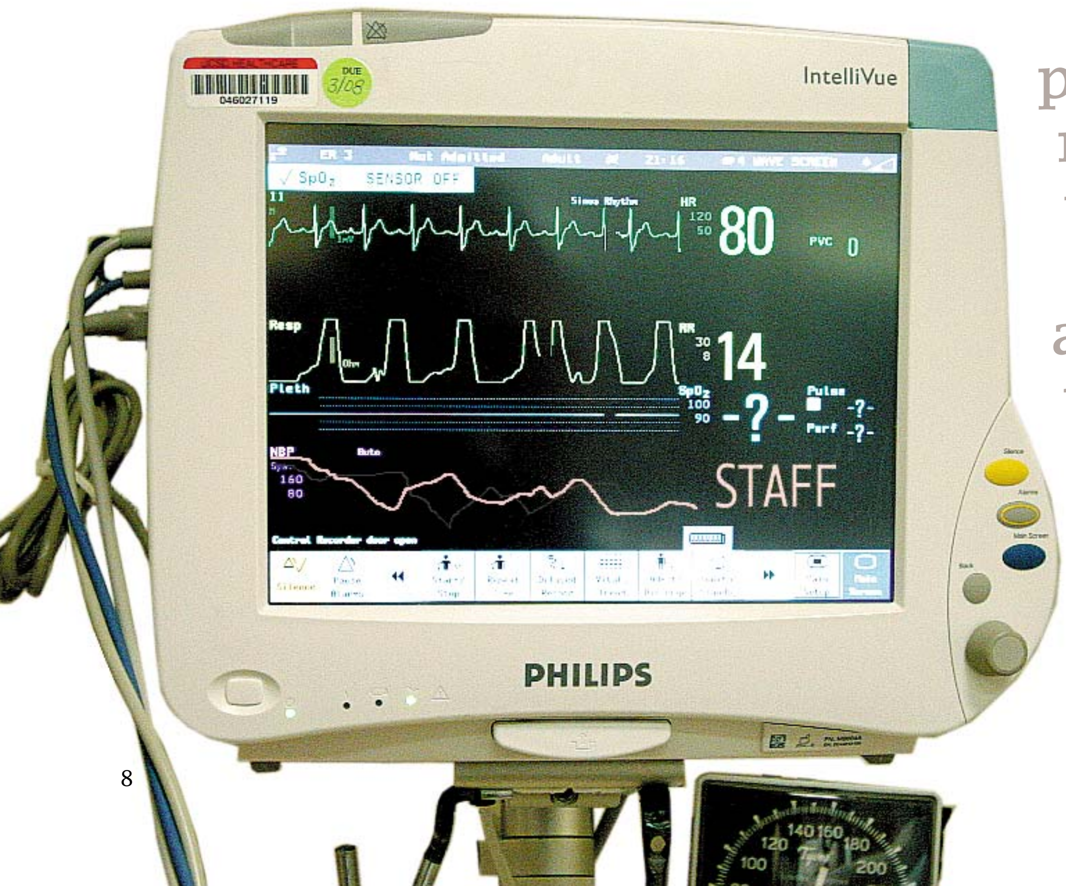
These effects are not trivial: the results suggest that a 10% increase in the gap between the wages paid to NHS nurses and those paid to women working in the private sector locally raises the fatality rate among people admitted with a heart attack by about 5%.

Centralised pay setting happens in many public sector labour markets like health, teaching and the police. People often worry about the minimum wage pricing people out of jobs. But when pay in a sector is set to be almost the same across the country, it effectively imposes a maximum wage on people living in parts of the South East where wages outside the public sector are pushed up by the tightness of the labour market.

Nowhere is centralised pay setting more important than in the NHS. More than a quarter of a million nurses in England have their pay set by a single pay review body. The process allows some local flexibility, but in practice the gap between the wages paid to a nurse in Newcastle and one in London is small compared with the pay gap between women in those areas who are not nurses.

The research looks at how centralised pay setting for nurses in the NHS affects hospital performance by tracking changes in the outside wage and changes in performance in over 100 English hospital trusts over a six-year period.

Common sense would suggest that hospitals located in places where outside opportunities are better are going to struggle to recruit, retain and motivate staff. This is



Centralised pay setting for nurses means that hospitals in high cost areas struggle to recruit and retain staff exactly what the study finds: in areas like London where the outside labour market is strong – where the wages of nurses are lowest compared with their non-nurse counterparts – nurse vacancy rates are higher and fewer qualified nurses work in the NHS.

But these recruitment difficulties are not confined to the human resources department. More worryingly, they feed into a lower quality of service provision and poorer outcomes for patients. Hospitals in areas where the outside labour market is strong have lower volumes of activity relative to their staffing levels. They also have higher fatality rates among patients who are admitted with emergency heart attacks. A 10% increase in the outside wage means a 5% increase in death rates from heart attacks.

None of these effects are present in firms operating in the private sector. Nor do they seem to arise because hospitals in high cost areas face greater financial problems or have patients who are sicker – in fact, patients in many high external wage areas generally have better health than those in low external wage areas.

One key problem is that hospitals that find it difficult to recruit permanent staff rely more on temporary agency staff. These nurses can be paid at a higher rate to get around the pay regulation. But they often tend to have less experience and training, and will not know the hospital as well as someone on a permanent contract.

The maps in Figure 1 show the link between outside wages and use of temporary agency nurses who are less experienced in working in the hospital. In the first map, the areas with the highest outside wages are marked in red and those with the lowest outside wages are marked in blue: it is clear that the large cities and the South East have higher outside wages. The second map shows the intensity of use of agency nurses, and the spatial distribution is very similar to that of the first map: where outside wages are high, use of agency nurses is high.

The study uses data from 1995 to 2002 and there have been some relaxations in the rules since then with more recruitment bonuses and cost of living allowances. But it is still the case that public sector workers are taking a much bigger effective pay cut compared with similarly skilled workers in lower cost areas.

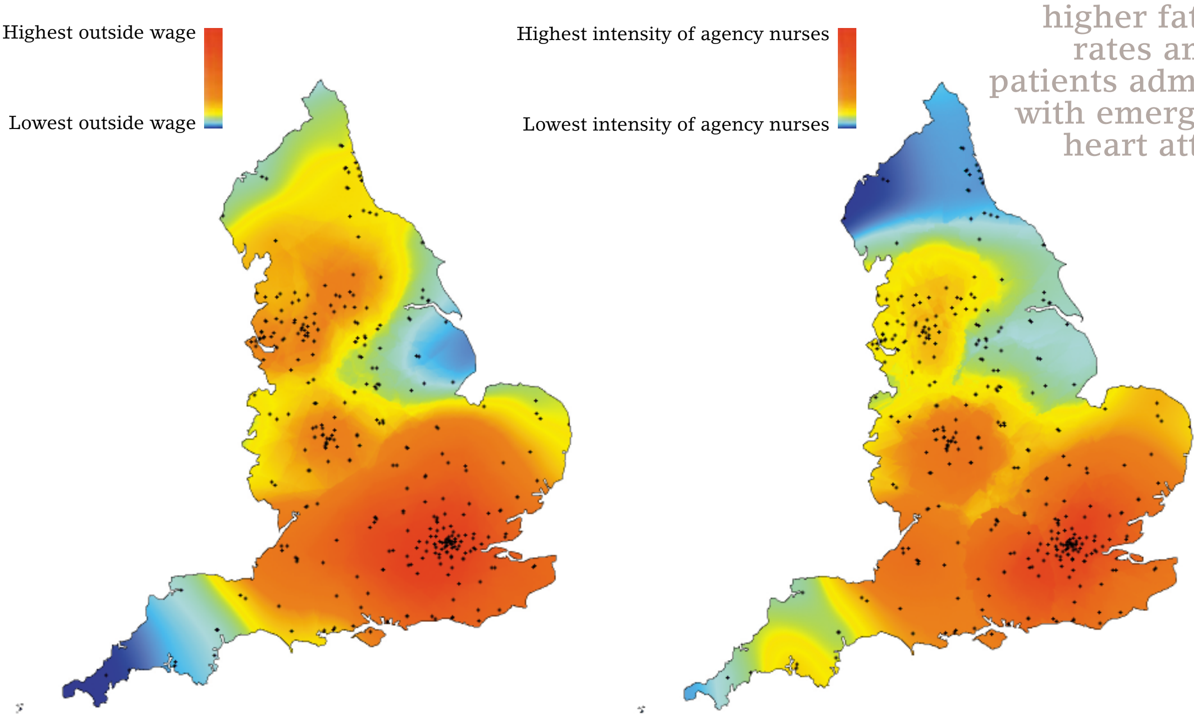
The lessons can be used throughout the public sector. Instead of across the board pay increases, the right thing to do is to allow wages in the high cost areas of the South to increase at a much faster rate than the low cost areas of the North. This should be done in schools and police departments as well as hospitals. Only then will the death premium of London be properly tackled.

This article summarises 'Can Pay Regulation Kill? Panel Data Evidence on the Effect of Labour Markets on Hospital Performance' by Emma Hall, Carol Propper and John Van Reenen, CEP Discussion Paper No. 843 (http://cep.lse.ac.uk/pubs/download/dp0843.pdf).

Emma Hall is at the Centre for Market and Public Organisation (CMPO) at the University of Bristol. **Carol Propper** is at CMPO and Imperial College, London. **John Van Reenen** is director of CEP.

Hospitals in high cost areas have higher fatality rates among patients admitted with emergency heart attacks

Figure 1:
Outside wages and the use of agency nurses



The economies of China and India have been booming – but do they have the quality of corporate management to sustain growth over the longer term? Using CEP's global survey of over 4,000 firms, **Nick Bloom** and **Rebecca Homkes** evaluate management practices in the two countries' manufacturing sectors.

Can better management sustain growth in China and India?

The phenomenal growth of China's manufacturing sector over the last decade has been fuelled in large part by a seemingly inexhaustible supply of cheap labour. The opening of the Chinese economy has enabled a country with one fifth of the world's population to make more use of that resource. Labour shortages in urban areas are supported by mass migration from the countryside.

But even in China, the supply of workers is not infinite and economic growth is leading to wage growth. With rapidly increasing wage rates and an ageing population (due in large part to the one-child policy instituted in 1978), Chinese manufacturing is set to change.

Can China's manufacturing sector continue to grow even with rapidly rising bills? And what about the other Asian giant: can Indian manufacturing start to catch up with China by raising its annual growth rate to the 10%-plus levels that China has enjoyed?

One key factor is the quality of management in these countries. If management practices are poor in comparison with those in Europe, Japan and the United States, Chinese and Indian firms will be less able to compete as their costs increase. But if Chinese and Indian firms are able to adopt world-class management practices, then the phenomenal growth rates of these industries may continue for many years.

CEP's research programme with McKinsey & Company and Stanford University makes it possible to compare management quality in China and India (Bloom, Dorgan et al, 2007). During the summer of 2006, our team contacted over 4,000 medium-sized manufacturing firms across Europe, India, Japan and the United States, and spoke directly with plant managers about their firms' management practices. In the summer of 2007, we extended this survey to China.

Measuring management practices

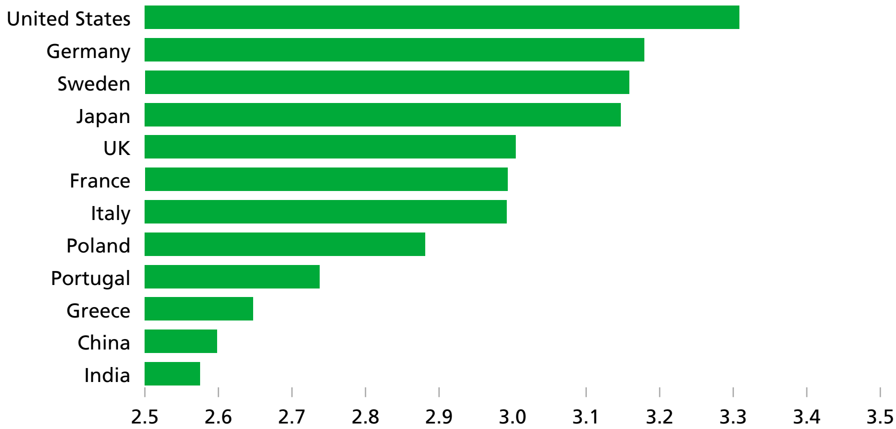
Measuring management in a systematic way requires codifying the concept of good and bad management into a measure applicable to different firms. We used an interview-based management practice evaluation tool that defines and scores from 1 (worst practice) to 5 (best practice) across 18 of the key management practices that appear to matter to industrial firms, based on McKinsey's expertise in working with thousands of companies across several decades. For full details of the survey methodology, including all the questions, see Bloom and Van Reenen (2007).

The 18 practices fall into four broad areas:

- Shopfloor operations: have companies adopted both the letter and the spirit of lean manufacturing?
- Performance monitoring: how well do companies track what goes on inside their firms?
- Target setting: do companies set the right targets, track the right outcomes and take appropriate action if the two don't tally?
- Incentive setting: are companies hiring, developing and keeping the right people and providing them with incentives to succeed?

The average Chinese and Indian firm is better managed than a quarter of UK firms

Figure 1:
Chinese and Indian firms are the worst managed on average



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

The average Chinese and Indian firm is poorly managed

The research finds that comparing across all the countries in the sample, the average management scores for Chinese and Indian firms are the lowest (see Figure 1). Despite recent media attention for the impact of principles of lean manufacturing in China and India, both countries still lag behind in terms of modern manufacturing techniques and practices. Their firms also underperform in terms of incentive structures and people management.

By comparison, firms from more developed countries – Germany, Japan, Sweden and the United States – are well managed. France, Italy, Poland and the UK are all solidly mid-table, while worryingly for Portugal and Greece, their management practices appear to be only slightly better than those in China and India. This suggests that the OECD countries' advantages in management should not be overstated and that China and India may be catching up.

What's more, although the average Chinese and Indian firm performs badly, this disguises tremendous variation in management practices within each country. The best Chinese and Indian firms are as well managed as those in the UK and the United States (see Figure 2).

Indeed, rather alarmingly for the British and Americans, many of their firms – about a quarter of UK firms and 15% of US firms – are actually *worse* managed than the average Chinese and Indian firms. And while roughly one third of well managed Chinese and Indian firms are foreign multinationals, two thirds are excellently run domestic firms.

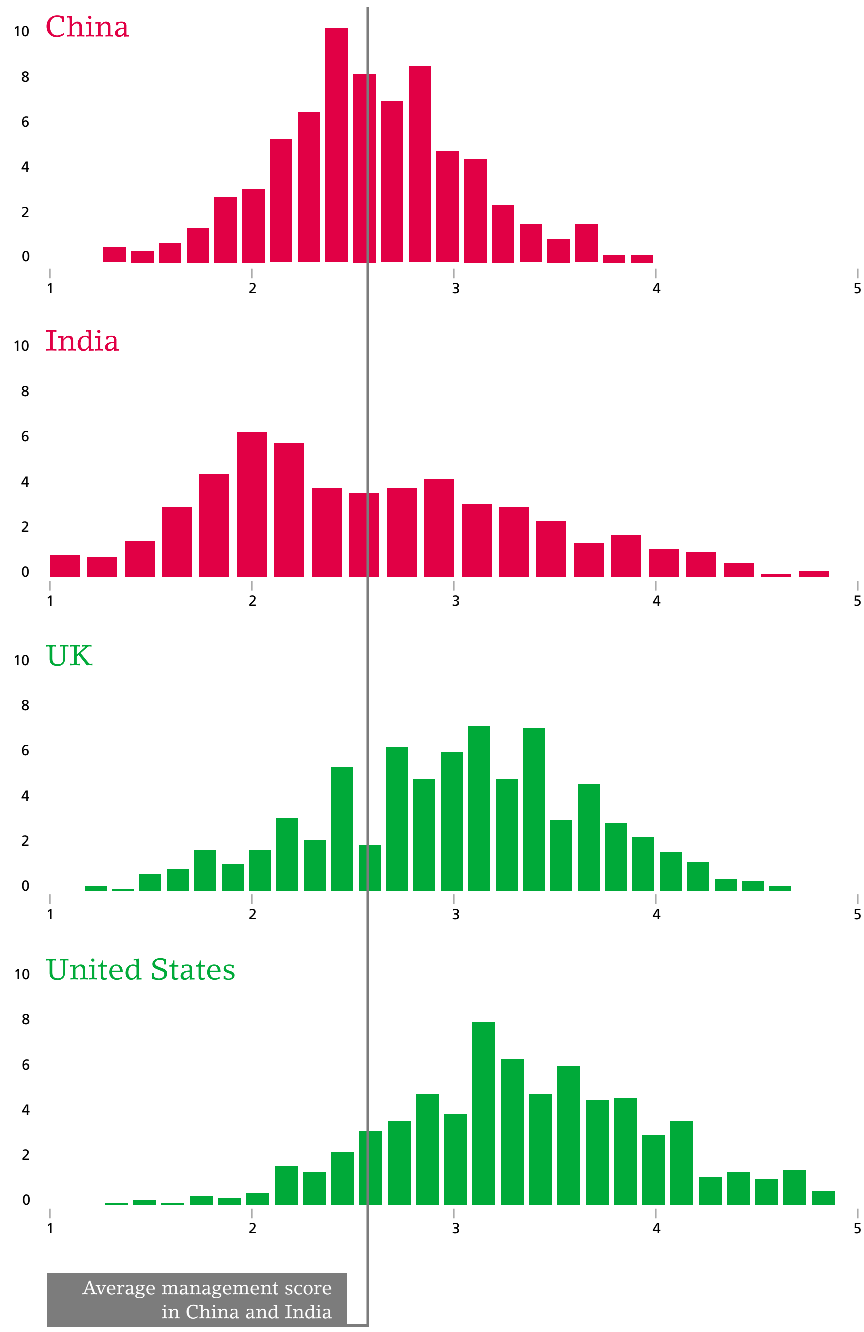
Another notable result illustrated in Figure 2 is the marked variation in management practices in India, especially in comparison with China. While India has a large upper and lower tail of over- and underperforming firms, Chinese firms are solidly clustered slightly below average.

The domestic Indian firms with poor management practices are typically government owned or family firms that practice *primogeniture* (handing down the CEO position to the eldest son). They stand

For each company in the study, researchers interviewed one or two senior plant-level managers, who knew only that they were taking part in a 'research' project. These managers were selected because they were senior enough to have a reasonable perspective on what happens in a company but not so senior that they might be out of touch with the shopfloor. The interviews relied on open questions and the interviewers were trained to probe for details of practices on the ground.

The interviews were run by an international team of 47 postgraduate students (mainly MBAs), who worked from CEP in a specially created survey centre during the summer of 2006. This was a 24-hour operation since the Chinese day starts at midnight in London, just before managers on the West Coast of the United States pack up to go home.

Figure 2:
Chinese and Indian firms are better managed than about 25% of UK firms and 15% of US firms



The charts show the distribution of firms across management scores (1=worst practice, 5=best practice) within each country.

Government firms and firms owned and run by families are very poorly managed

in sharp contrast to some of India's well-known industrial giants, which operate using world-class management practices.

India also displays a substantially larger spread of productivity across manufacturing plants than China. This suggests that there is something in the Indian business environment that is conducive to much more variation in management practices and productivity than in China, a phenomenon we are currently researching.

Which firms are getting it right?

To understand why China and India have these underperforming firms with poor management practices, we segmented the firms by broad ownership category. We find that multinational firms are well managed everywhere. These firms are typically the Chinese and Indian manufacturing operations of successful European, Japanese and US firms, which have transferred their world-class management practices abroad.

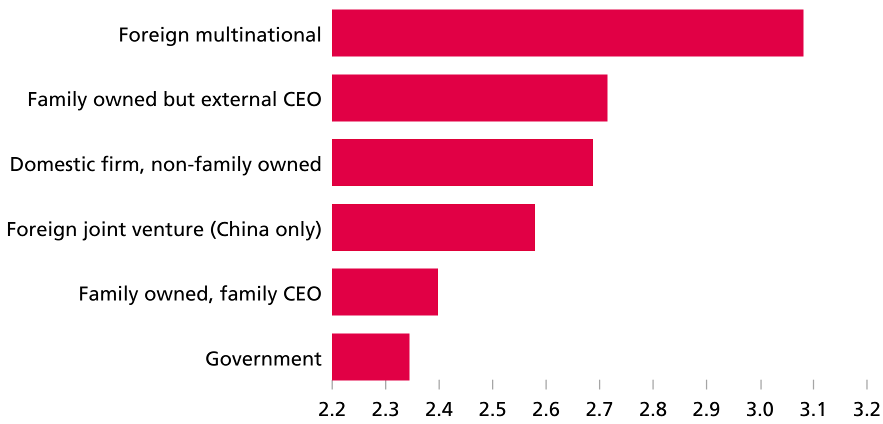
In stark contrast, foreign joint ventures – in which foreign and domestic firms share ownership – tend to struggle. Most of these ventures are located in China. They date from regulations introduced in 1979, which required foreign investors to set up joint ventures with local firms in order to gain entry to the market. (It was not until 1986 that the first wholly-owned foreign enterprise was established.)

Given the complex management structures that shared ownership entails (multiple layers of domestic and foreign management and shareholder boards), managerial clashes seem to have plagued the organisation of operations and incentives. Combined with the inherent cultural and language clashes, these foreign joint ventures adopted substantially worse management practices than even many domestic firms.

Other firms that are poorly managed are those owned and run by families. Such firms are particularly common in India but rare in China (there has been a more recent drive towards private family ownership in China, but this was difficult prior to 1979). Given the difficulties of separating ownership from control in India (arising from problems in the legal system), family firms rarely bring in external management.

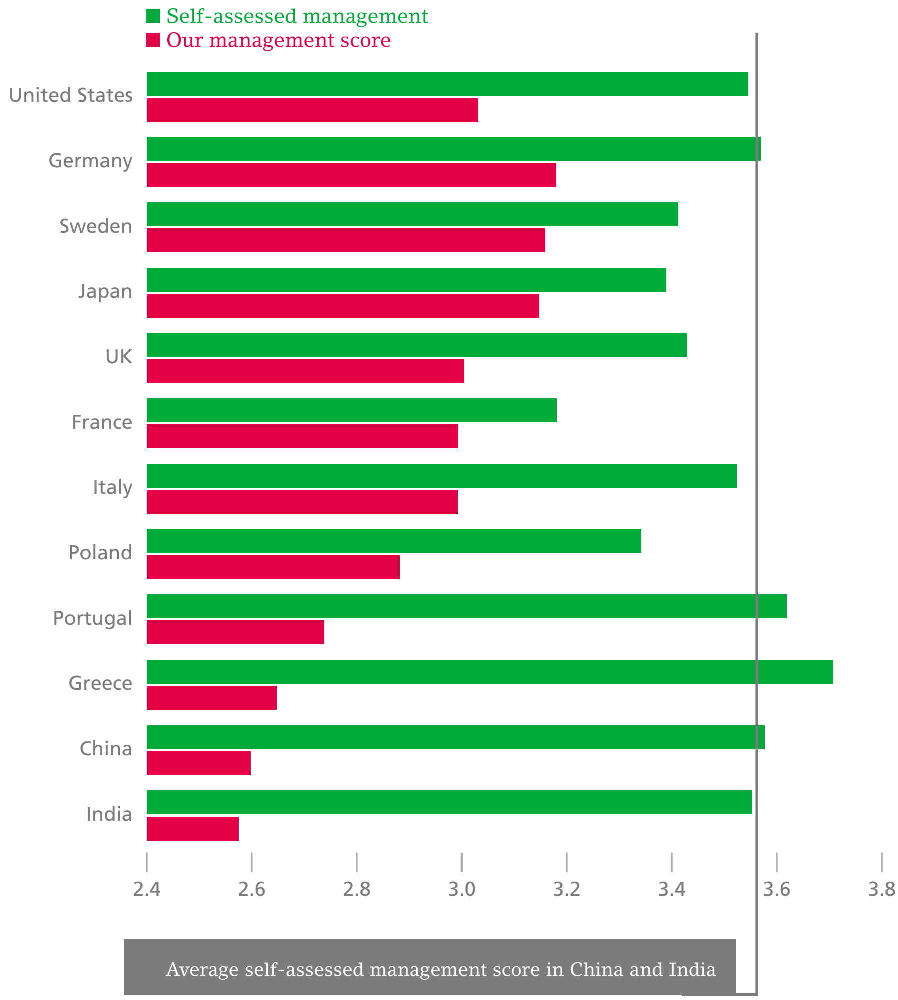
Government firms are also extremely

Figure 3:
Foreign multinationals are well managed in China and India, but foreign joint ventures are not



The bars indicate the average score on the 18 management questions (1=worst practice, 5=best practice) for each type of firm ownership in China and India.

Figure 4:
Chinese and Indian managers are more over-confident than European, US and Japanese managers



The bars indicate for each country the average score on the 18 management questions and the average score on the self-assessed management question: 'Excluding yourself, how well managed is your firm on a scale of 1 to 10, where 1 is worst practice, 10 is best practice and 5 is average'. The scores are divided by 2 to put them on the same scale as our management scores.

badly run in both countries (and indeed across all the countries in the sample), with particularly weak management of workers and a lack of modern manufacturing techniques.

In recent years, there has been a strong push in former Chinese state-owned firms towards dispersing ownership among their workers. With reforms to India's legal system, government and family-run firms may diminish in importance there as well. This may pave the way to a brighter future for the two countries' manufacturing sectors if firms can adapt their practices to match those of their competitors.

Managerial over-optimism is not equated with strong management practices

Since good management is strongly linked with good performance, why is it that not all firms make a priority of improving their practices? To examine the possible causes of this disconnect, we asked managers as a final question in the interview to assess the overall management performance of their firm. To avoid false modesty, they were asked to exclude their personal performance from the calculation.

The answers indicate that Chinese and Indian managers are particularly over-optimistic about their management practices. The average Chinese and Indian firm's self-assessment is that its management is better than the average French, Italian, Japanese, Polish, Swedish, UK and US firm.

This is particularly striking given how poorly managed the average Chinese and Indian firms are in comparison with their European, Japanese and US counterparts. In fact, the only country with distinctly more optimistic managers is Greece, which has the third-worst managed firms in the sample.

Chinese and Indian firms tend to be highly centralised

More than management practices, the degree of management autonomy within a firm can affect its productivity, especially in terms of its ability to implement processes and make timely decisions. We find huge variations in the extent to which power is centralised within firms' corporate headquarters rather than delegated to individual plant managers.

The corporate headquarters of some

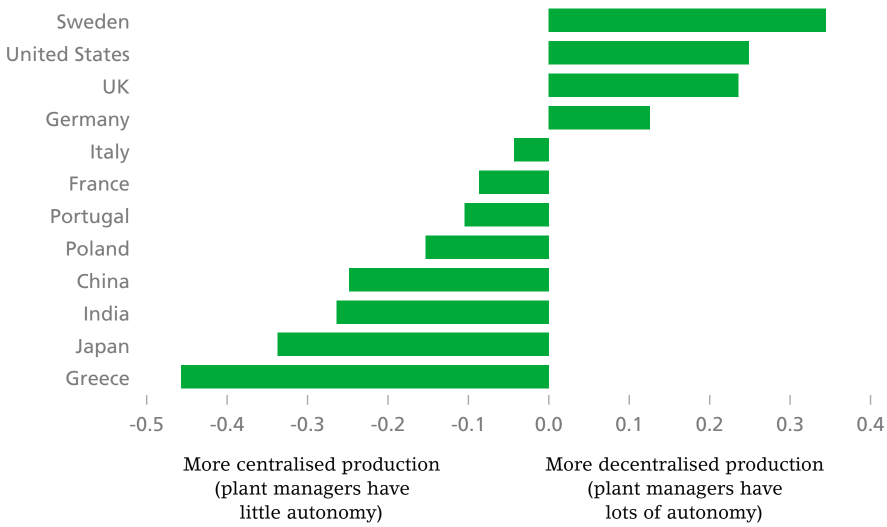
firms treat their production plants almost as independent entities, letting plant managers make decisions on hiring, investment, sales and product development. But others directly control almost every aspect of their plants' activities, leaving little decision-making power to plant managers.

To investigate this variation in decentralisation, we asked plant managers about the degree of autonomy they had in four activities: hiring new full-time workers; making capital investments; controlling their sales and marketing; and introducing new products. We combined these four indicators into one overall measure of plant managers' autonomy, where high values indicate that decisions are decentralised to plant managers and low values indicate that they are taken at corporate headquarters.

Figure 5 plots this measure of autonomy across countries. The substantial variation is evident as firms in Northern Europe and the United States are typically decentralised compared with the very hierarchical ones in Asia and Southern Europe.

Figure 5:

Asian firms are much more centralised (hierarchical) than Northern European and US firms



Average degree of plant manager autonomy over hiring, investment, sales and new products, by country

In related work (Bloom, Sadun and Van Reenen, 2007), we find that this degree of decentralisation is positively related to the productivity of information technology (IT). Firms in which managers and workers are more autonomous appear to make much better use of IT, presumably because their greater operating freedom enables them to experiment and adapt the IT to their local environment.

This highlights a potential future problem for Chinese and Indian firms. Their highly centralised management structures are likely to be less effective as production technologies become increasingly computer-intensive.

The future of Chinese and Indian manufacturing

While the results of our survey highlight the fact that Chinese and India firms have below average management practices, this is mainly due to a long tail of poorly run government and traditional family firms. As the two countries develop, both in terms of local markets and ownership structures, the proportion of these firms should continue to shrink rapidly.

The newly organised and changing firms that adopt competitive best practices should push average standards of management practices towards those in Europe and United States. Thus, even as Chinese and Indian wage rates and raw materials costs start to rise, the negative effects could be offset by an improvement in management practices.

But a possible cloud on the horizon for these countries is the hierarchical organisation of their firms, which, as our research shows, impedes the effective adoption of IT. Whether Chinese and Indian firms can also modernise the organisation of their firms alongside their management practices is a key question, and one that CEP researchers will continue to investigate.

This research was jointly funded by the Anglo-German Foundation and the Economic and Social Research Council.

Nick Bloom is an assistant professor of economics at Stanford University and a research associate in CEP's productivity and innovation programme.

Rebecca Homkes is management research project manager in CEP's productivity and innovation programme, and has been overseeing the Chinese survey.

Chinese and Indian firms are much more centralised than Northern European and US firms

Further reading

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Nick Bloom and John Van Reenen (2007), 'Measuring and Explaining Management Practices across Firms and Nations', *Quarterly Journal of Economics* 122(4): 1351-408 (earlier version available as CEP Discussion Paper No. 716: http://cep.lse.ac.uk/pubs/download/dp0716.pdf).

Nick Bloom, Raffaella Sadun and John Van Reenen (2007), 'Measuring and Explaining Decentralisation across Firms and Countries', LSE/Stanford mimeo (http://www.stanford.edu/~nbloom/decent.pdf).

CHINA CHINDIA INDIA

China's remarkable economic growth has been achieved through the rapid emergence of a dynamic private sector. **Linda Yueh** explores what we know about the generation of self-employed entrepreneurs who have driven this transformation.

China's entrepreneurs

The central feature of China's transition from a centrally planned economy is the development of the non-state sector – private firms led by an emerging class of entrepreneurs. In 1978, the first year of reform in China, the state sector accounted for over 90% of the country's GDP; by 2005, this had fallen to less than half (see Figure 1).

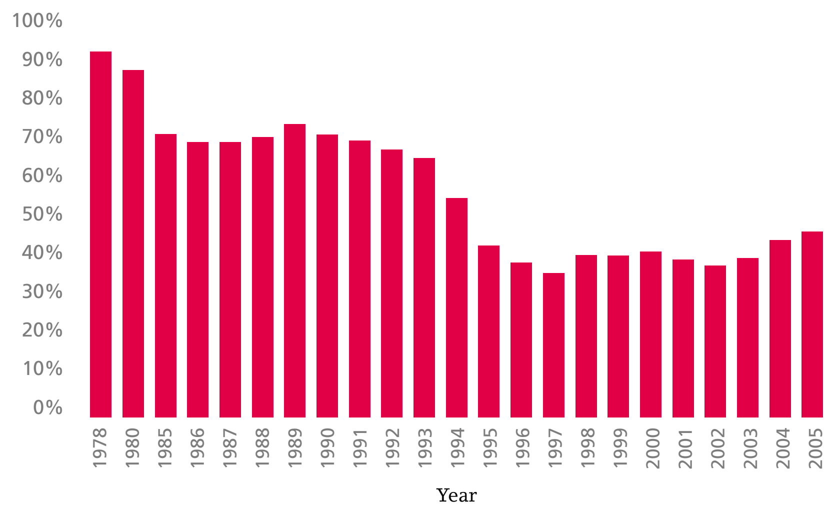
Not all of China's growth achievements can be attributed to entrepreneurs. Rural industries – the township and village enterprises – contributed a growing proportion from the early 1980s onwards and accounted for nearly a third of GDP in the mid-1990s. And foreign investors also played a role from around that time.

But since the late 1990s, China's entrepreneurs have been the key driver of growth. They are the creators of the *de novo* firms that are forming a dynamic and innovative private sector – an essential force in any developing country (see, for example, Wu, 2002, and Zhang et al, 2006).

What do we know about the people who have had the wherewithal to start a business or work for themselves? What kinds of personal traits differentiate them from people who choose not to embrace entrepreneurship? The findings from a national household survey conducted in

China's economy is increasingly driven by competition, innovation and productivity

Figure 1:
State-owned enterprises' share of GDP, 1978-2005



Source: China's National Bureau of Statistics urban China in 2000 shed some light on these questions.

The rise of China's entrepreneurial class

The dramatic growth in the share of self-employed entrepreneurs in the Chinese workforce is evident from the mid-1990s (see Figure 2). It is most apparent in the rural areas where there were no recorded private enterprises until 1994.

The upward trend continues in urban areas as in the country as a whole. But in rural areas, self-employment now seems to be falling. Given the massive migration from rural to urban areas, this may well reflect the limited opportunities for rural industries to develop when competing against the advantages of urban companies and markets.

Overall, the increase in entrepreneurship in China bodes well for sustained economic growth. But the emergence of China's entrepreneurs has not been without obstacles. By guaranteeing employment and providing social security in the absence of a national safety net, the lifetime employment system in the state-owned enterprises (known as the 'iron rice bowl') strongly discouraged urban workers from becoming self-employed.

Not until the dismantling of the employment system and the massive layoffs accompanying the restructuring of state-owned enterprises in the mid-1990s did private Chinese firms begin to flourish (Knight and Yueh, 2004). And by providing an alternative source of employment and revenue, the emerging non-state sector has given the government leeway in its efforts to downsize and reform state-owned enterprises (Fan, 1994).

Another institutional challenge faced by entrepreneurs has been limited access to credit. A recent estimate by the first Chinese chief economist of the World Bank suggests that out of 40 million small and medium-sized enterprises in China in 2006, less than half of 1% could obtain loans from banks (Lin, 2007).

Aspiring entrepreneurs have also faced a shortage of key assets such as land or property (the property market did not develop until the late 1990s) and insecure property rights in a system that did not protect private ownership officially until 2004. Having property in China suggests being fairly well connected as urban (and, for the most part, rural) land is state-owned and privatisation of land and buildings has only begun recently.

When the survey asked entrepreneurs why they started their own business, 37% said that it was because they had the requisite skills and experience, 17% started a business by joining in with relatives, 11% had property and 7% had funds.

Communist Party membership makes an individual less likely to be an entrepreneur

Comparing entrepreneurs and non-entrepreneurs

So which characteristics distinguish entrepreneurs from non-entrepreneurs in China? Comparing people who have started their own business as their primary or secondary job with people who remain in paid employment, the first notable difference is in annual incomes. As Figure 3 shows, between 1995 and 1999, the average entrepreneur earned over 35% more than the average person in paid employment.

As Table 1 shows, there are a large number of similarities between entrepreneurs and non-entrepreneurs. The average age of both groups is 35, both have identical years of education and nearly 85% of both groups are married.

There are, though, a number of

Figure 2:
Entrepreneurs as a percentage of total employment in China: national, urban and rural areas

Source: China's National Bureau of Statistics

China's entrepreneurs are more likely to have experienced unemployment than people in paid employment significant differences. The first is that nearly 18% of non-entrepreneurs are members of the Chinese Communist Party compared with just 6% of entrepreneurs. It may be that Party membership protects against retrenchment and thus reduces the likelihood of someone stepping out into the private sector.

Second, nearly a third of entrepreneurs have experienced unemployment compared with less than a fifth of non-entrepreneurs. This makes the difference in incomes all that more remarkable, as individuals who have experienced unemployment tend to suffer from 'scarring', which results in a lower wage when they are in work again. But having experienced unemployment during the large-scale layoffs of the mid- to late 1990s seems to be a significant factor in becoming an entrepreneur.

Third, entrepreneurs have larger social networks. In the context of a weak legal system and opaque regulatory structure, perhaps it is not surprising that starting one's own business requires contacts to secure supplies and distribution as well as operating licences.

The personal traits of Chinese entrepreneurs

Considering all of the relevant personal, socio-economic and attitudinal traits, estimates of the probability of entrepreneurship find that women and people who have been in employment for a number of years are less likely to be entrepreneurs. Some features of an individual's socio-economic background also affect his or her potential for entrepreneurship.

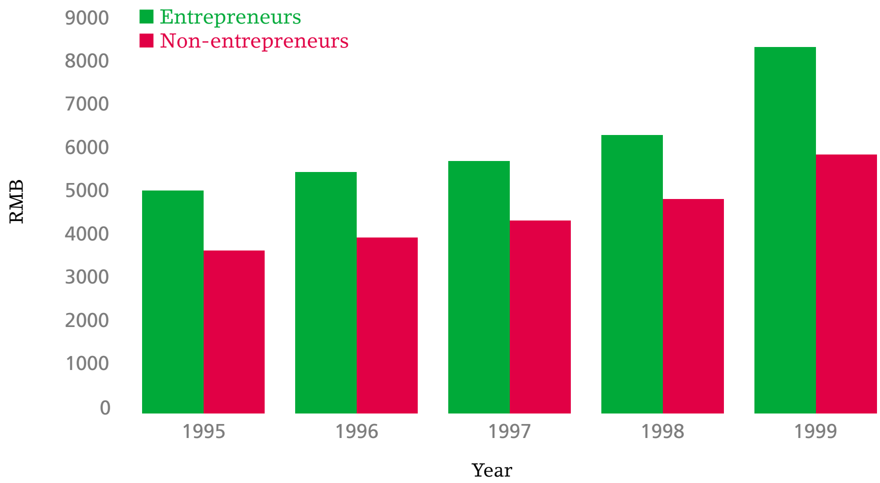
Having a more educated mother or one who is in a non-manual or professional job increases the likelihood of entrepreneurship, while having a father who is a Communist Party member decreases the likelihood. Mothers who are more accomplished seem to encourage their children to start their own businesses, while fathers with connections to the Party seem to reduce the job insecurity of their children.

Having a larger social network and a willingness to embrace risk also significantly increases the likelihood of becoming an entrepreneur.

A number of questions about attitudes asked of a sample that had experienced unemployment are also revealing. When

Figure 3:

Annual incomes of Chinese entrepreneurs and non-entrepreneurs in renminbi (RMB)



Source: Chinese Household Income Project survey, 2000

Table 1:

Differences between Chinese entrepreneurs and non-entrepreneurs

Personal characteristics	**Entrepreneurs**	**Non-entrepreneurs**
Age	35.6	35.8
Years of employment experience	12.3	22.8
Have experienced layoff	27.8%	19.2%
Years of education	9.4	9.4
Gender	55.7% male	49.7% male
	44.3% female	51.3% female
Marital status	83.4% married	84.2% married
Communist Party member	6.2%	17.7%
Social network (size)	8.2	6.4
Socio-economic background		
Father's education (years)	5.4	5.2
Mother's education (years)	6.0	5.9
Father is/was Communist Party member	26.5%	34.2%
Mother is/was Communist Party member	8.7%	10.8%
Father is/was self-employed	3.9%	2.8%
Mother is/was self-employed	1.7%	1.8%
Father is/was non-manual worker	22.3%	28.4%
Mother is/was non-manual worker	8.1%	13.7%
Income		
Annual income (RMB)	8475	5986
Average annual income (RMB), 1995-98	5751	4312

Source: Chinese Household Income Project survey, 2000 considering an opportunity for work, both entrepreneurs and non-entrepreneurs value wages, social security provision, good working conditions and the ability to learn skills on the job.

But they differ in that entrepreneurs do not worry as much about job stability or job dignity, and curiously, despite their higher earnings, they are less inclined than non-entrepreneurs to hope that their children will become entrepreneurs. And as is found among entrepreneurs across the world, the drive to earn money is a significant determinant of entrepreneurship.

Conclusion

The remarkable growth of China has been driven by various engines. The most notable is the development of the non-state sector, fuelled by the desire of millions of Chinese people to seek a better life. The easing of the state's control over the economy allowed the emergence of a generation of entrepreneurs, who have transformed the economy into one increasingly driven by competition, innovation and productivity.

The personal traits of China's entrepreneurs have much in common with those who remained in paid employment. But there are also notable differences: being female, older or a member of the Communist Party all significantly reduce the probability of becoming an entrepreneur.

These traits are not dissimilar to entrepreneurs elsewhere (see, for example, Djankov et al, 2005). Being female and older tend to discourage people from starting their own business in many countries. And as in the West, social networks, a healthy attitude to risk and an inclination to work hard are all traits associated with entrepreneurs in China.

Until recently, not much was known about these entrepreneurs, but the emerging picture is one of a group of individuals who are able to navigate China's uncertain institutional terrain and find opportunities in the world's potentially most significant market. Their foray into overseas markets is as inevitable as the rise of China.

This article summarises 'China's Entrepreneurs' by Linda Yueh, University of Oxford, Department of Economics, Discussion Paper No. 324 (http://www.economics.ox.ac.uk/Research/wp/pdf/paper324.pdf) and forthcoming in *World Development*.

Linda Yueh is fellow in economics at St Edmund Hall, University of Oxford, and an associate in CEP's globalisation programme.

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Forays by Chinese entrepreneurs into overseas markets are as inevitable as the rise of China

in brief...

India's foreign investment policy: the impact on productivity

What kind of liberalisation policies can make a difference to firms' productivity? Research by **Arunish Chawla** explores this question in the context of India's economic liberalisation of the 1990s. He analyses the impact of foreign investment policy on the performance of Indian manufacturing firms over a 15-year period.

A particularly striking feature of India's foreign investment regime since the 1990s has been that it encourages the adoption of foreign technology by domestic firms while at the same time opening up these industry sectors to foreign investors. So liberalisation consists of two distinct components:

- Foreign direct investment (FDI), defined by the International Monetary Fund as a foreign firm taking at least a 10% stake in a domestic firm.
- Foreign technology agreements (FTA), more 'arm's-length' transactions in which a foreign firm enters into partnership with a domestic firm.

The relative importance of the two components can be gauged by the fact that in the post-reform period (between August 1991 and January 2005 in this study), the number of FDI projects approved by the Indian government was nearly 19,000 and the number of FTAs approved was just over 7,600.

Unlike in many East Asian countries, Indian policy-makers have resisted the temptation to offer subsidies to foreign investors (at least until very recently). Instead, they have pursued a two-pronged strategy of inviting FDI from foreign firms as well as encouraging FTAs by domestic firms.

Previous research has shown that increasing FDI leads to greater competition in industries where firms compete with each other at a single stage of the production process. The effect of increased competitive pressure is to lower the mark-ups that domestic firms are able to charge, thereby reducing their measured productivity.

This is typically not outweighed by any productivity benefits to domestic firms from observing and copying the techniques used by foreign firms – what are known as 'technology spillovers'. For firms in these industries to gain significantly from technology spillovers, they need to be technologically advanced or close to the 'technology frontier'.

India's liberalisation has been successful by its openness to both foreign investment and foreign technology

But in vertically integrated industries (where firms operate at more than one stage of the production process), previous research suggests that the effect of FDI on productivity is positive. This implies that both domestic and foreign firms benefit from technology spillovers.

Chawla's research finds that liberalisation of the foreign investment regime in India has significantly improved the performance of manufacturing firms. This is surprising as the sample mainly consists of firms that compete at a single stage of production. What seems to have happened is that the policy of encouraging FTAs has had an effect equivalent to technology spillovers, moving domestic firms closer to the technology frontier, albeit through different means.

Since the industries studied were simultaneously subjected to both FDI and FTA liberalisation, it is not easy to distinguish between the effects of two policies. To do this, the research looks in detail at the motor vehicle industry. It finds that in this sector at least, the two elements of the foreign investment regime have been complementary in their positive impact on firms' productivity.

India's experiences are often compared with China's, and while the latter has attracted greater FDI inflows than the former since the early 1990s, India has attracted greater portfolio investment and the ratio of market capitalisation of its listed firms to GDP has been higher. What's more, Indian firms now invest so much abroad that FDI outflows almost match FDI inflows.

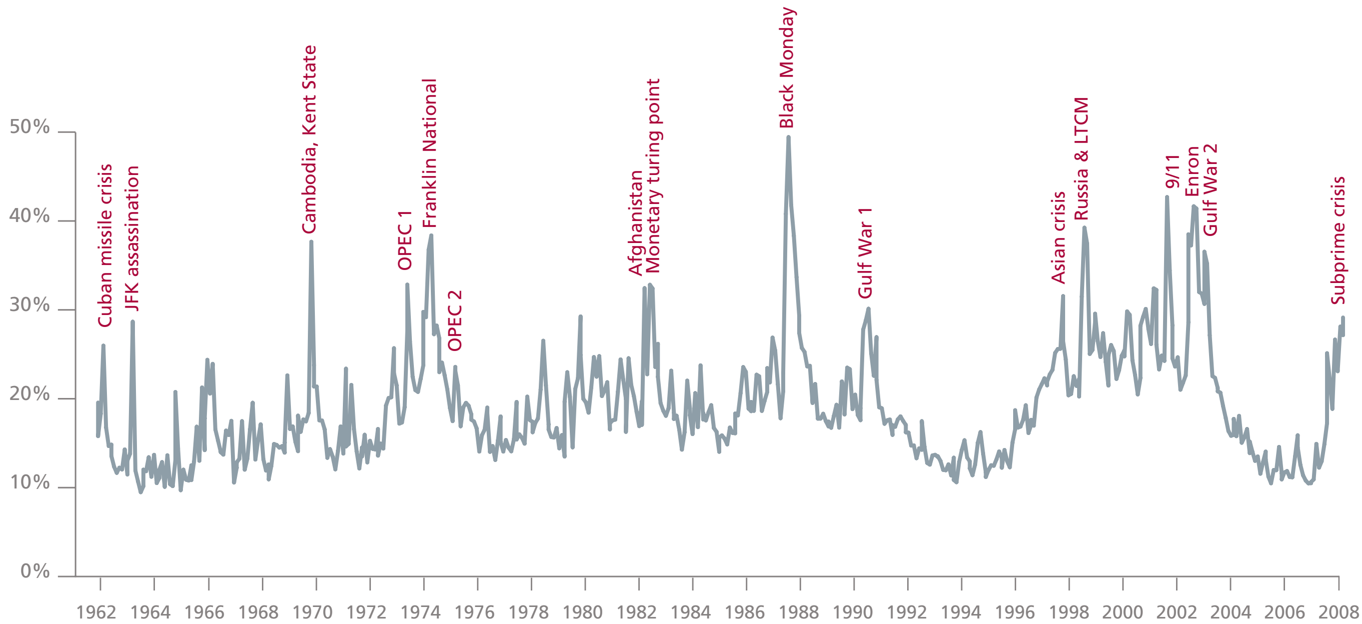
The fact that India's foreign investment liberalisation treats foreign technology and direct investment as inseparable is important here. Such a policy is bound to have effects beyond the simple enumeration of FDI inflow figures. At least one important implication of this policy is its positive effect on the productivity of manufacturing firms.

Arunish Chawla is an occasional research assistant in CEP's globalisation programme.

Recent research by **Nick Bloom** – as well as research of an earlier vintage by Fed chairman Ben Bernanke – suggests that the impact of the credit crunch on uncertainty will lead to an economic slowdown much worse than we currently anticipate.

Will the credit crunch lead to recession?

Figure 1:
Monthly US stock market volatility 1962-2008



Note: The vertical axis shows a percentage measure of volatility known as 'annualised standard deviation'. Prior to 1986, this is calculated as the percentage actual volatility of monthly returns on the S&P500 index of the US stock market. After 1986, it is calculated using the percentage 'implied volatility' from an option on the S&P100 index.

One of the most striking effects of the recent credit crunch is a huge surge in stock market volatility. The uncertainty over the extent of financial damage, the identity of the next banking casualty and the unpredictability of the policy response of central banks and governments have all led to tremendous instability.

A standard measure of uncertainty – the 'implied volatility' of the S&P100 of the US stock market, commonly known as the index of 'financial fear' – has more than doubled since the subprime crisis first emerged in August 2007. This jump in uncertainty is of similar magnitude to those that followed the Cuban missile crisis, the assassination of President Kennedy, the Gulf War and the terrorist attacks of 9/11 (see Figure 1).

But after these earlier 'shocks', volatility spiked and then quickly fell back. For example, after 9/11, implied volatility dropped back to baseline levels within two months. In contrast, the current levels of implied volatility have remained stubbornly high for the last seven months, rising rather than abating as the crisis continues.

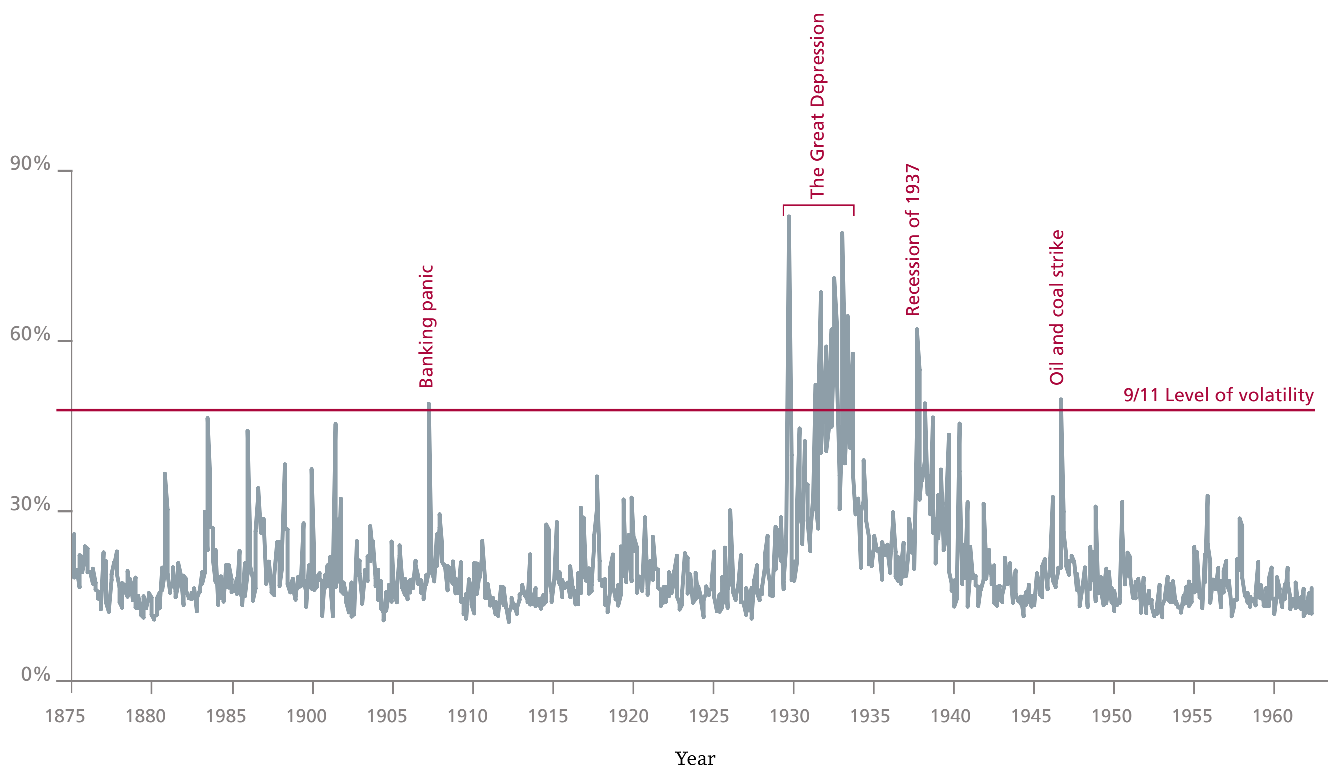
My research shows that even the temporary surges in uncertainty that followed previous shocks had very destructive effects. The average impact of the 16 shocks plotted in Figure 1 (before the credit crunch) was to cut US GDP by 2% over the next six months (Bloom, 2007).

So the omens for the impact of the current credit crunch are worrying. If these earlier temporary spikes in uncertainty had such a significant effect on economic activity, the impact of the current persistent spike in uncertainty is likely to be far worse. On these numbers, a recession is almost inevitable.

For a broader historical comparison to the credit crunch, we can also go back 70 years to the Great Depression.

The large and persistent rise in uncertainty since last August is likely to be very damaging to the economy

Figure 2:
The Great Depression was notable for very high volatility



Note: The vertical axis shows a measure of volatility derived from Schwert (1990), which contains daily stock returns to the Dow Jones composite portfolio from 1885 to 1927, and to the Standard and Poor's composite portfolio from 1928 to 1962. The figure plots the volatility of monthly returns following exactly the same procedure as for the actual volatility data from 1962 to 1985 in Figure 1.

This was the last time that volatility was persistently high (see Figure 2).

Much like the credit crunch today, the Great Depression began with a stock market crash and a meltdown of the financial system. Banks withdrew credit lines and the interbank lending market froze up. The US central bank – the Federal Reserve – desperately scrambled to restore calm but without success.

What followed were massive levels of stock market volatility and a recession of unprecedented proportions. From 1929 to 1933, US GDP fell by 50%, a bigger drop than in every recession since World War II combined. On these numbers, a recession not only looks almost inevitable, but its longer-run effects start to become alarming.

So why is this rise in uncertainty likely to be so damaging for the economy? The reason is that firms typically postpone making investment and hiring decisions when business conditions are uncertain. It is expensive to make a hiring or investment mistake – so if conditions are unpredictable, the best course of action is often to wait.

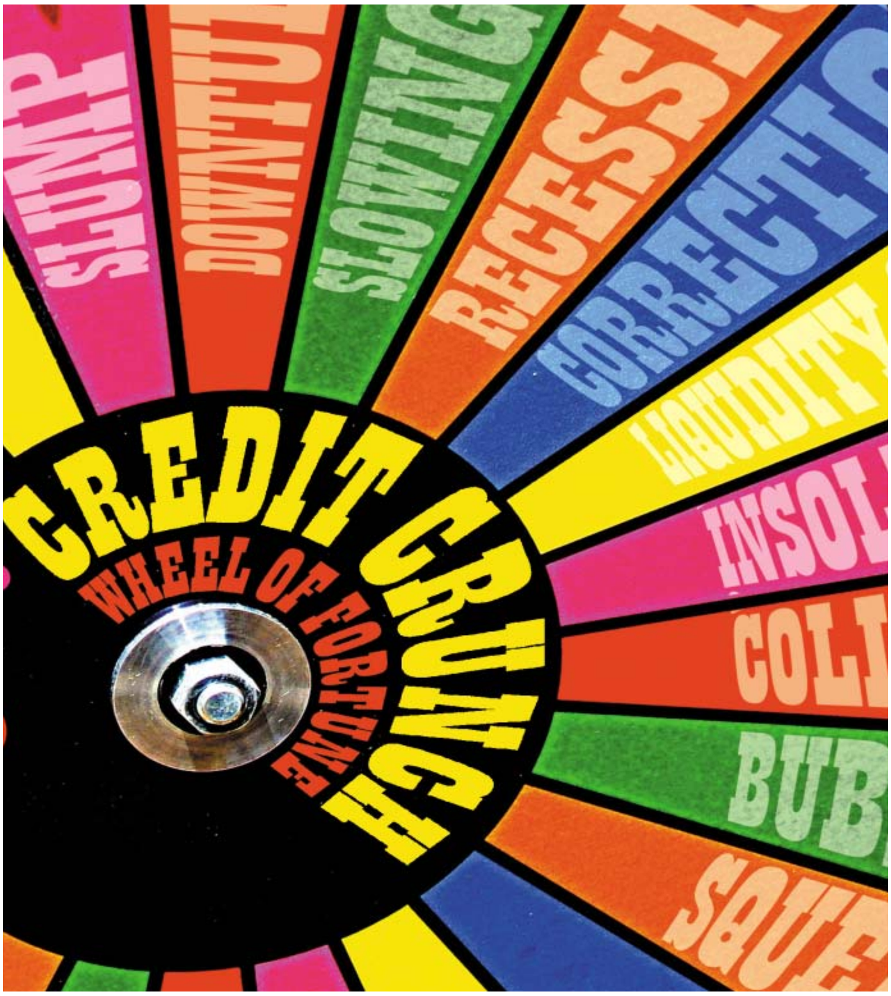
If every firm in the economy waits, then economic activity slows down. This directly cuts back on investment and employment, two of the main drivers of economic growth. But it also has knock-on effects in depressing productivity growth.

Most productivity growth comes from 'creative destruction' – productive firms expanding and unproductive firms shrinking. But if every firm in the economy pauses, then creative destruction temporarily freezes – productive firms do not grow and unproductive firms do not contract. This leads to a stalling of productivity growth.

Similarly damaging effects also happen on the consumers' side: when uncertainty is high, people avoid buying consumer durables like cars, fridges and TVs. The housing market is also hit hard: uncertainty makes people cautious about upscaling their house.

One reassuring fact is that global

> Much like the credit crunch today, the Great Depression began with a stock market crash and a meltdown of the financial system



The forces of uncertainty that lead to a recession also render policy-makers relatively powerless to prevent it

policy-making is in safe hands. The damaging effect of uncertainty shocks is well known to Fed chairman Ben Bernanke. His doctoral thesis of more than 25 years ago explored the negative effects of uncertainty shocks.

The main paper from that thesis was pioneering in the way it formalised the negative effects of uncertainty in causing recessions, noting that: 'events whose long-run implications are uncertain can create an investment cycle by temporarily increasing the returns to waiting for information' (Bernanke, 1983).

So what is stopping Bernanke acting to counteract this rise in uncertainty and forestall the recession? Well, as Bernanke also knows, the same forces of uncertainty that lead to a recession also render policy-makers relatively powerless to prevent it.

When uncertainty is high, firms become cautious, so they react much less readily to monetary and fiscal policy shocks. According to research on UK firms, which I conducted with two colleagues, uncertainty shocks typically reduce the responsiveness of firms by more than half, leaving monetary and fiscal policy-makers relatively powerless (Bloom et al, 2007).

So the current situation is a perfect storm – a huge surge in uncertainty that is not only generating a rapid slowdown in activity but also limiting the effectiveness of standard monetary and fiscal policy to prevent this.

Policy-makers are doing the best they can – making huge cuts in interest rates, dishing out tax rebates and aggressively pouring liquidity into the financial markets. But will this be enough? History suggests not. A recession looks likely.

Nick Bloom is an assistant professor of economics at Stanford University and a research associate in CEP's productivity and innovation programme.

Further reading

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Nick Bloom (2007), 'The Impact of Uncertainty Shocks', National Bureau of Economic Research Working Paper No. W13385, also available as CEP Discussion Paper No. 718 (http://cep.lse.ac.uk/pubs/download/dp0718.pdf).

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in brief...

Delayed doves

Do newly appointed external members of the Bank of England's Monetary Policy Committee (MPC) hide their true views on the right level for interest rates? **Stephen Hansen** and **Michael McMahon** look back at their voting records over the 10 years since the MPC was first given control of UK monetary policy-making.

On coming into office in May 1997, Gordon Brown, the new Chancellor of the Exchequer relinquished his power to set UK interest rates and passed responsibility to an independent body to be known as the Monetary Policy Committee (MPC). The central idea behind this decision was that with trained experts rather than politicians setting interest rates, there would be less scope for political manipulation and monetary policy-making would therefore have greater credibility.

Such an institutional arrangement is increasingly common around the world. What is slightly unusual in the UK case is that the Bank of England Act 1998, which established the MPC, requires the chancellor to appoint four of the nine committee members from outside the Bank. These external members join five internal members – the governor, two deputy governors, the chief economist and the executive director for market operations – to make up the MPC.

Other countries also appoint experts from outside their central bank, but the experts typically then take up a senior position within the bank. At times, such appointments happen in the UK: for example, some of the internal MPC members were appointed from outside the Bank but joined the in-house staff on their appointment.

Every month, since the first meeting on 6 June 1997, the MPC has met to decide interest rates by majority vote. With the entire UK economy affected, the MPC makes its decision on the basis of the one thing that economists agree monetary policy can control: prices. The MPC remit, as defined in the 1998 Act, is to 'maintain price stability, and subject to that, to support the economic policy of Her Majesty's government, including its objectives for growth and employment.'

In practice, the committee seeks to achieve a target inflation rate of 2%, based on the consumer price index. If inflation is greater than 3% or less than 1%, the governor must write an open letter to the chancellor explaining what has happened. In fact, the MPC has been very successful and the last 10 years have been a period of unprecedented stability for the UK both in terms of inflation keeping within target and GDP growth.

Despite the collective success of the committee, the voting differences of internal and external members (which are revealed in the publicly available minutes of MPC meetings) have been heavily scrutinised in the financial press. Those voting for higher interest rates are labelled inflation 'hawks'; those voting for lower rates are 'doves'.

Using these voting records, our research examines the behaviour of the external members. According to the Bank, 'the appointment of external members is designed to ensure that the MPC benefits from thinking and expertise in addition to that gained inside the Bank of England.'

We start from the premise that when MPC members (internal and external) vote on interest rates, they try to ensure that the inflation target is achieved. Furthermore, during the monthly meeting, members will communicate their views to the other MPC members. By taking account of every other member's view of the world, individual members can formulate their best – and possibly different – guess of what interest rates should be. Thus, the differences in voting behaviour between members, which are apparent in the voting records, are of themselves unsurprising.

But if the members are behaving according to this ideal, they will learn about the true state of the economy, and

After a year on the MPC, external members begin voting for substantially lower interest rates

External members may not fully express their views on interest rates when they first join the committee

begin to figure out how to interpret the views of their fellow members. If another member usually suggests interest rates that are high, then you will still listen to their views but interpret them in such a way as to factor in that member's tendency to vote for higher rates.

As all members are doing this, over time the voting behaviour of members should become more similar as everyone learns what interpretations different members will give to the same data. Therefore any differences in voting behaviour that exist initially should disappear as members adjust their views on monetary policy. Furthermore, members who begin voting for similar interest rates (and so must have the same interpretations of the data) should not diverge from each other in the future.

But our analysis of the voting records in fact shows the opposite pattern. External members initially vote in line with internal members, but after about a year on the MPC, these external appointments begin voting for substantially lower interest rates. This delayed 'dovishness' is present even when we take account of differences in members' backgrounds, age and education, as well as the current macroeconomic environment.

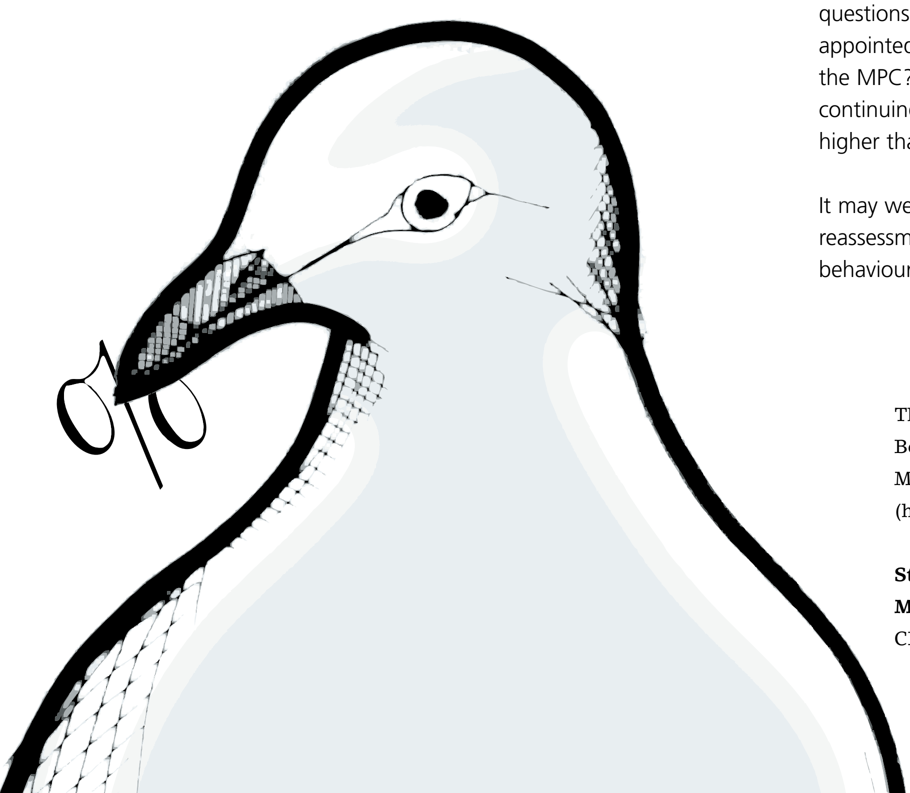
These results are especially striking considering that many of the internal and external members have very similar education and career experiences on appointment to the MPC, and many of the internal members have had no prior central bank experience until they joined the MPC and the Bank staff.

Our research explores why external members may behave in this way. We examine differences in the term lengths that they will serve, the likelihood that they will be reappointed and the possibility that external members try to differentiate themselves so as to get publicity and boost their career options on leaving the MPC. We cannot conclude that any of these factors are important.

One possible explanation that remains is that external members, on first joining the committee, do not fully express their view about the correct interest rate. It is only later, once they have gained experience, that they begin to articulate their differing views.

These results leave open a number of future research questions. For example, why would external members, appointed as experts, hide their views when they first join the MPC? And are some of the internal members continuing to hide their true views, keeping interest rates higher than necessary so as to be seen as more hawkish?

It may well be that the current structure of the MPC merits reassessment in the light of this evidence of the changing behaviour of external members.

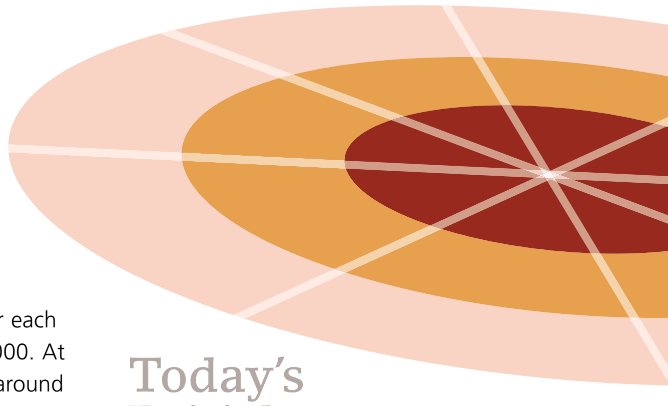


This article summarises 'Delayed Doves: MPC Voting Behaviour of Externals' by Stephen Hansen and Michael McMahon, CEP Discussion Paper No. 862 (http://cep.lse.ac.uk/pubs/download/dp0862.pdf).

Stephen Hansen is a doctoral student at LSE.
Michael McMahon is an occasional research assistant in CEP's macroeconomics programme.

The fast-growing cities of the Victorian age made Britain the workshop of the world. **Tim Leunig** argues that there are important lessons for how we manage today's economy, notably the need to end the highly restrictive planning laws that constrain housing development in the South East and in cities associated with our top universities.

Where to build Britain's new houses



Nineteenth-century Britain resembled a textbook market economy in many ways. Taxes and regulations were low, and firms were able to respond to the opportunities and threats that they faced with very little 'red tape'. One aspect of that economic liberalism was that if you owned land, you were able to build houses or factories pretty much at will. Concepts such as the 'green belt' and planning permission had not yet been invented.

The result was a massive movement of population over the course of the nineteenth century, out of the countryside and into the towns. This reflected the 'agglomeration economies' that cities offered to manufacturing firms. Put simply, productivity was higher in cities than in the countryside, and therefore firms chose to locate in cities. That productivity in turn fed through to higher wages, and while the streets of London, Liverpool, Manchester and so on were not paved with gold, they did offer more opportunities than were available in smaller towns and villages.

At the start of the nineteenth century, Liverpool and Manchester each had a population of around 100,000. At the century's end, they each had around 600,000. Towns such as Preston grew tenfold, and Crewe, which was a hamlet of 46 houses in 1800, was home to 42,000 people in 1900. And London grew by a truly phenomenal five million people over the century.

Not that all cities grew dramatically: some, such as Bristol or Gloucester, important places in 1800, were not transformed by 1900: their share of the British population did not grow.

The nineteenth century shows us that

Today's British economy cannot respond to new opportunities in the way that it did in the nineteenth century

location, as well as size, matters. Lancashire was the home of the cotton textile industry for good reasons: the damp climate was well suited to cotton spinning and weaving, and the raw cotton was imported from America via Liverpool.

Once established there, agglomeration economies meant that productivity was higher not only because of the climate, but because of the levels of local knowledge. It would have been possible to open a cotton mill in Suffolk, but the costs of getting the raw material to Suffolk, combined with lower productivity away from the agglomeration economies, meant that such a firm would have to pay very low wages indeed to compete with Lancashire mills. People in Suffolk preferred to move to Lancashire and be paid well, than to stay in Suffolk, do the same job and be much less well paid.

By 1945, for perfectly understandable reasons, Britain's faith in the market economy was shaken. We had just won the war with a state-planned and directed economy. Furthermore, the free market period between the two wars was seen as a failure. Policy-makers looked to our own wartime experience, which, combined with the apparent success of Soviet Russia and, to an extent, Germany prior to 1939 gave them great confidence in the ability of state planning to deliver a successful economy.

The belief that 'the man in Whitehall really does know best' took many forms. One aspect was the rise of the planning system, originating in the 1947 Town and Country Planning Act. Today, green belts, 'areas of outstanding natural beauty', 'sites of special scientific interest' and so on dramatically constrain the places where development can take place.

Furthermore, even within land marked for development, planning laws heavily constrain what can be built. For example, land zoned for industrial use cannot be used for housing, and vice versa. The economy cannot respond to new opportunities in the way that it did in the nineteenth century: the location of Britain's population has been ossified, and in 2008 it bears a far greater similarity to 1945 than, say, the location of population of 1908 did to that of 1845.

This would not matter if economic opportunities could flow easily to the areas in which people lived half a century or more ago. Sadly, the evidence shows that this is not the case. Just as it would not have been possible to move parts of the Lancashire cotton industry out of Lancashire a century ago, so it is not feasible to move finance to Lancashire today.

Agglomeration economies are growing. Information technology allows skilled white-collar 'HQ' service jobs to be detached from their associated manufacturing operations and located near to other skilled HQ jobs, allowing higher productivity driven by high skill service sector 'knowledge spillovers'. The rise of dual career households means that more couples want to work in places that are large enough to offer two careers rather than one career and one job.

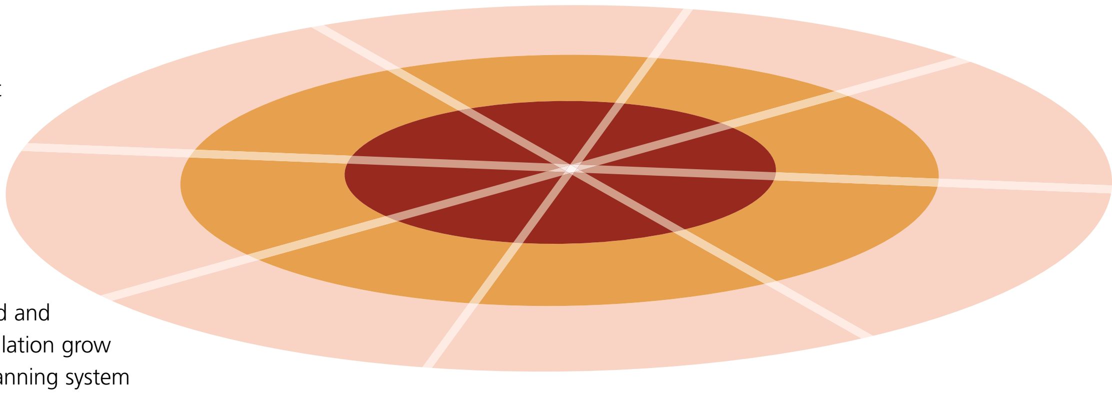
The planning system prevents Oxford and Cambridge becoming the twenty-first century equivalents of Liverpool and Manchester in the nineteenth century

Today, the South East is the best location for business. It is obviously closer to European markets, but better air links make it closer to all parts of the world than the North of England, Wales or Scotland. And London has simply been lucky: finance has prospered in the last century; textiles have not.

The outcome is that wages in the South East, and particularly in London, are higher than those anywhere else in Britain, reflecting higher levels of productivity. In contrast, towns outside the South East have lower wages and higher unemployment.

So we would expect to see the

The government should make clear that all significant levels of new building take place in housing hotspots



population of the South East boom as the population of the North West boomed a century ago. But this has not happened.

Two obvious places that should generate massive knowledge spillovers – Oxford and Cambridge – have seen population grow at just 0.5% per year. The planning system prevents them from becoming the Liverpool and Manchester of the twenty-first century, cities that grow beyond recognition within a generation, creating well paid, interesting jobs in abundance.

There is no doubt that Britain pays a high price for these restrictions. Had they been in place in 1850, Britain would not have become the workshop of the world and would have been markedly poorer. The same is true today.

The people who lose out are not primarily the well educated since they can afford to migrate and frequently do so after graduation. The people who lose out are those who cannot move to the South East because of housing costs: they end up in less well paid jobs and are more likely to be unemployed.

The planners were well meaning, and their confidence in planning over the market economy is easy to understand given the experience of 1939-45. They are still well meaning, but it is harder to understand ignoring market signals in 2008.

The market is very clear: land for housing and all other forms of development is worth far more in the South East than anywhere else in Britain. Land for flats or maisonettes is worth four times as much in Southwark as in Leeds, four times as much in Camden as in Manchester, and four times as much in Hackney as in Birmingham.

Indeed, housing land in the lowest cost part of London – Redbridge – is worth more than equivalent land in Manchester, which is the highest cost place outside the South East. Only Oxford, Cambridge and London's commuter towns come close to London's values.

Land is worth more in London and the South East because when people move to these places, they get better jobs and can afford to pay more for houses. Or to put it another way, if we build more houses in the South East, the jobs that emerge to take advantage of these new workers are better paid jobs than if we build them anywhere else in Britain.

For that reason, the government should make clear that all significant levels of new building will take place in housing hotspots: London and its commuter satellites as well as in high value-added cities, which are generally associated with top-notch universities. Land prices tell us where to allow development. If we follow those market signals, not only will the individual workers be better off but we will all be better off since tax revenues will be higher and benefit payments lower.

Of course, some land is worth preserving for its amenity value. But studies show that people place little value on relatively unattractive, industrialised agriculture that makes up so much of the green belt today. We have gone too far and it is those who are trapped in areas that are in decline, and will remain in decline, who are paying the price. It is a high price, and one that will increase, and not decrease, over time.

Tim Leunig is a lecturer in economic history at LSE and an associate in CEP's globalisation programme.

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